

# Exhibit 1

**From:** Hoau-yan Wang  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Re: CSF synaptic markers

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Lindsay,

OK. Let me read a little bit more before answering your questions. GAP-43 and SNAP-25 both had been used to assess presynaptic destruction. I would not consider synaptotagmin that is a family of 17 proteins. To pick a good ELISA or antibodies to use in ELISA format will take some times to validate its selectivity (and sensitivity). Small vendor itself is not the problem so long as their QC is solid. Many components including some antibodies in the ELISA kits are not made here, hopefully the availability won't be affected.

I know a little bit about GAP-43 as I had worked on modulation of this protein. GAP-43 also called F1, B-50 or pp46 is distributed wildly in the brain and associated with many proteins and lipids such as PKC synaptophysin, PIP2 etc. It is also a prominent PKC substrate (phosphorylated by PKC). Some antibodies have preference to non-phosphorylated form, this must be checked since in the CSF GAP-43 must have both forms and given AD has altered phosphorylation/

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**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent:** Thursday, October 14, 2021 1:08 PM  
**To:** Hoau-yan Wang  
**Cc:** Jim Kupiec  
**Subject:** [EXTERNAL] RE: CSF synaptic markers

So after a more careful read, it appears that GAP-43 or SNAP-25 would be the best as these are high in AD and the only two that are higher in AD than in MCI-AD. Synaptotagmin is higher in MCI-AD than in AD. NPTX1 and SV2A are reduced in AD, so an increase might not be the best signal, but we wouldn't know until we measure.

Lindsay

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**From:** Lindsay Burns  
**Sent:** Thursday, October 14, 2021 11:30 AM  
**To:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Subject:** CSF synaptic markers

POL 87(2)(d)

Hi Hoau,

[REDACTED] Except for albumin, most of these are Abcam or small vendors I don't know. Any thoughts on both biomarkers and vendors? I want to be sure that we don't select a biomarker that is high in MCI but then lower in more moderate disease. No rush. We probably won't have 25 Month 12 CSFs until early December.

Thanks,  
Lindsay

**Lindsay H. Burns, PhD**  
SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)



**From:** Marc Scullin  
**Sent time:** 08/02/2021 09:48:50 AM  
**To:** Tashuna Albritton; Jude-Marie A Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts  
**Subject:** Office of Research - NIH Funding Opportunities - Week ending 07/30/2021

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Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending July 30, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 07/30/2021, [Click HERE](#)

## Funding Opportunities

- [Investigator Initiated Research in Computational Genomics and Data Science \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-21-254)  
National Human Genome Research Institute  
Application Receipt Date(s): Standard dates apply. The first standard due date for this FOA is Oct 5, 2021.
- [Investigator Initiated Research in Computational Genomics and Data Science \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-21-255)  
National Human Genome Research Institute  
Application Receipt Date(s): Standard dates apply. The first standard due date for this FOA is Oct 16, 2021.
- [NINDS Research Education Opportunities \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-21-256)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): August 30, 2021, July 14, 2022, July 13, 2023
- [Utilizing Invasive Recording and Stimulating Opportunities in Humans to Advance Neural Circuitry Understanding of Mental Health Disorders \(R21 Clinical Trial Optional\)](#)  
(PAR-21-288)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Utilizing Invasive Recording and Stimulating Opportunities in Humans to Advance Neural Circuitry Understanding of Mental Health Disorders \(R01 Clinical Trial Optional\)](#)  
(PAR-21-289)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Clinical and Translational Science Award \(UM1 Clinical Trial Optional\)](#)  
(PAR-21-293)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): Multiple dates, see announcement.
- [Pancreatic Ductal Adenocarcinoma \(PDAC\) Stromal Reprogramming Consortium \(PSRC\) \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-041)  
National Cancer Institute  
Application Receipt Date(s): November 01, 2021
- [Pancreatic Ductal Adenocarcinoma Stromal Reprogramming Consortium Coordinating and Data Management Center \(PSRC CDMC\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-042)  
National Cancer Institute  
Application Receipt Date(s): November 01, 2021
- [Research Centers for Cancer Systems Biology \(U54 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-048)  
National Cancer Institute  
Application Receipt Date(s): November 12, 2021;
- [Division of Cancer Biology Multi-Consortia Coordinating Center \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-049)  
National Cancer Institute  
Application Receipt Date(s): November 12, 2021
- [Canine Cancer Immunotherapy Network \(K9CIN; U01 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-050)  
National Cancer Institute

Application Receipt Date(s): September 27, 2021

- [Coordinating Center for Canine Cancer Immunotherapy Network \(K9CIN; U24 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-051)  
National Cancer Institute  
Application Receipt Date(s): September 27, 2021
- [Advancing Validated Drug Targets for Substance Use Disorders \(R41/R42 - Clinical Trial Not Allowed\)](#)  
(RFA-DA-22-018)  
National Institute on Drug Abuse  
Application Receipt Date(s): February 18, 2022 No late applications will be accepted for this Funding Opportunity Announcement.
- [Advancing Validated Drug Targets for Substance Use Disorders \(R43/R44 - Clinical Trial Not Allowed\)](#)  
(RFA-DA-22-023)  
National Institute on Drug Abuse  
Application Receipt Date(s): February 18, 2022 No late applications will be accepted for this Funding Opportunity Announcement.
- [Pilot and Feasibility Studies to Improve Technology Adoption and Reduce Health Disparities in Type 1 Diabetes Mellitus \(R01 Clinical Trial Required\)](#)  
(RFA-DK-21-018)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): March 03, 2022
- [BRAIN Initiative Cell Atlas Network \(BICAN\): Comprehensive Center on Human and Non-human Primate Brain Cell Atlases \(UM1 Clinical Trial Not Allowed\)](#)  
(RFA-MH-21-235)  
National Institute of Mental Health  
Application Receipt Date(s): November 09, 2021
- [BRAIN Initiative Cell Atlas Network \(BICAN\): Specialized Collaboratory on Human, Non-human Primate, and Mouse Brain Cell Atlases \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-MH-21-236)  
National Institute of Mental Health  
Application Receipt Date(s): November 09, 2021
- [BRAIN Initiative Cell Atlas Network \(BICAN\): Coordinating Unit for Biostatistics, Informatics, and Engagement \(CUBIE\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-MH-21-237)  
National Institute of Mental Health  
Application Receipt Date(s): November 09, 2021
- [Materials to Enhance Training in Experimental Rigor \(METER\) \(UE5 Clinical Trial Not Allowed\)](#)  
(RFA-NS-21-033)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): October 21, 2021 October 11, 2022 October 10, 2023

**From:** Gonzalo Torres  
**Sent time:** 08/02/2021 09:57:14 AM  
Kaliris [REDACTED]@gmail.com) <[REDACTED].com>; Dr. Broderick [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosalinda Guce; Rosemary Wieczorek; Sanna Goyert; Susan Kornacki; Jun Yoshioka  
**To:**  
**Cc:** Maria Agosto; Roberto Rodriguez; Juana Torres  
**Subject:** Re: Class Day Ceremony - August 6th 11AM The Great Hall

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Dear All,

Please see the message below from Dani regarding the Annual Class Day Ceremony – the BS Graduation Ceremony, Friday August 6th, 2021, at 11:00AM. I would like to encourage all of you to attend this ceremony, support our students and participate in this important academic activity for our school.

**Please confirm your attendance by sending an email to Raquel at [morales@med.cuny.edu](mailto:morales@med.cuny.edu) today.**

Best,  
Gonzalo

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**From:** Dani Mcbeth  
**Sent:** Monday, July 26, 2021 8:05 AM  
**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gina Allegretti; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Maxine Nwigwe; Nancy Sohler; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Rosa Lee; Rosalinda Guce; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Susan Kornacki; Tashuna Albritton; Victoria Frye; Wenhua Lu  
**Subject:** Class Day Ceremony - August 6th 11AM The Great Hall

Dear faculty,

As you should know, we have scheduled the annual Class Day Ceremony – the BS Graduation Ceremony for Friday August 6<sup>th</sup> at 11AM. We are being allowed to have an in person ceremony in the Great Hall. We are encouraging all faculty to participate in the Academic Procession as is customary for this ceremony. This is the first large in person event that the college has allowed since the campus shutdown and as result there are understandably many precautions meant to keep the participants safe. Student are being allowed only 2 guests and all must be vaccinated or present a negative COVID test done no more than 48 hours prior to the ceremony. The set up will be as follows:

- All attendees must wear masks while in the building and during the ceremony.
- Faculty and students will be seated at the front of the Great Hall in chairs spaced from one another by 3 feet.
- Guests will be seated behind these chairs in pairs of chairs separated from one another by appropriate social distancing.
- Upon conclusion of the ceremony, all attendees will proceed directly to the outdoors for any congregating, photos etc.

We are pleased to announce that the Keynote Speaker will be Dr. Julian Nelson, Sophie Davis Class of 1999. Dr. Nelson is a general pediatrician. She earned her MD degree from the NYU Grossman School of Medicine and completed her residency at the Yale/New Haven Hospital. She is a partner of Crystal Run Healthcare, a multi-specialty medical practice which she joined in 2004 and practices in the Hudson River Valley community of Middletown, NY. She is a member of the Sophie Davis/CUNY School of Medicine Alumni Board and while a Sophie Davis student served as President of the SDSG.

We will be contacting the Chair of each department to gather a list of faculty participants. I do hope that most of you can attend to mark this great milestone for our students and make the day as festive as possible for them.

Best,  
Dani MCBeth

**From:** Holli-Anne S Tai  
**Sent time:** 08/02/2021 10:35:15 AM  
**To:** Tricia Mayhew-Noel; Hoau-yan Wang  
**Cc:** Maria D Lima; Alexander King  
**Subject:** RE: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

---

Dear Tricia,

I would just like to kindly follow up on the FCOI determination for this project. Any update would be greatly appreciated.

Best,

**Holli-Anne Tai**  
Grants Associate  
Grants and Sponsored Programs  
The City College of New York  
160 Convent Avenue | SH – Room 16  
New York, NY 10031  
Ph: 212-650-5418 | F: 212-650-7906  
GSP - <http://www.ccny.cuny.edu/research/gsp.cfm>  
PARS - <http://www.ccny.cuny.edu/research/pars.cfm>

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**From:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Sent:** Tuesday, July 27, 2021 2:52 PM  
**To:** Tricia Mayhew-Noel <tmayhewnoel@ccny.cuny.edu>  
**Cc:** Maria D Lima <mlima@med.cuny.edu>; Holli-Anne S Tai <htai@ccny.cuny.edu>; Alexander King <aking1@ccny.cuny.edu>  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Ms. Mayhew-Noel,

Yes, the information provided is still applicable for this new grant funded by Cassava.

Thanks.

Best regards,

Hoau-Yan

*Hoau-Yan Wang, Ph.D.*

*Medical Professor*

*CUNY SOM*

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**From:** Tricia Mayhew-Noel  
**Sent:** Tuesday, July 27, 2021 1:16 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Fw: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,

On a previous Conflict of Interest application, titled, "Linking peripheral and brain insulin resistance to AD neuropathology and

cognition", which was funded by National Institute of Aging NIH/Rush University Medical Center, you stated the following to Dr. Lima, CCNY's College Conflicts Officer, which was indicated in her review of your application and in the determination of a COI. Please confirm whether this information is still applicable or whether it should be updated for this new grant being funded by Cassava.

*"The PI serves as a consultant and a member of the scientific advisory board of CASSAVA for preclinical development and clinical trials of their proprietary drug and diagnostic (biomarker) candidates in central nervous diseases, especially the Alzheimer's disease. Together with other experts in the field, he answers their scientific questions to facilitate CASSAVA's drug and diagnostic development in preclinical testing and clinical trial design. He also functions as CASSAVA's academic collaborator in which he participates as a co-PI or co-investigator in ongoing NIH-funded SBIR and STTR (R41, R42, R44) clinical trial projects. In these projects, he is responsible for analyzing patient samples for CASSAVA. CASSAVA owns the intellectual properties (patents) of all the small molecule drug and diagnostic candidates.*

Thanks for your response.

Best Regards,

Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics

Division for Research

Shepard Hall Room 108B

160 Convent Ave

New York, NY 10031

1-212-650-7902 (phone)

1-212-650-8344 (fax)

[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)

Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>

<http://www.ccny.cuny.edu/irb/> (website)

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**From:** Holli-Anne S Tai

**Sent:** Tuesday, June 29, 2021 4:15 PM

**To:** Tricia Mayhew-Noel

**Cc:** Awards; Hoau-yan Wang

**Subject:** FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Please see attached FCOI supplement for Professor Wang's new project with Cassava Sciences. May you please let me know if a management plan will be required or if anything else is needed for further determination?

Thank you,

**Holli-Anne Tai**  
Grants Associate  
Grants and Sponsored Programs

The City College of New York  
160 Convent Avenue | SH – Room 16  
New York, NY 10031  
Ph: 212-650-5418 | F: 212-650-7906  
GSP - <http://www.cuny.edu/research/gsp.cfm>  
PARS - <http://www.cuny.edu/research/pars.cfm>

**From:** Tricia Mayhew-Noel  
**Sent time:** 08/02/2021 04:26:09 PM  
**To:** Holli-Anne S Tai; Hoau-yan Wang  
**Cc:** Maria D Lima; Alexander King  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

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Dear Holli-Anne;

Dr. Lima and I met regarding the FCOI determination, which will be forwarded to CUNY's COI Committee for approval of a recommended management plan.

If this can be moved along with RF, then please proceed, whilst letting them know that the COI review will be completed with CUNY Compliance where they will be notified.

Please let me know if you require any additional information.

Thanks and best regards,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccny.cuny.edu/irb/> (website)

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**From:** Holli-Anne S Tai  
**Sent:** Monday, August 2, 2021 10:35 AM  
**To:** Tricia Mayhew-Noel; Hoau-yan Wang  
**Cc:** Maria D Lima; Alexander King  
**Subject:** RE: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

I would just like to kindly follow up on the FCOI determination for this project. Any update would be greatly appreciated.

Best,

**Holli-Anne Tai**  
Grants Associate  
Grants and Sponsored Programs  
The City College of New York  
160 Convent Avenue | SH – Room 16  
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Ph: 212-650-5418 | F: 212-650-7906  
GSP - <http://www.ccny.cuny.edu/research/gsp.cfm>  
PARS - <http://www.ccny.cuny.edu/research/pars.cfm>

---

**From:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Sent:** Tuesday, July 27, 2021 2:52 PM  
**To:** Tricia Mayhew-Noel <tmayhewnoel@ccny.cuny.edu>  
**Cc:** Maria D Lima <mlima@med.cuny.edu>; Holli-Anne S Tai <htai@ccny.cuny.edu>; Alexander King <aking1@ccny.cuny.edu>  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Ms. Mayhew-Noel,

Yes, the information provided is still applicable for this new grant funded by Cassava.

Thanks.

Best regards,

Hoau-Yan

*Hoau-Yan Wang, Ph.D.*  
Medical Professor  
CUNY SOM

---

**From:** Tricia Mayhew-Noel  
**Sent:** Tuesday, July 27, 2021 1:16 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Fw: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,

On a previous Conflict of Interest application, titled, "Linking peripheral and brain insulin resistance to AD neuropathology and cognition", which was funded by National Institute of Aging NIH/Rush University Medical Center, you stated the following to Dr. Lima, CCNY's College Conflicts Officer, which was indicated in her review of your application and in the determination of a COI. Please confirm whether this information is still applicable or whether it should be updated for this new grant being funded by Cassava.

*"The PI serves as a consultant and a member of the scientific advisory board of CASSAVA for preclinical development and clinical trials of their proprietary drug and diagnostic (biomarker) candidates in central nervous diseases, especially the Alzheimer's disease. Together with other experts in the field, he answers their scientific questions to facilitate CASSAVA's drug and diagnostic development in preclinical testing and clinical trial design. He also functions as CASSAVA's academic collaborator in which he participates as a co-PI or co-investigator in ongoing NIH-funded SBIR and STTR (R41, R42, R44) clinical trial projects. In these projects, he is responsible for analyzing patient samples for CASSAVA. CASSAVA owns the intellectual properties (patents) of all the small molecule drug and diagnostic candidates.*

Thanks for your response.

Best Regards,  
Tricia

**Tricia Mayhew-Noel, MS**  
Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccnycuny.edu/irb/> (website)

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**From:** Holli-Anne S Tai  
**Sent:** Tuesday, June 29, 2021 4:15 PM  
**To:** Tricia Mayhew-Noel  
**Cc:** Awards; Hoau-yan Wang  
**Subject:** FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Please see attached FCOI supplement for Professor Wang's new project with Cassava Sciences. May you please let me know if a management plan will be required or if anything else is needed for further determination?

Thank you,

**Holli-Anne Tai**  
Grants Associate  
Grants and Sponsored Programs  
The City College of New York  
160 Convent Avenue | SH - Room 16  
New York, NY 10031

Ph: 212-650-5418 | F: 212-650-7906

GSP - <http://www.cuny.cuny.edu/research/gsp.cfm>

PARS - <http://www.cuny.cuny.edu/research/pars.cfm>

**From:** Maria Agosto  
**Sent time:** 08/05/2021 09:52:11 AM  
**To:** Maria Felice Ghilardi ([REDACTED]@gmail.com); [REDACTED]9@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Hoau-yan Wang; Itzhak (Itzik) Mano; John (Jack) Martin; Junghoon Kim; Khosrow Kashfi; Jun Yoshioka  
**Cc:** Gonzalo Torres; Maria D Lima  
**Subject:** FW: For your information – this HR Alert is being sent to all campus-based RF Employees

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Good morning All,

FYI, For anyone who has **RF employees**. Please read below. Each employee should have received this. They are to follow the steps below and get this done as soon as possible.

Best,  
Maria

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**From:** HRAAlert@rfcuny.org <HRAAlert@rfcuny.org>  
**Sent:** Wednesday, August 4, 2021 4:41 PM  
**To:** Maria Agosto <magosto@med.cuny.edu>  
**Subject:** [EXTERNAL] For your information – this HR Alert is being sent to all campus-based RF Employees



RESEARCH FOUNDATION  
of The City University of New York  
230 West 41st Street  
New York, NY 10036-7207

### **HR Alert – VACCINATION VERIFICATION & TESTING - UPDATE #4**

**AUGUST 4, 2021**

**TO: ALL CAMPUS-BASED RESEARCH FOUNDATION EMPLOYEES**

**SUBJECT: DISCLOSURE OF YOUR VACCINATED, NOT FULLY VACCINATED OR WISH NOT TO DISCLOSE STATUS**

As you know, the start date for the return to in-person work on CUNY campuses and offices is August 16, 2021. To return to in-person work, you will need to either:

- (1) upload your vaccine information, or
- (2) indicate that you are not vaccinated or do not wish to disclose your vaccination status.

In the latter case, you will be required to be tested on a routine basis. In both cases, the RF will ask for your consent to share your vaccine, testing and contact information with CUNY. **Therefore, it is imperative that you respond to this inquiry and disclose whether you are vaccinated, not fully vaccinated or you do not wish to disclose your status. If you fail to respond, CUNY will deny you access to your worksite.**

**For employees returning on August 16, the deadline for submitting your status is August 6.** For employees returning after August 16, the deadline for uploading the required information is 10 days before your start date.

Here are the steps for entering your status through the RF's portal:

- Go to RFCUNY's website at [www.rfcuny.org](http://www.rfcuny.org)
- Log in using your 6-digit RF-issued employee ID (EMP ID) and password
- Under the Electronic Tools tab, select Vaccine Verification
- Follow the prompts

To complete your vaccination information, you will need the date of your second shot for Pfizer or Moderna or the date of your single shot for Johnson & Johnson, and a scan or photograph of your CDC COVID-19 vaccination record card (or an equivalent document if you received your vaccination outside the U.S.).

If you do not know your RF EMP ID or password, send an email to [HRPassword@rfcuny.org](mailto:HRPassword@rfcuny.org). If you have other questions, send an email to [HRESManagement@rfcuny.org](mailto:HRESManagement@rfcuny.org).

Thank you!

**From:** Marc Scullin  
**Sent time:** 08/09/2021 07:43:40 AM  
Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts  
**To:**  
**Subject:** Office of Research - NIH Funding Opportunities for the week ending 08/06/2021

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Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending August 06, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 08/06/2021, [Click HERE](#)

## Funding Opportunities

- [Implementing and Sustaining Evidence-Based Mental Health Practices in Low-Resource Settings to Achieve Equity in Outcomes \(R34 Clinical Trial Required\)](#)  
(PAR-21-283)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Effectiveness of Implementing Sustainable Evidence-Based Mental Health Practices in Low-Resource Settings to Achieve Mental Health Equity for Traditionally Underserved Populations \(R01 Clinical Trial Optional\)](#)  
(PAR-21-284)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Initiation of a Mental Health Family Navigator Model to Promote Early Access, Engagement and Coordination of Needed Mental Health Services for Children and Adolescents \(R01 Clinical Trial Required\)](#)  
(PAR-21-291)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Pilot Studies to Test the Initiation of a Mental Health Family Navigator Model to Promote Early Access, Engagement and Coordination of Needed Mental Health Services for Children and Adolescents \(R34 Clinical Trial Required\)](#)  
(PAR-21-292)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Mobile Health: Technology and Outcomes in Low and Middle Income Countries \(R21/R33 - Clinical Trial Optional\)](#)  
(PAR-21-303)  
John E. Fogarty International Center  
National Cancer Institute  
National Eye Institute  
National Institute of Biomedical Imaging and Bioengineering  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
National Institute on Deafness and Other Communication Disorders  
National Institute of Environmental Health Sciences  
National Institute of Mental Health  
Office of Behavioral and Social Sciences Research  
Office of Research on Women's Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Brazil Regional Prospective Observational Research in Tuberculosis \(RePORT\) \(U01 Clinical Trial Not Allowed\)](#)  
(PAR-21-304)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): Not Applicable
- [Imaging - Science Track Award for Research Transition \(I/START\) \(R03- Basic Experimental Studies with Humans Required\)](#)  
(PAR-21-309)  
National Institute on Drug Abuse  
Application Receipt Date(s): Multiple dates, see announcement.
- [Imaging - Science Track Award for Research Transition \(I/START\) \(R03- Clinical Trial Optional\)](#)

(PAR-21-310)  
National Institute on Drug Abuse  
Application Receipt Date(s): Multiple dates, see announcement.

- [Multi-Disciplinary Collaborations to Understand Mechanisms of Systemic Immune Signaling and Inflammation in ADRD and its Progression \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-023)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): October 22, 2021
- [Acquired Resistance to Therapy Network \(ARTNet; U54 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-052)  
National Cancer Institute  
Application Receipt Date(s): November 01, 2021
- [Coordinating and Data Management Center for Acquired Resistance to Therapy Network \(ARTNet; U24 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-053)  
National Cancer Institute  
Application Receipt Date(s): November 01, 2021
- [Cardiovascular Biorepository for Type 1 Diabetes \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-DK-21-010)  
National Institute of Diabetes and Digestive and Kidney Diseases  
National Heart, Lung, and Blood Institute  
Application Receipt Date(s): October 20, 2021
- [Molecular Phenotypes of Null Alleles in Cells \(MorPhiC\) Phase 1: Data Production Research and Development Centers \(UM1\)\(Clinical trials not allowed\)](#)  
(RFA-HG-21-029)  
National Human Genome Research Institute  
Application Receipt Date(s): November 1, 2021 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s) Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
- [Molecular Phenotypes of Null Alleles in Cells \(MorPhiC\) Phase I: Data Analysis and Validation Centers \(U01 Clinical trials not allowed\)](#)  
(RFA-HG-21-030)  
National Human Genome Research Institute  
Application Receipt Date(s): November 1, 2021 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s) Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
- [Molecular Phenotypes of Null Alleles in Cells \(MorPhiC\) Phase I: Data Analysis and Validation Centers \(U24 Clinical trials not allowed\)](#)  
(RFA-HG-21-031)  
National Human Genome Research Institute  
Application Receipt Date(s): November 1, 2021 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s) Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
- [Genome Research Experiences to Attract Talented Undergraduates into the Genomics Field to Enhance Diversity \(R25 Clinical Trial Not Allowed\)](#)  
(RFA-HG-21-033)  
National Human Genome Research Institute  
Application Receipt Date(s): December 1, 2021; July 1, 2022; July 1, 2023 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s). Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
- [New Investigators to Promote Workforce Diversity in Genomics, Bioinformatics, or Bioengineering and Biomedical Imaging Research \(R01 Clinical Trial Optional\)](#)  
(RFA-HG-21-041)  
National Human Genome Research Institute  
National Institute of Biomedical Imaging and Bioengineering  
Office of the Director, NIH

Application Receipt Date(s): October 20, 2021

- [Biomarkers for the Lewy Body Dementias \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-001)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): October 22, 2021
- [Leveraging Existing Data Resources for Computational Model and Tool Development to Discover Novel Candidate Mechanisms and Biomarkers for ADRD \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-006)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): October 26, 2021

**From:** Annabel Santana  
**Sent time:** 08/09/2021 08:35:20 PM  
**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Maxine Nwigwe; Nancy Sohler; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Susan Kornacki; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters  
**Cc:** Robert M DeMicco; Priscilla Daniel  
**Subject:** CSOM Faculty meetings will resume in September

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Dear Faculty,

This is a reminder that there will be **NO Faculty meeting** this Thursday, August 12, 2021. Per the email below, the monthly CSOM faculty meetings will resume in September.

Annabel

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**From:** Annabel Santana  
**Sent:** Tuesday, July 6, 2021 12:52 PM  
**To:** Amr Soliman (asoliman@med.cuny.edu); Anabelle Andon; Andreas Kottmann; Ashiwel Undieh (aundieh@ccny.cuny.edu); Carol Moore; Dani L. McBeth; Danielle Pritchett (DPritchett@med.cuny.edu); Darwin Deen; Eitan Friedman; Emine Abali (EAbali@med.cuny.edu); Erica Friedman; Erica Lubetkin; Geri Kreitzer (gkreitzer@med.cuny.edu); Gina Allegretti; Gokhan Yilmaz; Gonzalo Torres (gtorres@med.cuny.edu); Holly Atkinson (hatkinson@med.cuny.edu); hywang@med.cuny.edu; imano@med.cuny.edu; Joao Nunes; Jodie Meyer (meyerjr@med.cuny.edu); John (Jack) Martin; Jose Cobo (jcobo@med.cuny.edu); Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam (llam@med.cuny.edu); Lisa Auerbach (lauerbach@med.cuny.edu); Lisa S. Coico (lisa.coico@ccny.cuny.edu); Lisanne Hauck; lspatz@med.cuny.edu; Lynn Hernandez; Maria D Lima; Maria Felice Ghilardi; Marisol Hernandez; Maxine Nwigwe (MNwigwe@med.cuny.edu); Nancy Sohler; Nichole K. Roberts; Noel Manyindo; Patricia Broderick (broderick@med.cuny.edu); Patricia Cortes; pgottl@med.cuny.edu; Preston Williams (pwilliams@ccny.cuny.edu); Rosa Lee; Rosalinda Guce; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge (SSaintonge@med.cuny.edu); Sanna Goyert; Siobhan Hollander (SHollander@med.cuny.edu); Susan Kornacki; Tashuna Albritton; Victoria Frye (vfrye@med.cuny.edu); Wenhua Lu; Birgland Joseph; Gloria Mabry (gmabry@med.cuny.edu); Jaclyn N Churchill; Mark Maraj; Olga Waters  
**Cc:** Robert M DeMicco; Priscilla Daniel  
**Subject:** CSOM Faculty meetings will resume in September

Dear CSOM Faculty,

In consideration of varied faculty vacation schedules, **there will be NO Faculty meeting this Thursday nor on August 12<sup>th</sup>**. Unless the need to address an urgent matter arises in the next weeks, **the monthly CSOM Faculty meetings will resume in September**. Updates of a non-urgent nature will be disseminated via email.

a.s.

*Annabel Santana, Assistant Dean for Academic & Faculty Affairs*  
CUNY School of Medicine  
The City College of New York  
160 Convent Avenue, Suite H-107  
New York, New York 10031  
Tel: 212-650-5297 or -5275  
Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)

CUNY School of Medicine

The City College  
of New York



**From:** Hoau-yan Wang  
**Sent time:** 08/11/2021 07:51:11 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: your 2017 paper

---

FYI

She had requested our 2017 Neurobiol of Aging. I answered her questions generically. From her questions, you can see she had no clues. Her Linkin info is at the her first email. This organization is apparently composed of oversea Chinese entrepreneurs. Apparently, there were a lot of searches done for the past few weeks.

Hoau

---

**From:** Suzhen Chen <SChen@1Globe-USA.com>  
**Sent:** Wednesday, August 11, 2021 4:16 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] RE: your 2017 paper

Dear Dr. Wang,

We got a few questions regarding the assays described in your papers to determine the binding affinity of PTI-125 to FLNA.

You have used age matched tissues from control and AD patients to determine the differential binding affinities of PTI-125 to normal and conformation altered FLNA. Where do you obtain the tissues? How hard to get these tissues?

We simply want to determine if one of our small molecule binds to FLNA and conformation altered FLNA. We don't have resource of AD animals or human tissues.

Do you know if there is a source that we may order FLNA and conformation altered FLNA? What is a simple assay would you suggest us to do?

I thank you for your time and kind consideration.

Suzhen

---

**From:** Hoau-yan Wang [mailto:hywang@med.cuny.edu]  
**Sent:** Wednesday, August 04, 2021 11:00 PM  
**To:** Suzhen Chen <SChen@1Globe-USA.com>  
**Subject:** Re: your 2017 paper

Dear Dr. Chen,

Please find a PDF copy of our 2017 Neurobiol of Aging paper you have requested.

Thank you.

Best,

Hoau-Yan

*Hoau-Yan Wang, Ph.D.  
Medical Professor  
CUNY SOM*

---

**From:** Suzhen Chen <SChen@1Globe-USA.com>  
**Sent:** Wednesday, August 4, 2021 4:13 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] your 2017 paper

Dear Dr. Wang,

May I have a PDF copy of your paper "PTI-125 binds and reverses an altered conformation of filamin A to reduce Alzheimer's disease pathogenesis"?

Thank you,

Suzhen

<https://www.linkedin.com/in/suzhen-chen/>

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 08/11/2021 08:42:53 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Re: your 2017 paper

---

Thanks.

Lindsay

On Aug 11, 2021, at 6:51 PM, Hoau-yan Wang <hywang@med.cuny.edu> wrote:

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

FYI

She had requested our 2017 Neurobiol of Aging. I answered her questions generically. From her questions, you can see she had no clues. Her Linkin info is at the her first email. This organization is apparently composed of oversea Chinese entrepreneurs. Apparently, there were a lot of searches done for the past few weeks.

Hoau

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**From:** Suzhen Chen <SChen@1Globe-USA.com>  
**Sent:** Wednesday, August 11, 2021 4:16 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] RE: your 2017 paper

Dear Dr. Wang,

We got a few questions regarding the assays described in your papers to determine the binding affinity of PTI-125 to FLNA.

You have used age matched tissues from control and AD patients to determine the differential binding affinities of PTI-125 to normal and conformation altered FLNA. Where do you obtain the tissues? How hard to get these tissues?

We simply want to determine if one of our small molecule binds to FLNA and conformation altered FLNA. We don't have resource of AD animals or human tissues.

Do you know if there is a source that we may order FLNA and conformation altered FLNA? What is a simple assay would you suggest us to do?

I thank you for your time and kind consideration.

Suzhen

---

**From:** Hoau-yan Wang [mailto:hywang@med.cuny.edu]  
**Sent:** Wednesday, August 04, 2021 11:00 PM  
**To:** Suzhen Chen <SChen@1Globe-USA.com>  
**Subject:** Re: your 2017 paper

Dear Dr. Chen,

Please find a PDF copy of our 2017 Neurobiol of Aging paper you have requested.

Thank you.

Best,

Hoau-Yan

*Hoau-Yan Wang, Ph.D.*

*Medical Professor*

*CUNY SOM*

---

**From:** Suzhen Chen <[SChen@1Globe-USA.com](mailto:SChen@1Globe-USA.com)>  
**Sent:** Wednesday, August 4, 2021 4:13 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] your 2017 paper

Dear Dr. Wang,

May I have a PDF copy of your paper "PTI-125 binds and reverses an altered conformation of filamin A to reduce Alzheimer's disease pathogenesis"?

Thank you,

Suzhen

<https://www.linkedin.com/in/suzhen-chen/>

**From:** Maria D Lima

**Sent time:** 08/12/2021 03:26:02 PM

**To:** Tashuna Albritton; Keosha Bond; Patricia Cortes; Victoria Frye; Paul Gottlieb; Sanna Goyert; Lice Ghilardi [REDACTED]@gmail.com>; Lynn Hernandez; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Erica Lubetkin; Noel Manyindo; John (Jack) Martin; Itzhak (Itzik) Mano; Nancy Sohler; Amr Soliman; Linda Spatz; Kaliris Salas; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Jun Yoshioka

**Cc:** Marc Scullin; Carmen [REDACTED]@gmail.com>; Erica Friedman

**Subject:** NIH Releases 2021-2025 Strategic Plan

---

Dear Colleagues,

I wanted to call your attention to the release of the NIH Strategic Plan (2021-2025). Please see below for the link. As the CUNY School of Medicine research faculty, we have many opportunities in the cross-cutting themes/priorities of this strategic plan (highlighted in yellow) and many others in the document.

My best,

Maria

### **NIH Releases 2021-2025 Strategic Plan**

On July 30, the National Institutes of Health (NIH) released its [agency-wide strategic plan for 2021-2025](#). The plan articulates five "cross-cutting themes" reflecting priorities that are seen as touching on all NIH programming. These themes include improving minority health and reducing health disparities; enhancing women's health; addressing public health challenges across the lifespan (from early childhood to advanced age); promoting collaborative science; and leveraging data sciences in biomedical discovery.

**From:** Marc Scullin

**Sent time:** 08/16/2021 09:32:15 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hou-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** Office of Research - NIH Funding opportunities - Week ending 8/13/2021

Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending August 13, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 08/13/2021, [Click HERE](#)

## Funding Opportunities

- [Time-Sensitive Obesity Policy and Program Evaluation \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-21-305)  
National Institute of Diabetes and Digestive and Kidney Diseases  
National Cancer Institute  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Office of Disease Prevention  
Application Receipt Date(s): September 22, 2021; October 14, 2021; November 9, 2021; December 9, 2021; January 10, 2022; February 10, 2022; March 10, 2022; April 11, 2022; May 10, 2022;
- [Dementia Care and Caregiver Support Intervention Research \(R01 Clinical Trial Required\)](#)  
(PAR-21-307)  
National Institute on Aging  
Application Receipt Date(s): Multiple dates, see announcement.
- [Pragmatic Trials for Dementia Care and Caregiver Support \(R61/R33 Clinical Trial Required\)](#)  
(PAR-21-308)  
National Institute on Aging  
Application Receipt Date(s): Multiple dates, see announcement.
- [Clinical and Biological Measures of TBI-related Dementia Including Chronic Traumatic Encephalopathy \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-024)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): November 10, 2021
- [American Women: Assessing Risk Epidemiologically \(AWARE\) \(R01 Clinical Trial Optional\)](#)  
(RFA-AI-21-058)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): Not Applicable
- [Fentanyl and its Analogs: Effects and Consequences for Treatment of Addiction and Overdose \(UG3/UH3 Clinical Trial Optional\)](#)  
(RFA-DA-22-022)  
National Institute on Drug Abuse  
Application Receipt Date(s): November 11, 2021
- [Feasibility Studies that Explore Healthy and Diseased Temporomandibular Joints \(TMJ\) using Single Cell Multi-Omic Analyses \(UH2/UH3 Clinical Trial Not Allowed\)](#)  
(RFA-DE-22-005)  
National Institute of Dental and Craniofacial Research  
Office of Research on Women's Health  
Application Receipt Date(s): November 10, 2021
- [High-Resolution Exploration of the Human Islet Tissue Environment \[HIRN Human Pancreas Analysis Consortium \(HPAC\)\] \(U01 - Clinical Trial Not Allowed\)](#)  
(RFA-DK-21-017)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): March 03, 2022

- [Innovative Approaches for Improving Environmental Health Literacy \(R43/R44 Clinical Trial Not Allowed\)](#)  
(RFA-ES-21-008)  
National Institute of Environmental Health Sciences  
Application Receipt Date(s): November 10, 2021.
- [Innovative Approaches for Improving Environmental Health Literacy \(R41/R42 Clinical Trial Not Allowed\)](#)  
(RFA-ES-21-009)  
National Institute of Environmental Health Sciences  
Application Receipt Date(s): November 10, 2021
- [Resource Center for Tribal Epidemiological Centers \(RC-TEC\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-MD-21-003)  
National Institute on Minority Health and Health Disparities  
Application Receipt Date(s): November 30, 2021
- [Creating an Educational Nexus for Training in Experimental Rigor \(CENTER\) \(UC2 Clinical Trial Not Allowed\)](#)  
(RFA-NS-21-009)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): October 21, 2021

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 08/17/2021 11:24:16 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Fwd: SVB Leerink Opportunity | Asceneuron  
**Attachments:** Asceneuron Corporate Deck August 2021.vF.pdf

---

Hoau,

I haven't looked yet, but I thought I'd pass to you as well if you have time. I'll look at it later today.

Lindsay

Begin forwarded message:

**From:** Remi Barbier <remi@cassavasciences.com>  
**Date:** August 17, 2021 at 10:17:29 AM CDT  
**To:** Jim Kupiec <jkupiec@cassavasciences.com>, Lindsay Burns <lburns@cassavasciences.com>, Nadav Friedmann <nfriedmann@cassavasciences.com>  
**Cc:** Eric Schoen <eschoen@cassavasciences.com>  
**Subject: FW: SVB Leerink Opportunity | Asceneuron**

FYI, attached is a presentation from a small, private Swiss company that's gone broke. I've been asked if Cassava might have interest in throwing them a lifeline.

It's an early-stage story focused on an inhibitor of the "O-GlcNAcase (OGA) enzyme". As I understand, this pathway regulates the function of all kinds of things, including neuronal loss. They are positioning the company as an anti-tau story. I'm not convinced anti-tau is the low-hanging apple for the drug's given MOA....it's probably an attempt to jump on the AD bandwagon. In any event Lilly is developing a similar small molecule drug.

Pls LMK if you have thoughts on this science or this company.

Remi

20  
AUGUST  
21



**ASCENEURON**   
*A Neurodegeneration Therapeutics Company*

# Corporate Presentation



## Disclaimer

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*Asceneuron assumes no responsibility to update forward-looking statements or to adapt them to future events or developments. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.*



Clinical stage company  
developing therapies to treat  
the root cause of neurodegeneration

SMALL  
MOLECULE

HIGHLY  
BRAIN PENETRANT

ORALLY  
BIOAVAILABLE

INTRACELLULAR



# Asceneuron Corporate Structure

## Swiss Headquarters

Corporate functions (incl. finance)

Research, Non-clinical & Early Clinical Development & CMC  
(7 FTE and 7 key consultants)

	<p><b>Dirk Beher, PhD</b> Chief Executive Officer &amp; Founder</p>	
	<p><b>Bruno Permanne, PhD</b> Senior Director Biology</p>	

## US Subsidiary

Clinical Development, Clinops and Regulatory Affairs  
(4 FTE and 4 key consultants)

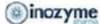
	<p><b>Eric Yuen, MD</b> Independent Board Director &amp; Acting Chief Medical Officer</p>	
	<p><b>Pearl Fang, PhD</b> VP Clinical Development</p>	
	<p><b>Ryan Schubert, MD</b> Senior Director Translational Medicine</p>	

# Investors and Board of Directors

## INVESTORS

	<i>Leading European venture capital firm in life sciences</i>
	<i>Strategic, corporate venture capital arm of Merck KGaA, Germany</i>
	<i>Trans-Atlantic biotech venture capital firm focused on US/EU biotech</i>
	<i>Strategic venture capital arm of Johnson &amp; Johnson</i>
	<i>Major player in the funding of healthcare and biotechnology in Europe</i>

## BOARD OF DIRECTORS

<b>Peter Van Vlasselaer</b> Chair	    
<b>Dirk Beher</b>	
<b>Henrijette Richter</b>	
<b>Hakan Goker</b>	
<b>Deborah Harland</b>	
<b>Jeanne Bolger</b>	
<b>Vanessa Malier</b>	
<b>Eric Yuen</b>	  
<b>Catherine Moukheibir</b>	  

## Capital Raised Since Inception

Round (year)	CHF	USD
Seed (2012)	CHF 6,000,000	USD 6,660,000
Series A (2015)	CHF 34,500,000	USD 38,295,000
Series B <sup>1</sup> (2021)	CHF 26,700,000	USD 29,637,000
Total raised	CHF 67,200,000	USD 74,592,000

Non-dilutive grants: ~USD 1,000,000

<sup>1</sup>first close

## CNS Pipeline with Multiple Clinical Programs

Preventing Toxic Insult to Neurons  
to **HALT / PREVENT** Disease and **IMPROVE** Synaptic Function

SYMPTOMATIC IMPROVEMENT<sup>1</sup> & DISEASE MODIFICATION

### O-GlcNAcase (OGA) Inhibitors

Alzheimer's & Parkinson's Disease, Progressive Supranuclear Palsy (PSP) & Epilepsy

Phase 1 Molecule  
ASN121151

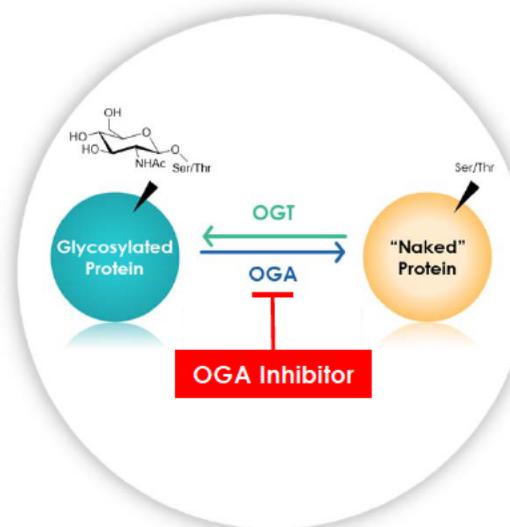
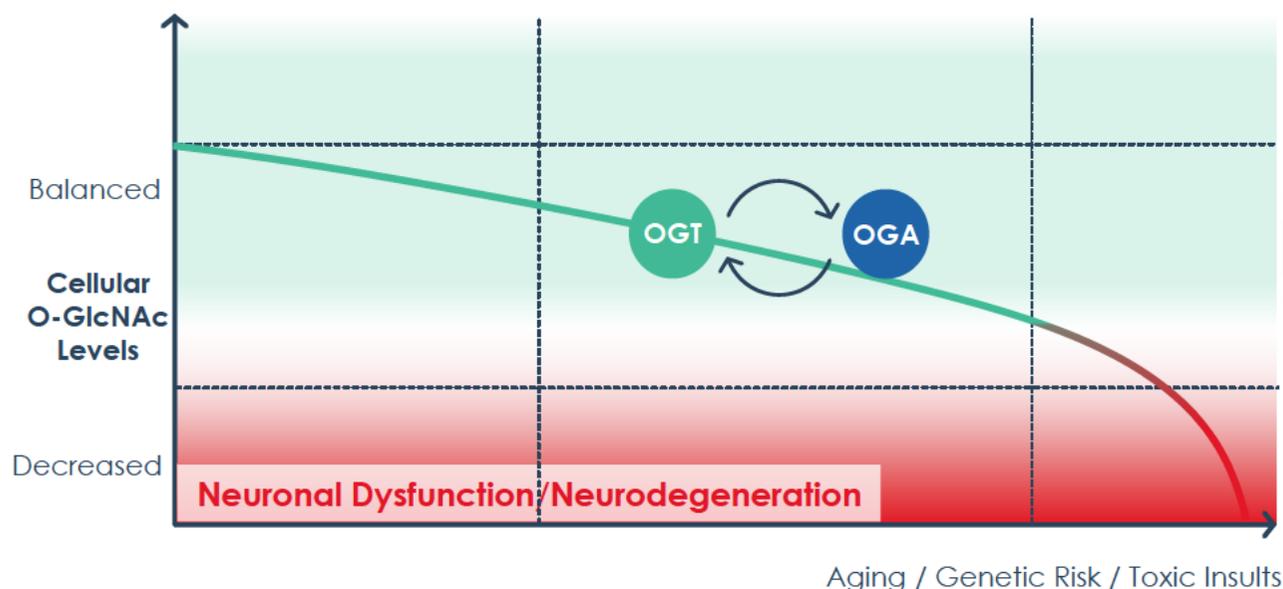
- Accelerated development path

Phase 1 Completed Pathfinder  
Molecule ASN120290

- Preclinical PoC & clinical feasibility demonstrated

<sup>1</sup>Cognition, sleep/insomnia, behaviour/agitation, epileptic seizures

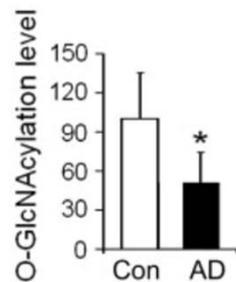
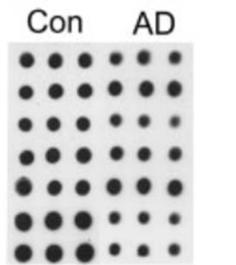
# Biological Rationale: Disruption of O-GlcNAcase (OGA) Homeostasis is a Major Contributor to CNS Diseases



- Cellular “buffering system” maintains homeostasis through mutual regulation of OGT and OGA
- Insults to the cellular buffering system leads to disruption of homeostasis and decline of protein O-GlcNAcylation which can be restored by an OGA inhibitor
- Contributes to multiple human diseases and especially CNS diseases: e.g. neurodegeneration, epilepsy, sleep disorders

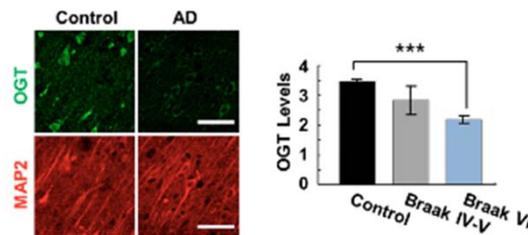
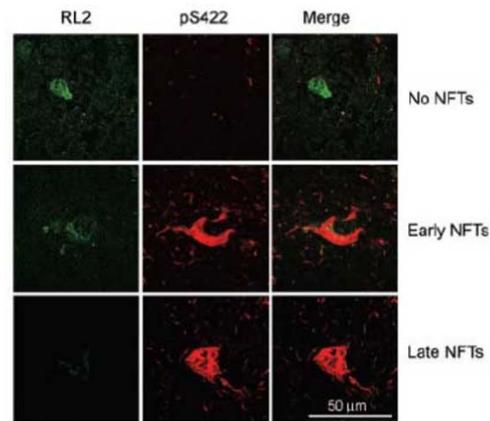
# Reduced O-GlcNAcylation as Common Denominator in Alzheimer's Disease

## Reduced O-GlcNAc in AD



Liu *et al.*, Brain (2009)  
Liu *et al.*, PNAS (2004)  
Pinho *et al.*, Mol Bas Dis (2019)  
Park *et al.*, Sci Adv (2021)

## Correlation with AD Tau Pathology



Wang *et al.*, PNAS (2016)

## O-GlcNAc in AD

- ✓ Reduced in the AD brain in humans and rodents
- ✓ Linked to AD pathologic disease severity in humans and rodents
- ✓ Linked to AD-like neuroinflammation & neurodegeneration in humans and rodents
- ✓ Linked to cognition, seizures, and sleep in rodents
- ✓ Rapidly increased by OGA inhibition

Abbreviations: RL2 = pan-O-GlcNAc antibody;  
pS422 = phosphorylated tau serine 422 antibody; NFT = neurofibrillary tangle.

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# Mechanism Informs Development of OGA Inhibitors

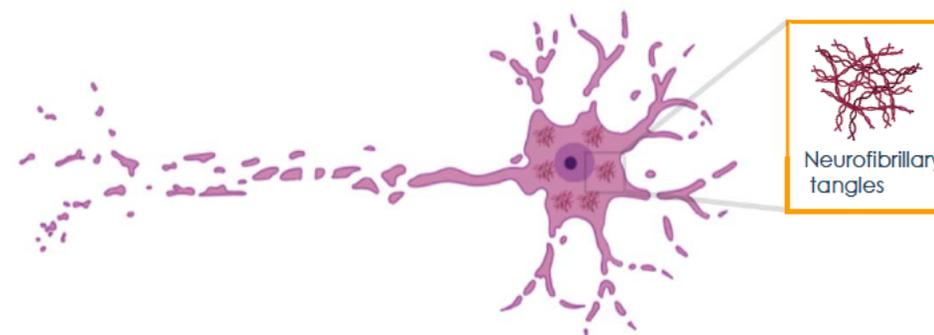
## Normal O-GlcNAc

● Intracellular O-GlcNAc



## Low O-GlcNAc

→  
  
**OGA Inhibitor**  
 (ASN51, ASN90)



### Multimodal Mechanism of Action

1. O-GlcNAc prevents tau and  $\alpha$ -Synuclein aggregation *in vitro* and *in vivo*
  - ↳ Direct and indirect mechanisms
2. O-GlcNAc necessary for synapse maintenance and reduced in neurodegeneration
  - ↳ Modifies multiple scaffolding and ion channel proteins
3. O-GlcNAc inhibits neuroinflammation
  - ↳ Regulates neural stem cell differentiation by inhibiting glial fate switch

### Multiple Clinical Development Opportunities

1. Tau and  $\alpha$ -Synuclein pathology
  - ↳ Co-pathology is common in AD and PD
  - ↳ **Chronic / disease-modifying trial**
2. Synaptic dysfunction and loss
  - ↳ Best marker of cognitive decline in human AD
  - ↳ **Acute / symptomatic trial**

# Beneficial Role of O-GlcNAc: Opportunity for Accelerated Clinical Development in Symptomatic Indications

## OGA Inhibitors show benefits in multiple preclinical models

- Translational approach opens accelerated clinical pathways to efficacy data in patients:
  - relatively short (1-3 months) trials
  - moderately sized (60-100 subjects)
  - recent examples of success in target indications of interest (Cassava, Axsome)
- Symptomatic biomarker-centered Phase 1a approach:
  - supported by strong preclinical data (internal & external)
  - allows the early probing of disease relevant mechanisms in healthy volunteers and AD patients
- Pipeline in a product approach: multiple indications for ASN121151 & ASN120290:
  - Alzheimer's and Parkinson's disease, orphan tauopathies (PSP), epileptiform disorders

# OGA Inhibition is Well Tolerated in Preclinical Studies (Including GLP Toxicology) and Humans

- Front runner ASN120290 and competitor LY3372689<sup>1</sup> well tolerated in human subjects in Phase 1 (12-day dosing in healthy elderly). No drug-related SAEs.
- No red flags in chronic toxicology studies including mandatory 9-month dog study with ASN120290
- Supported by literature reports on long term chronic studies in rodents indicating good tolerability of OGA inhibitors<sup>2-4</sup>

## Explanation:

- acute and chronic OGA inhibition with pharmacological means does not produce full enzyme inactivation (100% inhibition difficult to achieve & not desirable) and thus rather rebalances the system
- analogous to management of blood cholesterol or glucose levels where drugs are used to maintain healthy concentration ranges

<sup>1</sup>Poster presentation Goldsmith *et al.*, AAIC (2021)

<sup>2</sup>Borghgraef P. *et al.*, *PLoS One* **8**, e84442 (2013)

<sup>3</sup>Graham D. *et al.*, *J Neuropharm* **79**, 307-313 (2014)

<sup>4</sup>Yuzwa S. A. *et al.*, *Nat Chem Biol* **8**, 393-399 (2012)

# Attractive Neurodegeneration Pipeline

● Completed Studies ● Development Plan

Modality	Program	Indication	Lead Opt.	Non-Clinical	Phase 1	Phase 2	Pivotal / Phase 3	
<b>ENZYME INHIBITORS</b>								
OGAi (symptomatic & disease modifying)	ASN121151 (Next Generation)	AD (PD, PSP)	Completed Studies			2021*	2022	*on-going
OGAi (symptomatic & disease modifying)	ASN120290 (Pathfinder)	PSP (US IND open)	Completed Studies			2021 - 2023		

Abbreviations: AD, Alzheimer's disease; PD, Parkinson's disease; PSP, progressive supranuclear palsy; mAChR, muscarinic acetylcholine receptor; PAM, positive allosteric modulator

## OGA Inhibitor

**ASN120290**

### Pathfinder Molecule

- OGA inhibitor targeting Tau
- Highly selective and potent ( $IC_{50} = 12nM$ )
- Known MOA
- 2-3X per day administration

- High degree of target engagement (enzyme binding) in humans
- Demonstrated CNS drug properties & preclinical efficacy
- Good preclinical and clinical safety profile
- All mandatory chronic preclinical tox studies completed (including 39-week dog study)



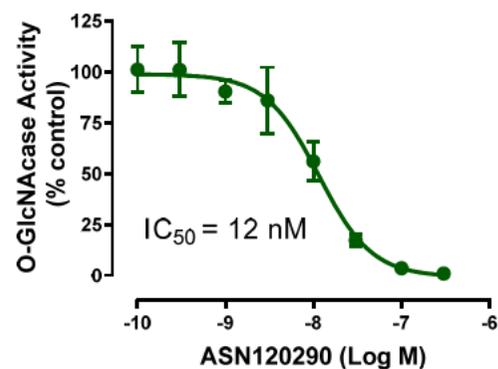
**Proven Preclinical Validation & Clinical Feasibility**

# ASN120290: In Vitro Profile

## Highly Selective OGA Inhibitor with Good Potency and CNS Drug-Like Properties

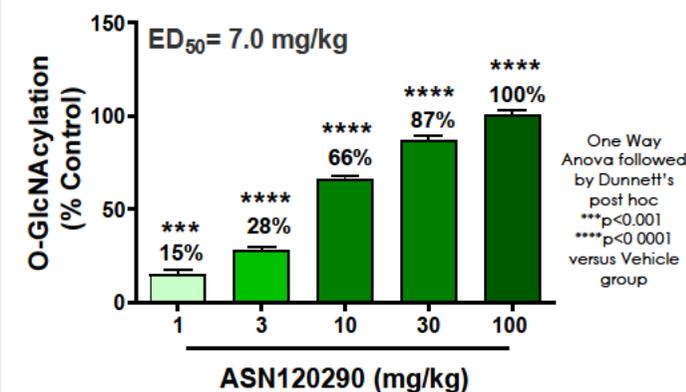
### Potent OGA Inhibitor

*In Vitro* Profile  
(Human)



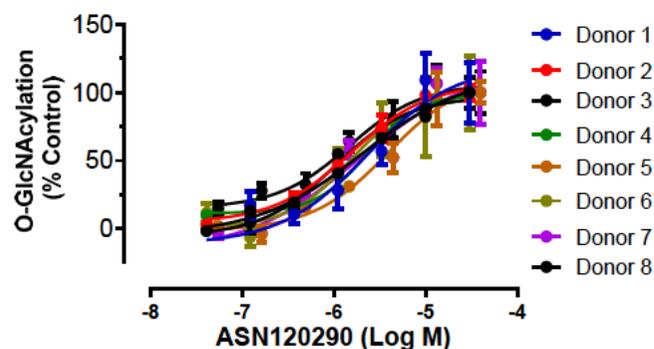
### Inhibition of Brain Enzyme Leads to Accumulation of Substrates: O-GlcNAc Proteins

*In Vivo* CNS Drug Profile (Rat)



### Inhibition of OGA in Human Blood PBMCs

*Ex Vivo* Profile  
(Human)



### Excellent CNS PK Profile

Brain / Plasma Ratio ~1 in Rat

Dose (mg/kg)	Plasma (nM)	Brain (nM)	CSF (nM)	CSF/Plasma
1	70	72	7.4	0.11
3	272	285	24	0.09
10	1969	1763	177	0.09
30	10756	9270	963.4	0.09
100	38779	43412	4560	0.12

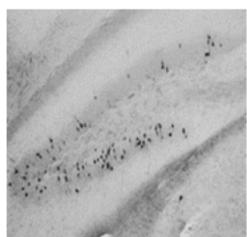
# ASN120290: Clinically Relevant Efficacy in Preclinical Tauopathy Models

## Prevents Tau Pathology (Toxic Tau Tangles)

Chronic treatment P301S tau transgenic mice (3.5 months)

### Diseased Mouse Brain

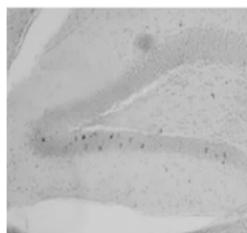
(No Treatment)



Full blown neurofibrillary tangle (NFT) formation (Gallyas stain)

### Healthy Mouse Brain

(Treatment with ASN120290)

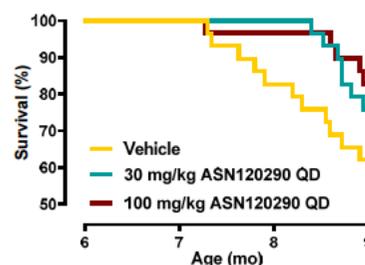


80% reduction of NFT (Gallyas stain)

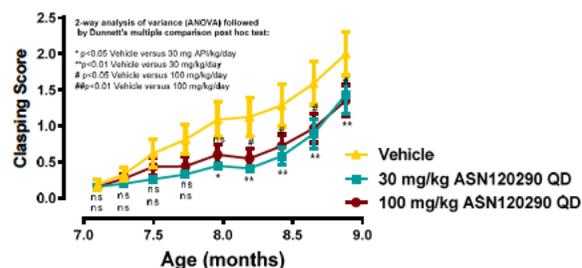
## Prolongs Survival and Improves Motor Function

Chronic treatment P301L tau transgenic mice (6 months)

### Survival – End-stage Tauopathy



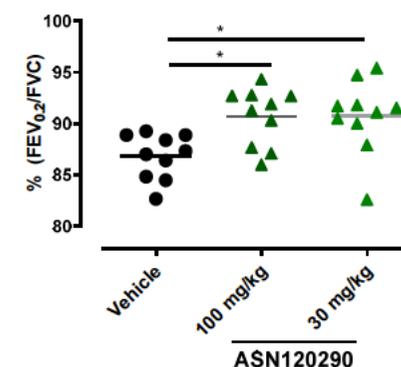
### Motor Efficacy – Clasp Score



## Improves Lung Function

Acute treatment P301L tau transgenic mice (4 days)

### Lung Function – Tiffeneau Index



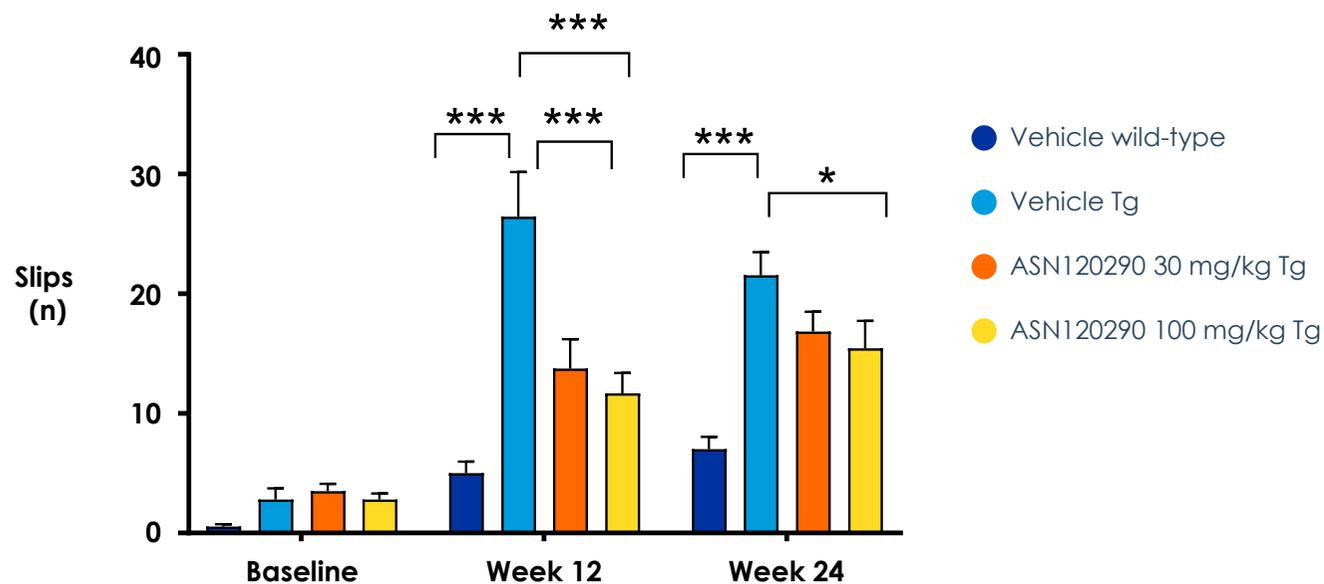
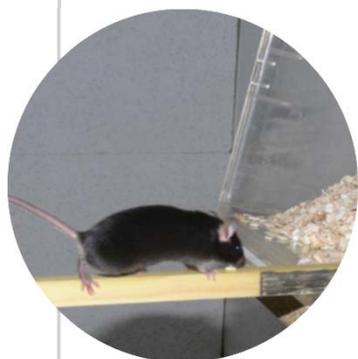
Clinically relevant findings since daily exposures at 30 mg/kg in mice are below human exposure and ii) trough at 100 mg/kg in mice is below human trough at clinical target dose

# ASN120290: Clinically Relevant Efficacy in Preclinical $\alpha$ -Synuclein Parkinson's Model

## Prevents Motor Deficits

### Chronic Treatment Line 61 $\alpha$ -Synuclein Transgenic (Tg) Mice for 24 Weeks

Persistent Efficacy Is Maintained Throughout The Study



## OGA Inhibitor

### ASN121151

#### Phase 1 Molecule Targeting the Root Cause of AD and PD

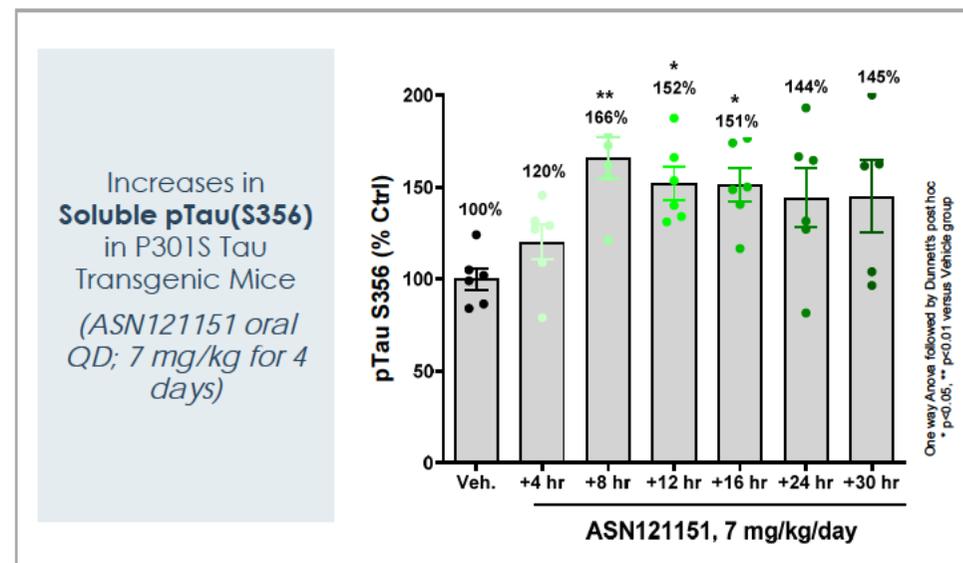
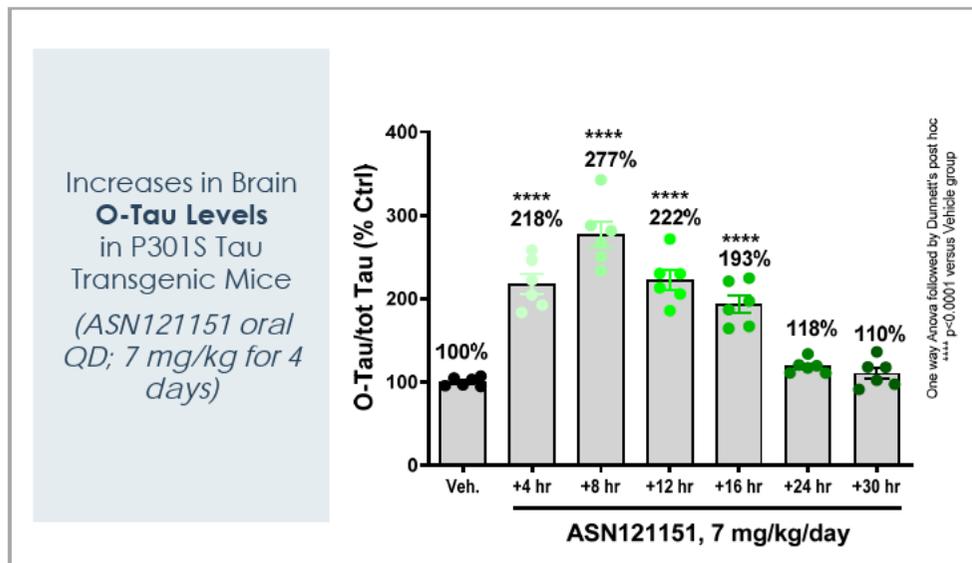
- Known MOA
- Improved PK properties and lower plasma protein binding compared to pathfinder molecule
- 1x a day drug with  $\leq 20$  mg dose

- New chemical entity and IP
- High degree of target engagement and enzyme binding (rat brain)



### Human Target Engagement in Q3 2021

# ASN121151 Immediately Effects Tau Biology Providing Translational CSF Biomarker: Tau Phosphorylation

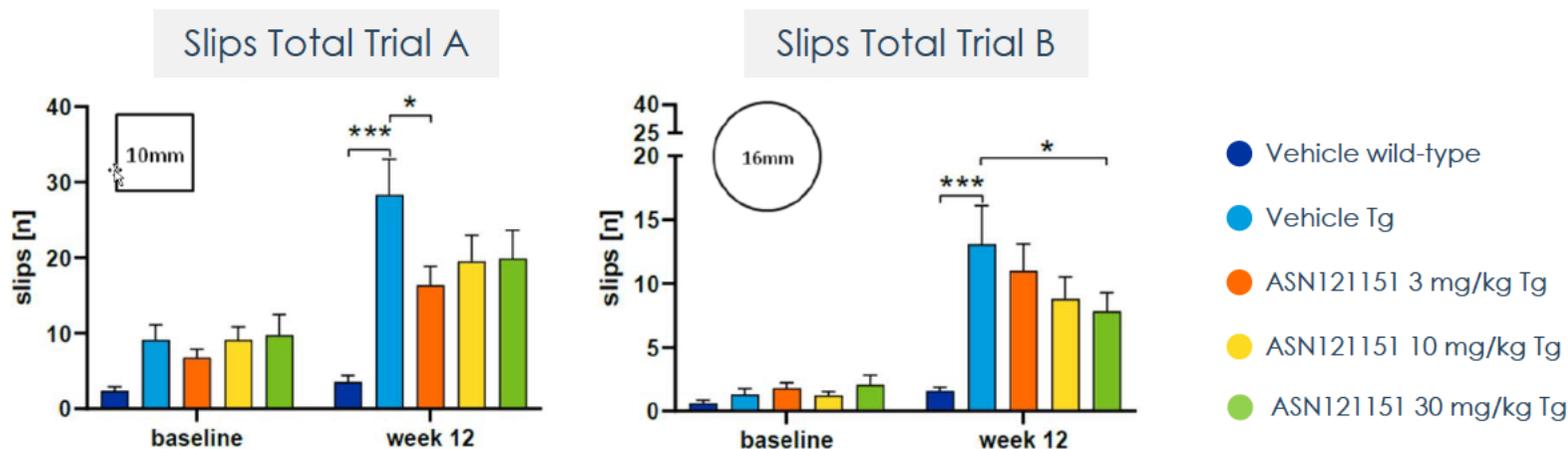


- Concomitant increase in tau O-GlcNAcylation (O-tau) and phosphorylation at serine 356 [p $\tau$ (S356)] in soluble brain fraction [also: AT8, p $\tau$ (S396)]
- Similar initial kinetics of O-tau and p $\tau$  accumulation reaching maximum at t=8 hrs post-dose
- O-tau much faster eliminated than p $\tau$ : reflection of enzyme activities of OGA vs phosphatases
- Demonstrates immediate effects of OGA inhibition on **tau biology** and provides potential CSF **translational biomarker** (p $\tau$ ) for clinical exploration

# ASN121151: Clinically Relevant Efficacy in Preclinical $\alpha$ -Synuclein Parkinson's Model

## Prevents Motor Deficits

### Chronic Treatment Line 61 $\alpha$ -Synuclein Transgenic (Tg) Mice for 12 Weeks



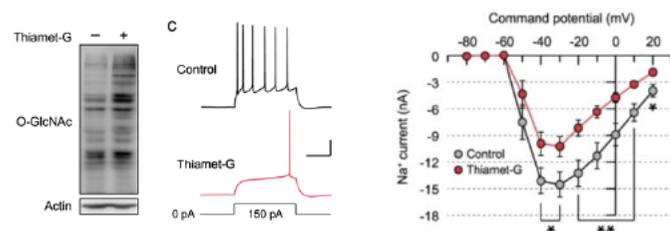
- Clinically relevant efficacy on motor function with two chemically distinct molecules highlights the potential of Asceneuron's OGA inhibitors for Parkinson's disease

# Anti-Epileptic Properties of OGA Inhibitors Confirmed for ASN121151 ("ASN51")

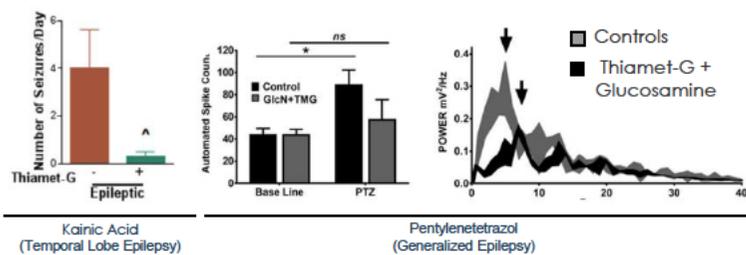
## Epilepsy

### Published Preclinical Data

#### OGA Inhibition Reduces Neuronal Excitability



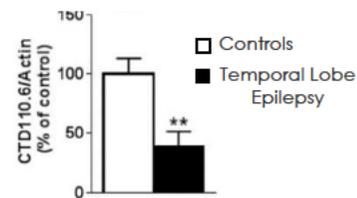
#### OGA Inhibition Reduces Seizures in vivo



### Human Epilepsy Data

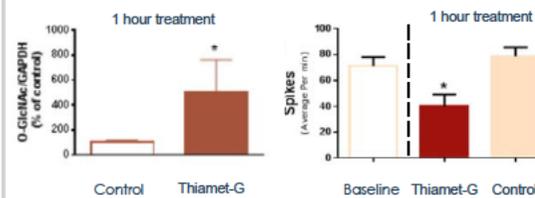
#### Low O-GlcNAc in Epilepsy

##### Human Hippocampal O-GlcNAc



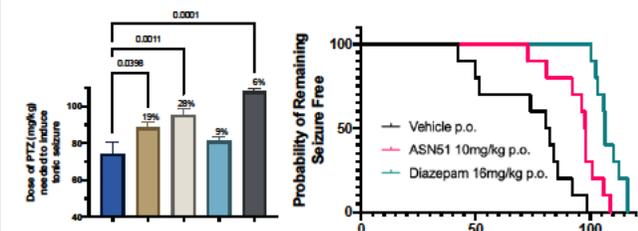
#### OGA Inhibition is Anti-Epileptic

##### Human Hippocampal Slice from Epilepsy Surgery Patients

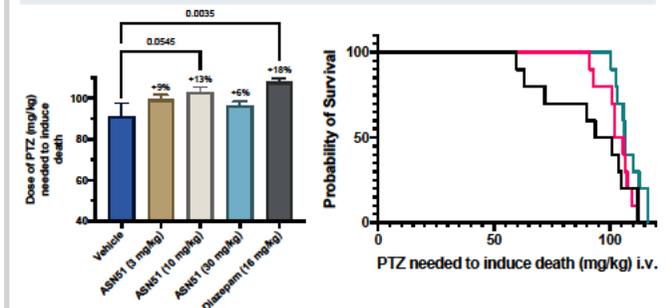


### Anti-Epileptic Effect of ASN51

#### Reduces Tonic Convulsions



#### Increases Survival



Stewart *et al.*, J Neurosci (2017); Sanchez *et al.*, Neurobiol Dis (2019); Hwang and Rhim, Sci Rep (2019)

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A Neurodegeneration Therapeutics Company

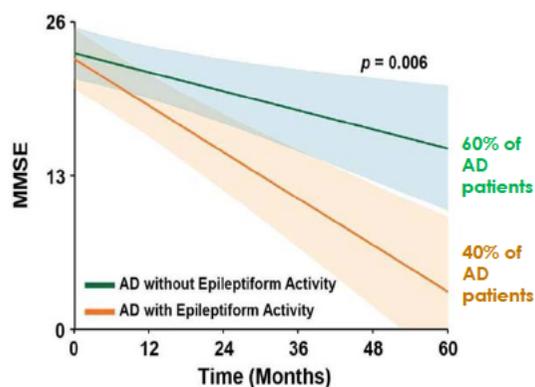
# Toxic Neuronal Hyperexcitability is Amenable to OGA Inhibition: Validates EEG Biomarker

## Neuronal Hyperexcitability

### Scientific Rationale

#### Neurotoxic in AD

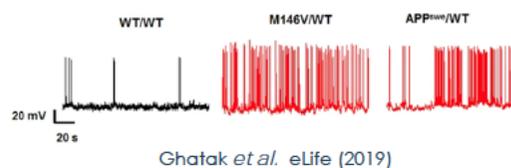
##### Drives Cognitive Impairment



Vossel *et al.* Ann Neurol (2016)

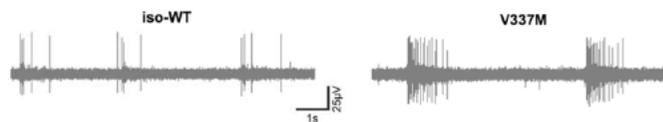
#### Caused by Known Neurodegenerative Mutations

##### APP/PSEN Mutation Carrying Human Neurons



Ghatak *et al.* eLife (2019)

##### Tau Mutation Carrying Human Neurons

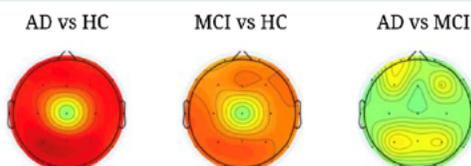


Sohn *et al.* Neuron (2019)

### EEG Biomarker

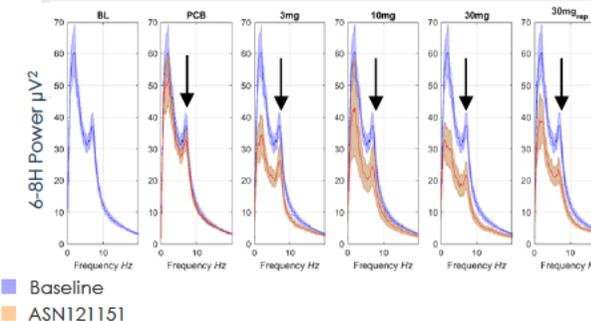
#### Responsive to OGA Inhibition

##### Theta Power is an EEG Biomarker of AD



Musaeus *et al.* J Alz Dis (2018)

##### ASN51 Reduces Theta Power



## OGA Inhibition – Abundant Supportive Preclinical Data

	Chronic / Disease Modifying Benefits						Acute / Symptomatic Benefits <sup>3</sup>					
	Aggregation				Survival	Neuro-inflammation	Motor		Breathing	Synaptic Function / EEG	Cognition	Sleep / Agitation
	Tau	$\alpha$ -Syn	A $\beta$	TDP-43			Tau	$\alpha$ -Syn				
<b>Tool OGA Inhibitors</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>ASN90<sup>1</sup></b>	✓	✓	N/A <sup>4</sup>	N/A	✓	✓	✓	✓	✓	N/A	N/A	N/A
<b>ASN51<sup>2</sup></b>	✓	✓	N/A	N/A	N/A	N/A	✓	✓	✓	✓	N/A	N/A
<b>MK-8719</b>	✓	N/A	N/A	N/A	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A
<b>LY3372689</b>	<i>No published preclinical efficacy data</i>											

<sup>1</sup>Pathfinder

<sup>2</sup>Best-in-class pharmacology

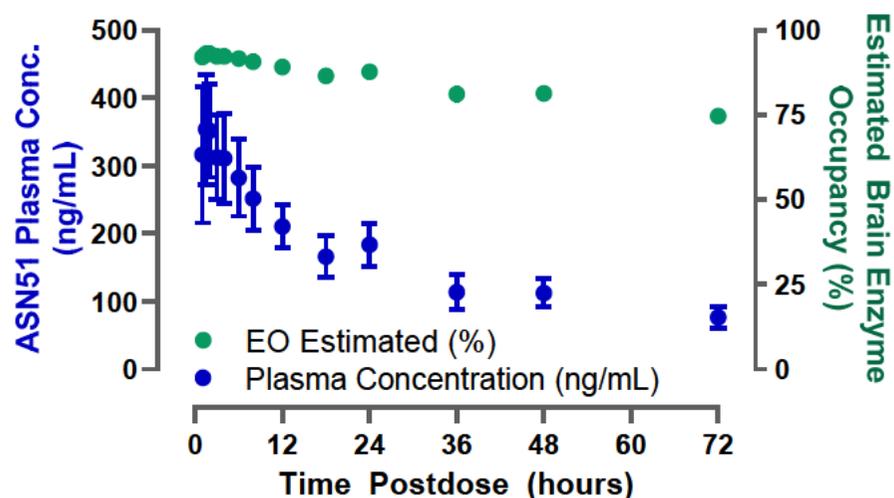
<sup>3</sup>Acute / symptomatic benefits are also supportive of disease modification

<sup>4</sup>N/A: not available / not in the public domain



## ASN51 is a Long-Acting Drug: Confirmation by Initial Pharmacokinetics in Humans

**Plasma Pharmacokinetics and Estimated Brain Enzyme Occupancy**  
(20 mg Single Dose Cohort; 6 Healthy Subjects)



- Rat PET  $EC_{50}$  with correction for human vs rat plasma protein binding for estimation of enzyme occupancy (EO) in human brain
- Estimated human CNS EO for single 20 mg dose is ~85% at 24h and >75% at 72h post-dose
- Enzyme occupancy can be assumed to be equal to enzyme inhibition due to linear dependence of enzyme velocity on enzyme concentration
- ASN51 is **best in class**:  $T_{1/2} \geq 24$  h compared to Eli Lilly's LY3372689  $T_{1/2} = 6$  h<sup>1</sup>; low dose drug for once a day dosing (5-20 mg QD)

<sup>1</sup>Poster presentation Goldsmith *et al.*, AAIC (2021)

## Symptomatic Indications – Accelerated Pathways to Approval

### Biomarker data have the potential to open multiple approval pathways

Disease	Indications with unmet medical need (approximate prevalence)	Relevant Phase 1a Data (Elderly and AD)	Subsequent Phase 1b/2a (sample size for 1:1 active:placebo; treatment duration; primary endpoint)	Approved Drugs and Value Proposition/Sales
<b>Alzheimer's Disease</b>	Mild to moderate cognitive impairment (70%)	EEG, P300 Anxiety/Cognition	64 subjects 4-6 weeks ADAS-Cog	Acetylcholinesterase inhibitors & Memantine, only AD therapies currently marketed
<b>Alzheimer's Disease</b>	Moderate agitation (25%) Severe agitation (25%)	EEG Anxiety/Cognition Actigraphy	74 subjects 4-6 weeks Cohen-Mansfield Agitation Inventory	Axsome ~\$2.6B USD market cap  Otsuka acquired AVP-786 with Avanir in 2014 (Deal for \$3.5B USD)
<b>Alzheimer's Disease</b>	Moderate sundowning (10%) Severe sundowning (10%)	EEG Anxiety Actigraphy	74 subjects 4-6 weeks Cohen-Mansfield Agitation Inventory	Pfizer's PF-05251749 acquired by Biogen in 2020 for \$710M USD
<b>Alzheimer's Disease</b>	Moderate sleep disorder / insomnia / circadian rhythm disorder (30%) Severe sleep disorder / insomnia / circadian rhythm disorder (20%)	EEG Anxiety/Cognition Actigraphy Watch Dreem Headband	64 subjects 4 weeks Polysomnography-derived Total Sleep Time	Merck's Suvorexant (Peak sales expected to be ~\$500M yearly)
<b>Parkinson's Disease Dementia and Lewy Body Dementia</b>	Agitation / Hallucinations (25%)	EEG Anxiety Actigraphy	72 subjects 4-6 weeks Scale for the Assessment of Positive Symptoms – PD	ACADIA's Neuplazid approved in 2016 for PD, ~\$440M USD yearly sales now
<b>Parkinson's Disease</b>	Off Time (25%)	EEG Upper limb motor function	100 subjects 6-8 weeks % off time	Kyowa Kirin's Nourianz approved in 2019, ~\$75M yearly sales now and projected to increase

Other diseases that can be explored further include medically refractory temporal lobe epilepsy, Dravet syndrome, autism, depression, schizophrenia, and ischemic stroke

# Asceneuron's OGA Inhibitors – Ample Clinical Development Opportunities

	<b>ASN51 (Best-in-class pharmacology)</b>	<b>ASN90 (Pathfinder)</b>
<b>Target Indications:</b>	<b>Alzheimer's &amp; Parkinson's disease</b>	<b>Progressive Supranuclear Palsy (PSP)</b>
<b>Toxicology (GLP):</b>	28-days rat & dog	28-days and 3-month rat & dog, 6-month dog, 9-month rat
<b>Anticipated Dosing:</b>	5-20 mg QD	300 mg TID / 450 mg BID
<b>Orphan Status:</b>	No	Yes (US + EU)
<b>Preclinical Data</b>	PK/PD, PET, P-Tau and O-Tau in P301S Tau model, EEG, epilepsy benefit in PTZ model	PK/PD, PET, tangle reduction in P301S Tau model, motor, breathing, and survival benefits in P301L Tau model
	<i>Chronic motor and pathology benefits in Line 61 PD model; abundant supportive literature data</i>	
<b>Prioritized Phase 2 Symptomatic Studies:</b>	<ol style="list-style-type: none"> <li>AD – 28 day symptomatic indication <ul style="list-style-type: none"> <li>Cognition</li> <li>Agitation</li> </ul> </li> <li>PD – 28-day symptomatic Indication <ul style="list-style-type: none"> <li>Off time</li> <li>Agitation</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>AD – 28 day symptomatic indication <ul style="list-style-type: none"> <li>Cognition</li> <li>Agitation</li> </ul> </li> <li>PD – 28-day symptomatic Indication <ul style="list-style-type: none"> <li>Off time</li> <li>Agitation</li> </ul> </li> </ol>
<b>Prioritized Phase 2 Disease Modifying Proof of Concept Studies:</b>	1. AD – 6 month Tau PET, CSF p-Tau 181, 217	NA
<b>Pivotal Trial Status:</b>	Multiple opportunities	<u>Open IND</u> for Ph 2/3 18-month PSP study
<b>Clinical Experience to Date:</b>	Phase 1a: 12 healthy volunteers to date with single 20 mg, 50 mg doses; safe and well tolerated; excellent PK	Three Phase 1a Trials: up to 1000 mg single doses; 500 mg BID for 12 days; safe and well tolerated

## Competition: Tau Clinical Landscape

Company	Modality	Molecule	Development Stage (Indication)	Comment
<i>Novel chemical entities (small molecule drugs) targeting <b>intracellular</b> tau</i>				
Asceneuron	OGA inhibitor	ASN120290	Phase 2/3 ready (PSP)	Active
Asceneuron	OGA inhibitor	ASN121151	Phase 1 (AD/PD)	Active
Eli Lilly	OGA inhibitor	LY3372689	Phase 1 (AD)	Active
Merck & Co	OGA inhibitor	MK-8719	Phase 1 (AD)	Discontinued <sup>1</sup>
Ionis	Tau antisense oligo	IONIS MAPTRx	Phase 1 (AD)	Injectable drug

### *Novel biological entities (antibodies & vaccines) targeting **extracellular** tau<sup>2</sup>*

Roche	Tau antibody	RG6100	Phase 2 (AD)	Injectable drug
Eli Lilly	Tau antibody	LY3303560	Phase 2 (AD)	Injectable drug
Lundbeck	Tau antibody	Lu AF87908	Phase 1 (AD)	Injectable drug
Biogen	Tau antibody	BIB076	Phase 1 (AD)	Injectable drug
Janssen (J&J)	Tau antibody	JNJ-63733657	Phase 2 (AD)	Injectable drug
UCB	Tau antibody	UCB0107	Phase 2 (AD)	Injectable drug
Axon	Tau vaccine	AADvac1	Phase 1 (nvf PPA); Phase 2 (AD)	Injectable drug
AC Immune	Tau vaccine	AC-35	Phase 1/2 (AD)	Injectable drug

Key benefits of orally bioavailable OGA inhibitors:

- Target pathology observed in patient brains: formation of toxic aggregates of tau protein in neurons (tau antibodies thought to inhibit transcellular spread of toxic tau)
- Multimodal drugs (tau &  $\alpha$ -synuclein) with additional synaptic mechanism of action

<sup>1</sup>Different structural class: carbohydrate mimetic

<sup>2</sup>Development of tau antibodies BIB092 and ABBV-8E12 has been discontinued



## Treating the Root Cause of Neurodegeneration

UNIQUE  
PLATFORMS



ATTRACTIVE  
PIPELINE



DIFFERENTIATED  
POSITION



EXPERIENCED  
TEAM

**Major Phase 1 Clinical Readouts during 3-4Q2021**



# Contact Information

## HEADQUARTERS

Asceneuron SA  
EPFL Innovation Park  
Bâtiment B  
CH-1015 Lausanne  
Switzerland

## US OFFICE

226 Airport Pkwy #400  
San Jose, CA 95110  
United States of America

## CONTACT

[asce-contact@asceneuron.com](mailto:asce-contact@asceneuron.com)

**From:** Jude-Marie A Smalec

**Sent time:** 08/17/2021 12:35:01 PM

meyerjr@med.cuny.edu; jsmalec@med.cuny.edu; liceg@med.cuny.edu; [REDACTED]@gmail.com; Birgland Joseph; Jaclyn N Churchill; Gloria J Mabry; Olga Waters; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ana Motta-Moss; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gina Allegritti; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Joy Richards; Jun Yoshioka; Junghoon Kim; Keosha Bond; Kaliris Salas; Katherine Mendis; Kevin A Ali; Kelly D Robinson; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Bauman; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Mario De La Cruz; Marisol Hernandez; Maxine Nwigwe; Nancy Sohler; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Rosa Lee; Rosalinda Guce; Rosemary Wiczorek; Daniel M Richter; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; ; ;

**Subject:** A fun learning and sharing experience on Thursday, August 19 at 1:00 PM!

zoom



Colleagues,

Join us for a fun learning and sharing experience this Thursday, August 19 at 1:00 PM! We will be hosting the second Faculty Support session on the important topic, "*Facilitating Learning in Small Groups.*"

We hope to see you on Thursday!  
Nicole and Jude-Marie

**[Join the FS Session this Thursday, August 19, at 1:00 PM!](#)**

One tap mobile: US: [+16465588656](tel:+16465588656), [+13126266799](tel:+13126266799), [+13017158592](tel:+13017158592), [+12532158782](tel:+12532158782), [+13462487799](tel:+13462487799), [+16699006833](tel:+16699006833), [\\*280562#](tel:+16465588656) or [\\*280562#](tel:+13126266799)

Meeting URL: <https://ccny.zoom.us/j/89869445373?pwd=YVUxM1F3WC9JeHZScT11cXBxL2F5QT09>

Meeting ID: 898 6944 5373  
Passcode: 280562

**Join by Telephone**

For higher quality, dial a number based on your current location.

Dial:

US: +1 646 558 8656 or +1 312 626 6799 or +1 301 715 8592 or +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833

Meeting ID: 898 6944 5373

Passcode: 280562

**From:** Marc Scullin  
**Sent time:** 08/23/2021 08:55:07 AM  
**To:** Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts  
**Subject:** Office of Research - NIH Funding Opportunities - Week ending 08/20/2021

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Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending August 20, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 08/20/2021, [Click HERE](#)

## Funding Opportunities

- [Maximizing Opportunities for Scientific and Academic Independent Careers \(MOSAIC\) Postdoctoral Career Transition Award to Promote Diversity \(K99/R00 Independent Clinical Trial Not Allowed\)](#)  
(PAR-21-271)  
National Institute of General Medical Sciences  
Application Receipt Date(s): The first due date for New applications is October 27th, 2021 by 5:00 PM local time. The first due date for Resubmission applications is November 12, 2021 by 5:00 PM local time.
- [Maximizing Opportunities for Scientific and Academic Independent Careers \(MOSAIC\) Postdoctoral Career Transition Award to Promote Diversity \(K99/R00 - Independent Clinical Trial Required\)](#)  
(PAR-21-272)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): The first due date for New applications is October 27th, 2021 by 5:00 PM local time. The first due date for Resubmission applications is November 12, 2021 by 5:00 PM local time.
- [Maximizing Opportunities for Scientific and Academic Independent Careers \(MOSAIC\) Postdoctoral Career Transition Award to Promote Diversity \(K99/R00 - Independent Basic Experimental Studies with Humans Required \(BESH\)\)](#)  
(PAR-21-273)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): The first due date for New applications is October 27th, 2021 by 5:00 PM local time. The first due date for Resubmission applications is November 12, 2021 by 5:00 PM local time.
- [Maximizing Opportunities for Scientific and Academic Independent Careers \(MOSAIC\) Institutionally-Focused Research Education Award to Promote Diversity \(UE5 - Clinical Trial Not Allowed\)](#)  
(PAR-21-277)  
National Institute of General Medical Sciences  
Application Receipt Date(s): November 18, 2021 November 15, 2022 November 15, 2023
- [Blueprint Medtech: Small Business Translator \(U44 - Clinical Trial Optional\)](#)  
(PAR-21-282)  
National Institute on Drug Abuse  
Application Receipt Date(s): October 20, 2021; February 18, 2022; June 20, 2022
- [NCI Research Specialist \(Clinician Scientist\) Award \(R50 Clinical Trial Not Allowed\)](#)  
(PAR-21-306)  
National Cancer Institute  
Application Receipt Date(s): October 06, 2023
- [Small Grants for New Investigators to Promote Diversity in Health-Related Research \(R21 Clinical Trial Optional\)](#)  
(PAR-21-313)  
National Institute of Diabetes and Digestive and Kidney Diseases  
National Human Genome Research Institute  
Application Receipt Date(s): September 07, 2024
- [Blueprint MedTech: Incubator Hubs \(U54 Clinical Trial Not Allowed\)](#)  
(PAR-21-314)  
National Institute of Biomedical Imaging and Bioengineering  
Application Receipt Date(s): October 20, 2021
- [Blueprint MedTech Translator \(UG3/UH3 - Clinical Trial Optional\)](#)  
(PAR-21-315)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): June 20, 2024
- [Innovative Mental Health Services Research Not Involving Clinical Trials \(R01 Clinical Trials Not Allowed\)](#)  
(PAR-21-316)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.

- [Selectively Target Technology Development to Understand How Changes or Dysfunction at the Capillary, Arterioles, and Small Lymphatic Vessels Level Can Have Long-term Impact on AD/ADRD \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-026)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): November 08, 2021 [HIV Prevention and Alcohol \(R01 Clinical Trials Optional\)](#)
- (RFA-AA-21-016)  
National Institute on Alcohol Abuse and Alcoholism  
Application Receipt Date(s): December 16, 2021
- [HIV Prevention and Alcohol \(R34 Clinical Trials Optional\)](#)  
(RFA-AA-21-017)  
National Institute on Alcohol Abuse and Alcoholism  
Application Receipt Date(s): December 16, 2021
- [Limited Competition for the Continuation of Epidemiology of Diabetes Interventions and Complications \(EDIC\) Study Research Center \(Collaborative U01 Clinical Trial Not Allowed\)](#)  
(RFA-DK-21-503)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): Not Applicable
- [Innovative Multi-Level Approaches and Strategies to Prevent, Test and Treat HIV in Primary Care Settings in Health Disparity Populations in Geographic Hot Spots in the United States \(R01 - Clinical Trial Required\)](#)  
(RFA-MD-22-001)  
National Institute on Minority Health and Health Disparities  
National Institute of Mental Health  
Application Receipt Date(s): January 14, 2022
- [Deciphering Immune-CNS interactions in people living with HIV on Anti-Retroviral therapy \(R01 Clinical Trial Optional\)](#)  
(RFA-MH-21-250)  
National Institute of Mental Health  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): December 07, 2021
- [Deciphering Immune-CNS interactions in HIV utilizing in-vitro and in-vivo model systems \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-MH-21-251)  
National Institute of Mental Health  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): December 07, 2021
- [Limited Competition: Genome Sequencing Center for the Gabriella Miller Kids First Pediatric Research Program \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-RM-21-013)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): Not Applicable

**From:** Maria D Lima  
**Sent time:** 08/23/2021 03:53:26 PM  
Tashuna Albritton; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Lisa Coico; Patricia Cortes; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica  
**To:** Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Joao Nunes; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Dani Mcbeth; Nicole Roberts  
**Cc:** Marc Scullin  
**Subject:** Re: Information about HRPP and Ideate  
**Attachments:** HRPP Transition Update #3 - IRB Manager.pdf

---

Dear Investigators,

Please see attached the information about the transition of the Human Research Protections Program.

Best,

Maria

Maria F. Lima, Ph.D.

Medical Professor, Molecular Cellular and Biomedical Sciences

Associate Dean for Research/Chief Research Officer

160 Convent Ave

Harris Hall, Suite 10

New York, NY 10031

Phone: (212) 650-6386

Email: [mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)

CUNY School of Medicine

The City College  
of New York

## HRPP Transition Update #3

### IRB Manager Q & A

As we prepare to go live with **IRB Manager** on Friday, September 3, 2021, we are providing some important questions and answers, including clarification on previous information that may have been provided during the training sessions.

**Q. When is the last date to request a new user profile in IDEATE?**

**A.** August 27<sup>th</sup> is the last day that any new user profiles will be created in IDEATE.

**Q. What will happen if I have an application currently in development in IDEATE and it does not meet the deadline dates?**

**A.** Please contact your campus HRPP Coordinator at the link provided below:

<https://www.cuny.edu/research/research-compliance/human-research-protection-program/hrpp-coordinators-list/>

**Q. If I have a submission that is approved in IDEATE after September 3<sup>rd</sup> (the IRB Manager “Go-Live” date), what will happen to my active approved protocol?**

**A.** The shell will be migrated into IRB Manager after the IRB application has been processed and approved.

**Q: What is the link for IRB Manager?**

**A:** <https://cuny.my.irbmanager.com/>

**Q: What credentials will be used to access IRB Manager?**

**A:** From the IRB Manager home page, select “To login using CUNY Login”. You will use your CUNYFirst credentials, where your username is entered as firstname.lastname##@login.cuny.edu followed by the password associated with that username.

If you are a CUNY researcher/research personnel who DOES NOT have CUNYFirst credentials, request an IRB Manager account by emailing (HRPP@cuny.edu) and include the following information in your email:

- First and Last Name
- EMPLID
- DOB (Does not need to be your actual DOB)
- PIN (4 digits - you can make something up)
- CUNY email address

**\*You will be notified within 1-2 business days with your credentials to log into IRB Manager.**

**Q: Will I have to upload my current CITI Certifications?**

**A.** No. If you have completed CITI training as a CUNY researcher, information related to your CITI training will be linked automatically to your IRB Manager profile, and will be available to HRPP and IRB reviewers; **however**, you **MUST** log into CITI (link provided below) and confirm that **your preferred email address in CITI is your CUNY email address. Your secondary email address** should be a personal email address. **Your preferred email address** is to ensure your CITI Certification is linked to your profile in IRB Manager.

The process for confirming and/or changing your preferred email address in CITI is as follows (this process applies to ALL research personnel on a protocol (if applicable):

1. Log in to CITI at <https://www.citiprogram.org>
2. In the upper right corner under your name and ID, click the down arrow.
3. Select "Profiles".
4. Under "Member Profiles", click "Edit Profile".
5. Scroll down to **Your preferred email address**.
6. Confirm that this is your current CUNY email address, or revise if needed.

**\*If you have not completed this process above then you MUST upload our current CITI Certification to your profile in IRB Manager. As a reminder, your CITI Certification is required for HRPP/IRB review of your IRB application.**

**Q: Will Faculty Advisors be able to review a student PI's IRB application before the student PI submits the application for HRPP/IRB processing and review?**

**A:** Yes. Faculty Advisors will review and sign off on their student PIs IRB applications. Faculty Advisors will also receive email notifications on their student PIs IRB applications.

**Q: What is meant by ONLY shells will be migrated into IRB Manager?**

**A:** Only the information below will be migrated from IDEATE into IRB Manager:

1. Protocol Number
2. Protocol Title
3. Approval Period
4. Approval Category
5. Research Personnel
6. Link to the IDEATE protocol

**Q. If ONLY the shell will be migrated, how do I get my active approved protocol into IRB Manager?**

**A.** The current process is for researchers and/or their staff to create an amendment to populate their active approved protocol in IRB Manager with the details and documents retrieved from their active approved IDEATE protocol. Researchers may also obtain assistance from staff at CUNY Central. Please coordinate this process your campus HRPP Coordinator Office.

**Q. Will research personnel be able to create IRB applications on behalf of the PI?**

**A.** Yes; however, the PI will be required to review and sign off on the IRB application before it is submitted for HRPP/IRB processing and review. This is the same process from IDEATE.

**Q. What can I do to prepare for the move from IDEATE to IRB Manager?**

**A.** Attend IRB Manager training and have your students and research personnel attend training as well. Look for your protocols in IDEATE and ensure that any pending tasks are addressed. Get in touch with your HRPP Coordinator with any specific questions about your protocols.

Download your IDEATE applications, documents, and approval letters.

The process is as follows:

**To download an application and attachments:**

The current approved attachments can be downloaded from the LiveList application Attachments tab or via each Submission.

**To create a PDF of the application:**

- From the LiveList, go to the **Lifecycle Event Manager** tab, Submissions, and click “View”
- Under **Details for the Initial Application** (or the most recent approved Amendment, which would then reflect the current approved application), a pop-up window will generate; click “Print” in the upper right corner to generate a PDF of that submission.

You can do this for each submission to keep a record in your files. You can also download the attachments included with each submission via this process.

Approval letters can be downloaded from the LiveList - go to the Communications tab.

**Q. What will happen to my protocols in IDEATE that are closed or expired?**

**A.** Researchers need to comply with the CUNY’s retention policy for human subjects research. It is highly suggested that researchers log into IDEATE and save their closed and expired protocols.

**Q. Will I have access to my IDEATE protocols indefinitely?**

**A.** No. For active approved protocols that are migrated from IDEATE to IRB Manager, you will be able to access the IDEATE protocol via a link for a period of time, but there will be a deadline for transferring data from IDEATE to IRB Manager.

**From:** Tricia Mayhew-Noel  
**Sent time:** 08/24/2021 11:54:20 AM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)  
**Attachments:** FCOI\_Wang\_Cassava\_Sciences\_Form1(5).pdf

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Dear Professor Wang,  
CUNY's Conflict of Interest Committee will be reviewing this project at the next committee meeting, however, the form attached is missing your response to question number 3. Please respond and return to me such that I may forward to the committee.

Thanks and best regards,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Tricia Mayhew-Noel  
**Sent:** Tuesday, July 27, 2021 1:16 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Fw: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,  
On a previous Conflict of Interest application, titled, "Linking peripheral and brain insulin resistance to AD neuropathology and cognition", which was funded by National Institute of Aging NIH/Rush University Medical Center, you stated the following to Dr. Lima, CCNY's College Conflicts Officer, which was indicated in her review of your application and in the determination of a COI. Please confirm whether this information is still applicable or whether it should be updated for this new grant being funded by Cassava.

*"The PI serves as a consultant and a member of the scientific advisory board of CASSAVA for preclinical development and clinical trials of their proprietary drug and diagnostic (biomarker) candidates in central nervous diseases, especially the Alzheimer's disease. Together with other experts in the field, he answers their scientific questions to facilitate CASSAVA's drug and diagnostic development in preclinical testing and clinical trial design. He also functions as CASSAVA's academic collaborator in which he participates as a co-PI or co-investigator in ongoing NIH-funded SBIR and STTR (R41, R42, R44) clinical trial projects. In these projects, he is responsible for analyzing patient samples for CASSAVA. CASSAVA owns the intellectual properties (patents) of all the small molecule drug and diagnostic candidates.*

Thanks for your response.

Best Regards,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>

**From:** Holli-Anne S Tai  
**Sent:** Tuesday, June 29, 2021 4:15 PM  
**To:** Tricia Mayhew-Noel  
**Cc:** Awards; Hoau-yan Wang  
**Subject:** FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Please see attached FCOI supplement for Professor Wang's new project with Cassava Sciences. May you please let me know if a management plan will be required or if anything else is needed for further determination?

Thank you,

**Holli-Anne Tai**  
Grants Associate  
Grants and Sponsored Programs  
The City College of New York  
160 Convent Avenue | SH - Room 16  
New York, NY 10031  
Ph: 212-650-5418 | F: 212-650-7906  
GSP - <http://www.ccny.cuny.edu/research/gsp.cfm>  
PARS - <http://www.ccny.cuny.edu/research/pars.cfm>

FCOI\_Wang\_Cassava\_Sciences\_Form1(5).pdf

# CUNY Significant Financial Interest (SFI) Disclosure Form For Sponsored Projects NOT Funded by the Public Health Service

\* to be completed by each investigator on the project

Name of Investigator<sup>1</sup>: **Hoau-Yan Wang**

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Role of Investigator (project director / **PI** / co-PI / consultant / etc.):

---

Phone: **212-650-8813**

Email: **hywang@med.cuny.edu**

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CUNY College/Site of Research: **CDI-3211**

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Title of Sponsored Project<sup>2</sup>: **Preclinical assessing the effectiveness of Simufilam on cognitively impaired Parkinson's disease cases using postmortem brains**

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**Cassava Sciences**

Funding Source:

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Disclosure submission for:

- New funding proposal or application
- Annual progress report
- Material change in a previously disclosed SFI
- Discovery or acquisition of a new SFI
- New investigator joining an ongoing sponsored project at CUNY

Please indicate whether **you, your spouse, or your dependent children** have any of the following financial interests that may reasonably be related to your institutional responsibilities<sup>3</sup>:

**Please note that this form must be completed by all individuals responsible for the design, conduct, or reporting of sponsored project.**

---

<sup>1</sup> **Investigator:** The project director, principal investigator, co-principal investigators, and any other person, regardless of title of position, who is responsible for the design, conduct, or reporting of a University Sponsored Project, which may include, for example, collaborators or consultants, whether or not such individual is employed by the University or the Research Foundation.

<sup>2</sup> **Sponsored Project:** Projects or activities involving research, creative activity, training, instruction or service undertaken within or on behalf of the University pursuant to funding or other support from an External Sponsor.

<sup>3</sup> **Institutional Responsibilities:** An investigator's professional responsibilities on behalf of the University, performed in the course of and within the scope of the Investigator's appointment or employment by the University, which may include, for example, activities such as research, research consultation, teaching, professional practice, institutional administration, committee memberships, and service on panels such as Institutional Review Boards, Institutional Animal Care and Use Committees or Institutional Biosafety Committees.

1. A total of salary, any other payment for services (for example, consulting fees or honoraria), and royalties expected to be received in the next 12 months that exceeds \$10,000, when aggregated for you, your spouse, and your dependent children, excluding any salary, royalties, or other remuneration from CUNY and income from seminars, lectures, or teaching engagements sponsored by public or nonprofit entities or from service on advisory committees or review panels for such entities.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. An equity interest (for example, stocks, stock options, or other ownership interests) in any single entity that, when aggregated for you, your spouse, and your dependent children, exceeds \$10,000 in value, as determined through reference to public prices or other reasonable measures of fair market value, <u>AND</u> represents more than a five percent (5%) ownership interest in the entity.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Intellectual property rights and interests (for example, patents, copyrights).	Yes <input type="checkbox"/> No <input type="checkbox"/>

**For yourself ONLY:**

4. If you are responsible for developing, discovering, or creating CUNY-owned intellectual property, are you aware of the acquisition or intention to acquire ownership of, or a license to, that intellectual property by any corporation, partnership, or other legal entity (excluding entities controlled by the U.S. government, the State or City of New York, or CUNY) in or from which you have a financial interest described in any of Items 1 or 2 above?  NOTE: If you answered "Yes" to this question you must also complete the CUNY Acquisition of or License to CUNY Intellectual Property (CALCIP) form and submit it to your College Conflicts Officer and the Director of the CUNY Technology Commercialization Office (TCO).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
5. Do you teach, supervise, or otherwise have control over any student or postdoctoral associate at CUNY who might be involved in work for any corporation, partnership, or other legal entity (excluding entities controlled by the U.S. government, the State or City of New York, or CUNY) in or from which you have a financial interest described in any of Items 1 or 2 above?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

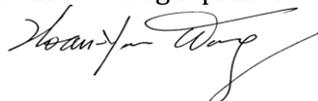
**If you responded "yes" to any of the questions above, you must also complete a CUNY Significant Financial Interest Supplement Form. This Form, and the Supplement Form if required, should be submitted to your College Conflicts Officer, with a copy to your Grants Officer.**

If you have any questions about this Form or the information it seeks, please refer to the [sponsored projects conflict of interest web site](#) or contact your [College Conflicts Officer](#).

**Agreement & Signature:**

By signing this form, I certify the following:

- The above statements are complete, true and accurate.
- I will submit an updated Form annually, prior to submission of annual progress reports; and also within 30 days of any material change to the above-disclosed Significant Financial Interest(s) or discovering or acquiring a new Significant Financial Interest.
- I will comply with all applicable regulations, CUNY policies, sponsor requirements, and any conflict of interest management and oversight plans issued by CUNY.



6/29/2021

Signature

Date

**From:** Nicolette Henning <Nicolette.Henning@keyence.com>

**Sent time:** 08/24/2021 03:10:33 PM

**To:** Itzhak (Itzik) Mano; Jorge Morales; Maria D Lima; Ranajeet Ghose; Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Andreas Kottmann; Christine Li; Mark Emerson; Osceola Whitney; Andrey Rudenko; Hysell Oviedo; Bao Vuong; Anuradha Janakiraman

**Subject:** [EXTERNAL] Keyence Microscope Installation

---

**From:** Andreas Kottmann  
**Sent time:** 08/25/2021 05:32:27 AM  
**To:** Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres; Geri Kreitzer; Ashiwel Undieh  
**Cc:** Maria D Lima  
**Subject:** supplemental and covid related funding for grad students; first EC meeting of the doctoral programs in biology

---

Dear Doctoral Faculty of CSOM:

The doctoral programs in biology EC held their first CUNY wide meeting of the new academic year yesterday.

The committee voted on a number of new faculty members. Ashiwel's application for membership in the NS subprogram was approved and is effective immediately. Congratulations to Ashiwel.

Further, the main topic of the meeting was the allocation and use of previously announced Covid related emergency and supplemental funding and new emergency funding.

**Earlier last year two initiatives were announced:**

- (1) Grad students entering their 5<sup>th</sup> year this autumn will be supported in full by the GC
- (2) Grad students entering their 6<sup>th</sup> year will receive a Grad D appointment from the GC and will be paid \$ 5,702. The Grad D position will make the student eligible for NYSHP insurance. The position requires a job description that the graduate deputy chair (GDC) or the mentor can design.

**Newly announced mechanisms of support:**

The MCD subprogram was unable to fill two allocated grad student slots. Since the GC budgeted to support each of these slots with 30,000 \$ during the current academic year, Josh Brumberg allows the EC committee to decide on how to use those funds (60,000\$) which have to be spend during the current financial year.

The following was decided:

- a) Taking a strongly argued lead from the 3 student reps on the committee, the funds will first be used to bring all grad students regardless of seniority to an annual support level of 32,000 \$. Current support letters will be used to determine need.
- b) Remaining funds will be used to pay tuition for 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> year students. (Note: as per bylaws, students have to pay tuition from their 6<sup>th</sup> year onwards. Tuition is covered by the GC for all students in year 1 to 5. After year 5 often the PI pays for tuition on behalf of the student.)
- c) Any remaining funds will be used to pay 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> year students out of the teaching part of their support package as long as they have already fulfilled their teaching obligation in previous semesters. I.e., if the commitment letter states that a part of their support comes from teaching, that part will be paid by the GC so the students can instead concentrate on completing their thesis.

A quick back of an envelope calculation during the meeting suggested that a, b, c will spend out the available 60,000 \$.

**Complications in getting the money to the students:**

The support from the GC is made in form of individual awards to named students through the financial aid department. In regard to (1) and (2) above, the students were notified by direct email during spring without copies to the EO, GDCs or Mentors. Not all students responded. Some students responded but might not have notified their GDCs or mentors. In the following weeks Joan Reid contacted individual students. Turns out that some students dismissed original email from financial aid office. Also, some students accepted the awards but did not yet receive it.

**What to do:**

Please verify the following and respond to me with corrections and additions. I will then follow up with the mentor and student, and coordinate with Gonzalo in regard of the next year commitment package:

We have two 5<sup>th</sup> year students at CSOM:  
Naomi Gaggi (Junghoon)  
Santiago Uribe-Cano (Andreas)

We have two 6<sup>th</sup> and above students at CSOM  
Zelda (Itzhak)  
Dustin (Andreas)

**Other matters of importance:**

The MCD advisory committee will be expanded by on additional alternate member slot. As per bylaws the alternate member will vote as a regular member on all admissions related subjects.  
There is a strong desire to have CSOM representation on this committee. Let's please agree on one candidate and support that candidate once the poll is send to you during the next few days.



**From:** Maria D Lima  
**Sent time:** 08/25/2021 09:33:49 AM  
**To:** Tashuna Albritton; Keosha Bond; Patricia Cortes; Victoria Frye; Lice Ghilardi <[REDACTED]@gmail.com>; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; John (Jack) Martin; Noel Manyindo; Wenhua Lu; Erica Lubetkin; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Jun Yoshioka; Hoau-yan Wang  
**Cc:** Marc Scullin  
**Subject:** FW: Request for Research Proposals - CCNY-MSKCC Partnership

---

Good morning,  
Please let me know if you are interested in this opportunity, or you know anyone who is, so we can discuss further.  
Maria

---

**From:** "Leo Spychala, CCNY-MSK Partnership Program Manager" <no-reply@ccny.cuny.edu>  
**Date:** Tuesday, August 24, 2021 at 5:00 PM  
**To:** Maria D Lima <mlima@med.cuny.edu>  
**Subject:** Request for Research Proposals - CCNY-MSKCC Partnership

[Collaborator Request Form CCNY-MSK Partnership](#)  
[LOI Template CCNY-MSK Partnership](#)  
[Request for Research Proposals Aug 2021 - CCNY-MSKCC](#)

## CCNY-MSKCC Partnership - PILOT RESEARCH FUNDING OPPORTUNITY

**Application Deadline: October 22, 2021**

### **Funding:**

- Budget period runs from March 1, 2022 to March 31, 2023.
- Pilot projects may request up to \$100,000, and Pre-pilot projects may request up to \$50,000.

### **Eligibility:**

- Each proposal must have a Principal Investigator from City College of New York and Memorial Sloan Kettering Cancer Center.
- Proposals should focus on research pertaining to: 1) translational cancer health disparities; 2) biomedical engineering projects relevant to impacting cancer health disparities; 3) differences in tumor biology related to genetic variation across racial and ethnic groups; 4) barriers to biospecimen/biobanking collection among racial/ethnically diverse and underrepresented populations; 5) impact of discrimination on cancer outcomes; and 6) risk factors for cancer, e.g., obesity, tobacco, etc.

*If you need assistance in finding a suitable collaborator, please submit the attached Collaborator Request Form by **September 10, 2021** to Program Assistant, Lakshmi Menon ([MenonL3@mskcc.org](mailto:MenonL3@mskcc.org)).*

### **Letter of Intent:**

- A letter of Intent (LOI) must be submitted on or before **October 1, 2021**.
- The LOI should include the project title, objective, specific aims, and the type of project funding (Pilot or Pre-pilot) you will be applying for. Attached is a template you may use as a guide.

Please see the attached research fund announcement or visit the CCNY-MSK Partnership website: <https://ccnymsk-partnership.ccnycuny.edu/> for additional information. Interested applicants must submit their LOI by **10/01/2021** and application by **10/22/2021** to CCNY-MSKCC Program Managers: Leo Spychala ([lspychala@ccny.cuny.edu](mailto:lspychala@ccny.cuny.edu)) and Nicole Roberts-Eversley ([RobertsN@mskcc.org](mailto:RobertsN@mskcc.org)), and Program Assistant: Lakshmi Menon ([MenonL3@mskcc.org](mailto:MenonL3@mskcc.org)).

The City College of New York (CCNY) and Memorial Sloan Kettering Cancer Center (MSKCC) Partnership has successfully created a mutually beneficial, cross-institutional collaboration that has emphasized research across the translational continuum, the creation of an education pipeline for attracting minority and low-income students to careers in cancer research, and the establishment of community networks and resources for conducting linguistically and culturally-responsive community engaged research among diverse, at-risk populations. This call for research proposals seeks pilot or pre-pilot projects developed jointly across CCNY and MSKCC investigative teams.

# CCNY-MSK

**PARTNERSHIP**  
FOR CANCER RESEARCH, EDUCATION,  
AND COMMUNITY OUTREACH

***CCNY-MSKCC Principal Investigators***

Tim A. Ahles, PhD  
Francesca Gany, MD, MS  
Karen Hubbard, PhD  
Bao Vuong, PhD

**From:** Hoau-yan Wang  
**Sent time:** 08/25/2021 10:17:02 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] New comment

---

See below.

---

**From:** alerts=pubpeer.com@mail.pubpeer.com <alerts=pubpeer.com@mail.pubpeer.com> on behalf of Pubpeer <alerts@pubpeer.com>  
**Sent:** Wednesday, August 25, 2021 6:05 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] New comment

PubPeer

**Dear Hoau-Yan Wang,**

There's a new comment on your article entitled: **High-Affinity Naloxone Binding to Filamin A Prevents Mu Opioid Receptor–Gs Coupling Underlying Opioid Tolerance and Dependence, PLoS ONE**

This link will log you in so that you can respond to the comment; please do not share the link with anyone else

See comment and respond

Regards,  
PubPeer

---

If you're having trouble clicking the "See comment and respond" button, copy and paste the URL below into your web browser:

<https://pubpeer.com/publications/0B03A2B682AAAD6A8E9D7C2C49DD22/author-response/29564885?signature=f4e71e67d4e7cea65c23d22c95d878e1d6755342f15d0b16d1873c69d5f8da87>

[Unsubscribe from all PubPeer emails](#)

**From:** Hoau-yan Wang  
**Sent time:** 08/25/2021 10:19:36 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] New comment

See below

**From:** alerts=pubpeer.com@mail.pubpeer.com <alerts=pubpeer.com@mail.pubpeer.com> on behalf of Pubpeer <alerts@pubpeer.com>  
**Sent:** Wednesday, August 25, 2021 4:45 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] New comment

PubPeer

**Dear Hoau-Yan Wang,**

There's a new comment on your article entitled: **Reducing amyloid-related Alzheimer's disease pathogenesis by a small molecule targeting filamin A, The Journal of neuroscience : the official journal of the Society for Neuroscience**

This link will log you in so that you can respond to the comment; please do not share the link with anyone else

See comment and respond

Regards,  
PubPeer

If you're having trouble clicking the "See comment and respond" button, copy and paste the URL below into your web browser:

<https://pubpeer.com/publications/F91E0D22B887598445BB1F908393EE/author-response/29213444?signature=14ab1c2b8a3a2a1c118011325bcbe85e99a4e72c12bfd071bea0ef42eb29358d>  
[Unsubscribe from all PubPeer emails](#)

**From:** Hoau-yan Wang  
**Sent time:** 08/25/2021 10:21:41 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Hi Dr. Wang

---

See below

---

**From:** Aaron Ryden <[REDACTED]@gmail.com>  
**Sent:** Tuesday, August 24, 2021 9:07 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Hi Dr. Wang

Hello Dr. Wang,

I have been a big believer in PTIE-125 / Simulam for the past 4-5 years. I have been a fan of Remi, Dr. Lindsay Burns, and yourself. I am terrified by the recent filing below, contesting your research and the trials / success already seen by PTIE-125.

<https://www.regulations.gov/docket/FDA-2021-P-0930/document>

I would really appreciate your thoughts, comments, and/or reassurance. This smells like a hit piece, and a scared Big Pharma last resort.

Thank you,  
Aaron Ryden

**From:** Tricia Mayhew-Noel  
**Sent time:** 08/26/2021 03:39:49 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

---

Dear Prof. Wang;

The Conflicts Committee Administrator asks the following; The equity interest is valued with Cassava Sciences is valued at \$125,000, is there a corresponding percentage of the ownership? Please respond at your earliest convenience.

Thanks,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Hoau-yan Wang  
**Sent:** Wednesday, August 25, 2021 10:35 AM  
**To:** Tricia Mayhew-Noel  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Sorry about the missing response to question #3. Enclosed is the rectified one.

Thanks.

Best regards,

Hoau

---

**From:** Tricia Mayhew-Noel  
**Sent:** Tuesday, August 24, 2021 11:54 AM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,

CUNY's Conflict of Interest Committee will be reviewing this project at the next committee meeting, however, the form attached is missing your response to question number 3. Please respond and return to me such that I may forward to the committee.

Thanks and best regards,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)

[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)

Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>

<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Tricia Mayhew-Noel

**Sent:** Tuesday, July 27, 2021 1:16 PM

**To:** Hoau-yan Wang

**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King

**Subject:** Fw: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,

On a previous Conflict of Interest application, titled, "Linking peripheral and brain insulin resistance to AD neuropathology and cognition", which was funded by National Institute of Aging NIH/Rush University Medical Center, you stated the following to Dr. Lima, CCNY's College Conflicts Officer, which was indicated in her review of your application and in the determination of a COI. Please confirm whether this information is still applicable or whether it should be updated for this new grant being funded by Cassava.

*"The PI serves as a consultant and a member of the scientific advisory board of CASSAVA for preclinical development and clinical trials of their proprietary drug and diagnostic (biomarker) candidates in central nervous diseases, especially the Alzheimer's disease. Together with other experts in the field, he answers their scientific questions to facilitate CASSAVA's drug and diagnostic development in preclinical testing and clinical trial design. He also functions as CASSAVA's academic collaborator in which he participates as a co-PI or co-investigator in ongoing NIH-funded SBIR and STTR (R41, R42, R44) clinical trial projects. In these projects, he is responsible for analyzing patient samples for CASSAVA. CASSAVA owns the intellectual properties (patents) of all the small molecule drug and diagnostic candidates.*

Thanks for your response.

Best Regards,

Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics

Division for Research

Shepard Hall Room 108B

160 Convent Ave

New York, NY 10031

1-212-650-7902 (phone)

1-212-650-8344 (fax)

[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)

Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>

<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Holli-Anne S Tai

**Sent:** Tuesday, June 29, 2021 4:15 PM

**To:** Tricia Mayhew-Noel

**Cc:** Awards; Hoau-yan Wang

**Subject:** FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Please see attached FCOI supplement for Professor Wang's new project with Cassava Sciences. May you please let me know if a management plan will be required or if anything else is needed for further determination?

Thank you,

**Holli-Anne Tai**

Grants Associate

Grants and Sponsored Programs

The City College of New York

160 Convent Avenue | SH - Room 16

New York, NY 10031

Ph: 212-650-5418 | F: 212-650-7906

GSP - <http://www.ccny.cuny.edu/research/gsp.cfm>

PARS - <http://www.ccny.cuny.edu/research/pars.cfm>

**From:** Marc Scullin

**Sent time:** 08/30/2021 08:51:34 AM

**To:** Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hou-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** CSOM Office of research - NIH funding Opportunities - Week ending 8/27/21

Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending August 27, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 08/27/2021, [Click HERE](#)

## Funding Opportunities

- [Cancer Research Education Grants Program - Courses for Skills Development \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-21-278)  
National Cancer Institute  
Application Receipt Date(s): Standard dates apply. The first standard application due date for this FOA is September 25, 2021.
- [Cancer Research Education Grants Program - Research Experiences \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-21-279)  
National Cancer Institute  
Application Receipt Date(s): Standard dates apply. The first standard application due date for this FOA is September 25, 2021.
- [Implementation Science for Cancer Control in People Living with HIV in Low- and Middle-Income Countries \(U01 Clinical Trial Optional\)](#)  
(RFA-CA-21-056)  
National Cancer Institute  
Application Receipt Date(s): December 15, 2021
- [Learning Disabilities Innovation Hubs \(P20 Clinical Trial Optional\)](#)  
(RFA-HD-22-005)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 30, 2021
- [Autism Centers of Excellence: Networks \(R01 Clinical Trial Optional\)](#)  
(RFA-HD-22-007)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 09, 2021
- [Autism Centers of Excellence: Centers \(P50 Clinical Trial Optional\)](#)  
(RFA-HD-22-008)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 09, 2021
- [Impact of Technology and Digital Media \(TDM\) Exposure/Usage on Child and Adolescent Development \(P01 Clinical Trial Optional\)](#)  
(RFA-HD-22-009)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 29, 2021
- [Limited Competition: Continued Development of the Gabriella Miller Kids First Pediatric Data Resource Center \(U2C Clinical Trial Not Allowed\)](#)  
(RFA-RM-21-014)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): October 20, 2021

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702

[CSOM Office of Research Home Page](#)



**From:** AAIC Abstracts <abstracts@alz.org>  
**Sent time:** 08/30/2021 06:35:23 PM  
**To:** lbrunelle@quanterix.com; qxx07a@acu.edu; Lindsay Burns <lbruns@cassavasciences.com>; Zhe Pei; Hoau-yan Wang  
**Subject:** [EXTERNAL] Fwd: Concerns regarding AAIC 2021 poster presentation "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam"

Hi Lindsay,

Thank you for your submission to and participation in the Alzheimer's Association International Conference (AAIC) 2021.

Below you will find concerns presented by **Tim Van Treuren** <[tvantreuren@biosres.com](mailto:tvantreuren@biosres.com)>, a conference attendee.

Please confirm receipt of email to me and respond directly to Tim.

Best regards,  
Nicole Sanders

----- Forwarded message -----

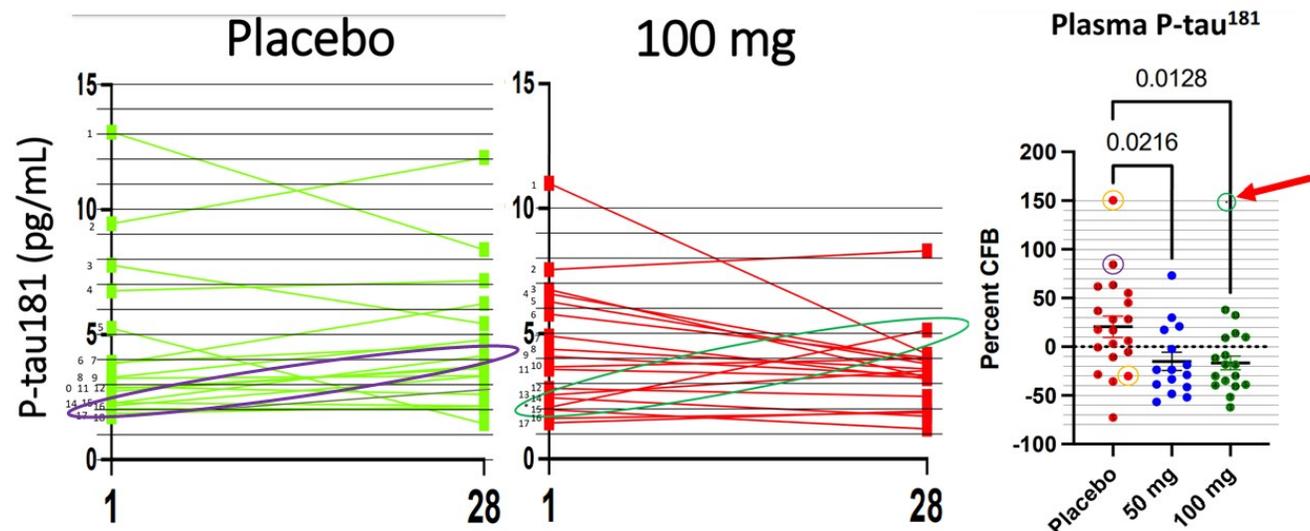
**From:** **Tim Van Treuren** <[tvantreuren@biosres.com](mailto:tvantreuren@biosres.com)>  
**Date:** Mon, Aug 30, 2021 at 12:58 PM  
**Subject:** Concerns regarding AAIC 2021 poster presentation "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam"  
**To:** <[abstracts@alz.org](mailto:abstracts@alz.org)>

To whom it may concern,

I am writing to express concern regarding potential manipulation of data that is presented in the poster entitled "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam" presented during the 2021 Alzheimer's Association International Conference in July. The abstract can be found at the following [link](#). The poster can be found at the following [link](#).

Of specific concern are figures 4 and 5 which show the changes in plasma p-tau181 in three treatment groups. The scatter plot in figure 4 shows the % change from baseline of p-tau in individuals that received placebo, 50mg of simufilam or 100mg of simufilam b.i.d. for 28 days. The spaghetti plot in figure 5 outlines the absolute values and changes of p-tau for each individual patient presented in figure 4. **I believe that there are several inconsistencies between these two figures that are concerning and which dramatically alter the statistical analysis of the data.**

First, in the 100mg group, **there are 18 lines on the spaghetti plot but only 17 scatter plot dots**. As best as I can estimate, all lines are numbered with their corresponding scatter plot dots. All of the lines are accounted for in the scatter plot except for the one that is circled in green in the adapted figure below. The line in question represents an approximate 150% increase in p-tau (from approximately 2pg/mL to 5pg/mL) that is not represented in the scatter plot **and as noted below alters the p-value**.



Second, in the placebo group, there is an outlier 150% increase in p-tau that is NOT observed in the spaghetti plot. The highest % increase in p-tau according to the spaghetti plot appears to be ~75-80% and is circled in purple on both plots. Additionally, there are 20 dots in the scatter plot and only 18 lines in the placebo spaghetti plot. The two scatter plot data points that appear to be missing from the spaghetti plot are circled in orange in the placebo scatter plot. It is certainly reasonable that the spaghetti line corresponding to the ~30% decrease in p-tau in the placebo group that doesn't seem to be in the spaghetti plot may in fact be present as two lines could be on top of each other, but the 150% line is certainly not present.

After estimating the %CFB, I re-ran the statistical analyses to see how the discrepancies alter the p-values. Those calculations are in the attached Excel sheet. Recalculation changes the p-value for the 100mg group from ~0.01 to ~0.10/~0.15 while the 50mg group remains largely unchanged.

Based on the correspondence between the majority of the data points in figure 4 and 5, it appears that either serious oversights/mistakes or

intentional manipulation occurred during data analysis for figure 4.

I hope that these concerns might be addressed by the poster authors as the changes made have a considerable effect on the analysis of the data and the conclusions that are drawn. I hope that specifically the absence of the +150% patient in the 100mg scatter plot and the introduction of the +150% increase into the placebo group scatter plot could be clarified.

Regards,

**Timothy Van Treuren, PhD.**

**From:** Hoau-yan Wang  
**Sent time:** 08/31/2021 10:53:53 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Reporter query re: Cassava Sciences  
**Attachments:** b2081ad1-0cc5-4e38-a546-1083b91f0843.pdf

---

I am NOT responding to this.

---

**From:** Feuerstein, Adam <adam.feuerstein@statnews.com>  
**Sent:** Tuesday, August 31, 2021 8:04 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Reporter query re: Cassava Sciences

Professor Wang --

I'm a reporter with STAT, a digital publication that covers health, medicine and the life sciences. I'm contacting you to see if you're willing to answer some questions about the research you conducted and published on the experimental Alzheimer's drug simufilam, in collaboration with Cassava Sciences.

As you're aware, questions have been raised about the scientific integrity and credibility of papers that you co-authored, along with Cassava's Lindsay Burns.

In particular, I'd like to better understand the specific role that you played in analyzing CSF samples taken from patients in Cassava's phase 2b study. When the "re-analysis" of those CSF samples were announced in September 2020, Cassava said the work was done by an "academic lab" without offering any further details.

Did you perform the biomarker analysis on those CSF samples in your lab at CUNY Medical School?

I've attached a copy of a research paper describing the results of the phase 2b study that was submitted to a preprint server in February 2021. You are the lead author on the paper. Inside the Oversight and Settings section of the paper, it says, "CSF samples were analyzed at CUNY School of Medicine."

Can you confirm that your lab performed the CSF biomarker analysis?

Thank you --

Adam Feuerstein

--

**Adam Feuerstein**

**Senior Writer, National Biotech Columnist**

Twitter: [@adamfeuerstein](https://twitter.com/adamfeuerstein)

Mobile: [\(415\) 254-5180](tel:4152545180) Office: [\(617\) 929-2922](tel:6179292922)



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# Effects of simufilam on cerebrospinal fluid biomarkers in Alzheimer's disease: A randomized clinical trial

**Hoau-Yan Wang**

CUNY School of Medicine: The City College of New York CUNY School of Medicine

**Zhe Pei**

CUNY School of Medicine at The City College of New York: The City College of New York CUNY School of Medicine

**Kuo-Chieh Lee**

CUNY School of Medicine: The City College of New York CUNY School of Medicine

**Yaneicy Gonzalez Rojas**

Optimus U Corp

**Tamara Doehner**

Cognitive Clinical Trials

**John Puente**

Cognitive Clinical Trials

**Patrick Sciara**

Cognitive Clinical Trials

**Brian Beck**

Cognitive Clinical Trials

**Evelyn Lopez-Brignoni**

IMIC Research

**Boris Nikolov**

IMIC Research

**Carrie Crowley**

Cassava Sciences, Inc.

**George Ben Thornton**

Cassava Sciences, Inc.

**Remi Barbier**

Cassava Sciences, Inc.

**Nadav Friedmann**

Cassava Sciences, Inc.

**Jeffrey L. Cummings**

University of Nevada Las Vegas

Lindsay Burns (✉ [lburns@cassavasciences.com](mailto:lburns@cassavasciences.com))

Cassava Sciences, Inc. <https://orcid.org/0000-0002-4303-3174>

---

## Research

**Keywords:** filamin A, tau hyperphosphorylation, neuroinflammation, blood-brain barrier

**DOI:** <https://doi.org/10.21203/rs.3.rs-249858/v1>

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# Abstract

## BACKGROUND

Simufilam is a first-in-class drug candidate targeting altered filamin A, a proteopathy in Alzheimer's disease. The primary objective of this Phase 2 clinical trial was to evaluate the effects of simufilam on cerebrospinal fluid (CSF) biomarkers in Alzheimer's disease patients. A secondary objective was to assess cognitive enhancement.

## METHODS

In a randomized, placebo-controlled trial conducted across 9 clinical sites in the US, 64 mild-to-moderate Alzheimer's disease patients were randomized to simufilam 50 or 100 mg b.i.d. or placebo for 28 days. Clinical diagnosis was confirmed by CSF total tau/amyloid-beta<sub>1-42</sub> ( $A\beta_{42}$ ) > 0.28. Co-primary endpoints were changes in CSF  $A\beta_{42}$ , total tau, phospho-tau (P-tau181), neurogranin, neurofilament light chain, and YKL-40. Secondary endpoints included additional CSF biomarkers assessing neuroinflammation and blood brain barrier integrity, and tests of episodic and spatial working memory.

## RESULTS

Adjusting for multiplicity of the six co-primary endpoints ( $p < 0.008$  versus placebo required for significance), simufilam 50 and 100 mg significantly reduced CSF levels of total tau, hyperphosphorylated tau (P-tau181), neurogranin, neurofilament light chain and YKL-40. Simufilam 50 mg significantly increased CSF levels of  $A\beta_{42}$ . On secondary CSF biomarker endpoints, both doses of simufilam significantly reduced IL-6, soluble TREM2 (triggering receptor expressed on myeloid cells-2), HMGB1 (high mobility group box-1), albumin and immunoglobulin G. All but one patient improved from baseline across biomarkers. Simufilam 50 and 100 mg showed effect sizes versus placebo (0.23–0.46) in change from baseline in episodic memory and spatial working memory. Episodic memory improvements correlated most strongly with decreases in P-tau181 ( $R^2 = 0.48$ ). Simufilam was safe and well tolerated. Target engagement was demonstrated by filamin A linkages to nicotinic acetylcholine receptor subtype  $\alpha 7$  ( $\alpha 7nAChR$ ) and toll-like receptor 4 (TLR4) in lymphocytes.

## CONCLUSIONS

Simufilam was safe and well tolerated and significantly improved eleven CSF biomarkers in patients with Alzheimer's disease, implying biological evidence of disease modification. Simufilam will be further evaluated in large, definitive clinical trials.

# TRIAL REGISTRATION:

ClinicalTrials.gov Identifier NCT04079803.

## Background

There are no approved treatments to slow the progression of Alzheimer's disease, expected to affect 13.8 million in the U.S. by 2050.<sup>1</sup> Biomarkers may facilitate drug development in Alzheimer's disease by quantifying disease stage, demonstrating target engagement, and supporting disease modification.<sup>2</sup>

Core CSF biomarkers of Alzheimer's disease are amyloid-beta1-42 ( $A\beta_{42}$ ), total tau and phospho-tau181 (P-tau181).<sup>3,4</sup>  $A\beta_{42}$  decreases while tau and phosphorylated tau, including P-tau181, increase as disease progresses and cognition declines. Neurogranin and neurofilament light chain, indicating damage to dendrites and axons respectively, are used to track disease progression.<sup>5-7</sup> Interestingly, neurogranin appears specific to Alzheimer's disease.<sup>7</sup> The current clinical trial measured CSF biomarkers in Alzheimer's disease dementia patients to evaluate drug candidate simufilam.

Simufilam represents a novel approach to combat amyloid toxicity and resulting neurodegeneration in Alzheimer's disease. Soluble  $A\beta_{42}$  initiates a predominant pathogenic pathway by binding  $\alpha 7$  nicotinic acetylcholine receptor ( $\alpha 7nAChR$ ), the only known sub-nanomolar-affinity binding site of soluble  $A\beta_{42}$ .<sup>8-10</sup> This femtomolar interaction poses enormous competition for any agent aiming to reduce soluble  $A\beta_{42}$  interactions.  $A\beta_{42}$  binds and signals through this receptor to activate kinases that hyperphosphorylate the protein tau,<sup>10-13</sup> impairing tau's ability to stabilize microtubules. This loss of functional tau is a primary driver of the neuronal degeneration and cognitive impairment in Alzheimer's disease.<sup>14</sup>

Without directly competing with the femtomolar binding of  $A\beta_{42}$  to  $\alpha 7nAChR$ , simufilam disrupts this ultra-high-affinity interaction by binding a critical accomplice to  $A\beta_{42}$ : an altered conformation of filamin A. Filamin A is an intracellular scaffolding protein that is highly expressed in brain and interacts with over 90 proteins to coordinate signaling processes.<sup>15</sup>  $A\beta_{42}$  initiates toxic signaling by binding  $\alpha 7nAChR$  to recruit filamin A.<sup>16,17</sup> Without directly contacting filamin A, and likely working through  $\alpha 7nAChR$  and other receptors that link to or recruit filamin A,  $A\beta_{42}$  induces the altered conformation of the filamin A protein.<sup>17</sup> Simufilam binds altered filamin A, restores its normal shape and disrupts the aberrant filamin A –  $\alpha 7nAChR$  linkage,  $A\beta_{42}$ 's femtomolar binding to  $\alpha 7nAChR$  and the ensuing toxic signaling that hyperphosphorylates tau.<sup>17,18</sup>

$A\beta_{42}$  also binds the toll-like receptor 4 (TLR4) co-receptor cluster-of-differentiation14 (CD14)<sup>19</sup> to recruit and alter filamin A.<sup>17</sup> The filamin A – TLR4 linkage enables persistent TLR4 activation by  $A\beta_{42}$ , causing inflammatory cytokine release and neuroinflammation. Simufilam's reversal of the filamin A proteopathy also blocks this  $A\beta_{42}$ -induced neuroinflammation.<sup>17,18</sup>

In a previous open-label, 28-day trial in patients with mild-to-moderate Alzheimer's disease dementia (NCT03748706), simufilam significantly reduced CSF total tau, P-tau181 and biomarkers of neurodegeneration and neuroinflammation in all patients, with no safety issues.<sup>20</sup> Biomarker reductions implied reduced disease pathophysiology and neurodegeneration, consistent with simufilam's mechanism of action and preclinical data. Based on encouraging prior clinical trial results, we evaluated simufilam in a randomized, double-blind, placebo-controlled Phase 2 trial. We hypothesized simufilam treatment would impact CSF biomarkers and may enhance cognition.

## Methods

### Patient Population

Patients were 50–85 years old, diagnosed with probable Alzheimer's disease dementia according to National Institute on Aging (NIA)/Alzheimer's Association (AA) criteria and a Mini-Mental State Exam (MMSE) score  $\geq 16$  and  $\leq 26$ . Diagnosis was confirmed by CSF total tau/ $A\beta_{42} \geq 0.28$ , a ratio selected to exclude dementia due to other causes (0.28 is intermediate between early and late mild cognitive impairment in amyloid-confirmed patients from the Alzheimer's Disease Neuroimaging Initiative<sup>21</sup>). Patients could be receiving acetylcholinesterase inhibitors, memantine and other medications if stable. Chronic opioids, tricyclic antidepressants, monoamine oxidase inhibitors, nicotine therapy (or smokers) were exclusions, as were uncontrolled medical illnesses, other neurodegenerative diseases, or clinically significant laboratory results.

### Trial Design

This double-blind, placebo-controlled, trial randomized 64 patients 1:1:1 to placebo or simufilam 50 or 100 mg oral tablets b.i.d. for 28 days. Patients, caregivers, clinic staff, the study sponsor and the laboratory analyzing biomarkers were blind to treatment. A randomization algorithm was generated by an outside vendor using Interactive Response Technology. Doses were selected by body surface area conversion of effective daily doses in mouse efficacy models and prior clinical experience. Sample sizes of 20 per arm were selected based on highly significant changes from baseline in many of the same CSF biomarkers by paired t-test in a prior open-label trial in mild-to-moderate Alzheimer's disease dementia patients.<sup>22</sup>

After initial screening, a second screening visit included a CSF draw and practice cognitive test. Cognitive tests were conducted Days 1 and 28. Blood samples were collected Days 1, 7, 14 and 28, with the Day 28 blood sample following the second CSF draw for CSF/plasma ratios of simufilam. Electrocardiograms and physical examinations were conducted on Days 1 and 28.

### Oversight and Settings

This trial was conducted between September 2019 and March 2020 at nine U.S. sites. An independent Data and Safety Monitoring Board approved the protocol and assessed safety mid-study. CSF samples

were analyzed at City University School of Medicine. Plasma was analyzed with a qualified assay at Worldwide Clinical Trials Bioanalytical Sciences. Data were analyzed by a data management and statistics contractor. Data was 100% monitored by independent clinical research associates. No protocol changes were made.

## Assessments

Levels of eleven CSF biomarkers in the screening and Day 28 samples were measured. Six CSF biomarkers were designated primary: biomarkers of Alzheimer's disease pathology ( $A\beta_{42}$ , total tau and P-tau181), neurodegeneration (neurofilament light chain and neurogranin) and neuroinflammation (YKL-40). Also assessed were interleukin-6, soluble triggering receptor expressed on myeloid cells 2 (sTREM2), and high mobility group box 1 (HMGB1). These nine biomarkers were measured using commercial enzyme-linked immunosorbent assay plates and an automated plate reader, with samples assayed in triplicate. CSF albumin and immunoglobulin G assessed blood-brain barrier integrity and were measured by immunoblot with densitometric quantitation. Target engagement was evaluated by measuring filamin A linkages to  $\alpha 7nAChR$  and TLR4 in patient lymphocytes by co-immunoprecipitation as described.<sup>17</sup>

Cognition was assessed on Day 1 and Day 28 by the Paired Associates Learning (an episodic memory test) and Spatial Working Memory tests of the Cambridge Neuropsychological Test Automated Battery (CANTAB). Both tests increase progressively in difficulty, with errors imputed for levels not reached. Reductions in the total error scores indicate improvement. The CANTAB Reaction Time test assessed psychomotor speed in milliseconds.

Safety was assessed by adverse event monitoring, clinical laboratory tests, electrocardiography, physical examinations and the Columbia-Suicide Severity Rating Scale.

## Outcomes

The six co-primary outcome measures were changes in CSF  $A\beta_{42}$ , total tau, P-tau181, neurogranin, neurofilament light chain, and YKL-40 levels from screening to Day 28. These six biomarkers were prospectively listed in the trial registration.  $A\beta_{42}$ , total tau and P-tau181 are considered core biomarkers of Alzheimer's disease pathology. Neurogranin and neurofilament light chain are intracellular proteins in dendrites and axons, respectively, that indicate neurodegeneration when found in CSF. YKL-40 is a glycoprotein involved in tissue remodeling after inflammation. Secondary biomarker outcomes included changes in CSF interleukin-6, sTREM2, HMGB1, albumin and immunoglobulin G. Interleukin-6 is an inflammatory cytokine. A marker of microglial-induced inflammation, sTREM2 is the ectodomain of the transmembrane receptor TREM2 that is cleaved and shed by microglia when activated during inflammation.<sup>23</sup> HMGB1 is a damage-associated molecular pattern protein released by necrotic cells and actively secreted by immune cells to further neuroinflammation and neurite damage.<sup>24</sup> Finally, albumin and immunoglobulin G are blood proteins that indicate blood-brain barrier compromise when found in CSF.<sup>25</sup>

Secondary cognitive outcome measures were drug-placebo differences in change from Day 1 to Day 28 in total errors on Paired Associates Learning and Spatial Working Memory tests. The Reaction Time test exploratory outcome was median response time in milliseconds.

The target engagement assay measured changes in filamin A linkages to  $\alpha 7$ nAChR and TLR4 in patient lymphocytes from Day 1 to Day 28.

## Statistical Analysis

The pre-specified analysis for biomarkers was drug-placebo differences in change from baseline, analyzed by the General Linear Model for the analysis of covariance (ANCOVA) with a two-sided 95% confidence interval and baseline CSF measurement as the covariate. Multiplicity of the six co-primary endpoints was addressed by the significance requirement:  $p < 0.008$  (i.e.,  $p < 0.05/6$ ).

The Full Analysis Set included all subjects with two CSF samples. Although plasma samples were collected at all visits to confirm compliance, the primary analyses were conducted on all patients. The secondary analyses excluded three subjects with no detectable levels of simufilam in plasma at any visit. Percent change from baseline of compliers in active treatment compared to placebo-treated participants was analyzed by the General Linear Model for the ANCOVA.

Lymphocyte biomarkers were analyzed by ANOVA: comparing to each patient's own baseline was considered more appropriate than adjusting for baseline value by ANCOVA, given the range of baseline values. The FLNA –  $\alpha 7$ nAChR linkage for the 100 mg dose arm versus placebo was the only comparison significantly different by ANOVA but not by ANCOVA.

Tests of cognition were not powered for statistical significance and were therefore evaluated by effect size, a standardized measure of relative size of treatment effect. Effect sizes of 20–25% are considered noteworthy, and a 25% effect size is typically considered clinically meaningful if significance is achieved in later, appropriately powered trials. For cognitive tests, effect sizes for each simufilam dose versus placebo were calculated by Hedge's  $g$ , appropriate for groups of 20, and these were identical or nearly identical to those calculated by Cohen's  $d$ . For the Paired Associates Learning test, the most and least impaired subjects were excluded by baseline score ( $\leq 11$  or  $\geq 54$  of 70 total possible errors) prior to calculation of effect size. These cutoffs were employed to remove subjects with very few errors (ceiling effects), as well as subjects who performed so poorly that they may not have understood the task. Effect sizes for spatial working memory included all subjects with detectable plasma simufilam. Reaction time was measured in milliseconds between stimulus onset and response.

## Results

### Trial Population

Of 115 patients screened, 64 patients enrolled. Twenty-two were randomized to placebo and 21 each to simufilam 50 mg and 100 mg. One participant discontinued for non-medical reasons (Fig. 1). One

completer was excluded from the primary analyses due to a missing Day 28 sample. One patient in the 50 mg arm and two in the 100 mg arm were excluded from the secondary analyses due to no detectable plasma levels of simufilam at return visits. Baseline demographics, MMSE, cognitive assessment scores, concomitant cholinesterase inhibitor or memantine use, and baseline biomarker levels were well balanced between groups (Table 1). CSF/plasma simufilam levels in simufilam arms were  $0.29 \pm 0.21$ .

Table 1  
Baseline Demographics and Assessments

Demographics and Characteristics	Placebo (N = 22)	Simufilam 50 mg (N = 21)	Simufilam 100 mg (N = 21)
Age, mean (SD)	71.3 (6.68)	69.3 (5.47)	67.1 (8.76)
Female sex, No. (%)	11 (50.0)	12 (57.1)	12 (57.1)
Not white race, No. (%)	3 (13.6)	4 (19.0)	2 (9.5)
Hispanic or Latino ethnicity, No. (%)	9 (40.9)	11 (52.4)	11 (52.4)
CSF total tau/A $\beta$ <sub>42</sub> ratio (SD)	1.20 (0.55)	1.17 (0.58)	1.08 (0.50)
MMSE, mean (SD)	23.1 (2.78)	22.7 (2.67)	23.0 (2.66)
APOE4 homozygous	1	1	3
APOE4 heterozygous	12	14	10
Taking cholinesterase inhibitor or memantine, No. (%)	8 (36.4)	5 (23.8)	7 (33.3)
Paired Associates Learning total errors, mean (SD)	35.5 (19.65)	36.1 (18.76)	31.0 (20.74)
Spatial Working Memory total errors, mean (SD)	19.0 (7.49)	22.3 (6.64)	22.1 (5.88)
CSF A $\beta$ <sub>42</sub> pg/mL, mean (SD)	125 (152)	108 (54.8)	117 (51.4)
CSF total tau pg/mL, mean (SD)	104 (32)	101 (17.6)	106 (27.9)
CSF P-tau181 pg/mL, mean (SD)	28.5 (0.73)	29.0 (1.0)	29.7 (1.5)
CSF neurogranin pg/mL, mean (SD)	1200 (365)	1352 (614)	1551 (751)
CSF NfL pg/mL, mean (SD)	161 (42.8)	181 (64.4)	219 (95.3)
CSF YKL-40 pg/mL, mean (SD)	206 (29.5)	194 (26.0)	203 (22.7)
CSF IL-6 pg/mL, mean (SD)	32.5 (1.2)	33.6 (1.7)	33.6 (1.8)
CSF sTREM2, pg/mL, mean (SD)	878 (435)	882 (476)	861 (421)

Demographics and Characteristics	Placebo (N = 22)	Simufilam 50 mg (N = 21)	Simufilam 100 mg (N = 21)
CSF HMGB1, pg/mL, mean (SD)	424 (48.0)	454 (70.6)	446 (67.3)
CSF/plasma albumin ratio, mean (SD)	0.24 (0.03)	0.25 (0.05)	0.25 (0.08)
CSF/plasma IgG ratio, mean (SD)	0.200 (0.07)	0.227 (0.07)	0.217 (0.11)
Lymphocyte filamin A – $\alpha$ 7nAChR, Ratio to total filamin A, mean (SD)	0.59 (0.10)	0.66 (0.12)	0.69 (0.11)
Lymphocyte filamin A – TLR4, Ratio to total filamin A, mean (SD)	0.55 (0.10)	0.58 (0.11)	0.60 (0.07)

## CSF Biomarker Change from Baseline

The pre-specified primary analysis was change from baseline to Day 28 on six CSF biomarkers ( $A\beta_{42}$ , total tau, P-tau181, neurogranin, neurofilament light chain and YKL-40) in the drug arms versus the placebo arm. Significance levels were adjusted for multiplicity ( $p < 0.05/6$  or  $p < 0.008$ ). Both dose arms showed significant changes from baseline on five of the six primary biomarkers, with the increase in  $A\beta_{42}$  in the 100 mg dose arm not significant, likely due to the range of baseline values (Table 2). The secondary analysis of change from baseline with three non-compliers excluded produced similar results to the primary analysis of the full analysis set. Individual patients' Screening and Day 28 values (pg/mL) are shown by spaghetti plots for each treatment arm (Fig. 2).

Table 2  
Biomarkers Change from Baseline in pg/mL (SD)

Biomarker	Placebo (N = 22)	Simufilam 50 mg		Simufilam 100 mg	
		All Patients N = 19	Compliers N = 18	All Patients N = 21	Compliers N = 19
CSF A $\beta$ <sub>42</sub>	4.8 (30.9)	16.2 (21.1) p = 0.01	16.9 (21.5) p = 0.006	12.5 (11.9) p = 0.087	13.4 (11.2) p = 0.088
CSF total tau	-3.2 (14.8)	-14.6 (9.6) p = 0.0012	-14.9 (9.8) p = 0.0014	-18.7 (10.4) p = 0.0000	-19.8 (10.3) p = 0.0000
Total tau/A $\beta$ <sub>42</sub>	-0.029 (0.327)	-0.28 (0.27) p = 0.0006	-0.30 (0.27) p = 0.0008	-0.30 (0.22) p = 0.0001	-0.31 (0.22) p = 0.0001
CSF P-tau181	-0.63 (1.8)	-2.4 (1.6) p = 0.002	2.5 (1.6) p = 0.003	-3.1 (1.7) p = 0.005	-3.2 (1.7) p = 0.003
CSF neurogranin	-50.5 (434.0)	-527 (361) p = 0.0005	-531 (371) p = 0.0006	-648 (491) p = 0.0002	-681 (505) p = 0.0002
CSF Neurofilament Light Chain	-10.0 (45.0)	-49.7 (35.5) p = 0.0058	-51.0 (36.1) p = 0.0008	-76.3 (50.6) p = 0.0003	-78.5 (52.9) p = 0.0002
CSF YKL-40	-0.96 (24.2)	-20.4 (17.4) p = 0.0001	-20.9 (17.7) p = 0.002	-22.3 (11.7) p = 0.0001	-23.7 (11.4) p = 0.0001
CSF Interleukin-6	-1.1 (2.0)	-3.3 (1.8) p = 0.011	-3.3 (1.9) p = 0.019	-3.5 (1.8) p = 0.003	-3.7 (1.8) p = 0.0078
CSF sTREM2	-77.3 (510)	-418 (376) p = 0.0005	-424 (386) p = 0.0007	-404 (269) p = 0.0001	-426 (274) p = 0.0002

<sup>a</sup> Units are optical density units of immunoblot bands.

<sup>b</sup> Densitometric quantities of  $\alpha$ 7nAChR or TLR4 in anti-filamin A precipitates as a ratio to total filamin A.

N.B.: p values are compared to placebo for each biomarker.

Biomarker	Placebo (N = 22)	Simufilam 50 mg		Simufilam 100 mg	
		All Patients N = 19	Compliers N = 18	All Patients N = 21	Compliers N = 19
CSF	19.4 (172.3)	-149 (50.3)	-152 (50.1)	-140 (51.3)	143 (51.3)
HMGB1		p = 0.0001	p = 0.0001	p = 0.0001	p = 0.0001
CSF albumin <sup>a</sup>	-240 (1620)	-1184 (1707)	-1245 (1735)	-2103 (1774)	-2292 (1760)
		p = 0.054	p = 0.046	p = 0.0001	p = 0.0001
CSF IgG <sup>a</sup>	-574.8 (2518.32)	-2269 (2176)	-2444 (2097)	-2253 (2414)	-2350 (2517)
		p = 0.018	p = 0.014	p = 0.007	p = 0.012
Lymphocyte filamin A – α7nAChR <sup>b</sup>	-0.07 (0.19)	-0.22 (0.13)	-0.23 (0.13)	-0.22 (0.16)	-0.24 (0.16)
		p = 0.014	p = 0.009	P = 0.008	p = 0.005
Lymphocyte filamin A – TLR4 <sup>b</sup>	-0.05 (0.18)	-0.19 (0.11)	-0.19 (0.11)	-0.18 (0.13)	-0.19 (0.14)
		P = 0.011	p = 0.010	p = 0.012	p = 0.010
<sup>a</sup> Units are optical density units of immunoblot bands.					
<sup>b</sup> Densitometric quantities of α7nAChR or TLR4 in anti-filamin A precipitates as a ratio to total filamin A.					
N.B.: p values are compared to placebo for each biomarker.					

## CSF Biomarker Percent Change from Baseline

The secondary analysis of percent change from baseline showed significant differences for both dose arms versus placebo on all eleven CSF biomarkers, adjusted for multiplicity for the six primary biomarkers (Fig. 3). P values for change and percent change from baseline were similar, with Aβ<sub>42</sub> in the 100 mg dose arm the sole comparison that was significant by percent change but not by change, due to the range in baseline values.

## Biomarkers of AD Pathology and Neurodegeneration

Low in Alzheimer's disease, CSF Aβ<sub>42</sub> significantly increased 17% and 14% in the 50 and 100 mg arms, respectively (p = 0.0004 and p = 0.004). CSF total tau decreased 16% and 18% (p = 0.0002 and p = 0.00001) and CSF P-tau181 decreased 8% and 11% (p = 0.002 and p = 0.003) in 50 and 100 mg dose arms compared to placebo, respectively. CSF neurofilament light chain, reflecting axonal damage, decreased 28% and 34% in respective dose arms (p = 0.002 and p = 0.0003). Neurogranin, indicating post-

synaptic damage, significantly decreased 36% and 43% in respective dose arms ( $p = 0.0004$  and  $p = 0.0001$ ).

## Biomarkers of Neuroinflammation

Simufilam treatment significantly decreased four CSF biomarkers of neuroinflammation compared to placebo. YKL-40 decreased 10% and 11% in the 50 and 100 mg arms, respectively ( $p = 0.0003$  and  $p = 0.0002$ ). Inflammatory cytokine interleukin-6 decreased 10% and 11% in the 50 and 100 mg arms ( $p = 0.017$  and  $p = 0.007$ ). Indicating reduced microglial activation, sTREM2 decreased 43% and 46% in the 50 and 100 mg arms ( $p = 0.0009$  and  $p = 0.0003$ ). Finally, the damage-associated molecular pattern protein HMGB1 decreased 33% and 32% in the 50 and 100 mg arms ( $p = 0.0002$  and  $p = 0.0001$ ).

## Biomarkers of Blood-Brain Barrier Integrity

Simufilam improved blood-brain barrier integrity, evidenced by lower levels of albumin and immunoglobulin G in CSF. Simufilam 50 and 100 mg significantly decreased CSF albumin by 15% and 29%, respectively ( $p = 0.04$  and  $p = 0.0001$ ). CSF immunoglobulin G decreased 30% in both drug arms (both  $p = 0.02$ ).

## Validation of Biomarker Analyses

The statistical validation of biomarker data is supported by the placebo dataset: modest changes (-2%, on average) and robust correlations (mean  $R^2 = 0.96$ ) between all pair combinations among total tau, P-tau181, neurogranin, neurofilament light chain, YKL-40 and IL-6 in change from baseline. Because  $A\beta_{42}$  decreases in CSF in Alzheimer's disease as other markers increase,  $A\beta_{42}$  movement negatively correlated with changes in those six biomarkers (mean  $R^2 = -0.82$  in placebo). Biomarker changes also correlated in simufilam arms (mean  $R^2 = 0.77$ , excluding  $A\beta_{42}$ ), indicating that the magnitude of change in individual patients was generally consistent across biomarkers.

## Target Engagement

Both  $\alpha 7nAChR$  and TLR4 receptors and filamin A are present in lymphocytes, allowing assessment of target engagement in patients' lymphocytes. Filamin A linkages to  $\alpha 7nAChR$  and TLR4 in lymphocytes were significantly reduced 31–34% from baseline in both drug arms ( $p \leq 0.01$ ).

## Cognition

On the Paired Associate Learning test assessing episodic memory, patients in the 50 mg arm made on average 5.7 fewer errors on Day 28, patients in the 100 mg arm made 4.5 fewer errors, and placebo patients made 1.5 fewer errors (Fig. 4). These differences represent 0.37 and 0.23 effect sizes for 50 and 100 mg arms, respectively, versus placebo. The most and least impaired subjects were removed by baseline score ( $\geq 54$  and  $\leq 11$  of 70 possible total errors) to eliminate ceiling effects (those with very few errors) and subjects who performed so poorly that they may not have understood the task. Standard deviations for change from baseline in PAL total errors were 8.5, 13.6, 17.7 for placebo, 50 and 100 mg, respectively.

In Spatial Working Memory, patients in 50 and 100 mg arms made 2.3 and 3.3 fewer errors, respectively, compared to 0.4 in placebo, representing 0.25 and 0.46 effect sizes. Standard deviations for change from baseline in Spatial Working Memory total errors were 7.5, 7.5, 4.7 for placebo, 50 and 100 mg, respectively.

Improvements in episodic memory, correlated most strongly with decreases in P-tau181 ( $R^2 = 0.48$ ). Interleukin-6, total tau, albumin, neurofilament light chain and YKL-40 also correlated ( $R^2$  values 0.41, 0.37, 0.37, 0.36 and 0.30, respectively).

In reaction time, placebo, 50 and 100 mg arms showed mean (SD) changes from baseline in median reaction time of -11 (57), -19 (38) and 11 (66) milliseconds, respectively.

## Safety

Simufilam was safe and well-tolerated. There were no serious adverse events. Adverse events were mostly mild; none caused discontinuation; none were noted likely to be drug related. Total adverse events were 20, 9 and 15 in placebo, 50 and 100 mg arms, respectively. Adverse events that occurred in 3 or more patients were headache (3, 1 and 2), fatigue (2, 1 and 0), nausea (2, 0 and 1), and upper respiratory infection (1, 2 and 2) for placebo, 50 and 100 mg, respectively.

## Discussion

In a randomized clinical trial of 64 patients with Alzheimer's disease dementia, simufilam 50 or 100 mg significantly improved multiple biomarkers of Alzheimer's disease, neurodegeneration, neuroinflammation and blood-brain barrier integrity, with no safety issues. Collectively, results of this randomized controlled trial are consistent with the drug's mechanism of action and replicate a prior, open-label study.<sup>20</sup>

Increases in  $A\beta_{42}$  and reductions in total tau and p-Tau181 imply reduced Alzheimer's disease pathophysiology. Reduced levels of neurofilament light chain and neurogranin suggest a slower rate of neurodegeneration. The 36% and 43% reductions in neurogranin, considered specific to Alzheimer's disease,<sup>24</sup> additionally suggest reduced disease pathology. Reductions in neuroinflammatory markers YKL-40, interleukin-6, sTREM2 and HMGB1 indicate suppressed neuroinflammation. Because HMGB1 also damages neurites and furthers neuroinflammation,<sup>24</sup> the more than 30% reductions in HMGB1 imply reduced pathogenic drive. Finally, lower CSF albumin and immunoglobulin G indicate improved blood-brain barrier integrity, possibly related to simufilam's suppression of neuroinflammation, as blood-brain barrier breakdown correlates with neuroinflammation and cognitive decline.<sup>25,26</sup> Restoring  $\alpha 7nAChR$  function by displacing  $A\beta_{42}$  from this receptor may also improve blood-brain barrier integrity.<sup>27,28</sup>

Robust statistical correlations between biomarkers in changes from baseline within the placebo arm illustrate the interdependency of biomarkers in Alzheimer's disease and validate the study's biomarker assessments. Strong correlations between biomarkers in changes from baseline within simufilam arms suggest that the filamin A proteopathy is a critical, upstream pathogenic event in Alzheimer's disease.

Reductions in filamin A linkages to  $\alpha 7$ nAChR and TLR4 in patient lymphocytes, demonstrating target engagement, likely mirror the target engagement of simufilam in brain. Reductions in these filamin A linkages were previously demonstrated in both brain and lymphocytes of simufilam-treated Alzheimer's disease transgenic mice (lymphocytes unpublished), and in postmortem human Alzheimer's disease brain tissue incubated with simufilam.<sup>17</sup>

The small dose-response in this study suggests near saturation of the target protein, anticipated because simufilam, a small molecule, binds the altered conformation of filamin A with ultra-high (580 femtomolar) affinity.<sup>17</sup> Clean safety, a mild dose-response, high (98%) response rate and clear evidence of target engagement collectively suggest 50–100 mg b.i.d. is an optimal dose range.

Effect sizes on tests of episodic and spatial working memory suggest a drug response. Episodic memory improvements correlated best with decreases in levels of CSF P-tau181. Because cognitive decline is not expected over 28 days in mild-to-moderate Alzheimer's disease patients, the biomarker changes that imply slowed disease progression may also reflect suppressed disease mechanisms and improved neuronal function. Certainly, any benefit to cognition over this trial's duration implies cognitive enhancement.

FDA Guidance requires clinical trials in Alzheimer's disease to show a clinical benefit on cognitive and functional co-primary endpoints. Meaningful benefits are unlikely to occur without concurrent improvements in a broad panel of disease biomarkers. There are few reports of drug effects on CSF biomarkers, and these effects on one to three markers have not always shown concurrent effects on cognition or function.<sup>29</sup> Drug effects on biomarkers that are compellingly related to the neurobiology of Alzheimer's disease in the pathway(s) affected by a drug candidate can support a regulatory claim for disease modification.<sup>30</sup>

Simufilam's potential to modify the disease and enhance cognition is supported by preclinical data. In a triple transgenic mouse model of Alzheimer's disease, simufilam improved cognitive behavior and reduced amyloid deposits, tau hyperphosphorylation, neurofibrillary lesions and inflammatory cytokine release.<sup>17</sup> Additionally, in brains of these transgenic mice, and in postmortem human brain tissue, simufilam restored function of  $\alpha 7$ nAChR, N-methyl-D-aspartate (NMDA) receptors and insulin receptors and improved synaptic plasticity (indicated by NMDA-induced activity-dependent expression of the master synaptic plasticity regulator Arc).<sup>17</sup> Improvements in receptor function and synaptic plasticity could underlie the apparent cognitive enhancement in this trial.

## Limitations

There are several limitations to this study. The sample size is small. The directional changes and statistical significance are encouraging; however, the magnitude of observed biomarker changes is of uncertain significance. The relationships of changes in biomarkers to cognitive and functional measures have not been established, and multiple studies assessing a similar panel of biomarkers are required to

determine these correlations and mechanistic relationships. Studies of simufilam large enough to detect treatment effects on clinical measures are warranted. Despite an interpretation of slowed disease processes, this study was not long enough to allow conclusions regarding disease modification. Longer studies are needed to measure effects on the trajectory of clinical decline.

## Conclusions

Simufilam is the first of a new class of drug candidates to target altered filamin A, a proteopathy in Alzheimer's disease. This clinical dataset of CSF biomarker changes offers new insights into the pathophysiology of Alzheimer's disease and a potential new therapeutic strategy. Effect sizes on memory assessments indicate potential for cognitive enhancement. Simufilam's ability to slow disease progression in patients will need to be evaluated in large, definitive clinical trials.

## Abbreviations

Amyloid-beta1-42 (A $\beta$ 42), phospho-tau181 (P-tau181),  $\alpha$ 7 nicotinic acetylcholine receptor ( $\alpha$ 7nAChR), toll-like receptor 4 (TLR4), cluster-of-differentiation14 (CD14), National Institute on Aging (NIA), Alzheimer's Association (AA), Mini-Mental State Exam (MMSE), soluble triggering receptor expressed on myeloid cells 2 (sTREM2), high mobility group box 1 (HMGB1), Cambridge Neuropsychological Test Automated Battery (CANTAB)

## Declarations

### Ethics Approval and Consent to Participate:

This study was reviewed and approved by Advarra, Inc., a central institutional review board. Written informed consent was obtained from all participants.

### Consent for Publication:

As patient data is presented only in aggregate, no consent for publication was required.

### Availability of Data:

Cassava Sciences has not established a data sharing repository for the data from this trial.

### Competing Interests:

Simufilam is the chemical name for a compound owned by Cassava Sciences, Inc. CC, GBT, RB, NF and LHB are Cassava Sciences employees. H-YW and JC are consultants and scientific advisory board members for Cassava Sciences.

### Funding:

This trial was supported by NIA grant AG050878. NIA personnel approved the clinical trial protocol. NIA personnel also approved the selection of Data and Safety Monitoring Board members and participate in these meetings.

## Acknowledgements

We thank the patients and caregivers, clinical investigators, site staff and monitors involved in this trial. We are grateful for advice of our advisors and the scientific and financial support of the National Institute on Aging (NIA).

## Author Contributions

RB, NF and LHB designed the clinical trial with guidance from JC. Biomarker analyses were conducted blind to treatment and time point by H-YW, ZP and K-CL. K-CL and H-YW conducted APOE genotyping. CC oversaw clinical operations and trial monitors. YGR, TAD, JP, BB, PS, ELB and BN were clinical investigators. GBT analyzed lymphocyte assays. LHB wrote the manuscript with help from HYW, RB and JC. All authors have access to the data via an electronic data capture system, except H-YW, ZP and K-CL who remain blinded to treatment.

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## Figures

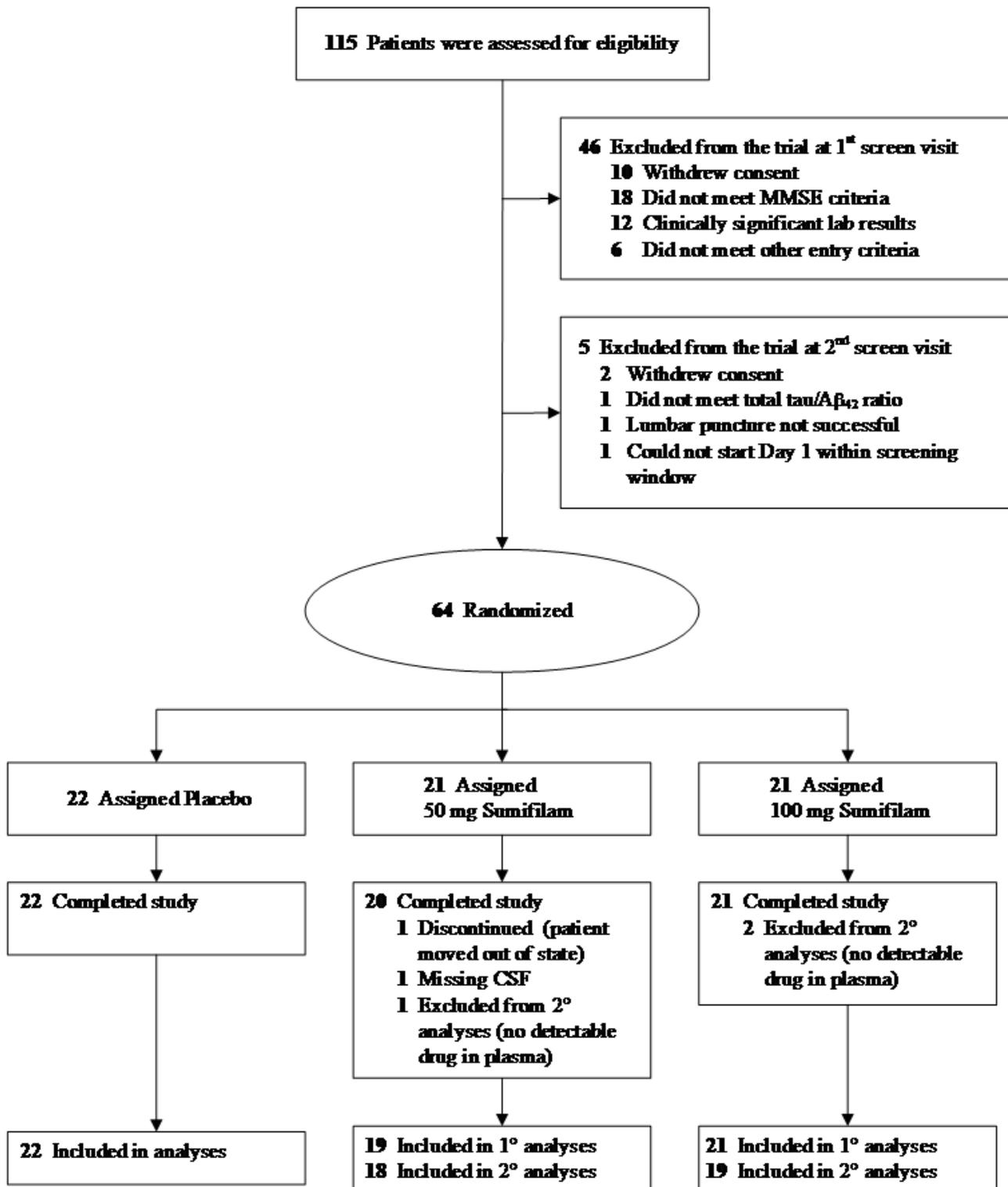
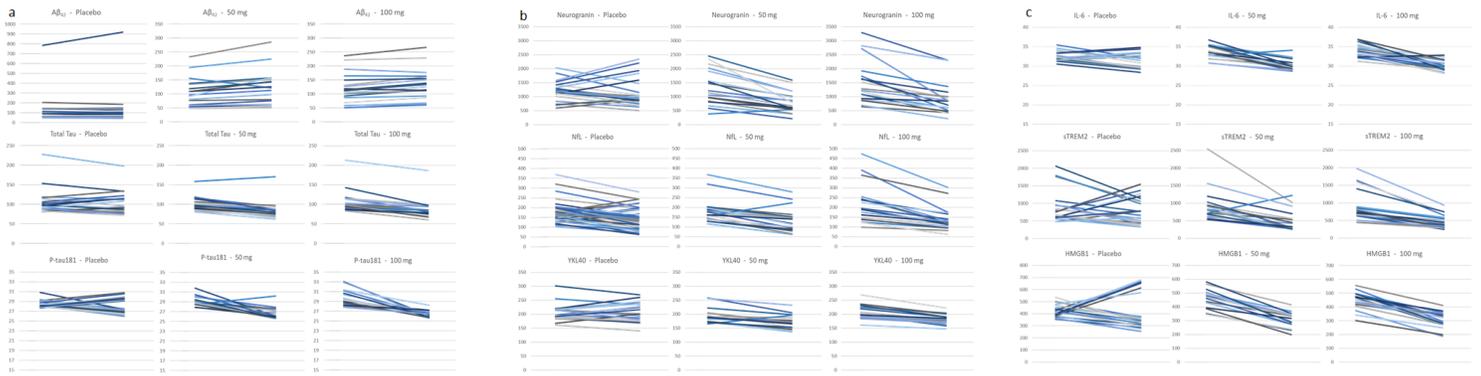


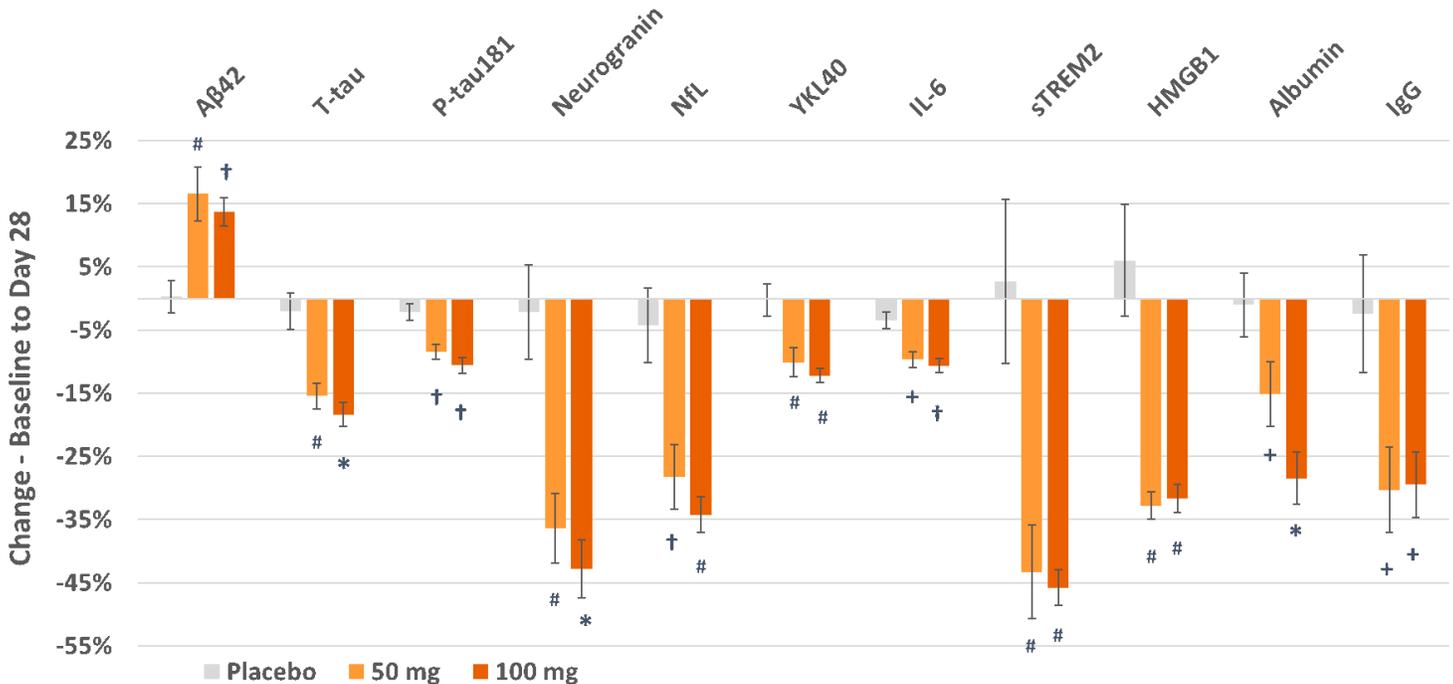
Figure 1

Patient Flow Diagram



**Figure 2**

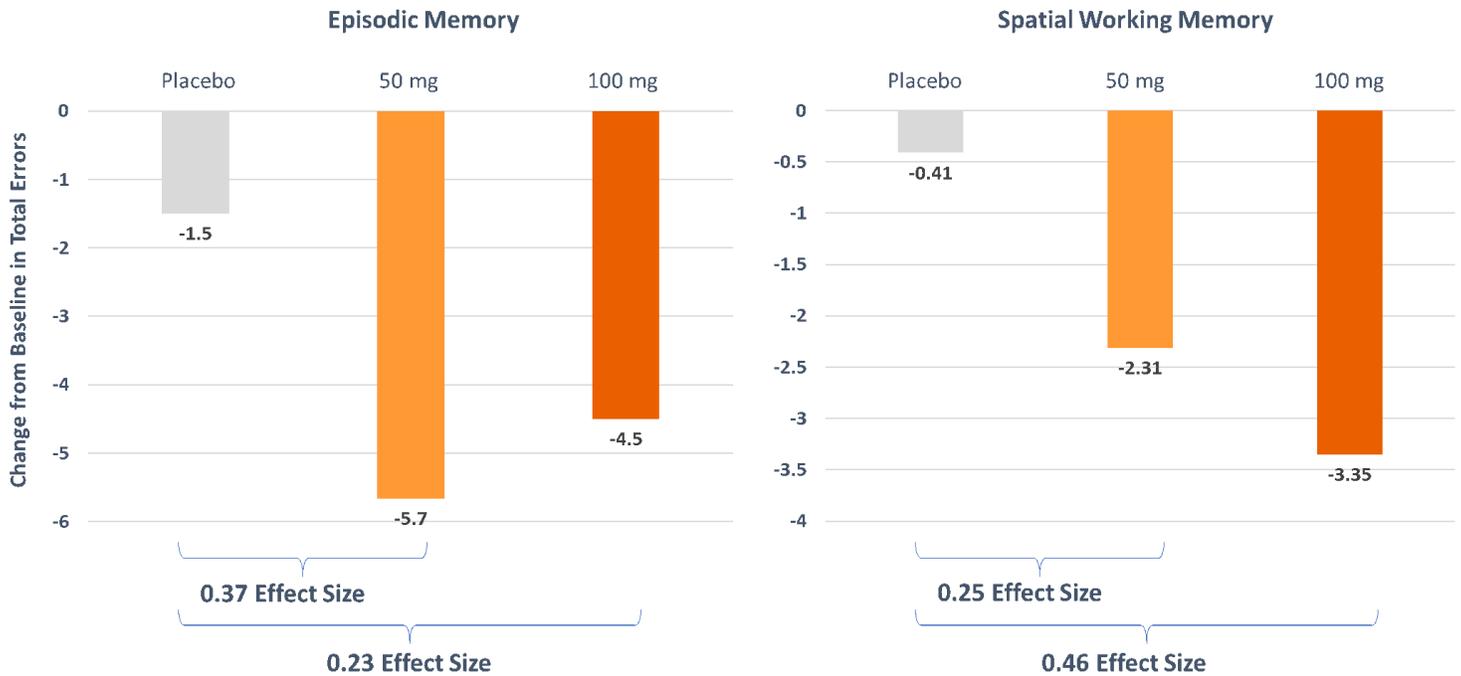
Simufilam improved biomarkers of AD pathology, neurodegeneration, neuroinflammation and BBB integrity. Percent change from baseline of CSF biomarkers (A) and lymphocyte target engagement markers (B). Reductions in filamin A linkages to  $\alpha 7nAChR$  or TLR4 in lymphocytes indicate target engagement. These secondary analyses of percent change from baseline on all biomarkers excluded the 3 patients with no detectable simufilam in plasma at return visits. Data are means  $\pm$  SEM. \* $p \leq 0.0001$ , # $p < 0.001$ , † $p < 0.01$  and + $p < 0.05$  versus placebo. N=22, 20, 19 for placebo, 50 and 100 mg, respectively.



**Figure 3**

Spaghetti plots by group for biomarkers measured by ELISA. Plots show individual patient levels (pg/mL) at screening (left) and at Day 28 (right). All patients in simufilam groups show decreases in all biomarkers except one individual in the 50 mg group. By contrast, placebo patients show movement in

both directions for each biomarker. A: Core AD pathology biomarkers. B: Neurogranin, neurofilament light chain (NfL), and YKL-40. C: Secondary biomarkers IL-6, sTREM2 and HMGB1.



**Figure 4**

Simufilam appeared to improve both episodic memory and spatial working memory. Effect sizes were calculated by Hedge's g. For the episodic memory test (Paired Associates Learning), the least impaired patients (11 or fewer errors, representing a ceiling effect) and patients with 54 or more errors (very poor performance suggesting not understanding the task) were removed from the analysis. Both datasets removed the 3 patients with no detectable drug in plasma, 2 patients with  $\geq 25\%$  non-compliance by pill counts, one patient with no baseline test and one who did not understand instructions per rater notes. N=14, 13, 10 for PAL, and N=22, 17, 18 for spatial working memory for placebo, 50 and 100 mg, respectively.

**From:** Maria D Lima  
**Sent time:** 08/31/2021 12:44:06 PM  
Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Lice Ghilardi <[REDACTED]@gmail.com>; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam;  
**To:** Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ereikan Abali; Lisa Auerbach; Jaelyn N Churchill; Lynn Hernandez; Rosa Lee; Dani Mebeth; Nicole Roberts  
**Cc:** Marc Scullin; Erica Friedman; Priscilla Daniel  
**Subject:** Re: Funding Opportunity -CSOM Intramural Research Program

---

Dear Faculty,

We are happy to announce that we are making available two opportunities to obtain intramural (CSOM) funds for your research in support and preparation for subsequent submission of extramural grants.

The CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**.

[Click here to access the submission portal](#)

#### **Bridge Funding Eligibility**

Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

#### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

#### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

We welcome any questions you may have.

With my best regards,

Maria

Maria F. Lima, Ph.D.

Associate Dean for Research/Chief Research Officer

Medical Professor, Department of Molecular Cellular and Biomedical Sciences

160 Convent Ave, Harris Hall, Suite 10

New York, NY 10031

Phone: (212) 650-6386

Email: [mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)

CUNY School of Medicine

The City College  
of New York

**From:** Hoau-yan Wang  
**Sent time:** 09/01/2021 12:55:15 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] [WARNING: MESSAGE ENCRYPTED][WARNING: MESSAGE ENCRYPTED]In the Matter of Cassava Sciences, Inc. (HO-14346) smail

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**From:** amparoe sec.gov <sec.notification@zixmessagecenter.com>  
**Sent:** Tuesday, August 31, 2021 3:38 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] [WARNING: MESSAGE ENCRYPTED][WARNING: MESSAGE ENCRYPTED]In the Matter of Cassava Sciences, Inc. (HO-14346) smail

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**New ZixCorp secure email message from U.S. Securities and Exchange Commission  
Secure Email**

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To view the secure message, click Open Message.

The secure message expires on Nov 29, 2021 @ 08:38 PM (GMT).

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To reply to the sender, click Open Message.

If clicking Open Message does not work, copy and paste the link below into your Internet browser address bar.

<https://web1.zixmail.net/s/e?>

[b=sec&m=ABAyZgWUfoaVotObOh5kB0lp&em=hywang%40med%2ecuny%2eedu](https://web1.zixmail.net/s/e?b=sec&m=ABAyZgWUfoaVotObOh5kB0lp&em=hywang%40med%2ecuny%2eedu)

**From:** Hoau-yan Wang  
**Sent time:** 09/01/2021 01:00:30 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Simufilam data manipulation

---

**From:** Holyearth <[REDACTED]@gmail.com>  
**Sent:** Wednesday, September 1, 2021 8:58 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Simufilam data manipulation

Hello Dr. Wang,

Have you participated in any data manipulation with regards to Simufilam data?

Regards,  
Sunny Mirpuri  
tel: [REDACTED]  
e-mail [REDACTED]@gmail.com

**From:** Hoau-yan Wang  
**Sent time:** 09/01/2021 06:18:56 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Fwd: Simufilam data manipulation

**From:** Holyearth <[REDACTED]@gmail.com>  
**Sent:** Wednesday, September 1, 2021 5:23 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Fwd: Simufilam data manipulation

This was funny



\* Fiction: Before and After photos are identical, more evidence of image manipulation.  
Fact: The photos shown in the allegation are control pictures. Control pictures are supposed to be highly similar

----- Forwarded message -----  
**From:** Holyearth <[REDACTED]@gmail.com>  
**Date:** Wed, Sep 1, 2021 at 8:58 AM  
**Subject:** Simufilam data manipulation  
**To:** <hywang@med.cuny.edu>

Hello Dr. Wang,

Have you participated in any data manipulation with regards to Simufilam data?

Regards,  
Sunny Mirpuri  
tel: [REDACTED]  
e-mail: [REDACTED]@gmail.com

**From:** Gonzalo Torres  
**Sent time:** 09/03/2021 09:39:45 AM  
Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Dr. Broderick [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com <[REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosalinda Guce; Rosemary Wieczorek; Sanna Goyert; Susan Kornacki; Jun Yoshioka  
**To:**  
**Cc:** Maria Agosto; Roberto Rodriguez; Juana Torres  
**Subject:** MCBS faculty meeting next Wednesday September 8, 4PM

---

Dear All,

I hope everyone had a good summer and is safe after the storm.

I would like to have a faculty meeting next **Wednesday, September 8th, at 4 pm**. We will be discussing plans for the upcoming semester.

You can come to room 110 (Harris) if you are around or join the meeting via zoom. Below is the zoom link:

Have a nice long weekend.

Best,  
Gonzalo

Topic: MCBS Faculty Meeting  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
<https://ccny.zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)  
+13017158592,,3783139420# US (Washington DC)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 312 626 6799 US (Chicago)  
+1 669 900 6833 US (San Jose)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)

Meeting ID: 378 313 9420  
Find your local number: <https://ccny.zoom.us/u/kezsSsx6C>

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 09/03/2021 10:30:33 AM  
**To:** lbrunelle@quanterix.com; qxx07a@acu.edu; AAIC Abstracts <abstracts@alz.org>; Zhe Pei; Hoau-yan Wang  
**Subject:** [EXTERNAL] RE: Concerns regarding AAIC 2021 poster presentation "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam"  
**Attachments:** Cassava - Public Statement 09 03 21 pdf

---

Dear Nicole,

Sorry for the delay. Attached is a public statement released this morning addressing the errors in the spaghetti plot.

Thank you,  
Lindsay

---

**From:** AAIC Abstracts <abstracts@alz.org>  
**Sent:** Monday, August 30, 2021 5:35 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>; lbrunelle@quanterix.com; qxx07a@acu.edu; zpei@ccny.cuny.edu; hywang@med.cuny.edu  
**Subject:** Fwd: Concerns regarding AAIC 2021 poster presentation "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam"

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for your submission to and participation in the Alzheimer's Association International Conference (AAIC) 2021.

Below you will find concerns presented by **Tim Van Treuren** <[tvantreuren@biosres.com](mailto:tvantreuren@biosres.com)>, a conference attendee.

Please confirm receipt of email to me and respond directly to Tim.

Best regards,  
Nicole Sanders

----- Forwarded message -----

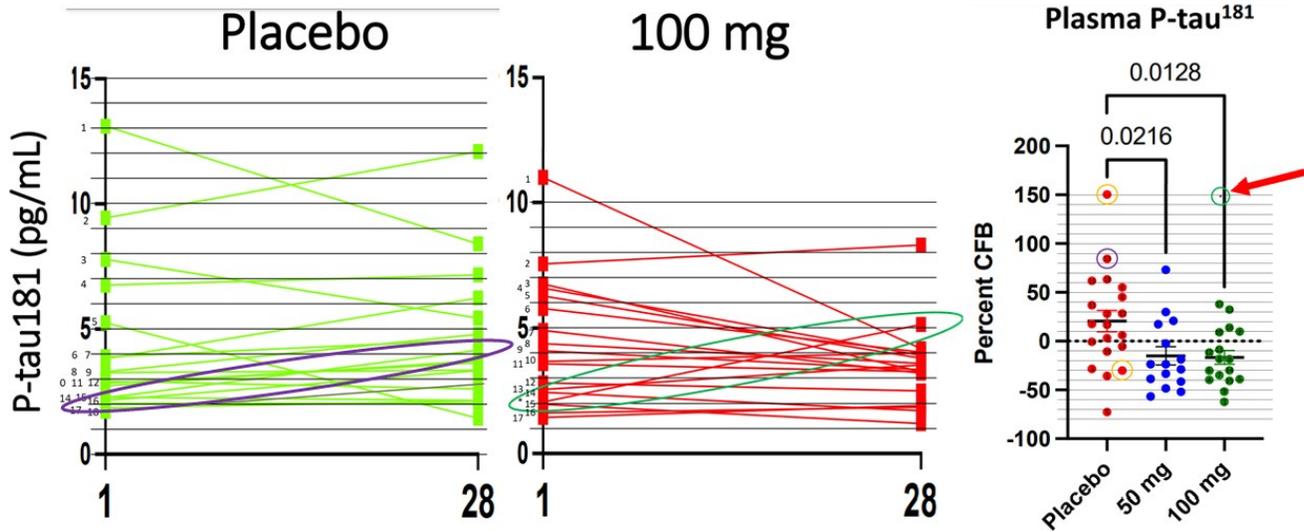
**From:** **Tim Van Treuren** <[tvantreuren@biosres.com](mailto:tvantreuren@biosres.com)>  
**Date:** Mon, Aug 30, 2021 at 12:58 PM  
**Subject:** Concerns regarding AAIC 2021 poster presentation "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam"  
**To:** <[abstracts@alz.org](mailto:abstracts@alz.org)>

To whom it may concern,

I am writing to express concern regarding potential manipulation of data that is presented in the poster entitled "SavaDx, a novel plasma biomarker to detect Alzheimer's disease, confirms mechanism of action of simufilam" presented during the 2021 Alzheimer's Association International Conference in July. The abstract can be found at the following [link](#). The poster can be found at the following [link](#).

Of specific concern are figures 4 and 5 which show the changes in plasma p-tau181 in three treatment groups. The scatter plot in figure 4 shows the % change from baseline of p-tau in individuals that received placebo, 50mg of simufilam or 100mg of simufilam b.i.d. for 28 days. The spaghetti plot in figure 5 outlines the absolute values and changes of p-tau for each individual patient presented in figure 4. **I believe that there are several inconsistencies between these two figures that are concerning and which dramatically alter the statistical analysis of the data.**

First, in the 100mg group, **there are 18 lines on the spaghetti plot but only 17 scatter plot dots.** As best as I can estimate, all lines are numbered with their corresponding scatter plot dots. All of the lines are accounted for in the scatter plot except for the one that is circled in green in the adapted figure below. The line in question represents an approximate 150% increase in p-tau (from approximately 2pg/mL to 5pg/mL) that is not represented in the scatter plot **and as noted below alters the p-value.**



Second, in the placebo group, there is an outlier 150% increase in p-tau that is NOT observed in the spaghetti plot. The highest % increase in p-tau according to the spaghetti plot appears to be ~75-80% and is circled in purple on both plots. Additionally, there are 20 dots in the scatter plot and only 18 lines in the placebo spaghetti plot. The two scatter plot data points that appear to be missing from the spaghetti plot are circled in orange in the placebo scatter plot. It is certainly reasonable that the spaghetti line corresponding to the ~30% decrease in p-tau in the placebo group that doesn't seem to be in the spaghetti plot may in fact be present as two lines could be on top of each other, but the 150% line is certainly not present.

After estimating the %CFB, I re-ran the statistical analyses to see how the discrepancies alter the p-values. Those calculations are in the attached Excel sheet. Recalculation changes the p-value for the 100mg group from ~0.01 to ~0.10/~0.15 while the 50mg group remains largely unchanged.

Based on the correspondence between the majority of the data points in figure 4 and 5, it appears that either serious oversights/mistakes or intentional manipulation occurred during data analysis for figure 4.

I hope that these concerns might be addressed by the poster authors as the changes made have a considerable effect on the analysis of the data and the conclusions that are drawn. I hope that specifically the absence of the +150% patient in the 100mg scatter plot and the introduction of the +150% increase into the placebo group scatter plot could be clarified.

Regards,  
**Timothy Van Treuren, PhD.**

## Cassava Sciences, Inc.

### Public Statement Regarding Recent Allegations Against Cassava Sciences, Inc.

September 3, 2021

*Please refer to the Forward-Looking Statements at the end of this document.*

*(Transcript of recorded session).*

Good morning, everyone. My name is Remi Barbier, Chairman of the Board, President & CEO of Cassava Sciences. Today I'd like to discuss allegations that were recently made against our Company and what we're doing about it. We'll end the discussion with an overview of Cassava Sciences' progress in Alzheimer's disease.

As most people know, last Tuesday, August 24<sup>th</sup>, a law firm in NY made allegations against us. Let me be very clear: I think these allegations are false. This NY law firm claims our science is improbable, unexpected and unique to Cassava Sciences, and therefore it's all an elaborate fraud. By these criteria, all drug innovations are fraudulent. The NY law firm also filed a Citizen's Petition with FDA, essentially using the same allegations to demand a regulatory halt to our clinical progress in Alzheimer's disease. Two days after issuing their report, the law firm disclosed that they represent clients who have a short position in Cassava stock.

## Cassava Sciences, Inc.

It's been about a week since these allegations were posted on-line. In that short period of time, our market valuation declined by over \$2 billion dollars. You heard right: \$2 billion dollars of valuation, wiped out in one week by on-line allegations.

When I first read the allegations, I felt dazed and confused. After all, we've been working slowly, carefully, patiently for over ten years on the science, and always in collaboration with a wide range of stakeholders, including academic advisors, non-clinical sites, clinical sites, the NIH, the FDA, peer-reviewed journal publications, and of course, you, the investing public. After ten plus years of effort, we're finally on the verge of initiating a pivotal Phase 3 program. And now this.

So let me tell you what I think of these allegations, and I won't hold back. These allegations are not only false, I also think they are misleading. As a science organization, we conduct experiments that generate data. We do not invent stuff out of thin air. Needless to say, we intend to vigorously defend ourselves and our stakeholders against false and misleading allegations.

There is an enormous profit motive at work. As previously noted, after the allegations were made public, which is to say after the damage was done, the law firm issued a press release admitting its anonymous clients "*hold short positions in Cassava stock.*" (For those who don't follow Wall St, a short position allows an investor to make a financial profit from a drop in a Company's stock price). So here we have a situation where there's a significant financial motive

## Cassava Sciences, Inc.

to drive down our stock price. When done correctly, short selling is legal. But there are some short sellers who make outlandish allegations, then make a killing when the stock price declines. In fact, this practice has a name. It's called "short and distort". Look it up.

Let me be clear: biotech is and will always be a high-risk, high-reward activity. Most drug candidates fail, that's a fact. Simufilam, which is our drug candidate for Alzheimer's disease, still needs to undergo Phase 3 testing and FDA approval before we can declare victory. In this regard, it's normal for some investors to bet for, and some to bet against, a biotech company, especially around the release of important clinical datasets. After all, every trade needs a buyer and a seller. And that's fine. That's the way a healthy market works.

But I think what we're currently seeing is no ordinary short seller betting our data will disappoint. To me, the short attack against Cassava Sciences feels unprecedented in its boldness, its scope, its immediacy and its intensity. It feels highly organized and well-funded. It feels like whoever is behind this effort wants to make a lot of money quickly, at the expense of our science. And, of course, by hiring a law firm to spread allegations on-line, the holders of a short position don't have to do the dirty work. That's done by the law firm. In other words, by distancing the monkey from the organ grinder, those behind this scheme are hard to detect.

Now I'll say a few words about the allegations themselves. When we first heard of the allegations, we stayed up for a good part of the night crafting a press release. It's hard to respond to 40+ pages of inflammatory accusations overnight, but we did, and the next day,

## Cassava Sciences, Inc.

Wednesday, August 25<sup>th</sup>, we issued a press release stating we believe the allegations regarding our scientific integrity are false and misleading. I think what we did is good governance and standard corporate behavior. But it may not be enough. As I said, this attack is unprecedented in scope and intensity, and it requires us to be forceful in our response.

Let's turn our attention to the Citizen's Petition. This may be a short discussion. In brief, I think the Citizen's Petition is meaningless. An FDA Citizen's Petition is exactly what it sounds like. Any citizen can write to the FDA and complain about a drug. I don't think there are any special requirements that a Citizen's Petition be accurate, or even truthful. Pretty much anything goes. There is a lot of literature around abuse of the Citizen's Petition privilege, but that's a topic for another day. To my knowledge, a Citizen's Petition is typically filed against an approved drug or a drug candidate that is up for FDA approval. Our drug candidate in Alzheimer's disease fits neither of those two categories. Personally, I've never heard of a Citizen's Petition against a drug candidate that has not yet entered Phase 3 and that has demonstrated a clean safety profile in an elderly frail population. In any event, FDA has up to 150 days to take final action on a Citizen's Petition. As I said, I think the Citizen's Petition is meaningless and I hope FDA responds sooner rather than later.

For the record, we are not on clinical hold, nor has FDA contacted us regarding the Citizen's Petition or any allegations. In fact, we recently reached agreement with FDA for two Special Protocol Assessments for our Phase 3 program. We remain full-speed-ahead with our clinical program in Alzheimer's disease.

## Cassava Sciences, Inc.

Some of the allegations focus on peoples' perceptions of our Western blots. Western blot is a highly technical area of science and it's a discussion that resists quick summary. For those who are unfamiliar, a Western blot is a standard lab technique used by researchers to specifically detect a protein. Now, I have no expertise in this technique, but I do know that the final product is a photograph. The photo can have light, or no light, or some other visual markings. I am aware that the allegations have caused a storm of opinions and counter-opinions on the internet around the fine visual features of photograph of certain Western blots. We all know that once a photograph is on the internet, the pixels that make up that photograph can easily be Photoshopped, cropped or otherwise distorted to mean anything you want it to mean. Furthermore, internet photos are resolution dependent. This means an internet photo can quickly lose quality and look blurry or pixelated, or whatever. I don't trust the authenticity of photos on the internet, and neither should you.

One way to settle the discourse around Western blots might be to go back to the original films and images. As a reminder, Cassava Sciences does not have its own laboratory facilities. We use other people's labs. For this reason, we don't have the original films or images for the Western blots in question. Those were generated by our science collaborator at CUNY, who is Prof. Wang. For this reason, I have respectfully requested that CUNY inquire thoroughly but expeditiously into the allegations targeting Prof. Wang. I have also asked CUNY that its conclusionary findings be made available to the public.

## Cassava Sciences, Inc.

I would like to provide my thoughts around Prof. Wang, our scientific collaborator. He is a tenured professor at CUNY School of Medicine. Prof. Wang is at the tail end of his academic career. He has a long and outstanding record of scholarly achievements in Alzheimer's and other disease areas. His work has been published in many peer-reviewed journals. He has collaborated with a wide range of science partners, both in academia and industry.

Prof. Wang has also been a scientific collaborator to Cassava Sciences for about 15 years on the Alzheimer's program. Over 15 years, you get to know someone very well. Based on our long-term scientific relationship with Prof. Wang, we support his scientific integrity and ethics in the strongest possible terms. Prof. Wang has always embodied a commitment of intellectual honesty, rigor and transparency in the conduct of his scientific research. To me, it is not credible or fair to accuse Prof. Wang of a long-term, widespread pattern of scientific fraud, as the NY law firm alleges. I am not aware of any basis for them to do so.

On a more general note, I'm also concerned that credible scientists who have a lifelong record of scholarly achievements, such as Prof. Wang, can be instantly squelched by on-line allegations that go far beyond scientific debate. And of course, once they're out there on the internet, allegations take on a life of their own. There are legitimate forums to host scientific debate and make scholarly inquiries, and Twitter isn't one of them. Twitter storms can be entertaining to read, but entertainment is not evidence against the accused.

## Cassava Sciences, Inc.

Let me also say that we are humans, and we do make honest mistakes from time to time. We have no shame in owning what we create. Folks on the internet have pointed out two errors. These are not material errors. There may be more to come, I just don't know given that our Alzheimer's program spans about 15 years of research, but right now I am specifically aware of visual errors in one publication and one poster presentation. Let me be clear: these are only visual errors. They should have been caught in proofing but were not. In all cases, the data analysis is correct; the visual display of the data is not correct. It's worth repeating: the data analysis is correct; the visual display of the data is not correct.

In 2017, we published in *Neurobiology of Aging*, a peer-reviewed publication. In that paper, Figure 12 contains an image showing 12 control bands. It should show 13. That's it. This is a visual error that was not caught in proofing. The data analysis was based on all 13 control bands.

In July 2021, we made a poster presentation at a conference in Denver on SavaDx, one of our product candidates. Figure 5 of that poster presentation shows what's called a spaghetti plot. A spaghetti plot is a visual representation of individual data, and consists of many lines displayed together, which I suppose, really can look like a plate of spaghettis. In any event, Figure 5 for the placebo group shows 18 lines; it should show 20. To be clear, the lines that were visually left out of this spaghetti plot are included in the data analysis. Figure 5 for the 100 mg group shows 18 lines; it should show 17. (The 18<sup>th</sup> line represents data for an outlier

that has been consistently removed from analysis). Again, these visual errors were not caught in proofing. A corrected Figure 5 is in the Appendix.

Finally, and this is the last thing I'll say today about the allegations, investors sometimes ask us why we don't respond to internet trolls. My rule is this: we do not engage on social media platforms. We won't take the bait; we won't go there. It's not what we do. We're not an entertainment company; we're a science shop. Our currency is data. That's how we plan to win. And of course, the big win may come later, as we generate clinical data with our drug candidate, simufilam, in Alzheimer's disease. That's our gameplan.

This is a good transition to provide an overview of our progress in Alzheimer's disease. As you know, we have a Phase 3 program in the works for our drug candidate, simufilam, in people with Alzheimer's disease.

I'm happy with the progress of this Phase 3 program. It's a lot of work and overall, it's going well. To recap our progress, we had a good end-of-phase 2 meeting with FDA earlier this year. We raised capital from investors to fund the Phase 3 program. We're working with Evonik for large-scale, Phase 3 drug supply. That effort is intense, and it's going well, again, thanks to a highly dedicated group of people in our Technical Operations team and at Evonik. Building a good team is very important for getting things done the right way. In clinical operations we've hired what I would describe as the-best-of-the-best. People with deep, hands-on experience

## Cassava Sciences, Inc.

managing large, complex clinical studies. We're working with Premier Research, one of the top clinical research organizations for neuroscience trials.

Last week, we announced that we had reached agreement with FDA for Special Protocol Assessments for both of our upcoming Phase 3 studies. These SPA agreements document that FDA has reviewed and agreed upon the key design features of our Phase 3 study protocols of simufilam for the treatment of patients with Alzheimer's disease.

This week, we received notification from the Institutional Review Board, or IRB, that our two Phase 3 study protocols are now fully approved. All this to say, I think we're on-track to initiate our Phase 3 program shortly.

The on-going open-label study is going well. I expect our next public disclosure for this study will be interim results of a pre-planned analysis on the first 50 patients who've completed 12 months of open-label treatment with simufilam. We don't have all that data in-hand, so we can't disclose just yet. Stay tuned.

In closing, I want to say both thank you and to apologize to all the people who have reached out to us in the past week. The thank you is for showing support. The apology is for not being able to return everyone's phone call or email inquiry. We've simply been overwhelmed by the volume of inquiries from investors. We'll try to do better as things calm down.

## **Cassava Sciences, Inc.**

**I truly believe Cassava Sciences is one clinical program away from greatness. We must be ambitious, and we must be persevering in achieving that goal. Distractions may distract, but they will not lead us astray. Ultimately, we're here to serve people with Alzheimer's disease. You have my commitment that we will honor those people with hard work, perseverance and an unwavering commitment to develop a treatment for Alzheimer's disease. That is our goal. That is our journey.**

**Respectfully,**

**Remi Barbier  
Chairman of the Board  
President & CEO**

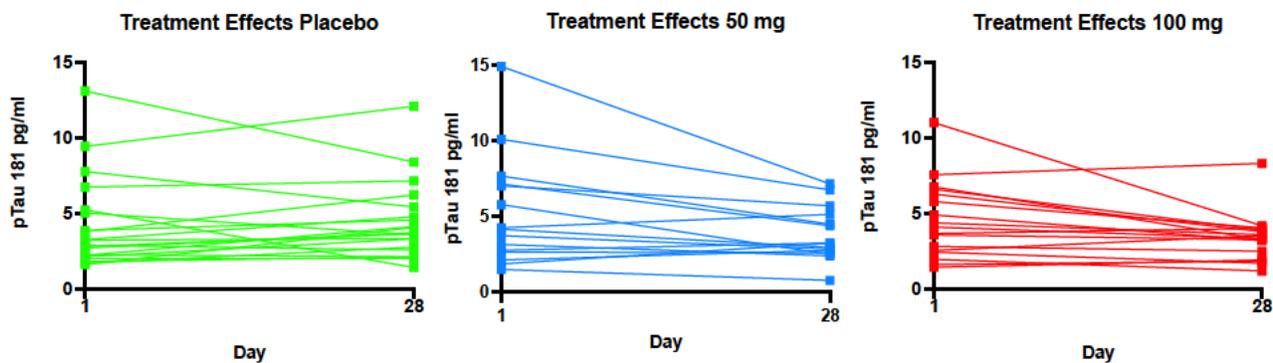
APPENDIX

Erratum to a poster presentation titled *“SavaDx, a Novel Plasma Biomarker to Detect Alzheimer’s Disease, Confirms Mechanism of Action of Simufilam”*. The data and data analysis are correct; certain visual displays that were not caught in proofing are incorrect, as follows.

- a) Figure 5, spaghetti plot for the placebo group, originally showed 18 lines; it should show 20 lines. Data for the two missing lines are properly included in the analysis.
- b) Figure 5, spaghetti plot for the 100 mg group originally showed 18 lines; it should show 17. (The 18<sup>th</sup> line represents data for an outlier that is consistently removed from analysis).

Corrected Figure 5 appears below.

Figure 5. Spaghetti plots show individual changes in plasma P-tau181 in pg/ml.



**Cautionary Note Regarding Forward-Looking Statements:**

*This Public Statement includes forward looking statements including but not limited to those regarding the timing of the initiation and subsequent progress of our pivotal Phase 3 trial and its likelihood of success, the timing of announcement of the results of our open label study, the FDA response to the Citizen’s Petition, the initiation and progression of the CUNY scientific inquiry and the publication of its results, and the restoration of scientific reputations.*

*Drug development involves a high degree of risk, and historically only a small number of research and development programs result in commercialization of a product. Clinical results from our earlier-stage clinical trials may not be indicative of full results or results from later-stage or larger scale clinical trials and do not ensure regulatory approval. You should not place undue reliance on these statements or any scientific data we present or publish. Such statements are based largely on our current expectations and projections about future events.*

*Such statements speak only as of the date of this public statement and are subject to a number of risks, uncertainties and assumptions, including, but not limited to, those risks relating to the ability to conduct or complete clinical studies on expected timelines, to demonstrate the specificity, safety, efficacy or potential health benefits of our product candidates, the severity and duration of health care precautions given the COVID-19 pandemic, any unanticipated impacts of the pandemic on our business operations, and including those described in the section entitled “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2020 and future reports to be filed with the SEC. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from expectations in any forward-looking statement. In light of these risks, uncertainties and assumptions, the forward-looking statements and events discussed in this public statement are inherently uncertain and may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Accordingly, you should not rely upon forward-looking statements as predictions of future events. Except as required by law, we disclaim any intention or responsibility for updating or revising any forward-looking statements contained in this news release.*

*For further information regarding these and other risks related to our business, investors should consult our filings with the SEC, which are available on the SEC’s website at [www.sec.gov](http://www.sec.gov).*

###

**From:** Patricia Broderick  
**Sent time:** 09/03/2021 10:43:55 PM  
Kaliris gmail [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Dr.Broderick [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wiczorek [REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Cortes; Paul Gottlieb; Rosalinda Guce; Rosemary Wiczorek; Sanna Goyert; Susan Kornacki; Jun Yoshioka  
**To:**  
**Cc:** Maria Agosto; Roberto Rodriguez; Juana Torres  
**Subject:** Re: MCBS faculty meeting next Wednesday September 8, 4PM

---

Hi Gonzalo,

See you on the zoom camera on the 8th at 4PM.

Looking forward.

Many good wishes for the Labor Day weekend.  
Patricia

---

**From:** Gonzalo Torres  
**Sent:** Friday, September 3, 2021 9:39 AM  
**To:** Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail [REDACTED]@gmail.com); Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr.Broderick ([REDACTED]@gmail.com); Patricia Cortes; Paul Gottlieb; Rosalinda Guce; Rosemary Wiczorek; Rosemary Wiczorek ([REDACTED]@outlook.com); Sanna Goyert; Susan Kornacki; Jun Yoshioka  
**Cc:** Maria Agosto; Roberto Rodriguez; Juana Torres  
**Subject:** MCBS faculty meeting next Wednesday September 8, 4PM

Dear All,

I hope everyone had a good summer and is safe after the storm.

I would like to have a faculty meeting next **Wednesday, September 8th, at 4 pm**. We will be discussing plans for the upcoming semester.

You can come to room 110 (Harris) if you are around or join the meeting via zoom. Below is the zoom link:

Have a nice long weekend.

Best,  
Gonzalo

Topic: MCBS Faculty Meeting  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
<https://ccny.zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)  
+13017158592,,3783139420# US (Washington DC)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 312 626 6799 US (Chicago)  
+1 669 900 6833 US (San Jose)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)

Meeting ID: 378 313 9420  
Find your local number: <https://ccny.zoom.us/u/kezsSsx6C>

**From:** Marc Scullin

**Sent time:** 09/07/2021 09:14:03 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hou-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** CSOM Office of Research - NIH Finding Opportunities - Week ending 09/03/2021

Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending September 03, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 09/03/2021, [Click HERE](#)

## Funding Opportunities

- [NCI Mentored Research Scientist Development Award to Promote Diversity \(K01 Independent Clinical Trial Not Allowed\)](#)  
(PAR-21-295)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [NCI Mentored Research Scientist Development Award to Promote Diversity \(K01 Clinical Trial Required\)](#)  
(PAR-21-296)  
National Cancer Institute  
Application Receipt Date(s): November 12, 2024
- [Multipurpose Prevention Technology: Novel Systemic Options for Young Adults \(R43/R44 Clinical Trial Not Allowed\)](#)  
(PAR-21-297)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
National Institute of Mental Health  
Application Receipt Date(s): Only accepting applications for the AIDS Application Due Date(s) listed below:
- [Multipurpose Prevention Technology: Novel Systemic Options for Young Adults \(R41/R42 Clinical Trial Not Allowed\)](#)  
(PAR-21-298)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
National Institute of Mental Health  
Application Receipt Date(s): Only accepting applications for the AIDS Application Due Date(s):
- [NIDCR Behavioral and Social Intervention Clinical Trial Planning and Implementation Cooperative Agreement \(UG3/UH3 Clinical Trial Required\)](#)  
(PAR-21-317)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): May 07, 2024
- [NIDA Research Education Program for Clinical Researchers and Clinicians \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-21-320)  
National Institute on Drug Abuse  
Application Receipt Date(s): November 15, 2021, March 15, 2022
- [Basic Research in Cancer Health Disparities \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-21-322)  
National Cancer Institute  
Application Receipt Date(s): September 07, 2024
- [Basic Research in Cancer Health Disparities \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-21-323)  
National Cancer Institute  
Application Receipt Date(s): September 07, 2024
- [Basic Research in Cancer Health Disparities \(R03 Clinical Trial Not Allowed\)](#)  
(PAR-21-324)  
National Cancer Institute  
Application Receipt Date(s): September 07, 2024
- [Mechanisms that Impact Cancer Risk after Bariatric Surgery \(R01 Clinical Trial Optional\)](#)

(PAR-21-331)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.

- [Mechanisms that Impact Cancer Risk after Bariatric Surgery \(R21 Clinical Trial Not Allowed\)](#)

(PAR-21-332)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.

- [NINDS Alzheimers Disease and Alzheimers Disease-Related Dementias \(AD/ADRD\) Advanced Postdoctoral Career Transition Award to Promote Diversity \(K99/R00 Independent Clinical Trial Not Allowed\)](#)

(PAR-22-022)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): Standard dates apply, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

- [Mechanism for Time-Sensitive Drug Abuse Research \(R21 Clinical Trial Optional\)](#)

(PAR-22-027)  
National Institute on Drug Abuse  
Application Receipt Date(s): September 07, 2024

- [Longitudinal Single Cell Characterization of ADRD Postmortem Tissue \(R01 Clinical Trial Not Allowed\)](#)

(PAR-22-029)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): October 05, 2021

- [Collaborative Partnership between Research Centers in Minority Institutions \(RCMI\) and Alcohol Research Centers \(U54 Clinical Trial Optional\)](#)

(RFA-AA-21-015)  
National Institute on Alcohol Abuse and Alcoholism  
Application Receipt Date(s): December 15, 2021

- [National Cancer Institute Youth Enjoy Science Research Education Program \(R25 Clinical Trial Not Allowed\)](#)

(RFA-CA-21-020)  
National Cancer Institute  
Application Receipt Date(s): October 28, 2021; September 28, 2022; September 28, 2023 No late applications will be accepted for this Funding Opportunity Announcement.

- [Translational and Basic Science Research in Early Lesions \(TBEL\) \(U54 Clinical Trial Not Allowed\)](#)

(RFA-CA-21-054)  
National Cancer Institute  
Application Receipt Date(s): November 02, 2021

- [Translational and Basic Science Research in Early Lesions \(TBEL\) Coordinating and Data Management Center \(U24 Clinical Trial Not Allowed\)](#)

(RFA-CA-21-055)  
National Cancer Institute  
Application Receipt Date(s): November 2, 2021 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s) Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

- [A Multilevel Approach to Connecting Underrepresented Populations to Clinical Trials \(CUSP2CT U01 Clinical Trial Not Allowed\)](#)

(RFA-CA-21-057)  
National Cancer Institute  
Application Receipt Date(s): November 19, 2021

- [Data, Evaluation and Coordinating Center for: A Multilevel Approach to Connecting Underrepresented Populations to Clinical Trials \(CUSP2CT\) \(U24 Clinical Trial Not Allowed\)](#)

(RFA-CA-21-058)  
National Cancer Institute  
Application Receipt Date(s): November 19, 2021

- [National Program for the Career Development Of Physician Scientists in Diabetes Research \(Diabetes - Docs\) \(K12 Clinical Trial Optional\)](#)

(RFA-DK-21-019)

National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): November 18, 2021

- [NIDDK Inflammatory Bowel Disease Genetics Consortium \(IBDGC\) Genetic Research Centers \(GRCs\) \(U01 Clinical Trial Optional\)](#)  
(RFA-DK-21-022)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): December 21, 2021
- [Pediatric Centers of Excellence in Nephrology \(P50 Clinical Trial Optional\)](#)  
(RFA-DK-21-024)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): November 18, 2021
- [Silvio O. Conte Digestive Diseases Research Core Centers \(P30 Clinical Trial Optional\)](#)  
(RFA-DK-21-026)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): Multiple dates, see announcement.
- [Limited Competition for the Data Coordinating Center \(DCC\) for the NIDDK Inflammatory Bowel Disease Genetics Consortium \(IBDGC\) \(U24 Clinical Trial Optional\)](#)  
(RFA-DK-21-502)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): December 21, 2021
- [Limited Competition: Knockout Mouse Production and Phenotyping Project \(UM1\) Clinical Trial Not Allowed](#)  
(RFA-HG-21-036)  
National Human Genome Research Institute  
Application Receipt Date(s): November 01, 2021
- [Limited Competition: Knockout Mouse Phenotyping Project Data Coordination Center and Database \(UM1 Clinical Trial Not Allowed\)](#)  
(RFA-HG-21-037)  
National Human Genome Research Institute  
Application Receipt Date(s): November 01, 2021
- [HEAL Initiative: Interdisciplinary Teams to Elucidate the Mechanisms of Device-Based Pain Relief \(RM1 Clinical Trial Optional\)](#)  
(RFA-NS-22-016)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): November 03, 2021
- [World Trade Center Health Research-Related to WTC Survivors \(U01 no Applications with Responders Accepted\)](#)  
(RFA-OH-22-004)  
National Institute for Occupational Safety and Health  
Application Receipt Date(s): December 7, 2021; December 6, 2022; December 5, 2023; December 10, 2024 On-time submission requires that electronic applications be error-free and made available to CDC for processing from eRA Commons on or before the deadline date. Applications must be submitted to and validated successfully by Grants.gov/eRA Commons no later than 5:00 PM Eastern Time on the listed application due date. Applicant organizations are strongly encouraged to start the registration process at least 4 weeks prior to the application due date. Note: HHS/CDC grant submission procedures do not provide a period of time beyond the application due date to correct any error or warning notices of noncompliance with application instructions that are identified by Grants.gov or eRA systems (i.e., error correction window).

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702

[CSOM Office of Research Home Page](#)



*Annabel Santana, Assistant Dean for Academic & Faculty Affairs*  
*CUNY School of Medicine*  
*The City College of New York*  
*160 Convent Avenue, Suite H-107*  
*New York, New York 10031*  
*Tel: 212-650-5297 or -5275*  
*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Annabel Santana

**Sent time:** 09/07/2021 11:59:23 AM

**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gina Allegretti; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Maxine Nwigwe; Miguel A Munoz-Laboy; Nancy Sohler; Nicole Roberts; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Rosa Lee; Rosalinda Guce; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Susan Kornacki; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; Olga Waters; Priscilla Daniel

**Cc:** Rosemary Wiczorek <starwiz99@outlook.com>; Noel Manyindo

**Subject:** Canceled: CSOM Faculty meetings

---

The CSOM Faculty Council meetings are resuming monthly on the **2<sup>nd</sup> Thursday of each month at 4:30 PM.**

**\*\* Please note: the NEW Zoom link below.\*\***

Topic: CSOM Faculty Council meeting

Time: Recurring meeting - 2<sup>nd</sup> Thursday of each month at 4:30 PM

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828 532

One tap mobile

+16465588656,,83777353931# US (New York)

+13126266799,,83777353931# US (Chicago)

Dial by your location

+1 646 558 8656 US (New York)

+1 312 626 6799 US (Chicago)

+1 301 715 8592 US (Washington DC)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

Find your local number: <https://ccny.zoom.us/u/kdJQGKqIGV>

**From:** Annabel Santana

**Sent time:** 09/07/2021 11:59:24 AM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoauyan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim;

**To:** Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lianne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; ; ; ; ;

**Subject:** CSOM Faculty meetings

---

The CSOM Faculty Council meetings are resuming monthly on the **2<sup>nd</sup> Thursday of each month at 4:30 PM.**

**\*\* Please note: the NEW Zoom link below.\*\***

Topic: CSOM Faculty Council meeting

Time: Recurring meeting - 2<sup>nd</sup> Thursday of each month at 4:30 PM

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

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Dial by your location

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+1 301 715 8592 US (Washington DC)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

Find your local number: <https://ccny.zoom.us/u/kdJQGKqIGV>

**From:** Hoau-yan Wang  
**Sent time:** 09/07/2021 03:06:22 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Hey lier

---

**From:** Eric Jing <734516044@qq.com>  
**Sent:** Monday, September 6, 2021 10:15 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Hey lier

I'm an investor of SAVA, i want to say fuck you.

**From:** Hoau-yan Wang  
**Sent time:** 09/07/2021 03:06:39 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Request For Reply On Allegations Leveled Against Yourself In Citizen Petition Related To Cassava Sciences & Wester Blots Image Manipulation

---

---

**From:** Musarat Naveed [REDACTED]@yahoo.com>  
**Sent:** Monday, September 6, 2021 4:34 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Request For Reply On Allegations Leveled Against Yourself In Citizen Petition Related To Cassava Sciences & Wester Blots Image Manipulation

Respected Dr. Wang

I hope you are fine and doing well today.

I am an individual investor of Cassava Sciences and affected party because of a sudden price collapse due to allegations leveled against you and Cassava Sciences that "Dr. Wang manipulated Western Blot images" and that post hoc analyses of Simufilam phase 2 trials that turned the data positive second time was conducted at your laboratory...

Can you please provide your response on these allegations of image manipulations? because your response with proper evidence that these allegations are wrong can prove to be the missing piece of the puzzle. So far we have not heard your point of view in this regards...

Kindly respond when you see fit..... Your respond in this regard shall be highly appreciated...

Regards  
Cassava Sciences Retail Investor

**From:** Raquel Morales  
**Sent time:** 09/08/2021 09:59:11 AM  
**To:** Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Gonzalo Torres; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosalinda Guce; Rosemary Wiczorek; Sanna Goyert; Susan Kornacki; Jun Yoshioka  
**Cc:** Maria Agosto; Roberto Rodriguez; Juana Torres  
**Subject:** MCBS faculty meeting

---

Dear Faculty,

A friendly reminder, today is the Departmental faculty meeting at 4pm. You can come to room 110 (Harris) if you are around or join the meeting via zoom. All details are below.

Join Zoom Meeting  
<https://ccny.zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)

Best Regards,

*Raquel Morales*

Assistant to Chair  
Department of Molecular, Cellular & Biomedical Sciences

---

**From:** Gonzalo Torres <GTorres@med.cuny.edu>  
**Sent:** Friday, September 3, 2021 9:40 AM  
**To:** Raquel Morales <rmorales@med.cuny.edu>  
**Subject:** MCBS faculty meeting next Wednesday September 8, 4PM

Dear All,

I hope everyone had a good summer and is safe after the storm.

I would like to have a faculty meeting next **Wednesday, September 8th, at 4 pm**. We will be discussing plans for the upcoming semester.

You can come to room 110 (Harris) if you are around or join the meeting via zoom. Below is the zoom link:

Have a nice long weekend.

Best,  
Gonzalo

Topic: MCBS Faculty Meeting  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
<https://ccny.zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)  
+13017158592,,3783139420# US (Washington DC)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 312 626 6799 US (Chicago)  
+1 669 900 6833 US (San Jose)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)

Meeting ID: 378 313 9420  
Find your local number: <https://ccny.zoom.us/u/kezsSsxn6C>

**From:** Marc Scullin

**Sent time:** 09/08/2021 11:12:11 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** Funding Opportunity Reminder - CSOM Bridge & Pilot Project Program - Submission Portal is OPEN

---

Greeting CUNY School of Medicine Research Faculty. I am writing to remind you that the CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**. Eligibility information and a brief FAQ are listed below. If you have any additional questions, please contact Dr. Lima or myself.

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 09/08/2021 04:06:11 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] RE: IL6 raw data

---

Thanks!

---

**From:** Hoau-Yan Wang <hywang@med.cuny.edu>  
**Sent:** Wednesday, September 8, 2021 2:54 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Re: IL6 raw data

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Here you go.

On Wed, Sep 8, 2021 at 1:04 PM Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Hoau,

In my organizing, I see I am missing your original file for IL-6 in CSF of Phase 2b. Could you resend?

I'm booked from 2:15 to 5:00 my time today, 12:15 to 5:00 tomorrow and 1:15 to 3:00 my time on Friday. Otherwise reachable.

Thanks,  
Lindsay

**Lindsay H. Burns, PhD**  
SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)



**From:** Annabel Santana

**Sent time:** 09/09/2021 01:46:51 PM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoauyan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim;

**To:** Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smid-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; ; ; ; ; ;

**Subject:** REMINDER: CSOM Faculty meeting today - Thurs, 9/9/21 @ 4:30 pm

Reminder:

The next Faculty Council meeting will be today - Thursday, Sept. 9, 2021 at 4:30pm via Zoom. **Please note the NEW ZOOM Link**. The agenda appears below.

a.s.

### CSOM Faculty Council Meeting

September 9, 2021

#### AGENDA:

- Welcome new faculty (E Friedman)
- LCME update (E Friedman)
- Update on In-person teaching (E Abali)
- BS-MD Program Evaluation (R Lee)
- Curriculum Committee - U3 curriculum proposal (N Sohler, L Spatz)
- USMLE Step 1 and Step 2 (D McBeth)
- GQ Survey (N Roberts)
- Action steps re: Climate Concerns (L. Hernandez)
- New Business/Announcements

### CSOM Faculty Council Meeting. Note: this is a NEW Zoom link.

Join Zoom Meeting: <https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRlVpZdDh0TmVxNXpIdz09>

Meeting ID: 837 7735 3931

Passcode: 828 532

One tap mobile

+1646588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

---

**From:** Annabel Santana

**Sent:** Tuesday, September 7, 2021 11:52 AM

**To:** 'Amr Soliman (asoliman@med.cuny.edu)' <asoliman@med.cuny.edu>; Anabelle Andon <AAndon@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; 'Ashiwe Undieh (aundieh@ccny.cuny.edu)' <aundieh@ccny.cuny.edu>; 'Carol Moore' <moore@med.cuny.edu>; 'Dani L. McBeth' <dmcbeth@med.cuny.edu>; Daniel M Richter <drichter@med.cuny.edu>; 'Danielle Pritchett (DPritchett@med.cuny.edu)' <DPritchett@med.cuny.edu>; 'Darwin Deen' <ddeen@ccny.cuny.edu>; 'Eitan Friedman' <friedman@med.cuny.edu>; 'Emine Abali (EAbali@med.cuny.edu)' <EAbali@med.cuny.edu>; 'Erica Friedman' <ericafriedman@med.cuny.edu>; 'Erica Lubetkin' <lubetkin@med.cuny.edu>; 'Geri Kreitzer (gkreitzer@med.cuny.edu)' <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; 'Gonzalo Torres (gtorres@med.cuny.edu)' <gtorres@med.cuny.edu>; 'Holly Atkinson (hatkinson@med.cuny.edu)' <hatkinson@med.cuny.edu>; 'hywang@med.cuny.edu' <hywang@med.cuny.edu>; 'imano@med.cuny.edu' <imano@med.cuny.edu>; 'Joao Nunes' <nunes@med.cuny.edu>; 'Jodie Meyer (meyerjr@med.cuny.edu)' <meyerjr@med.cuny.edu>; 'John (Jack) Martin' <jmartin@ccny.cuny.edu>; 'Jose Cobo (jcobo@med.cuny.edu)' <jcobo@med.cuny.edu>; 'Jude-Marie A Smalec' <JSmalec@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Katherine Mendis <kmendis@med.cuny.edu>; Keosha Bond <kbond@med.cuny.edu>; 'Khosrow Kashfi' <Kashfi@med.cuny.edu>; Kiran Matthews

<kmatthews@med.cuny.edu>; 'Lily Lam (llam@med.cuny.edu)' <llam@med.cuny.edu>; 'Lisa Auerbach (lauerbach@med.cuny.edu)' <lauerbach@med.cuny.edu>; 'Lisa S. Coico (lisa.coico@ccny.cuny.edu)' <lisa.coico@ccny.cuny.edu>; Lisanne Hauck <LHauck@med.cuny.edu>; 'lspatz@med.cuny.edu' <lspatz@med.cuny.edu>; Lynn Hernandez <LHernandez@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; 'Maria Felice Ghilardi' <lice@med.cuny.edu>; Marisol Hernandez <MHernandez@med.cuny.edu>; 'Nancy Sohler' <nsohler@med.cuny.edu>; Naomi Smidt-Afek <nsmidtafek@med.cuny.edu>; 'Nichole K. Roberts' <nroberts@med.cuny.edu>; Noel Manyindo <nmanyindo@med.cuny.edu>; 'Patricia Broderick (broderick@med.cuny.edu)' <broderick@med.cuny.edu>; Patricia Cortes <pcortes@med.cuny.edu>; 'pgottl@med.cuny.edu' <pgottl@med.cuny.edu>; 'Preston Williams (pwilliams@ccny.cuny.edu)' <pwilliams@ccny.cuny.edu>; Raymond Robinson <rrobinson1@med.cuny.edu>; Rosa Lee <Rlee@med.cuny.edu>; Rosemary Wieczorek <RWieczorek@med.cuny.edu>; Samantha Barrick <SBarrick@med.cuny.edu>; 'Sandy Saintonge (SSaintonge@med.cuny.edu)' <SSaintonge@med.cuny.edu>; 'Sanna Goyert' <sgoyert@med.cuny.edu>; 'Siobhan Hollander (SHollander@med.cuny.edu)' <SHollander@med.cuny.edu>; Tashuna Albritton <TAlbritton@med.cuny.edu>; 'Victoria Frye (vfrye@med.cuny.edu)' <vfrye@med.cuny.edu>; Wenhua Lu <wlu1@med.cuny.edu>; Birgland Joseph <BJoseph@med.cuny.edu>; 'Gloria Mabry (gmabry@med.cuny.edu)' <gmabry@med.cuny.edu>; Jaclyn N Churchill <JChurchill@med.cuny.edu>; Mark Maraj <mmaraj1@med.cuny.edu>; Olga Waters <owaters@med.cuny.edu>  
**Cc:** Robert M DeMicco <RDeMicco@med.cuny.edu>; Priscilla Daniel <PDaniel@med.cuny.edu>

**Subject:** CSOM Faculty meetings resume this Thursday, 9/9/21 @ 4:30 pm  
**Importance:** High

Dear CSOM Faculty,

The monthly faculty meetings will resume on the second Thursday of each month at 4:30 PM. Accordingly, **the next Faculty Council meeting will be this Thursday, Sept. 9, 2021 at 4:30pm via Zoom.** Please note the **NEW ZOOM Link** below.

An agenda and an updated calendar invite will follow.

Annabel

-----

Topic: CSOM Faculty Council meeting. **Note: this is a NEW Zoom link.**

Time: Recurring meeting - second Thursday of each month at 4:30 PM

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZIRVpqdXBZdDh0TmVxNXpIdz09>

Meeting ID: 837 7735 3931

Passcode: 828 532

One tap mobile

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+13126266799,,83777353931# US (Chicago)

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+1 301 715 8592 US (Washington DC)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

Find your local number: <https://ccny.zoom.us/u/kdJOGKqIGV>

*Annabel Santana, Assistant Dean for Academic & Faculty Affairs  
CUNY School of Medicine  
The City College of New York  
160 Convent Avenue, Suite H-107  
New York, New York 10031  
Tel: 212-650-5297 or -5275*

Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)

CUNY School of Medicine

The City College  
of New York

**From:** Tricia Mayhew-Noel  
**Sent time:** 09/09/2021 02:18:24 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

---

Dear Prof. Wang,  
CUNY's Conflict Committee Administrator is awaiting your response to the question below, please respond at your earliest convenience such that the Committee may review at the upcoming meeting.

Thanks and Best Regards,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Tricia Mayhew-Noel  
**Sent:** Thursday, August 26, 2021 3:39 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Prof. Wang;  
The Conflicts Committee Administrator asks the following; The equity interest is valued with Cassava Sciences is valued at \$125,000, is there a corresponding percentage of the ownership? Please respond at your earliest convenience.

Thanks,  
Tricia

**Tricia Mayhew-Noel, MS**

Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Hoau-yan Wang  
**Sent:** Wednesday, August 25, 2021 10:35 AM  
**To:** Tricia Mayhew-Noel  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Sorry about the missing response to question #3. Enclosed is the rectified one.

Thanks.

Best regards,

Hoau

---

**From:** Tricia Mayhew-Noel  
**Sent:** Tuesday, August 24, 2021 11:54 AM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Re: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,  
CCNY's Conflict of Interest Committee will be reviewing this project at the next committee meeting, however, the form attached is missing your response to question number 3. Please respond and return to me such that I may forward to the committee.

Thanks and best regards,  
Tricia

**Tricia Mayhew-Noel, MS**  
Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)  
Zoom link: <https://ccny.zoom.us/j/7512512512>  
<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Tricia Mayhew-Noel  
**Sent:** Tuesday, July 27, 2021 1:16 PM  
**To:** Hoau-yan Wang  
**Cc:** Maria D Lima; Holli-Anne S Tai; Alexander King  
**Subject:** Fw: FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Professor Wang,  
On a previous Conflict of Interest application, titled, "Linking peripheral and brain insulin resistance to AD neuropathology and cognition", which was funded by National Institute of Aging NIH/Rush University Medical Center, you stated the following to Dr. Lima, CCNY's College Conflicts Officer, which was indicated in her review of your application and in the determination of a COI. Please confirm whether this information is still applicable or whether it should be updated for this new grant being funded by Cassava.

*"The PI serves as a consultant and a member of the scientific advisory board of CASSAVA for preclinical development and clinical trials of their proprietary drug and diagnostic (biomarker) candidates in central nervous diseases, especially the Alzheimer's disease . Together with other experts in the field, he answers their scientific questions to facilitate CASSAVA's drug and diagnostic development in preclinical testing and clinical trial design. He also functions as CASSAVA's academic collaborator in which he participates as a co-PI or co-investigator in ongoing NIH-funded SBIR and STTR (R41, R42, R44) clinical trial projects. In these projects, he is responsible for analyzing patient samples for CASSAVA. CASSAVA owns the intellectual properties (patents) of all the small molecule drug and diagnostic candidates.*

Thanks for your response.

Best Regards,  
Tricia

**Tricia Mayhew-Noel, MS**  
Director, Research Compliance & Ethics  
Division for Research  
Shepard Hall Room 108B  
160 Convent Ave  
New York, NY 10031  
1-212-650-7902 (phone)  
1-212-650-8344 (fax)  
[tmayhewnoel@ccny.cuny.edu](mailto:tmayhewnoel@ccny.cuny.edu) (email)

Zoom link: <https://ccny.zoom.us/my/tmayhewnoel>  
<http://www.ccny.cuny.edu/irb/> (website)

---

**From:** Holli-Anne S Tai  
**Sent:** Tuesday, June 29, 2021 4:15 PM  
**To:** Tricia Mayhew-Noel  
**Cc:** Awards; Hoau-yan Wang  
**Subject:** FCOI Determination -- PI: Hoau-Yan Wang (Cassava Sciences)

Dear Tricia,

Please see attached FCOI supplement for Professor Wang's new project with Cassava Sciences. May you please let me know if a management plan will be required or if anything else is needed for further determination?

Thank you,

**Holli-Anne Tai**  
Grants Associate  
Grants and Sponsored Programs  
The City College of New York  
160 Convent Avenue | SH - Room 16  
New York, NY 10031  
Ph: 212-650-5418 | F: 212-650-7906  
GSP - <http://www.ccny.cuny.edu/research/gsp.cfm>  
PARS - <http://www.ccny.cuny.edu/research/pars.cfm>

**From:** Marc Scullin

**Sent time:** 09/13/2021 09:18:18 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hou-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 09/10/2021

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Good morning CSOM Faculty. Please below for a list of new NIH funding opportunities for the week ending September 10, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 09/10/2021, [Click HERE](#)

## Funding Opportunities

- [Making Health Care Safer in Ambulatory Care Settings and Long-term Care Facilities \(R18\)](#)  
(PA-21-267)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): Standard dates apply. The first standard due date for the FOA is January 25, 2022. All applications are due by 5:00 PM local time of applicant organization.
- [Administrative Supplements to Promote Diversity in Small Businesses-SBIR/STTR \(Admin Supp Clinical Trial Not Allowed\)](#)  
(PA-21-345)  
Office of the Director, NIH  
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs  
Application Receipt Date(s): Applications are accepted on a rolling basis at any time starting 30 days after the Open Date until the expiration date, unless otherwise noted in Institute specific language. Please consult with Scientific contacts listed in Section VII.
- [Emerging Global Leader Award \(K43 Independent Clinical Trial Required\)](#)  
(PAR-21-251)  
John E. Fogarty International Center  
Application Receipt Date(s): November 3, 2021, November 3, 2022, and November 3, 2023 by 5:00 PM local time of the applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.
- [Emerging Global Leader Award \(K43 Independent Clinical Trial Not Allowed\)](#)  
(PAR-21-252)  
John E. Fogarty International Center  
Application Receipt Date(s): November 3, 2021, November 3, 2022, and November 3, 2023 by 5:00 PM local time of the applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.
- [NCI Mentored Clinical Scientist Research Career Development Award to Promote Diversity \(K08 Clinical Trial Required\)](#)  
(PAR-21-299)  
National Cancer Institute  
Application Receipt Date(s): Standard dates apply. All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s).
- [NCI Mentored Clinical Scientist Research Career Development Award to Promote Diversity \(K08 Independent Clinical Trial Not Allowed\)](#)  
(PAR-21-300)  
National Cancer Institute  
Application Receipt Date(s): Standard dates apply. All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s).
- [NCI Transition Career Development Award to Promote Diversity \(K22 Independent Clinical Trial Not Allowed\)](#)  
(PAR-21-301)  
National Cancer Institute  
Application Receipt Date(s): Standard dates apply. All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s).
- [NCI Transition Career Development Award to Promote Diversity \(K22 Clinical Trial Required\)](#)  
(PAR-21-302)  
National Cancer Institute  
Application Receipt Date(s): Standard dates apply. All applications are due by 5:00 PM local time of applicant organization. All

types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s).

- [Career Transition Award for NINDS Intramural Clinician-Scientists \(K22 Clinical Trial Required\)](#)  
(PAR-21-327)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): Standard dates apply, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.
- [Career Transition Award for NINDS Intramural Clinician-Scientists \(K22 Clinical Trial Not Allowed\)](#)  
(PAR-21-328)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): Standard dates apply, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.
- [Utilizing the PLCO Biospecimens Resource to Bridge Gaps in Cancer Etiology and Early Detection Research \(U01 Clinical Trial Not Allowed\)](#)  
(PAR-21-330)  
National Cancer Institute  
Application Receipt Date(s): October 11, 2024
- [AIDS-Science Track Award for Research Transition \(R03 Clinical Trial Optional\)](#)  
(PAS-21-270)  
National Institute on Drug Abuse  
Application Receipt Date(s): Multiple dates, see announcement.
- [Pharmacokinetics \(PK\) and Pharmacodynamics \(PD\) of THC in Cannabis and Cannabis Products \(R01 - Clinical Trial Optional\)](#)  
(RFA-DA-22-028)  
National Institute on Drug Abuse  
Application Receipt Date(s): February 09, 2022
- [Pharmacokinetics \(PK\) and Pharmacodynamics \(PD\) of THC in Cannabis and Cannabis Products \(R21 - Clinical Trial Optional\)](#)  
(RFA-DA-22-039)  
National Institute on Drug Abuse  
Application Receipt Date(s): February 09, 2022
- [High Priority HIV and Substance Use Research \(R01 Clinical Trial Optional\)](#)  
(RFA-DA-22-040)  
National Institute on Drug Abuse  
Application Receipt Date(s): February 15, 2024
- [An Intergenerational Precision Medicine Research Program for the Study of Factor VIII Immunogenicity in Severe Hemophilia A: Hemophilia A Analytical Cohort Research Program \(UG3/UH3 Clinical Trial Not Allowed\)](#)  
(RFA-HL-22-004)  
National Heart, Lung, and Blood Institute  
Application Receipt Date(s): October 19, 2021
- [Detecting Cognitive Impairment, Including Dementia, in Primary Care and Other Everyday Clinical Settings for the General Public and Health Equity, Pragmatic Clinical Trials \(U01 Clinical Trial Required\)](#)  
(RFA-NS-22-009)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): November 10, 2021
- [Small Vessel VCID Biomarkers Validation Consortium Coordinating Center \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-017)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): November 12, 2021
- [The Human BioMolecular Atlas Program \(HuBMAP\) Demonstration Project \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-RM-21-027)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): November 19, 2021

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)



**From:** Marc Scullin

**Sent time:** 09/14/2021 10:59:26 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Komacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hou-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** NIH FINAL Notice - NOT-OD-21-040 - Required Use of Two-Factor Authentication Using Login.Gov - DEADLINE September 15 2021

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Good morning CSOM Research Faculty. This is e mail is a final reminder that starting on Wednesday, 09/15/2021 the NIH will require Two-Factor Authentication Using Login.Gov for eRA Commons External Modules. The full details of the NIH notice are listed below. The notice is located on the NIH site [HERE](#)

Please let me know if you require any assistance to bringing your account into compliance.

## Required Use of Two-Factor Authentication Using Login.Gov for eRA's External Modules in 2021

**Notice Number:**

NOT-OD-21-040

### Key Dates

**Release Date:**

December 11, 2020

### Related Announcements

[NOT-OD-21-172](#) - Adjusted Timeline for Requiring Two-Factor Authentication to Access eRA Modules Using Login.Gov or InCommon Federated Accounts

### Issued by

NATIONAL INSTITUTES OF HEALTH ([NIH](#))

Centers for Disease Control and Prevention (CDC)

U.S. Food and Drug Administration (FDA)

Agency for Healthcare Research and Quality (AHRQ)

Office of Research and Development (ORD), Department of Veterans Affairs (VA)

Substance Abuse and Mental Health Services Administration (SAMHSA)

### Purpose

#### Background

In April 2020, eRA launched the availability of login.gov for its external modules for optional use. Login.gov is a shared service authentication provider managed by General Services Administration (GSA). With one login.gov account, users can sign into multiple government agency systems while taking advantage of login.gov's two-factor authentication capabilities that ensure the security of their personal information.

NIH/eRA and its partner agencies are now expanding the use of two-factor authentication via login.gov for all external user communities that access eRA's external modules including Commons, Commons Mobile, Internet Assisted Review (IAR) and ASSIST. Beginning soon, NIH/eRA and its partner agencies will require all external users to only use login.gov to access eRA's external modules including Commons, Commons Mobile, IAR and ASSIST.

#### Implementation

Initially, two-factor authentication requirements will be enforced for reviewers using the IAR module. Starting December 14, 2020, the new requirement will be phased in for reviewers, meeting by meeting, effective for review meetings February 1, 2021 and beyond.

By September 15, 2021, all external users will be required to use login.gov when logging into eRA systems. All users of eRA Commons, Commons Mobile and ASSIST are encouraged to begin the switchover now, before the mandatory deadline.

Note that when an external user is transitioned to required use of login.gov, the ability to use eRA credentials (username and password) or InCommon Federated credentials (where organizations authenticate their own users) will no longer be supported.

NIH is working with the InCommon Federation community to identify a solution that allows the InCommon Federation platform to support two-factor authentication requirements and continue its availability in the future.

At this time, users can only have one login.gov account associated with one eRA account. Users with multiple eRA accounts should review the FAQs for additional information.

#### Resources

See step-by-step instructions, FAQs, video tutorials and more at the [Access eRA Modules via login.gov](#) webpage.

Users with multiple eRA accounts should review the FAQ — [If I have more than one eRA account, can I use my login.gov account for all of those eRA accounts to log in to eRA?](#)

## Inquiries

Please direct all inquiries to:

eRA Service Desk

Submit a web ticket: <https://grants.nih.gov/support/index.html>

Toll-free: 1-866-504-9552

Phone: 301-402-7469

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 09/16/2021 08:44:41 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** IRB Manager Training Dates - For all CSOM human subject research Faculty/staff

---

Good morning CSOM research faculty. The following message comes from the CCNY Office of Research Compliance & Ethics and pertains to the transition from IDEATE to IRB Manager. Any CSOM faculty or staff who conduct human subject research are highly encouraged to attend. As always, if you have any questions about the transition, the CSOM office of Research is here to assist

On September 7th, 2021, CUNY transitioned from IDEATE to IRB Manager, an online protocol management tool, to manage the submission and review of all CUNY Human Subjects Research protocols.

To aid in understanding and navigating IRB Manager, CUNY has scheduled 3 training dates and times aimed specifically for CCNY Principal Investigators, Researchers, Advisors, administrative staff and students, who prepare or submit human subjects research applications for IRB review and determination.

The training will target the submission and application process within IRB Manager, and will include the following:

- Logging in with your CUNYFirst credentials.
- Creating New Submissions.
- Submitting Amendments, Continuing Reviews, Proxy Submissions and Final Reports.
- Reporting Events.
- Copying Existing Applications for new Submissions

The dates and times are as followed with the varying Zoom meeting links:

**September 21st, 1-2pm**

**September 29th, 1-2pm**

**October 4th, 1-2pm**

**September 21st, 1-2pm**

Join Zoom Meeting

<https://us02web.zoom.us/j/85627153396?pwd=THJUNy9HUINhSmd4eVZ5eWZJMTB4dz09>

Meeting ID: 856 2715 3396

Passcode: 087558

One tap mobile

+16465588656,,85627153396# US (New York)

+13017158592,,85627153396# US (Washington DC)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 669 900 9128 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 856 2715 3396

Find your local number: <https://us02web.zoom.us/j/k2RiwsKBg>

**From:** Marc Scullin

**Sent time:** 09/16/2021 11:30:34 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** Funding Opportunity Reminder - CSOM Bridge & Pilot Project Program - DEADLINE 10/31/21

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Greeting CUNY School of Medicine Research Faculty. I am writing to remind you that the CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**. Eligibility information and a brief FAQ are listed below. If you have any additional questions, please contact Dr. Lima or myself.

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

**From:** Itzhak (Itzik) Mano  
**Sent time:** 09/16/2021 12:02:38 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose  
**Subject:** develop strategy for operating our new microscope

---

Hi everyone,

I am writing to consult with you on our preferred mode of operation for the new microscope, and develop a consensus on policies.

I started a discussion with Jorge to develop a strategy for the long-term operation of the microscope. When we initially developed the proposal for the GRTI funding we suggested that this will be operated in coordination with Jorge and his core facility, but we did not specify the exact policies. I think we all agreed that we will run a sign-up sheet through Jorge, similar to other core microscopes, but we did not finalize the finance.

We did not purchase a service agreement because the Keyence rep said that most places run this microscope without meaningful ongoing expenses or major breakdowns. The rep also said that the company has a strong interest to provide any rare repair at minimal cost, because they want to create a name for themselves in the long term. I confirmed the view of minimal expenses when I spoke to a number of colleagues in other universities where this is used by multiple labs (including places where most users are undergrads).

I therefore do not think we need to charge hefty user fees (please tell me if you think this is not likely to be so). However, at some point I expect we will need to fix things (such as mechanical repair, or someone dropped a cube and broke it, etc). I initially thought that we could charge a low-but-meaningful fee, and accumulate funds over time for a rainy day or an upgrade. However, I understand from Jorge (see below) that funds need to be spent by the end of each year.

So let's discuss your preferred policies. One possibility I am thinking of is to charge something really minimal (e.g., 1\$/hr) that we can definitely spend on oil, lens paper, and cleaning solution. Moreover, this record can then be used if there is a more significant expense, so that we can brake the charge of the new larger expense according to the past year's fractional user time of each lab.

I thought that for substantial upgrades we can apply for further GRTI in the coming years. I asked Keyence for prices of what they consider regular replacement items.

Jorge is asking if we want to set up another computer work station for off-microscope image analysis. I haven't thought about this option before. Do you think this is needed? Do you want to collect user fees for that, or do you want to put it into a future GRTI application?

Would you like to offer other strategies?

best

Itzik

----- Forwarded Message -----

Subject: Strategy for new Keyence 800  
Date: Thu, 16 Sep 2021 09:47:07 -0400  
From: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>  
To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>  
CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>

Hi Professor Mano,

I will be happy to assist you in any way I can. Lets zoom or meet in person this Friday any time from 2 to 4 pm.

Do you want to get a calendar similar to the confocal? We may have to ask Daniel or Dean Mars.

How much do you want to charge users? Keeping in mind that we have to have a balance of \$0 at the end of each year.

As far as Training, how do you feel about 2 session of 1 hour each? The first session will be similar to what Nicolette gave us. The second session the user will operate the microscope with their sample. We can talk more about this...

Other questions I have:

How much is the annual service contract?

How much are the replacement parts such as UV bulb, UV fiber(s), filter cubes?

How much will it be to add a 40X or 10X lens?

How much will it be to add another computer with the software for analysis?

Jorge Morales

CCNY Microscopy

(347) 398-1846

From: Itzhak (Itzik) Mano

Sent: Wednesday, September 15, 2021 5:09 PM

To: Jorge Morales

Subject: Fwd: See time table for training slots Re: [EXTERNAL] RE: Keyence microscope for CDI

Hi Jorge,

It was good seeing you yesterday! I'm sorry I had to leave the session immediately so I could not coordinate things with you.

I wanted to ask how do you think we can coordinate the operation with you. I do not know how these things work. I would be happy if we can run this like the confocal on our floor, i.e., administratively under your core and with your signup. We did not purchase a service plan (I am not sure they offer). My understanding is that this is pretty sturdy and expenses on maintenance are very small. However, it might be advisable to set a small user fee to prepare for potential maintenance expenses.

What do you think? we can also talk over zoom. I am leaving early (=now) today and will be home tomorrow for the Jewish Holiday, but I can have a short zoom without a problem. Or we can talk of Friday or next week.

Thanks, all the best

Itzik

On 9/15/2021 5:10 PM, Itzhak (Itzik) Mano wrote:

Hi everyone,

Here is a link to the recording of the training session over zoom.

<https://drive.google.com/file/d/1cPHycudhTlonKN1UU1uP81HPJ9BEvix/view?usp=sharing>

It is really poor quality, but I hope it can still be helpful for some people ( I guess it is better than nothing).

all the best

Itzik



**From:** Itzhak (Itzik) Mano  
**Sent time:** 09/16/2021 12:24:17 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales  
**Subject:** Re: develop strategy for operating our new microscope

---

see below

Itzik

---

On 9/16/2021 12:20 PM, Nicolette Henning wrote:

>  
> Hi Itzik,  
>  
>  
>  
> I received your inquiry into maintenance costs for the Keyence microscope. The only consumable on the microscope is the metal halide lamp that has a life expectancy of about ~2000 hours and a cost of \$1,020. For a typical lab, the lamp will last 2-3 years. However, since I am expecting heavy use on your system, I would expect a replacement every two years or so.  
>  
>  
>  
> There are no other consumables, but I would recommend budgeting \$3k-\$5k every five years as a “just in case fund” to cover any repairs if a user is to break something accidentally.  
>  
>  
>  
> Regards,  
>  
>  
>  
> Nicolette Henning  
>  
> Sales Specialist  
>  
> Life Science Microscope Team  
>  
> Keyence Corporation of America  
>  
> 669 River Drive, Suite 302  
>  
> Elmwood Park, NJ 07407  
>  
> (201) 421-2376 Office  
>  
> (551) 246-5015 Cell

On 9/16/2021 12:02 PM, Itzhak (Itzik) Mano wrote:

Hi everyone,

I am writing to consult with you on our preferred mode of operation for the new microscope, and develop a consensus on policies.

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Would you like to offer other strategies?

best

Itzik

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Subject: Strategy for new Keyence 800  
Date: Thu, 16 Sep 2021 09:47:07 -0400  
From: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>  
To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>  
CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>

Hi Professor Mano,

I will be happy to assist you in any way I can. Lets zoom or meet in person this Friday any time from 2 to 4 pm.

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Jorge Morales

CCNY Microscopy

(347) 398-1846

From: Itzhak (Itzik) Mano

Sent: Wednesday, September 15, 2021 5:09 PM

To: Jorge Morales

Subject: Fwd: See time table for training slots Re: [EXTERNAL] RE: Keyence microscope for CDI

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**From:** Jorge Morales  
**Sent time:** 09/17/2021 12:39:11 PM  
**To:** Itzhak (Itzik) Mano; Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman; Daniel Fimiartz  
**Cc:** Maria D Lima; Ranajeet Ghose  
**Subject:** Re: develop strategy for operating our new microscope

---

Hi Prof. Mano,  
How about if we meet today briefly for one hour between 1 to 4 pm.  
I am copying Daniel Fimiartz because he manages the calendar for all the core facilities.  
Please let me know when and where do you want to meet. Or if you prefer we can meet via Zoom.

Jorge Morales  
CCNY Microscopy  
(347) 398-1846

---

**From:** Itzhak (Itzik) Mano  
**Sent:** Thursday, September 16, 2021 12:24 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales  
**Subject:** Re: develop strategy for operating our new microscope

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>  
> Nicolette Henning  
>  
> Sales Specialist  
>  
> Life Science Microscope Team  
>  
> Keyence Corporation of America  
>  
> 669 River Drive, Suite 302  
>  
> Elmwood Park, NJ 07407  
>  
> (201) 421-2376 Office  
>  
> (551) 246-5015 Cell

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CCNY Microscopy

(347) 398-1846

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**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales; Daniel Fimiarz  
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Model	OP-87762
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Emission wavelength	460/50 nm
Dichroic mirror wavelength	400 nm

DAPI-V (BFP) [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-88359/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-88359/?search_sl=1)

Model OP-88359  
Excitation wavelength 395/25 nm  
Emission wavelength 460/50 nm  
Dichroic mirror wavelength 425 nm

GFP [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87763/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87763/?search_sl=1)

Model OP-87763  
Excitation wavelength 470/40 nm  
Emission wavelength 525/50 nm  
Dichroic mirror wavelength 495 nm

Texas Red [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87765/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87765/?search_sl=1)

Model OP-87765  
Excitation wavelength 560/40 nm  
Emission wavelength 630/75 nm  
Dichroic mirror wavelength 585 nm

Cy5 [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87766/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87766/?search_sl=1)

Model OP-87766  
Excitation wavelength 620/60 nm  
Emission wavelength 700/75 nm  
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see below

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>  
> Keyence Corporation of America  
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> Elmwood Park, NJ 07407  
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**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales; Daniel Fimiarz  
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Hi,

Bao reminded me of a point I forgot to address.

Initially I thought we can institute some kind of small/estimate user charge, and use it as a rainy day fund. However, Jorge told me that all collected funds *have* to be spent by the end of the year, so this might not be a good option.

Bao raised the point that there is a problem with retroactive charge - what if the PI does not have funds at that time? I hope that the prospects for this are not terrible. The most expected maintenance expense is the bulb, which is estimated at ~\$1K every two years =  $\$500/y = \$50/y$  if we are ~10 groups. At this level I think we can ask for "insurance" from our department chair and/or colleagues.

Replacing a cube will be ~\$2K.

So I do not think we are talking about big expenses and big risks, given the pool of users. I would rather collect funds for a rainy day, but Jorge advised against it.

For your consideration, best

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Dichroic mirror wavelength	425 nm

GFP [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87763/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87763/?search_sl=1)

Model	OP-87763
Excitation wavelength	470/40 nm
Emission wavelength	525/50 nm
Dichroic mirror wavelength	495 nm

Texas Red [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87765/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87765/?search_sl=1)

Model	OP-87765
Excitation wavelength	560/40 nm
Emission wavelength	630/75 nm
Dichroic mirror wavelength	585 nm

Model OP-87766  
Excitation wavelength 620/60 nm  
Emission wavelength 700/75 nm  
Dichroic mirror wavelength 660 nm

On 9/16/2021 12:24 PM, Itzhak (Itzik) Mano wrote:

see below

Itzik

---

On 9/16/2021 12:20 PM, Nicolette Henning wrote:

>

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>

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> Regards,

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> Nicolette Henning

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> Sales Specialist

>

> Life Science Microscope Team

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> Keyence Corporation of America

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> 669 River Drive, Suite 302

>

> Elmwood Park, NJ 07407

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> (201) 421-2376 Office

>

> (551) 246-5015 Cell

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We did not purchase a service agreement because the Keyence rep said that most places run this microscope without meaningful ongoing expenses or major breakdowns. The rep also said that the company has a strong interest to provide any rare repair at minimal cost, because they want to create a name for themselves in the long term. I confirmed the view of minimal expenses when I spoke to a number of colleagues in other universities where this is used by multiple labs (including places where most users are undergrads).

I therefore do not think we need to charge hefty user fees (please tell me if you think this is not likely to be so). However, at some point I expect we will need to fix things (such as mechanical repair, or someone dropped a cube and broke it, etc). I initially thought that we could charge a low-but-meaningful fee, and accumulate funds over time for a rainy day or an upgrade. However, I understand from Jorge (see below) that funds need to be spent by the end of each year.

So let's discuss your preferred policies. One possibility I am thinking of is to charge something really minimal (e.g., 1\$/hr) that we can definitely spend on oil, lens paper, and cleaning solution. Moreover, this record can then be used if there is a more significant expense, so that we can brake the charge of the new larger expense according to the past year's fractional user time of each lab.

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Would you like to offer other strategies?

best

Itzik

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Subject: Strategy for new Keyence 800  
Date: Thu, 16 Sep 2021 09:47:07 -0400  
From: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>  
To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>  
CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>

Hi Professor Mano,

I will be happy to assist you in any way I can. Lets zoom or meet in person this Friday any time from 2 to 4 pm.

Do you want to get a calendar similar to the confocal? We may have to ask Daniel or Dean Mars.

How much do you want to charge users? Keeping in mind that we have to have a balance

of \$0 at the end of each year.

As far as Training, how do you feel about 2 session of 1 hour each? The first session will be similar to what Nicolette gave us. The second session the user will operate the microscope with their sample. We can talk more about this...

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Jorge Morales

CCNY Microscopy

(347) 398-1846

From: Itzhak (Itzik) Mano

Sent: Wednesday, September 15, 2021 5:09 PM

To: Jorge Morales

Subject: Fwd: See time table for training slots Re: [EXTERNAL] RE: Keyence microscope for CDI

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I wanted to ask how do you think we can coordinate the operation with you. I do not know how these things work. I would be happy if we can run this like the confocal on our floor, i.e., administratively under your core and with your signup. We did not purchase a service plan (I am not sure they offer). My understanding is that this is pretty sturdy and expenses on maintenance are very small. However, it might be advisable to set a small user fee to prepare for potential maintenance expenses.

What do you think? we can also talk over zoom. I am leaving early (=now) today and will be home tomorrow for the Jewish Holiday, but I can have a short zoom without a problem. Or we can talk of Friday or next week.

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[usp=sharing](#)

It is really poor quality, but I hope it can still be helpful for some people ( I guess it is better than nothing).

all the best

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**From:** Daniel Fimiarz  
**Sent time:** 09/17/2021 07:45:29 PM  
**To:** Itzhak (Itzik) Mano; Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales  
**Subject:** Re: develop strategy for operating our new microscope

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**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
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Subject: Strategy for new Keyence 800

Date: Thu, 16 Sep 2021 09:47:07 -0400

From: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>

To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>

CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>

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Jorge Morales

CCNY Microscopy

(347) 398-1846

From: Itzhak (Itzik) Mano  
Sent: Wednesday, September 15, 2021 5:09 PM  
To: Jorge Morales  
Subject: Fwd: See time table for training slots Re: [EXTERNAL] RE: Keyence microscope for CDI

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**Sent time:** 09/18/2021 07:24:47 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales; Daniel Fimiarz  
**Subject:** Re: develop strategy for operating our new microscope

---

It seems that I misunderstood Jorge & Daniel - apologies to both!

So in fact we *do* have the two options: running charge fees for maintenance/accidents/depreciation/rainy day, or use retroactive charges.

What do people prefer? Please vote:

A) \$5-10/hr regular charge (or other amount).

OR

B) Retroactive charges.

I think that (as long as we keep usage records) our decision probably does not have to be final, and we can revisit this, say, after 6 months or a year.

please let me know of your preference [option A (and how much) vs B]

Best

Itzik

On 9/17/2021 7:45 PM, Daniel Fimiarz wrote:

My 2 cents to add.

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Emission wavelength 630/75 nm  
Dichroic mirror wavelength 585 nm

Cy5 [https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87766/?search\\_sl=1](https://www.keyence.com/products/microscope/fluorescence-microscope/bz-x700/models/op-87766/?search_sl=1)

Model OP-87766  
Excitation wavelength 620/60 nm  
Emission wavelength 700/75 nm  
Dichroic mirror wavelength 660 nm

On 9/16/2021 12:24 PM, Itzhak (Itzik) Mano wrote:

see below  
Itzik

---

On 9/16/2021 12:20 PM, Nicolette Henning wrote:

>

> Hi Itzik,

>

>

>

> I received your inquiry into maintenance costs for the Keyence microscope. The only consumable on the microscope is the metal halide lamp that has a life expectancy of about ~2000 hours and a cost of \$1,020. For a typical lab, the lamp will last 2-3 years.

> However, since I am expecting heavy use on your system, I would expect a replacement every two years or so.

>

>

>

> There are no other consumables, but I would recommend budgeting \$3k-\$5k every five years as a "just in case fund" to cover any repairs if a user is to break something accidentally.

>

>

>

> Regards,

>  
>  
>  
> Nicolette Henning  
>  
> Sales Specialist  
>  
> Life Science Microscope Team  
>  
> Keyence Corporation of America  
>  
> 669 River Drive, Suite 302  
>  
> Elmwood Park, NJ 07407  
>  
> (201) 421-2376 Office  
>  
> (551) 246-5015 Cell  
On 9/16/2021 12:02 PM, Itzhak (Itzik) Mano wrote:

Hi everyone,

I am writing to consult with you on our preferred mode of operation for the new microscope, and develop a consensus on policies.

I started a discussion with Jorge to develop a strategy for the long-term operation of the microscope. When we initially developed the proposal for the GRTI funding we suggested that this will be operated in coordination with Jorge and his core facility, but we did not specify the exact policies. I think we all agreed that we will run a signup sheet through Jorge, similar to other core microscopes, but we did not finalize the finance.

We did not purchase a service agreement because the Keyence rep said that most places run this microscope without meaningful ongoing expenses or major breakdowns. The rep also said that the company has a strong interest to provide any rare repair at minimal cost, because they want to create a name for themselves in the long term. I confirmed the view of minimal expenses when I spoke to a number of colleagues in other universities where this is used by multiple labs (including places where most users are undergrads).

I therefore do not think we need to charge hefty user fees (please tell me if you think this is not likely to be so). However, at some point I expect we will need to fix things (such as mechanical repair, or someone dropped a cube and broke it, etc). I initially thought that we could charge a low-but-meaningful fee, and accumulate funds over time for a rainy day or an upgrade. However, I understand from Jorge (see below) that funds need to be spent by the end of each year.

So let's discuss your preferred policies. One possibility I am thinking of is to charge something really minimal (e.g., 1\$/hr) that we can definitely spend on oil, lens paper, and cleaning solution. Moreover, this record can then be used if there is a more significant expense, so that we can brake the charge of the new larger expense according to the past year's fractional user time of each lab.

I thought that for substantial upgrades we can apply for further GRTI in the coming years. I asked Keyence for prices of what they consider regular replacement items.

Jorge is asking if we want to set up another computer work station for off-microscope image analysis. I haven't thought about this option before. Do you think this is needed? Do you want to collect user fees for that, or do you want to put it into a future GRTI application?

Would you like to offer other strategies?

best  
Itzik

----- Forwarded Message -----  
Subject: Strategy for new Keyence 800  
Date: Thu, 16 Sep 2021 09:47:07 -0400  
From: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>  
To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>  
CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>

Hi Professor Mano,

I will be happy to assist you in any way I can. Lets zoom or meet in person this Friday any time from 2 to 4 pm.

Do you want to get a calendar similar to the confocal? We may have to ask Daniel or Dean Mars.

How much do you want to charge users? Keeping in mind that we have to have a balance of \$0 at the end of each year.

As far as Training, how do you feel about 2 session of 1 hour each? The first session will be similar to what Nicolette gave us. The second session the user will operate the microscope with their sample. We can talk more about this...

Other questions I have:

How much is the annual service contract?

How much are the replacement parts such as UV bulb, UV fiber(s), filter cubes?

How much will it be to add a 40X or 10X lens?

How much will it be to add another computer with the software for analysis?

Jorge Morales

CCNY Microscopy

(347) 398-1846

From: Itzhak (Itzik) Mano  
Sent: Wednesday, September 15, 2021 5:09 PM  
To: Jorge Morales  
Subject: Fwd: See time table for training slots Re: [EXTERNAL] RE: Keyence microscope for CDI

Hi Jorge,

It was good seeing you yesterday! I'm sorry I had to leave the session immediately so I could not coordinate things with you.

I wanted to ask how do you think we can coordinate the operation with you. I do not know how these things work. I would be happy if we can run this

like the confocal on our floor, i.e., administratively under your core and with your signup. We did not purchase a service plan (I am not sure they offer). My understanding is that this is pretty sturdy and expenses on maintenance are very small. However, it might be advisable to set a small user fee to prepare for potential maintenance expenses.

What do you think? we can also talk over zoom. I am leaving early (=now) today and will be home tomorrow for the Jewish Holiday, but I can have a short zoom without a problem. Or we can talk of Friday or next week.

Thanks, all the best

Itzik

On 9/15/2021 5:10 PM, Itzhak (Itzik) Mano wrote:

Hi everyone,

Here is a link to the recording of the training session over zoom.

<https://drive.google.com/file/d/1cPHycudhTlonKN1UU1uP81HPJJ9BEvix/view?usp=sharing>

It is really poor quality, but I hope it can still be helpful for some people ( I guess it is better than nothing).

all the best

Itzik

**From:** Itzhak (Itzik) Mano  
**Sent time:** 09/19/2021 04:18:50 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales; Daniel Fimiarz  
**Subject:** Keyence BZ-X800 Analysis Application License Key Guidance

---

Hi everyone,

I got this email from Keyence about the license key for the analysis application of the new scope.

I'm keeping a copy for my record, but it will be good if others can keep a record of this too.

Best

Itzik

----- Forwarded Message -----

Subject: [EXTERNAL] [KEYENCE] BZ-X800 Analysis Application License Key Guidance  
Date: Tue, 14 Sep 2021 10:33:06 -0400  
From: info@keyence.co.jp  
To: Itzhak (Itzik) Mano

Dear Nicolette Henning

Thank you for requesting a license key for the analysis application of the All-in-One Fluorescence Microscope BZ-X800.

Your license key is shown below.

License key : [ E5F9F19B ]

Hardware ID : 5J020045AA

-----  
Requested optional application 1 : BZ-H4M  
Authentication code for optional application 1 : DF2F1330

-----  
Requested optional application 2 : BZ-H4R  
Authentication code for optional application 2 : E32D20CA  
-----

We look forward to your continued business in the future.

-----  
Microscope Division, KEYENCE CORPORATION  
-----

**From:** Itzhak (Itzik) Mano  
**Sent time:** 09/19/2021 04:25:27 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman  
**Cc:** Maria D Lima; Ranajeet Ghose; Jorge Morales; Daniel Fimiarz  
**Subject:** Re: Keyence BZ-X800 Observation Application License Key Guidance

---

And this is another component

i

----- Forwarded Message -----

**Subject:**[EXTERNAL] [KEYENCE] BZ-X800 Observation Application License Key Guidance  
**Date:**Tue, 14 Sep 2021 10:22:06 -0400  
**From:**[info@keyence.co.jp](mailto:info@keyence.co.jp) <[info@keyence.co.jp](mailto:info@keyence.co.jp)>  
**To:**Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>

Dear Nicolette Henning

Thank you for requesting a license key for the observation application of the All-in-One Fluorescence Microscope BZ-X800.

Your license key is shown below.

License key : [ 509B8D76 ]

Hardware ID : 5D02003501A3

-----  
Requested optional module 1 : BZ-H4XF  
Authentication code for optional module 1 : 740E38DE

-----  
Requested optional module 2 : BZ-H4XD  
Authentication code for optional module 2 : 1F15F218

-----  
We look forward to your continued business in the future.

-----  
Microscope Division, KEYENCE CORPORATION  
-----

**From:** Marc Scullin

**Sent time:** 09/20/2021 09:40:03 AM

**To:** Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 09/17/2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending September 17, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 09/17/2021, [Click HERE](#)

## Funding Opportunities

- [Global Brain and Nervous System Disorders Research Across the Lifespan \(R01 Clinical Trials Optional\)](#)  
(PAR-21-311)  
John E. Fogarty International Center  
Application Receipt Date(s): Multiple dates, see announcement.
- [Global Brain and Nervous System Disorders Research Across the Lifespan \(R21 Clinical Trial Optional\)](#)  
(PAR-21-319)  
John E. Fogarty International Center  
Application Receipt Date(s): Multiple dates, see announcement.
- [Mental Health Research Dissertation Grant to Enhance Workforce Diversity \(R36 Independent Clinical Trial Not Allowed\)](#)  
(PAR-21-325)  
National Institute of Mental Health  
Application Receipt Date(s): September 07, 2024
- [Pancreatic Cancer Detection Consortium: Research Units \(U01 Clinical Trial Optional\)](#)  
(PAR-21-334)  
National Cancer Institute  
Application Receipt Date(s): June 11, 2024
- [Pancreatic Cancer Detection Consortium: Management and Data Coordination Unit \(U24 Clinical Trial Not Allowed\)](#)  
(PAR-21-335)  
National Cancer Institute  
Application Receipt Date(s): June 11, 2024
- [Limited Competition: Mentored Research Career Development Program Award in Clinical and Translational Science Awards \(CTSA\) Program \(K12 Clinical Trial Optional\)](#)  
(PAR-21-336)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): Multiple dates, see announcement.
- [Limited Competition: NCATS Clinical and Translational Science Award \(CTSA\) Program Research Education Grants Programs \(R25 - Clinical Trial Not Allowed\)](#)  
(PAR-21-339)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): Multiple dates, see announcement.
- [Limited Competition: High Impact Specialized Innovation Programs in Clinical and Translational Science for UM1 CTSA Hub Awards \(RC2 Clinical Trials Not Allowed\)](#)  
(PAR-21-340)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): Multiple dates, see announcement.
- [Tissue Mapping Centers for the Human BioMolecular Atlas Program \(U54 Clinical Trial Not Allowed\)](#)  
(RFA-RM-21-026)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): November 19, 2021

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Hoau-yan Wang  
**Sent time:** 09/20/2021 02:30:05 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

---

I don't have access to anything at the moment. Can you please help with dealing with this.

Thanks.

Best,

Hoau

---

**From:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Sent:** Wednesday, September 15, 2021 7:35 AM  
**To:** Hoau-yan Wang  
**Cc:** Weerd-Wilson, Donna (ELS-AMS)  
**Subject:** [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Wang,

It has been brought to our attention that several figures from your 2005 Neuroscience paper (<https://doi.org/10.1016/j.neuroscience.2005.06.003>) have problems that make some figures fraudulent. Please see <https://pubpeer.com/publications/5E71DFFFC843817787A90968A16765> for understanding what the problems are. I have personally checked these issues and I find them reasonable source of concern so I am requesting your collaboration to clarify the situation, as the Ctte of Publication Ethics (COPE) requires.

We will wait to a maximum of 30 days for your response. I case we don't have a reasonable explanation, we will proceed to retract your paper from our Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

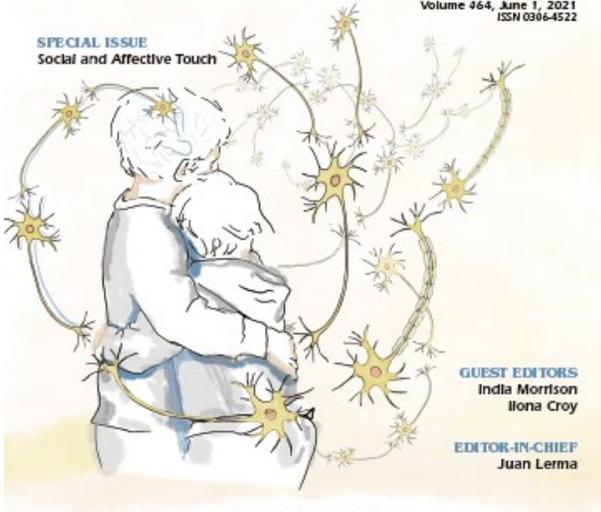
Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

# NEUROSCIENCE

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**SPECIAL ISSUE**  
Social and Affective Touch



**GUEST EDITORS**  
India Morrison  
Ilona Croy

**EDITOR-IN-CHIEF**  
Juan Lerma

INTERNATIONAL BRAIN  
**IBRO**  
RESEARCH ORGANIZATION

[The Neurobiology of Social and Affective Touch](#)

**From:** Itzhak (Itzik) Mano  
**Sent time:** 09/23/2021 08:25:08 AM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman; Jorge Morales  
**Cc:** Maria D Lima; Ranajeet Ghose; Daniel Fimiarz; Susan Perkins; Rosemarie Wesson  
**Subject:** Please note: Signup system for the Keyence BZX microscope through CCNY core.  
**Attachments:** UsageLogTemplate.docx

---

Hi everyone,

Please note the email from Daniel who is setting up the signup & charge system for our new Keyence BZX scope @CDI.

Daniel recommends writing up user rules (I can not at this moment - tons of teaching right now) and establishing a user committee.

A question for Jorge and the group:

How do people feel about training new people? Do we need it to go through Jorge, or locally within each group (given that operation is relatively straight forward)? If locally, I would also add a recommendation that each lab appoints a Keyence Scope liaison/chief, who will be responsible to train new people from that lab, and communicate with liaisons/chiefs from other labs about keeping things in order. We can post that list of liaisons in the room.

I'll keep you posted on further development.

I believe we can start using it!!!

best wishes for a lot of papers with amazing images!

Itzik

----- Forwarded Message -----

**Subject:**BZX microscope core.

**Date:**Thu, 23 Sep 2021 07:33:18 -0400

**From:**Daniel Fimiarz <[dfimiarz@ccny.cuny.edu](mailto:dfimiarz@ccny.cuny.edu)>

**To:**Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>

**CC:**Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>, Susan Perkins <[sperkins@ccny.cuny.edu](mailto:sperkins@ccny.cuny.edu)>, Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>, Rosemarie Wesson <[rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)>, John (Jack) Martin <[jmartin@med.cuny.edu](mailto:jmartin@med.cuny.edu)>

Users can now register to schedule time on the microscope.

[http://corelabs.sci.cuny.cuny.edu/?RID=KEYENCE\\_BZX](http://corelabs.sci.cuny.cuny.edu/?RID=KEYENCE_BZX)

Jorge and I have manager access.

A few comments about billing and management.

All of our billing and accounting procedures are based on <https://grants.nih.gov/grants/guide/notice-files/not-od-13-053.html>

>> Core facilities should set user fees based on actual costs and actual usage.

I am still working on the rate (hopefully finished today). We also need a usage log (template attached) since the calendar itself may not be good enough to show the actual usage.

It may be a good idea to compose a document with usage rules. I put some together for our confocals <http://forum.sci.cuny.cuny.edu/cores/microscopy-imaging/confocal-microscopy/lsm800/documents/usage-rules> so this could be a good basis for writing one for the new scope.

The system is a great turn-key solution to imaging but it is not a good teaching system in my opinion. A lot can go wrong when users are careless. I would love to have some monitoring in place as well but space constraints could be a problem.

Will there be a user committee?

Finally, it may also be a good idea to think about future restructuring of our imaging cores to address the scattering of resources across campus. I can see a central imaging core an attractive option that could help CCNY with budgeting, recruitment, and oversight.

Best,

Daniel Fimiarz  
CCNY Core Facilities  
(212) 650 8596  
(646) 238 2087

---

From Itzik: sometime my email can only forward simple text, so here is another simple-text copy of the above:

----- Forwarded Message -----

Subject: BZX microscope core.

Date: Thu, 23 Sep 2021 07:33:18 -0400

From: Daniel Fimiarz <[dfimiarz@ccny.cuny.edu](mailto:dfimiarz@ccny.cuny.edu)>

To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>

CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>, Susan Perkins <[isperkins@ccny.cuny.edu](mailto:isperkins@ccny.cuny.edu)>, Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>, Rosemarie Wesson <[rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)>, John (Jack) Martin <[jmartin@med.cuny.edu](mailto:jmartin@med.cuny.edu)>

Users can now register to schedule time on the microscope.

[http://corelabs.sci.cuny.cuny.edu/?RID=KEYENCE\\_BZX](http://corelabs.sci.cuny.cuny.edu/?RID=KEYENCE_BZX)

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The system is a great turn-key solution to imaging but it is not a good teaching system in my opinion. A lot can go wrong when users are careless. I would love to have some monitoring in place as well but space constraints could be a problem.

Will there be a user committee?

Finally, it may also be a good idea to think about future restructuring of our imaging cores to address the scattering of resources across campus. I can see a central imaging core an attractive option that could help CCNY with budgeting, recruitment, and oversight.

Best,

Daniel Fimiarz  
CCNY Core Facilities  
(212) 650 8596  
(646) 238 2087





**From:** Hoau-yan Wang  
**Sent time:** 09/25/2021 08:32:18 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] Bloomberg News Query

---

**From:** Cristin Flanagan (BLOOMBERG/ NEWSROOM:) <cflanagan1@bloomberg.net>  
**Sent:** Friday, September 24, 2021 11:04 AM  
**To:** Hoau-yan Wang; [REDACTED]@gmail.com  
**Subject:** [EXTERNAL] Bloomberg News Query

Good morning Dr. Wang,

I wanted to see if you had any response to the concerns raised about the quality of the data you produced for Cassava Sciences. Wondering if you are able to produce any of the original images in question or otherwise offer clarity on the issue.

Best,

Cristin

---

Cristin Flanagan  
Health Stocks Reporter  
Cell: 347 578 2894  
Office: (212) 617-8919  
email: [cflanagan1@bloomberg.net](mailto:cflanagan1@bloomberg.net)

**From:** Marc Scullin  
**Sent time:** 09/27/2021 09:29:06 AM  
Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**To:**  
**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 09/24/21

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending September 24, 2021. If any of the opportunities below are of interest to you, please contact the office of research so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 09/24/2021, [Click HERE](#)

## Funding Opportunities

- [Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations \(R24 Clinical Trials Not Allowed\)](#)  
(PAR-21-326)  
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs  
Application Receipt Date(s): December 01, 2021
- [Clinical Characterization of Cancer Therapy-induced Adverse Sequelae and Mechanism-based Interventional Strategies \(R01 Clinical Trial Optional\)](#)  
(PAR-21-329)  
National Cancer Institute  
Application Receipt Date(s): November 05, 2024
- [NCI Outstanding Investigator Award \(R35 Clinical Trial Not Allowed\)](#)  
(PAR-21-333)  
National Cancer Institute  
Application Receipt Date(s): November 4, 2021 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s) Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
- [Limited Competition: Ruth L. Kirschstein National Research Service Award \(NRSA\) Predoctoral Research Training Grant for the Clinical and Translational Science Awards \(CTSA\) Program \(T32 Clinical Trial Not Allowed\)](#)  
(PAR-21-337)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): September 13, 2024
- [Limited Competition: Ruth L. Kirschstein National Research Service Award \(NRSA\) Postdoctoral Research Training Grant for the Clinical and Translational Science Awards \(CTSA\) Program \(T32 Clinical Trial Not Allowed\)](#)  
(PAR-21-338)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): September 13, 2024
- [Mood and Psychosis Symptoms during the Menopause Transition \(R01 Clinical Trial Optional\)](#)  
(PAR-22-035)  
National Institute of Mental Health  
Application Receipt Date(s): January 07, 2025
- [Mood and Psychosis Symptoms during the Menopause Transition \(R21 Clinical Trial Optional\)](#)  
(PAR-22-036)  
National Institute of Mental Health  
Application Receipt Date(s): January 07, 2025
- [Limited Competition:Caenorhabditis Intervention Testing Program Data Coordinating Center \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-AG-22-028)  
National Institute on Aging  
Application Receipt Date(s): October 27, 2021
- [Limited Competition: Renewal of the Caenorhabditis Intervention Testing Program \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-AG-22-029)  
National Institute on Aging  
Application Receipt Date(s): October 27, 2021

- [SUNBEAM - Analysis and Bioinformatics Center \(ABC\) \(UM1 Clinical Trial Not Allowed\)](#)  
(RFA-AI-21-060)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): February 15, 2022
- [Development of Microbiome-Related Approaches for Diagnosis/Mitigation/Treatment of Radiation Injuries \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-21-068)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): February 09, 2022
- [The NCI Predoctoral to Postdoctoral Fellow Transition Award \(F99/K00 Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-059)  
National Cancer Institute  
Application Receipt Date(s): November 18, 2021
- [Innovation Award: COVID-19 and Health Equity \(U01\) Clinical Trials Optional](#)  
(RFA-FD-22-003)  
Food and Drug Administration  
Application Receipt Date(s): November 29, 2021
- [Effectiveness and Implementation Research for Post-Acute Interventions to Optimize Long-Term Mental Health Outcomes in Low- and Middle-Income Countries \(R34 Clinical Trial Optional\)](#)  
(RFA-MH-22-100)  
National Institute of Mental Health  
Application Receipt Date(s): December 09, 2021
- [Investigation of Co-occurring conditions across the Lifespan to Understand Down syndromE \(INCLUDE\) Exploratory/Developmental Research Grant Award \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-OD-21-007)  
Office of the Director, NIH  
National Center for Complementary and Integrative Health
- Application Receipt Date(s): Multiple dates, see announcement.

Marc Scullin, MA  
 Research Programs Specialist  
 CUNY School of Medicine  
 Harris Hall 10E  
 (212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 09/29/2021 09:09:50 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** Funding Opportunity Reminder - CSOM Bridge & Pilot Project Program - DEADLINE 10/31/21

---

Greeting CUNY School of Medicine Research Faculty. I am writing to remind you that the CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**. Eligibility information and a brief FAQ are listed below. If you have any additional questions, please contact Dr. Lima or myself.

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

**From:** Raquel Morales

**Sent time:** 09/29/2021 11:01:29 AM

Kaliris gmail ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Dr Broderick ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wieczorek ([REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman;

**To:** Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka

**Cc:** Gonzalo Torres; Maria Agosto; Juana Torres; Roberto Rodriguez

**Subject:** FW: Departmental faculty meeting

---

Dear Faculty,

The next Departmental faculty meeting will be held next Wednesday, October 6 at 4:00pm. Agenda will follow.

Best Regards,

*Raquel Morales*

Assistant to Chair

Department of Molecular, Cellular & Biomedical Sciences

CUNY School of Medicine

160 Convent Ave, Harris Hall suite 202

New York, NY 10031

**From:** Hoau-yan Wang  
**Sent time:** 09/30/2021 09:09:19 AM  
**To:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Cc:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

---

Dear Dr. Gomez,

Sorry for my late reply. Please contact Dr. Rosemarie Wesson.

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

Thank you.

Sincerely,

Hoau-Yan Wang

---

**From:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Sent:** Monday, September 27, 2021 9:01 AM  
**To:** Lindsay Burns  
**Cc:** Hoau-yan Wang  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Burns,

Thanks very much for your email. Before making any further movement, I wonder whether you could please provide the name of the CUNY committee and a contact person.

Thanks very much.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39



[Brain Imaging Special Issue](#)

On 20 Sep 2021, at 21:34, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

Dr. Wang has handed over all electronic files for an investigation. CUNY has committed to making their findings of this investigation public. I do not have any files from this paper that is 16 years old.

Thank you,  
Lindsay Burns

**Lindsay H. Burns, PhD**

SVP, Neuroscience

Cassava Sciences, Inc.

O: 512-501-2484 C: 512-574-4238

[www.cassavasciences.com](http://www.cassavasciences.com)

<image001.png>

---

**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>

**Sent:** Monday, September 20, 2021 1:30 PM

**To:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>

**Subject:** Fw: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I don't have access to anything at the moment. Can you please help with dealing with this.

Thanks.

Best,

Hoau

---

**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>

**Sent:** Wednesday, September 15, 2021 7:35 AM

**To:** Hoau-yan Wang

**Cc:** Weerd-Wilson, Donna (ELS-AMS)

**Subject:** [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Wang,

It has been brought to our attention that several figures from your 2005 Neuroscience paper (<https://doi.org/10.1016/j.neuroscience.2005.06.003>) have problems that make some figures fraudulent. Please see <https://pubpeer.com/publications/5E71DFFFC843817787A90968A16765> for understanding what the problems are. I have personally checked these issues and I find them reasonable source of concern so I am requesting your collaboration to clarify the situation, as the Ctte of Publication Ethics (COPE) requires.

We will wait to a maximum of 30 days for your response. In case we don't have a reasonable explanation, we will proceed to retract your paper from our Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

[The Neurobiology of Social and Affective Touch](#)

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**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 09/30/2021 09:35:05 AM  
**To:** Hoau-yan Wang; Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Subject:** RE: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

---

Dear Dr. Gomez,

It is not appropriate to call these figures fraudulent before any investigation. This has been guilty until proven innocent. We have already responded to JNS with original blots (exonerating claims of fraud) and a corrected IHC figure that was human error. We are having trouble accessing files for this 16-year-old paper. Hopefully Dr. Wesson can be helpful to you.

Thank you,  
Lindsay

---

**From:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Sent:** Thursday, September 30, 2021 8:09 AM  
**To:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Cc:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

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Dear Dr. Gomez,

Sorry for my late reply. Please contact Dr. Rosemarie Wesson.

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

Thank you.

Sincerely,

Hoau-Yan Wang

---

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Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39



[Brain Imaging Special Issue](#)

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Thank you,  
Lindsay Burns

**Lindsay H. Burns, PhD**  
SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)  
<image001.png>

---

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**Sent:** Monday, September 20, 2021 1:30 PM

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Subject: Fw: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

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Thanks.

Best,

Hoau

---

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**Cc:** Weerd-Wilson, Donna (ELS-AMS)

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Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

[The Neurobiology of Social and Affective Touch](#)

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**From:** Gonzalo Torres  
**Sent time:** 09/30/2021 10:03:49 AM  
Kaliris gmail (██████████) <██████████@gmail.com>; Dr.Broderick (██████████@gmail.com) <██████████@l.com>; Rosemary Wieczorek (██████████@outlook.com) <██████████@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**To:**  
**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** Kaliris received education award  
**Attachments:** Kaliris award.png

---

Dear All,

I want to share some good news. Our Kaliris just received the 2021 Champions of Education Award from the Alliance for Quality Education for her continuous work and fight to make sure that students have access to a quality education.

Congratulations Kaliris!

Best,  
Gonzalo



12,600

# CHAMPIONS OF EDUCATION

October 27 // 6 PM // Online



<https://bit.ly/edchampions>

## 2021 Honorees



**Grassroots Leadership Award**  
**Kaliris Salas- Ramirez**



**Resiliency/ Education Justice Marathon Award**  
**Johanna Garcia**



**Joy in Movement Award**  
**Resistance Revival Chorus**

Alliance for Quality Education of New York  
Like This Page · September 25

We have more than ever to celebrate during this year's Champions of Education celebration 🎉 We are proud to officially announce our 2021 honorees- 2021 honorees include Kaliris Salas-Ramirez, Johanna Garcia & The Resistance Revival Chorus, who have gone above and beyond in the fight for our students.

<https://buff.ly/3n11AP>

Nicole Job likes this.

8 Shares

See more of Alliance for Quality Education of New York on Facebook

**From:** Lisa Coico

**Sent time:** 09/30/2021 10:13:09 AM

Kaliris gmail (██████████@gmail.com) <██████████@gmail.com>; Dr Broderick (██████████@gmail.com) <██████████k@gmail.com>; Rosemary Wieczorek (██████████@outlook.com) <██████████@outlook.com>; Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka

**To:**

**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez

**Subject:** Re: Kaliris received education award

---

Congratulations!!

Sincerely,

Lisa

Lisa Staiano-Coico, Ph.D.

Medical Professor

CUNY School of Medicine

Dept. of Molecular Cellular and Biomedical Sciences

---

**From:** Gonzalo Torres <GTorres@med.cuny.edu>

**Date:** Thursday, September 30, 2021 at 10:03 AM

**To:** Raquel Morales <rmorales@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Eitan Friedman <friedman@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, "Itzhak (Itzik) Mano" <imano@med.cuny.edu>, Joao Nunes <nunes@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Jose Cobo <jcobo@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, "Kaliris gmail (██████████@gmail.com)" <██████████@gmail.com>, Khosrow Kashfi <kashfi@med.cuny.edu>, Kiran Matthews <kmatthews@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Lisa Coico <LSCoico@med.cuny.edu>, Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>, Maria D Lima <mlima@med.cuny.edu>, Patricia Broderick <broderick@med.cuny.edu>, "Dr. Broderick (██████████@gmail.com)" <██████████@gmail.com>, Patricia Cortes <pcortes@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Rosemary Wieczorek <RWieczorek@med.cuny.edu>, "Rosemary Wieczorek (██████████@outlook.com)" <██████████@outlook.com>, Sanna Goyert <sgoyert@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>

**Cc:** Maria Agosto <magosto@med.cuny.edu>, Juana Torres <velas@med.cuny.edu>, Roberto Rodriguez <RRodriguez@med.cuny.edu>

**Subject:** Kaliris received education award

Dear All,

I want to share some good news. Our Kaliris just received the 2021 Champions of Education Award from the Alliance for Quality Education for her continuous work and fight to make sure that students have access to a quality education.

Congratulations Kaliris!

Best,

Gonzalo

**From:** Carol Moore

**Sent time:** 09/30/2021 10:17:15 AM

Kaliris gmail ([REDACTED]@gmail.com) [REDACTED]@gmail.com>; Dr Broderick ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wiczorek (starwiz99@outlook.com) <starwiz99@outlook.com>; Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka

**To:**

**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez

**Subject:** RE: Kaliris received education award

---

Heartfelt Congratulations Kaliris on your well-deserved award – so glad for your recognition.

---

**From:** Gonzalo Torres

**Sent:** Thursday, September 30, 2021 10:04 AM

**To:** Raquel Morales <rmorales@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Kaliris gmail (ksalasramirez@gmail.com) <ksalasramirez@gmail.com>; Khosrow Kashfi <kashfi@med.cuny.edu>; Kiran Matthews <kmatthews@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Dr. Broderick ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Rosemary Wiczorek <RWiczorek@med.cuny.edu>; Rosemary Wiczorek (starwiz99@outlook.com) <starwiz99@outlook.com>; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>

**Cc:** Maria Agosto <magosto@med.cuny.edu>; Juana Torres <velas@med.cuny.edu>; Roberto Rodriguez <RRodriguez@med.cuny.edu>

**Subject:** Kaliris received education award

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Best,  
Gonzalo

**From:** Paul Gottlieb  
**Sent time:** 09/30/2021 10:20:03 AM  
**To:** Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Dr. Broderick [REDACTED]@gmail.com <drpbroderick@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com <[REDACTED]@outlook.com>; Carol Moore; Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** Re: Kaliris received education award

---

Fantastic news and congratulations Kaliris- and so well deserved!

---

**From:** Carol Moore  
**Sent:** Thursday, September 30, 2021 10:17 AM  
**To:** Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail [REDACTED]@gmail.com); Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr. Broderick [REDACTED]@gmail.com); Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Rosemary Wieczorek [REDACTED]@outlook.com); Sanna Goyert; Jun Yoshioka  
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**From:** Gonzalo Torres  
**Sent:** Thursday, September 30, 2021 10:04 AM  
**To:** Raquel Morales <rmorales@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Kaliris gmail [REDACTED]@gmail.com); [REDACTED]@gmail.com); Khosrow Kashfi <kashfi@med.cuny.edu>; Kiran Matthews <kmatthews@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Dr. Broderick ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Rosemary Wieczorek <RWieczorek@med.cuny.edu>; Rosemary Wieczorek [REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>  
**Cc:** Maria Agosto <magosto@med.cuny.edu>; Juana Torres <velas@med.cuny.edu>; Roberto Rodriguez <RRodriguez@med.cuny.edu>  
**Subject:** Kaliris received education award

Dear All,

I want to share some good news. Our Kaliris just received the 2021 Champions of Education Award from the Alliance for Quality Education for her continuous work and fight to make sure that students have access to a quality education.

Congratulations Kaliris!

Best,  
Gonzalo

**From:** Rosemary Wieczorek  
**Sent time:** 09/30/2021 10:53:06 AM  
Kaliris gmail [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Dr. Broderick [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Paul Gottlieb; Carol Moore;  
**To:** Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Sanna Goyert; Jun Yoshioka  
**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** Re: Kaliris received education award

---

Congratulations, Kaliris!

RW

---

**From:** Paul Gottlieb  
**Sent:** Thursday, September 30, 2021 10:20 AM  
**To:** Carol Moore; Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail [REDACTED]@gmail.com); Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr. Broderick ([REDACTED]k@gmail.com); Patricia Cortes; Rosemary Wieczorek; Rosemary Wieczorek [REDACTED]@outlook.com); Sanna Goyert; Jun Yoshioka  
**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** Re: Kaliris received education award

Fantastic news and congratulations Kaliris- and so well deserved!

---

**From:** Carol Moore  
**Sent:** Thursday, September 30, 2021 10:17 AM  
**To:** Gonzalo Torres; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail [REDACTED]@gmail.com); Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr. Broderick ([REDACTED]@gmail.com); Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Rosemary Wieczorek ([REDACTED]@outlook.com); Sanna Goyert; Jun Yoshioka  
**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** RE: Kaliris received education award

Heartfelt Congratulations Kaliris on your well-deserved award – so glad for your recognition.

---

**From:** Gonzalo Torres  
**Sent:** Thursday, September 30, 2021 10:04 AM  
**To:** Raquel Morales <rmorales@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Kaliris gmail [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Khosrow Kashfi <kashfi@med.cuny.edu>; Kiran Matthews <kmatthews@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Dr. Broderick ([REDACTED]@gmail.com) <[REDACTED]k@gmail.com>; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Rosemary Wieczorek <RWieczorek@med.cuny.edu>; Rosemary Wieczorek [REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>  
**Cc:** Maria Agosto <magosto@med.cuny.edu>; Juana Torres <velas@med.cuny.edu>; Roberto Rodriguez <RRodriguez@med.cuny.edu>  
**Subject:** Kaliris received education award

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Congratulations Kaliris!

Best,  
Gonzalo

**From:** Andreas Kottmann  
**Sent time:** 09/30/2021 12:36:51 PM  
Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Dr Broderick [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com <[REDACTED]@outlook.com>; Gonzalo Torres; Raquel Morales; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**To:**  
**Cc:** Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** RE: Kaliris received education award

---

Congrats Kaliris!  
Great News and Highly Deserved!  
Andreas

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**From:** Gonzalo Torres  
**Sent:** Thursday, September 30, 2021 10:04 AM  
**To:** Raquel Morales <rmorales@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Kaliris gmail [REDACTED]@gmail.com <ksalasramirez@gmail.com>; Khosrow Kashfi <kashfi@med.cuny.edu>; Kiran Matthews <kmatthews@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Dr. Broderick [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Rosemary Wieczorek <RWieczorek@med.cuny.edu>; Rosemary Wieczorek [REDACTED]@outlook.com <[REDACTED]@outlook.com>; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>  
**Cc:** Maria Agosto <magosto@med.cuny.edu>; Juana Torres <velas@med.cuny.edu>; Roberto Rodriguez <RRodriguez@med.cuny.edu>  
**Subject:** Kaliris received education award

Dear All,

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Congratulations Kaliris!

Best,  
Gonzalo

**From:** Hoau-yan Wang  
**Sent time:** 09/30/2021 03:21:36 PM  
**To:** Kaliris Salas; Gonzalo Torres  
Dr. Broderick [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wiczorek [REDACTED]@outlook.com) <[REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka; Maria Agosto; Juana Torres; Roberto Rodriguez  
**Cc:**  
**Subject:** Re: Kaliris received education award

---

Congrats Kaliris. Well done.

Hoau

---

**From:** Kaliris Salas  
**Sent:** Thursday, September 30, 2021 11:11 AM  
**To:** Gonzalo Torres  
**Cc:** Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr. Broderick [REDACTED]k@gmail.com); Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Rosemary Wiczorek [REDACTED]@outlook.com); Sanna Goyert; Jun Yoshioka; Maria Agosto; Juana Torres; Roberto Rodriguez  
**Subject:** Re: Kaliris received education award

Thank you all! It is an unexpected recognition but one that I am very humbled by. The Alliance for Quality Education has been fighting forever 30 yrs to fully fund our Public schools and in that has championed different policies for equity in public education.

As you know, NYC has the most segregated education system in the country... so all of these issues have been important. By doing this work, it has allowed me to understand where our students come from, what their needs are and consider the supports they need to succeed with us. A remarkable continuum of work.

Feel free to join us. The event is virtual... but also consider donating. AQE serves the whole state and elevates many issues that are central to achieving racial and social justice in society.

I hold you all in gratitude!

-Kaliris

Kaliris Y. Salas-Ramirez, PhD  
Distinguished Medical Lecturer  
Dept. of Molecular, Cellular and Biomedical Sciences

The Sophie Davis Program of Biomedical Sciences, CUNY School of Medicine  
Harris Hall Rm. 203E  
160 Convent Ave  
New York, NY 10031

Lab phone: 212-650-7758 (Marshak Science Building)  
Office phone: 212-650-8255 (Harris Hall)  
Dept phone: 212-650-6994  
Fax: 212-650-7726

On Sep 30, 2021, at 10:04 AM, Gonzalo Torres <GTorres@med.cuny.edu> wrote:

Dear All,

I want to share some good news. Our Kaliris just received the 2021 Champions of Education Award from the Alliance for Quality Education for her continuous work and fight to make sure that students have access to a quality education.

Congratulations Kaliris!

Best,

Gonzalo

<Kaliris award.png>

- [Advancing Gender Inclusive Excellence \(AGIE\) Coordinating Center \(U54 Clinical Trial Not Allowed\)](#)

(RFA-OD-21-010)

Office of Research on Women's Health

National Institute of Diabetes and Digestive and Kidney Diseases

Application Receipt Date(s): November 30, 2021 All applications are due by 5:00 PM local time of applicant organization.

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 10/06/2021 09:53:05 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** Funding Opportunity Reminder - CSOM Bridge & Pilot Project Program - DEADLINE 10/31/21

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Greeting CUNY School of Medicine Research Faculty. I am writing to remind you that the CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**. Eligibility information and a brief FAQ are listed below. If you have any additional questions, please contact Dr. Lima or myself.

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

**From:** Raquel Morales  
**Sent time:** 10/06/2021 09:54:36 AM  
**To:** Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Hoau-Yan Wang [REDACTED]@gmail.com>; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka  
**Cc:** Gonzalo Torres  
**Subject:** Reminder: Departmental Faculty Meeting today at 4PM via zoom

---

Dear Faculty,

A friendly reminder for today's Departmental faculty meeting at 4:00pm. Below is the zoom link.

Best Regards,

*Raquel Morales*

Assistant to Chair

---

**From:** Gonzalo Torres <GTorres@med.cuny.edu>  
**Sent:** Wednesday, October 6, 2021 9:48 AM  
**To:** Raquel Morales <rmorales@med.cuny.edu>  
**Subject:** Faculty Meeting today at 4PM

Topic: MCBS Faculty Meeting  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
<https://ccny.zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)  
+13017158592,,3783139420# US (Washington DC)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 312 626 6799 US (Chicago)  
+1 669 900 6833 US (San Jose)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)

Meeting ID: 378 313 9420  
Find your local number: <https://ccny.zoom.us/u/kezsSsxn6C>

**From:** Itzik Mano, PSC CUNY <[REDACTED]@gmail.com>

**Sent time:** 10/08/2021 02:36:00 PM

**To:** Kaliris gmail ([REDACTED]@gmail.com) ([REDACTED]@gmail.com); Raquel Morales; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Hoau-Yan Wang <[REDACTED]@gmail.com>; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka

**Cc:** Gonzalo Torres

**Subject:** [EXTERNAL] Follow up on our recent Departmental Faculty Meeting, Re: Union rep, CSoM\_PSC Google group

---

Dear MCBS members,

As I mentioned in our recent faculty meeting, after previous CSoM faculty members stepped down as our representatives to the PSC CCNY chapter, I recently put my name forward and was certified as a new rep for faculty & staff from our school at the PSC CCNY chapter, and as an *alternate* delegate to the PSC- wide delegate assembly (DA).

Recently many PSC members felt that there was insufficient communication between PSC members and their representatives. I therefore thought it would be beneficial if we establish a Google group (CSoM\_PSC) for information exchange and discussion of union issues among CSoM PSC members.

The aim is that this forum might help me get a better feeling of your views and desires on union issues, to give me a better conduit to pass relevant information from the union to the CSoM PSC members, and to create an opportunity for you to express your view and facilitate discussion within our group.

If you are interested to join this group, please send me an email and I will add you to this Google group.

Please note: The policy of PSC is that detailed discussions of union issues among PSC members (=employees) and their reps should be conducted outside the CUNY (=employer) email system. Therefore, I will need you to give me a non-CUNY email address to use for this Google group. I am therefore using here a dedicated address: [REDACTED]@gmail.com .

I have already posted to the group a short description of items discussed in recent PSC meetings (regarding retiree benefits, RFCUNY employees, and proposed changes to the process of producing future PSC resolutions).

At this time I am sending this email only to MCBS members (as a followup to my note during our recent zoom meeting), but the CSoM\_PSC Google group is open to any CSoM PSC member. I will communicate this info in the next school-wide meeting. In the mean time, you are welcome to share this info with additional CSoM PSC members outside MCBS.

BTW: I am new to operating a Google group, so any assistance / advice is welcome.

all the best

Itzik

**From:** Annabel Santana

**Sent time:** 10/13/2021 11:19:40 AM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoauyan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim;

**To:** Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lianne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; ; ; ; ; ;

**Subject:** CSOM Faculty meeting CANCELED - Thurs, 10/14/21 @ 4:30 pm

---

Dear CSOM Faculty,

Please note that there will be **\*NO\*** Faculty Council meeting tomorrow – Thursday, 10/14/2021.

The next CSOM Faculty meeting will be held Thursday, November 11, 2021 at 4:30pm.

Annabel

*Annabel Santana, Assistant Dean for Academic & Faculty Affairs*  
*CUNY School of Medicine*  
*The City College of New York*  
*160 Convent Avenue, Suite H-107*  
*New York, New York 10031*  
*Tel: 212-650-5297 or -5275*  
*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Annabel Santana

**Sent time:** 10/13/2021 11:20:48 AM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A Smalec; Jun Yoshioka; Junghoon Kim;

**To:** Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lianne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu ; ; ; ; ;

**Subject:** Canceled: CSOM Faculty meetings

---

The CSOM Faculty Council meetings are resuming monthly on the **2<sup>nd</sup> Thursday of each month at 4:30 PM.**

**\*\* Please note: the NEW Zoom link below.\*\***

Topic: CSOM Faculty Council meeting

Time: Recurring meeting - 2<sup>nd</sup> Thursday of each month at 4:30 PM

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828 532

One tap mobile

+16465588656,,83777353931# US (New York)

+13126266799,,83777353931# US (Chicago)

Dial by your location

+1 646 558 8656 US (New York)

+1 312 626 6799 US (Chicago)

+1 301 715 8592 US (Washington DC)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

Find your local number: <https://ccny.zoom.us/u/kdJQGKqIGV>

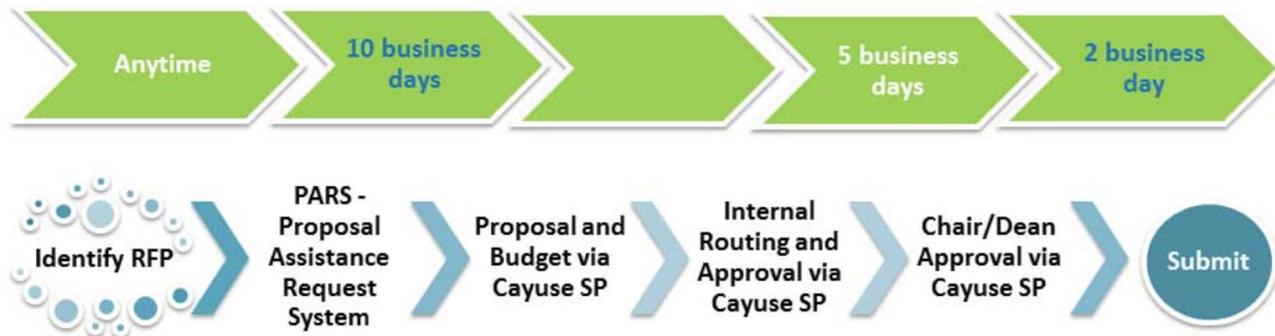
**From:** Marc Scullin  
**Sent time:** 10/14/2021 10 08 12 AM  
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**To:**  
**Subject:** Important Reminder Regarding CCNY GSP Proposal Submission Timeline

Greetings CSOM Faculty I am writing to remind all faculty that CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all extramural research proposals.

The GSP has had a recent influx of proposal requests (some from CSOM) that do not adhere to this timeline and in some cases, proposals have not been allowed to be submitted. The GSP has deadlines in place in order to have sufficient time to review the sponsor's guidelines, develop accurate budgets, prepare institutional documents and ensure a fully compliant application.

**The CSOM Office of Research is here to help you navigate this process. If you are interested in submitting any research proposal, please reach out to either Dr. Lima or myself as soon as possible so that we can help you navigate accordingly.**

The Diagram below outlines the major deadlines in the GSP Pre Award process, but I encourage all faculty to review the full details of the CCNY GSP research proposal timeline, which can be found [HERE](#)



Thank you.

The CSOM Office of Research

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 10/14/2021 12:30:05 PM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] CSF synaptic markers  
**Attachments:** CSF biomarkers synaptic.pdf

POL 87(2)(d)

Hi Hoau,

[REDACTED]

Except for albumin, most of these are Abcam or small vendors I don't know. Any thoughts on both biomarkers and vendors? I want to be sure that we don't select a biomarker that is high in MCI but then lower in more moderate disease. No rush. We probably won't have 25 Month 12 CSFs until early December.

Thanks,  
Lindsay

**Lindsay H. Burns, PhD**

SVP, Neuroscience

Cassava Sciences, Inc.

O: 512-501-2484 C: 512-574-4238

[www.cassavasciences.com](http://www.cassavasciences.com)



# Fluid Biomarkers for Synaptic Dysfunction and Loss

Elena Camporesi<sup>1</sup> , Johanna Nilsson<sup>1</sup>, Ann Brinkmalm<sup>1</sup>, Bruno Becker<sup>1,2</sup>, Nicholas J Ashton<sup>1,3,4,5</sup>, Kaj Blennow<sup>1,2</sup> and Henrik Zetterberg<sup>1,2,6,7</sup>

<sup>1</sup>Department of Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden. <sup>2</sup>Clinical Neurochemistry Laboratory, Sahlgrenska University Hospital, Mölndal, Sweden. <sup>3</sup>King's College London, Institute of Psychiatry, Psychology & Neuroscience, The Maurice Wohl Clinical Neuroscience Institute, London, UK. <sup>4</sup>NIHR Biomedical Research Centre for Mental Health & Biomedical Research Unit for Dementia at South London & Maudsley NHS Foundation, London, UK. <sup>5</sup>Wallenberg Centre for Molecular and Translational Medicine, Department of Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden. <sup>6</sup>Department of Neurodegenerative Disease, UCL Institute of Neurology, London, UK. <sup>7</sup>UK Dementia Research Institute at UCL, London, UK.

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**ABSTRACT:** Synapses are the site for brain communication where information is transmitted between neurons and stored for memory formation. Synaptic degeneration is a global and early pathogenic event in neurodegenerative disorders with reduced levels of pre- and postsynaptic proteins being recognized as a core feature of Alzheimer's disease (AD) pathophysiology. Together with AD, other neurodegenerative and neurodevelopmental disorders show altered synaptic homeostasis as an important pathogenic event, and due to that, they are commonly referred to as synaptopathies. The exact mechanisms of synapse dysfunction in the different diseases are not well understood and their study would help understanding the pathogenic role of synaptic degeneration, as well as differences and commonalities among them and highlight candidate synaptic biomarkers for specific disorders. The assessment of synaptic proteins in cerebrospinal fluid (CSF), which can reflect synaptic dysfunction in patients with cognitive disorders, is a keen area of interest. Substantial research efforts are now directed toward the investigation of CSF synaptic pathology to improve the diagnosis of neurodegenerative disorders at an early stage as well as to monitor clinical progression. In this review, we will first summarize the pathological events that lead to synapse loss and then discuss the available data on established (eg, neurogranin, SNAP-25, synaptotagmin-1, GAP-43, and  $\alpha$ -syn) and emerging (eg, synaptic vesicle glycoprotein 2A and neuronal pentraxins) CSF biomarkers for synapse dysfunction, while highlighting possible utilities, disease specificity, and technical challenges for their detection.

**KEYWORDS:** Synaptic biomarkers, cerebrospinal fluid, synaptopathies, Alzheimer's disease, proteomics

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**CORRESPONDING AUTHOR:** Elena Camporesi, Department of Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, Sahlgrenska Academy, University of Gothenburg, SE 43180 Gothenburg, Sweden. Email: elena.camporesi@gu.se

## Introduction

The central nervous system (CNS) can be subject to numerous pathological conditions, which can affect its development, functionality, or cause premature cell death, resulting in neurodevelopmental, neuropsychiatric, and neurodegenerative disorders. Although these disorders have different etiologies and pathophysiological mechanisms, many of them have some degree of dysfunction and alteration of the synapses and can thus be categorized as synaptopathies.<sup>1,2</sup> In this review, we will discuss how synapses are affected in the most common diseases affecting the CNS, and how advances in synaptic biomarker discovery provide new tools for the study of those diseases. We will mainly focus on neurodegenerative conditions, and in particular on Alzheimer's disease (AD),

which is the predominant cause of dementia affecting approximately 50 million people worldwide.<sup>3</sup> Although the exact mechanisms of synaptic loss and dysfunction in the different diseases are still poorly understood, there is evidence that a reduction in synaptic activity and density is one of the earliest events in many of the diseases of the CNS and may even appear before neuronal loss.<sup>4,5</sup> The significant role of synapse dysfunction in the disease pathology and progression of synaptopathies has therefore prompted a keen interest in detecting and quantifying synaptic proteins. Molecular brain imaging<sup>6</sup> and analysis of cerebrospinal fluid (CSF)<sup>7</sup> are used in conjunction to study synaptic proteins, with the aim of using them as biomarkers for prognosis, to follow disease progression and to evaluate effects of drug testing.



## Pathophysiology of Synaptic Dysfunction and Loss

### Synaptic functions

The neuronal synapses are the functional units of neurotransmission in the brain, with an estimated 100 trillion interconnecting synapses<sup>8</sup> in an elaborate and complex network. Synapses are formed during development and the early postnatal period. After reaching the maximum density at 2 to 4 years of age,<sup>9,10</sup> in the following years synapses are physiologically eliminated in a process known as pruning.<sup>11</sup> Synapses that survive to adulthood are the ones stably maintained, although we have a certain degree of synapse formation and elimination throughout life.<sup>12</sup>

Neuronal signal transmission in the CNS requires the presence of functional synapses, with properly arranged pre- and postsynaptic compartments. The presynaptic compartment contains all the structures for formation, storage, and release of neurotransmitter-containing vesicles. Following an action potential, the increase of  $\text{Ca}^{2+}$  in the presynaptic terminal triggers synaptic vesicles to fuse with the presynaptic membrane upon which neurotransmitters are released into the synaptic cleft.<sup>13</sup> Subsequently, neurotransmitters interact with receptors on the postsynaptic compartment (the dendritic spine), and through the activation of different signaling pathways<sup>14</sup> the neuronal signal is transmitted further. Synapses can be excitatory or inhibitory, using glutamate and GABA, as neurotransmitters, respectively.<sup>15</sup> The dendritic spines are the primary location of excitatory synapses.

Synapse formation, maturation, and elimination is a dynamic series of events that can be defined as synaptic plasticity. Processes representing synaptic plasticity are phenomena termed long-term potentiation (LTP) and long-term depression (LTD), through which, during memory formation, signaling via preferred synapses is enhanced or reduced. Selection of synapses seems to be activity-dependent, LTP is usually considered as a protective mechanism and LTD as inductive of elimination.<sup>16</sup> These 2 processes are considered the basis for memory formation and storage.<sup>17,18</sup> LTP is identified by the addition of new receptors at the postsynaptic density (PSD) and the consequent enlargement of the spine head resulting in transmission of a stronger signal.<sup>19</sup> On the contrary, during LTD a series of events lead to spine shrinkage and elimination.<sup>18</sup> Many different mechanisms for synaptic elimination have been suggested (for extensive review, see Cardozo et al<sup>20</sup> and Maiti et al<sup>21</sup>) Elimination of weaker and unnecessary synapses and maintenance of the stronger ones are processes that balance each other, to ensure proper connectivity between brain regions and signal refinement.<sup>22,23</sup> For proper synaptic activity, a balance is needed, and alterations between synapse formation and elimination can cause synaptic dysfunction and impaired brain network activities.<sup>21</sup> To understand pathological mechanisms and at which stage synapses are affected is of utmost importance to define targets and intervention strategies.

### Synapse and neuronal loss in brain disorders

As mentioned, a balance in synapse formation and pruning is essential for proper connectivity and brain functionality. For instance, excessive synaptic pruning during adolescence is one of the hypothesized mechanisms for schizophrenia, which most commonly manifests with an onset in late adolescence or early-adulthood.<sup>24-26</sup> The term “synaptopathy” is applied to refer to all diseases that are characterized by a progressive synaptic dysfunction and loss.<sup>20</sup> AD, the most common neurodegenerative disease, can be therefore considered both a synaptopathy and a proteinopathy.

AD pathology is identified by the presence of extracellular deposits of amyloid- $\beta$  (A $\beta$ ) plaques, formed by the aggregation of A $\beta$  peptides, and neurofibrillary tangles (NFTs) that are intraneuronal accumulations of hyperphosphorylated and truncated tau protein, respectively.<sup>27,28</sup> Along with these main hallmarks, gliosis, neuroinflammation,<sup>29-31</sup> and vascular dysfunction<sup>32,33</sup> are also present, which reflects the complexity of AD. However, it is synaptic loss which best correlates with cognitive symptoms<sup>34-36</sup> and it is also apparent in the early stages of the disease pathophysiology.<sup>37,38</sup> The number of synapses in the brain decreases during normal aging but this decrease is exacerbated in AD and, consequently, the synapse-to-neuron ratio is lower in AD brains compared with age-matched nondemented individuals.<sup>39</sup> In AD, brain biopsies show synaptic loss in neocortical regions and the hippocampus,<sup>40,41</sup> the latter showing the greatest reduction by approximately 50%.<sup>42-44</sup>

How the major AD hallmarks, tau and A $\beta$ , pathologically interact with synapses needs more investigation. However, most studies identified the oligomeric forms of A $\beta$  and tau, rather than larger aggregates, to be the synaptotoxic species.<sup>45-49</sup> Both in vivo<sup>50</sup> and ex vivo<sup>51</sup> A $\beta$  oligomers (A $\beta$ o) disrupt LTP, probably interfering with NMDAR (*N*-methyl-D-aspartate receptor) activity and downstream pathways,<sup>52</sup> in addition to causing oxidative stress, impairing axonal transport, and causing nerve cell death (reviewed in Cline et al<sup>53</sup>). In AD, A $\beta$  and tau act in concert and studies have identified their simultaneous presence in the postsynaptic compartment.<sup>54,55</sup> A $\beta$ o have been suggested to bind to a variety of targets,<sup>56</sup> including cellular prion protein (PrP<sup>c</sup>),<sup>57</sup> neuroligin 1, neurexin-2 $\alpha$ ,<sup>58</sup> PirB, EphB2,<sup>59</sup> shank, syn-Gap, Na/K-ATPase,<sup>60</sup> ultimately leading to impairment of LTP and synapse loss.<sup>45,50,61</sup> Phosphorylated tau oligomers can relocate from axons to dendrites, interfering with NMDAR and AMPAR ( $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor) and impairing glutamatergic transmission.<sup>62,63</sup>

Moreover, as points of transmission of signals between neurons, synapses seem also to help the spreading of the pathology via prion-like mechanisms, and some studies show the possibility of A $\beta$ o and tau oligomers to be transferred from neuron to neuron.<sup>64-69</sup>

Tau aggregation, without A $\beta$  pathology, is also a pathological hallmark of other neurodegenerative diseases, the so-called tauopathies.<sup>70</sup> Tauopathies include, among others, some forms of

frontotemporal lobar degeneration (FTLD), namely FTLD-tau, progressive supranuclear palsy (PSP), and corticobasal degeneration (CBD). Although all tauopathies have in common the presence of tau aggregates in the CNS, the characteristics of these aggregates differ among them and are different from the NFTs of AD. PSP shows filamentous aggregates in astrocytes and oligodendrocytes, while in CBD tau accumulation in neurons is less fibrillar and in astrocytes it accumulates in the form of astrocytic plaques.<sup>71</sup> As introduced above, oligomeric tau has been connected to synaptic damage through different pathways,<sup>63</sup> also involving activation of microglia and astrocytes through inflammatory processes,<sup>72</sup> and animal models of tau pathology show early synaptic loss prior to neuronal death.<sup>73,74</sup>

As the combination of A $\beta$  and tau pathology define AD, accumulation of aggregated  $\alpha$ -synuclein ( $\alpha$ -syn) is the pathological feature of several diseases, which are commonly collectively referred to as  $\alpha$ -synucleinopathies.<sup>75</sup> Among the most common synucleinopathies are Parkinson's disease (PD), Parkinson's disease dementia (PDD), dementia with Lewy body (DLB), and multiple system atrophy (MSA). PD, PDD, and DLB show accumulation of the so-called Lewy neurites (LN) and Lewy bodies (LB), where  $\alpha$ -syn is the principal component.<sup>76</sup> The physiological role of  $\alpha$ -syn at the synapse is not precisely understood yet<sup>77</sup>; however, it is commonly accepted that its dyshomeostasis and accumulation leads to cell damage and it is responsible for synaptic impairment and neuronal damage.<sup>78,79</sup> Alpha-syn, localized mainly presynaptically, is involved in synaptic vesicle regulation and trafficking,<sup>80,81</sup> and in the SNARE complex formation.<sup>82,83</sup> It also interacts with membrane lipids and can associate with mitochondria,<sup>84</sup> the Golgi-endoplasmic reticulum system,<sup>85</sup> and the endolysosomal system. Pathologic  $\alpha$ -syn can interfere with all these organelles, consequently impairing-related pathways.<sup>86,87</sup> The protein can change its conformation and aggregate, giving rise to oligomers, fibrils, and larger aggregates.<sup>88</sup> Which form is responsible for toxicity is still a matter of debate. However, as discussed for AD, the oligomeric form of  $\alpha$ -syn has been suggested to be the responsible for the synaptic damage in dopaminergic neurons,<sup>89,90</sup> and the possibility for oligomeric  $\alpha$ -syn of spreading in a prion-like manner has been proposed.<sup>91,92</sup> At a cellular level, typically PD and DLB are distinguished from MSA, inasmuch the accumulations of LN and LB are mainly present in neurons, while in MSA,  $\alpha$ -syn accumulation appears in oligodendrocytes.<sup>93</sup> Moreover, MSA inclusions seem to be more compact and aggressive,<sup>94</sup> in line with the increased severity of the disease.<sup>95</sup> However, it was most recently reported that also neurons in MSA show  $\alpha$ -syn oligomers depositions.<sup>96</sup> A recent study showed that  $\alpha$ -syn filaments differ in DLB and MSA.<sup>97</sup> PD and DLB are usually distinguished based on the symptoms, with DLB being the second most common type of dementia.<sup>98</sup> PD, similar to AD, starts many years before symptoms become overt and at that point, patients had already lost up to 60% motor neurons in the substantia nigra.<sup>99</sup>

Nonetheless,  $\alpha$ -syn was first identified and characterized in relation to AD when it was found to be a major non-amyloid beta component of A $\beta$  plaques.<sup>100</sup> In fact, Lewy pathology can be also found in over half of all patients with AD.<sup>101-103</sup> To further complicate the clinical picture,  $\alpha$ -syn depositions are found in tauopathies like PSP and CBD, and NFTs have been found in PD brains.<sup>104,105</sup>

Comorbidities and co-occurrence of different pathologies make diagnosis of these diseases challenging. Synapse damage is a common and early first change in the disease development and prolonged synaptic damage can lead to synaptic loss. Neuronal damage and death seem to be a follow-up event seen only at later stages. For these reasons, the investigation of synaptic biomarkers has the potential to find a way to diagnose the disease in its early stages and also to give us information on the main pathological mechanisms involved.

## Current Climate of Fluid Biomarkers in Dementia

### *Imaging and CSF biomarkers*

The core CSF biomarkers for AD (A $\beta$ 42/A $\beta$ 40, total-tau, and phospho-tau), reflecting the defining A $\beta$  and tau neuropathologies, consistently demonstrate diagnostically significant changes across studies<sup>106</sup> and now have prominent positions in biological and diagnostic criteria for AD.<sup>28,107</sup> The concentrations of these core AD biomarkers, however, are no different from healthy controls in the majority of dementias outside of the AD continuum<sup>108,109</sup> which can be of great utility in the differential diagnosis of patients with cognitive symptoms. An exception can be made for Creutzfeldt–Jakob disease (CJD), which presents vastly increased levels of t-tau, whereas the concentrations of p-tau181 remain normal or only marginally changed in CJD.<sup>110,111</sup>

Together with CSF biomarkers, positron emission tomography (PET) and magnetic resonance imaging (MRI) are used to provide a clearer view of pathology and atrophy patterns in the brains of living humans. MRI allows for the measurement of brain atrophy and provides information on regional, structural, and functional integrity of the brain.<sup>112</sup> In the research of neurodegenerative disorders, PET tracers for protein aggregation such as A $\beta$ <sup>113,114</sup> and tau,<sup>115</sup> as well as glucose metabolism as a measure for neuronal activity<sup>116,117</sup> and synaptic density,<sup>118</sup> have been developed. Together with CSF biomarkers, MRI and PET are nowadays included in the research diagnostic criteria for AD.<sup>28,119</sup> However, the availability of PET scans is limited and when possible expensive, thus it is not always applicable.

### *Blood biomarkers*

In certain instances, the biomarkers field is rapidly evolving from CSF into blood, which is a more easily accessible biological fluid. Despite the latest advancement in developing CSF biomarkers for synaptic integrity and large

high-resolution mass spectrometry proteomic studies demonstrating the presence of synaptic proteins in blood,<sup>120,121</sup> to date no studies have shown positive results for any pre- or postsynaptic biomarkers in blood correlating to any neurodegenerative disease phenotype.

The advancement of ultrasensitive methodologies has enabled, however, the detection of the CSF core biomarkers and neuronal injury, like neurofilaments, in blood. New evidence from high-resolution mass spectrometry,<sup>122,123</sup> single molecule array (Simoa),<sup>124</sup> and fully automated immunoassays,<sup>125</sup> which are highly sensitive and alleviate confounding matrix effects in blood, suggests that A $\beta$  peptide ratios are specific markers of individuals with A $\beta$ -positive brain scans. In addition, recent evidence has shown that plasma p-tau181 concentrations are higher in individuals with AD dementia than in healthy controls.<sup>126</sup> Plasma p-tau181 correlates with tau PET in A $\beta$ -positive AD individuals and, encouragingly, can accurately identify elderly controls and mild cognitive impairment (MCI) individuals with a positive A $\beta$ -PET scan (area under the curve [AUC] > 0.85).<sup>127-129</sup> Conversely, although significant increase of plasma t-tau has been vastly observed in individuals with AD, the plasma t-tau levels between control, MCI, and AD groups substantially overlapped.<sup>130</sup>

The neurofilaments are cytoskeletal protein abundantly expressed in neuronal axons, among which neurofilament light polypeptide (NfL) is the smallest of the neurofilament proteins (for a detailed review on neurofilament structure and function, please see Khalil et al<sup>131</sup>). A moderate-to-good correlation between NfL concentration in blood and CSF has been observed in several studies and many CSF findings of increased NfL in neurodegenerative diseases have subsequently been replicated in blood.<sup>132</sup> Although not a specific marker for AD, blood NfL has the potential to track or predict many aspects of neurodegeneration, including cognitive performance,<sup>133</sup> the degree of postmortem pathology,<sup>134</sup> structural imaging,<sup>135</sup> and glucose metabolism.<sup>136,137</sup>

### Fluid Biomarkers for Synapse Pathology

The pathophysiology of synaptopathies and the significance of synapses in cognition make a convincing argument for the need and use of biomarkers of synapse pathology as representation of cognitive and synaptic function. Clinically, synaptic biomarkers may link synaptic degeneration with the cognitive status and decline of the patient, and they could be implemented together with cognitive tests to have a more precise description of the patient's symptoms, especially at early stages. Moreover, synaptic biomarkers can help to understand the underlying pathological processes ongoing during cognitive diseases, as different proteins could reflect different mechanisms, thus helping the diagnosis. In addition, synaptic biomarkers can also be used during drug development, to monitor the efficacy of treatments on synaptic functioning in drug trials.

### Pre- and postsynaptic biomarkers

Biomarkers for synaptic dysfunction can be divided into pre- and postsynaptic biomarkers depending on the localization of the protein. The presence of synaptic proteins in CSF was first demonstrated in the late 1990s,<sup>138,139</sup> but for a long time, most studies still involved postmortem brain tissue. However, in the last decade, advances in mass spectrometry and immunoassays have allowed the accurate quantification of synaptic proteins in biofluids. As of today, there are 4 main presynaptic biomarkers, growth-associated protein 43 (GAP-43), synaptosomal-associated protein 25 (SNAP-25), synaptotagmin-1, and  $\alpha$ -syn, and 1 postsynaptic marker, neurogranin.

**GAP-43.** GAP-43 is a presynaptic protein which plays an important role in memory and information storage.<sup>140</sup> It is anchored on the cytoplasmic side of the presynaptic plasma membrane and is mainly expressed in the hippocampus, entorhinal cortex, and neocortex of the adult brain. At the synapse, upon intracellular Ca<sup>2+</sup> increase, GAP-43 is phosphorylated by protein kinase C. This leads GAP-43 to interact, among others, with synaptophysin and SNAP-25, facilitating synaptic vesicle recycling.<sup>141</sup> Studies have found GAP-43 CSF levels to be significantly increased in patients with AD compared with controls<sup>142</sup> and also other neurodegenerative disorders.<sup>143</sup> CSF GAP-43 levels were also increased in preclinical and clinical patients with AD compared with controls. However, in an antibody-based explorative study, no significant changes in patients with PD or DLB were found in comparison with controls.<sup>144</sup> Altered CSF GAP-43 levels have also been reported in progressive multiple sclerosis (MS),<sup>143,145</sup> inflammation,<sup>146</sup> stroke,<sup>147</sup> and PD,<sup>109</sup> but not in frontotemporal dementia (FTD).<sup>109</sup>

**SNAP-25.** SNAP-25 is a presynaptic protein with a key role in neuronal survival and cognitive function due to its essential part in vesicular exocytosis, neurite outgrowth, and LTP.<sup>148</sup> SNAP-25, together with vesicle-associated membrane proteins (VAMPs) and syntaxins, forms SNARE complexes, which mediate synaptic vesicle apposition to the presynaptic membrane thus allowing for the Ca<sup>2+</sup>-triggered vesicle fusion during exocytosis.<sup>149</sup> SNAP-25 has, in various studies using both enzyme-linked immunosorbent assay (ELISA) and mass spectrometry-based assays, shown to have significantly higher CSF levels in AD, even at a very early stages.<sup>7,150-152</sup> Increased CSF levels of SNAP-25 have also been found in patients with PD<sup>153</sup> and patients with sporadic CJD.<sup>154</sup> In addition, SNAP-25 has been associated with several psychiatric diseases such as attention deficiency hyperactivity disorder (ADHD), schizophrenia, and bipolar disorder.<sup>149</sup> Furthermore, there are 2 splicing variants of SNAP-25: SNAP-25A and SNAP-25B. Mass spectrometry-based methods to quantify both total SNAP-25 and the 2 isoforms have therefore been developed to study potential differences in the roles of the isoforms of SNAP-25

in disease. Nine amino acids differentiate the 2 protein isoforms, which also differ in their effects on neurotransmission.<sup>155</sup> To our knowledge, no studies have investigated the different isoforms in CSF. However, a postmortem brain tissue study by Barakauskas et al<sup>155</sup> found significantly decreased levels of total SNAP-25 and SNAP-25A but not of SNAP-25B, indicating a specific differential expression of SNAP-25A in schizophrenia.

*Synaptotagmin-1.* Synaptotagmin-1 is a calcium sensor vesicle protein vital for fast synchronous neurotransmitter release in hippocampal neurons.<sup>156</sup> It is a transmembrane protein anchored in the vesicle membranes containing 2 Ca<sup>2+</sup>-binding domains. In response to Ca<sup>2+</sup>-binding at elevated concentrations, synaptotagmin-1 triggers the vesicle fusion, but the exact molecular mechanisms remain to be elucidated (for review see Park and Ryu<sup>157</sup>). Initial CSF studies of synaptotagmin-1 found it to be decreased in a CSF pool from patients with early-onset AD compared with a CSF pool from healthy controls.<sup>158</sup> Two decades later, Öhrfelt et al<sup>158</sup> quantified synaptotagmin-1 in individual CSF samples from patients with AD, MCI, and controls, demonstrating significantly increased concentrations of synaptotagmin-1 in patients with AD and MCI, the highest being MCI due to AD. These findings have been corroborated in a recent study where synaptotagmin-1 was quantified in patients in the AD continuum and cognitive decline from other dementias.<sup>159,160</sup>

In the same study by Tible et al, in addition to synaptotagmin-1, the concentrations of GAP-43 and SNAP-25 were quantified. All 3 presynaptic proteins were significantly increased in AD and MCI-AD compared with the other disorders. However, only SNAP-25 and GAP-43 levels were also significantly higher in AD versus MCI-AD. Only synaptotagmin-1 concentrations were significantly lower in other neurodegenerative disorders compared with controls. Recently, Clarke et al<sup>161</sup> compared synaptotagmin-1 and SNAP-25 concentrations in patients with FTD and demonstrated increased levels in patients with AD biomarker profile compared with those patients with an FTD profile.

*Alpha-synuclein and its forms.* Alpha-syn is a key player in the etiology of different neurodegenerative conditions and as such, it has been studied as a possible biomarker for their detection. However, besides being a possible cause for diseases, it is also a presynaptic protein, taking part in many synaptic processes as previously described, which is why it is important to include it in this review. The synucleins family comprises  $\alpha$ -,  $\beta$ -, and  $\gamma$ -synuclein, which are soluble proteins encoded by 3 different genes. Among them,  $\alpha$ -syn is the most studied.<sup>162</sup>

*Total  $\alpha$ -syn.* Studies of  $\alpha$ -syn in CSF have mainly been focused on  $\alpha$ -synucleinopathies and were based on immunological assays measuring total  $\alpha$ -syn (t- $\alpha$ -syn); however, they have been largely inconsistent. For instance, in PD compared

with controls, t- $\alpha$ -syn has been found in several studies to be slightly decreased<sup>163-165</sup> which is supported by several meta-analyses which concluded that there are significantly lower levels of t- $\alpha$ -syn in PD (10%-15%). However, in other studies no significant difference has been found,<sup>166,167</sup> and the diagnostic performance of t- $\alpha$ -syn is not considered sufficient for clinical utility due to significant overlap between the populations.<sup>168-170</sup> Other synucleinopathies, like DLB and MSA, have also shown a similar decrease compared with healthy controls, while tauopathies such as PSP and CBD seem to show no significant difference.<sup>163,165,171</sup> For AD in comparison with healthy controls, t- $\alpha$ -syn levels seem to be elevated<sup>171-174</sup>; however, several studies showed no significant difference.<sup>175-179</sup> Patients with CJD, on the other hand, have a more pronounced increase in CSF t- $\alpha$ -syn, both compared with controls and with other neurodegenerative diseases.<sup>178,180,181</sup> An explanation for the inconclusive findings of CSF  $\alpha$ -syn is that leakage into the CSF from synapse breakdown occurs simultaneously as  $\alpha$ -syn is retained in pathological inclusions. In addition, the extensive reduction in synapse number over time might lead to a decrease of  $\alpha$ -syn production. Together these events might contribute to the confounding results.<sup>166,182</sup> Another contributing factor for the varying results might be due to technical variation such as handling of samples or quantification methods leading to low reproducibility.<sup>182</sup> Moreover,  $\alpha$ -syn is largely expressed outside of the CNS and highly abundant in blood, with red blood cells (RBCs) as its major source. Thus, blood contamination during CSF acquisition might represent another source of variation, skewing the t- $\alpha$ -syn concentration results in CSF.<sup>183,184</sup>

Despite the possible problems just discussed, there have been many studies evaluating  $\alpha$ -syn as blood biomarker for dementias. Studies for  $\alpha$ -syn in plasma and serum in PD have all shown similar conflicting results as in CSF.<sup>185-188</sup> However, a meta-analysis indicates that plasma t- $\alpha$ -syn is significantly higher in PD than in controls.<sup>189</sup> In a study by Laske et al,<sup>190</sup> decreased serum concentrations of t- $\alpha$ -syn in DLB were found but with no difference for AD compared with controls. There are also a few studies on RBC t- $\alpha$ -syn<sup>191-193</sup> which showed significantly decreased levels of the protein in PD and AD compared with controls. Studies on t- $\alpha$ -syn in saliva have also been performed, but with limited success in differentiating PD from controls.<sup>194-196</sup>

*Oligomeric, phosphorylated, and aggregated forms of  $\alpha$ -synuclein.* The inconclusive results of t- $\alpha$ -syn as a diagnostic biomarker have sparked research into pathological forms of  $\alpha$ -syn, such as oligomeric (o- $\alpha$ -syn), phosphorylated (Ser129) (p- $\alpha$ -syn), and aggregated forms of  $\alpha$ -synuclein. *Oligomeric  $\alpha$ -syn* in CSF seems to be increased in PD compared with controls<sup>169</sup> but not in AD and DLB.<sup>174,197</sup> Furthermore, Parnetti et al<sup>198</sup> found that the diagnostic accuracy of PD can be improved by using the ratio of oligomeric/total  $\alpha$ -syn in CSF. In plasma,<sup>199</sup> serum,<sup>200</sup> and RBC,<sup>193,201</sup> significantly elevated levels have been reported for PD, but also non-significant

results exist.<sup>202-204</sup> In a study by Vivacqua et al,<sup>205</sup> increased saliva levels of o- $\alpha$ -syn were found for PD. *Phosphorylated  $\alpha$ -syn*, one of the main disease-associated posttranslational modifications (PTMs),<sup>206</sup> is hard to quantify due to its low CSF concentration, but similar to the oligomeric and the total form, it has been found elevated in PD<sup>169</sup> and its diagnostic accuracy increases when its ratio to other  $\alpha$ -syn forms are used.<sup>207</sup> Phosphorylated- $\alpha$ -syn has also been indicated to be elevated in CJD<sup>181</sup> and not increased in AD.<sup>174,179</sup> Plasma p- $\alpha$ -syn has been found to be significantly increased in PD compared with controls.<sup>185,203</sup> For the measurement of pathogenic  $\alpha$ -syn aggregates in CSF, aggregation assays have been developed. Assays based on real-time quaking-induced conversion (RT-QuIC) or protein misfolding cyclic amplification (PMCA) have shown very promising results (specificity > 95%, sensitivity > 80%) in discriminating synucleinopathies (PD, MSA, and DLB) from nonsynucleinopathies (AD and controls).<sup>208-210</sup>

**Neurogranin.** Neurogranin is an intracellular 7.5-kDa protein, concentrated in the dendritic and postsynaptic compartment of synaptic spines of neurons.<sup>211,212</sup> There it binds via its central IQ domain<sup>213</sup> to the Ca<sup>2+</sup>-signaling mediator calmodulin, enhancing signaling for processes important in memory formation and to phosphatidic acid at the inner plasma membrane.<sup>214</sup> A neurogranin knockout mouse model showed deficits in spatial memory and synaptic plasticity.<sup>215</sup> In a first study, CSF neurogranin was shown by immunoprecipitation and Western blot to be increased in AD.<sup>216</sup> After the development of immunoassay methods using ELISA,<sup>217</sup> Singulex,<sup>218</sup> and Mesoscale,<sup>219</sup> these findings have been verified in several studies and neurogranin consistently showed increased levels in CSF of AD patients as compared with controls.<sup>121,220-224</sup> This increase appears to be specific for AD, as CSF from patients with other neurodegenerative diseases, with the exception of CJD,<sup>225</sup> do not show such an increase.<sup>161,226,227</sup> High levels of neurogranin in CSF during prodromal AD have been shown to be predictive of more rapid progression toward AD.<sup>217,219</sup>

Besides full-length neurogranin, CSF contains mainly fragments of the C-terminal half (with a variety of different truncations at their C-terminal and N-terminal ends).<sup>216,217</sup> Two intracellular enzymes have been identified that can generate cleavages in the functionally important IQ domain and at the very C-terminal end (calpain-1 and prolyl endopeptidase, respectively).<sup>228</sup> Whether these different fragments of neurogranin have roles in different physiological or pathophysiological functions is still unknown. In a comparison study, different ELISAs and the Singulex assay were found to have similar performance in predicting AD, in spite targeting different parts of neurogranin.<sup>229</sup> However, this does not rule out that particular neurogranin fragments could yield more discriminatory power to detect AD. Overall, it can be said that neurogranin may be a useful biomarker in CSF to detect early degeneration of neurons and it appears to be fairly specific for AD among several tauopathies.

Plasma concentrations of neurogranin are detectable with conventional ELISAs but are unchanged in AD and do not correlate with CSF neurogranin, probably due to the contribution of peripherally expressed neurogranin peptides to blood neurogranin measurements.<sup>121,220</sup>

### *Emerging synaptic biomarkers*

Recently, other studies identified more synaptic proteins in CSF, which have been investigated without success so far or that show promise as synaptic biomarkers, thus worth to be mentioned in this section. Wesenhagen et al have recently reviewed 29 proteomic studies that investigated AD-related changes in CSF protein abundances. In total, 97 proteins, including the synaptic proteins neurofascin, NPTX1, NPTX2, and neurexin 1, were reported by 2 or more studies and associated with AD.<sup>230</sup> One of the reviewed studies<sup>231</sup> reported a synaptic biomarker panel where only the 3 synaptic proteins neurofascin, NPTX1, and neurexin 1 were significantly lowered in AD. Similarly, Lleó et al<sup>232</sup> found that 6 synaptic proteins, calyntenin-1, glutamate receptor 4 (GRIA4), neurexin-2A, neurexin-3A, syntaxin-1B, and thy-1 membrane glycoprotein, were increased in CSF in preclinical AD even before the core CSF biomarkers for neurodegeneration.

In explorative proteomics, high-resolution separation methods such as gel electrophoresis, isoelectric focusing, and high-performance liquid chromatography are used in conjunction with mass spectrometry and bioinformatics to study differences in protein expression due to diseases, genetic variations, or therapy. A major advantage of using an explorative approach to study protein abundances is that many hundred proteins and protein variants can be studied simultaneously without existing hypotheses or bias. Thus, the discovery of novel biomarkers could lead to new insights on disease mechanisms and eventually the formulation of novel hypotheses. However, using the explorative approach to identify biomarkers in biofluids from individual patient samples is challenging and the overlap of identified biomarker candidates among these studies has historically been relatively low. These discrepancies may be due to a low number of study participants, differences in sample handling, and other analytical parameters. Another possible approach to identify new candidate biomarkers is setting up targeted assays based on proteins of interest from studying the literature and/or public databases. Commonly shotgun proteomics, to identify possible proteins of interest, is also used in the selective process. In this way, several potential biomarker candidates can be validated in a targeted setting in larger cohorts. Among emerging synaptic biomarkers, of special note are neuronal pentraxins and the synaptic vesicle glycoprotein 2A.

**Neuronal pentraxins.** Neuronal pentraxin I (NPTX1, also called NP1) and II (NPTX2, also called NP2), and the neuronal pentraxin receptor (NPTXR) are widely expressed at excitatory synapses, where they bind to AMPA receptors and

are suggested to be involved in synaptic plasticity.<sup>233,234</sup> All 3 neuronal pentraxins have lately received much attention and have been shown in several studies to have decreased CSF levels in AD and MCI groups compared with controls.<sup>231,235-242</sup> CSF pentraxin levels also correlate with cognitive performance and hippocampal volume.<sup>150,242,243</sup> Few studies have been performed on other diseases but NPTXR has also been associated with other neurological diseases such as MS<sup>244</sup> and FTD.<sup>245</sup> Furthermore, in a study by Magdalino et al<sup>246</sup> both NPTXR and NPTX1 were found to be decreased in between atypical parkinsonian disorders (PSP, MSA, CBD) and controls.

**SV2A.** Recent studies using [<sup>11</sup>C]UCB-J PET have identified SV2A as the first in vivo marker of synaptic density<sup>247</sup> which demonstrates widespread synaptic loss in AD.<sup>118</sup> SV2A is a synaptic vesicle transmembrane protein, which in brain is widely expressed in neurons.<sup>248</sup> SV2A has been described to be located in the dense-core vesicles<sup>249,250</sup> and in small synaptic vesicles,<sup>251</sup> most probably in both. Although its exact mechanism needs more investigation, it is involved in regulation of neurotransmitter release<sup>252,253</sup> and expression and trafficking of synaptotagmin.<sup>254</sup> Compared with the typical pattern of hypometabolism seen in AD using [<sup>18</sup>F]FDG, the spatial extent of decreases in [<sup>11</sup>C]UCB-J uptake was significantly more confined. The reduction in hippocampal binding is in line with the early loss of entorhinal cortical cell projections to the hippocampus, and reductions of hippocampal SV2A seen in post-mortem studies in AD brain tissue.<sup>255,256</sup> More recently, changes in [<sup>11</sup>C]UCB-J PET have been observed in PD,<sup>257</sup> PSP,<sup>258</sup> cortical basal syndrome, and epilepsy<sup>247</sup> suggesting that SV2A could be a global marker for synaptic density, unlike CSF synaptotagmin-1, SNAP-25, GAP-43, and neurogranin, which are rather specific to AD or amyloidopathies. Recently, SV2A has been detected in CSF and shown to be reduced in AD<sup>259</sup>; however it is yet to be determined whether CSF SV2A can be used as a marker for synaptic density in other dementias and whether it has a meaningful correlation with [<sup>11</sup>C]UCB-J (Figure 1).

#### *Miscellaneous: other emerging synaptic biomarkers*

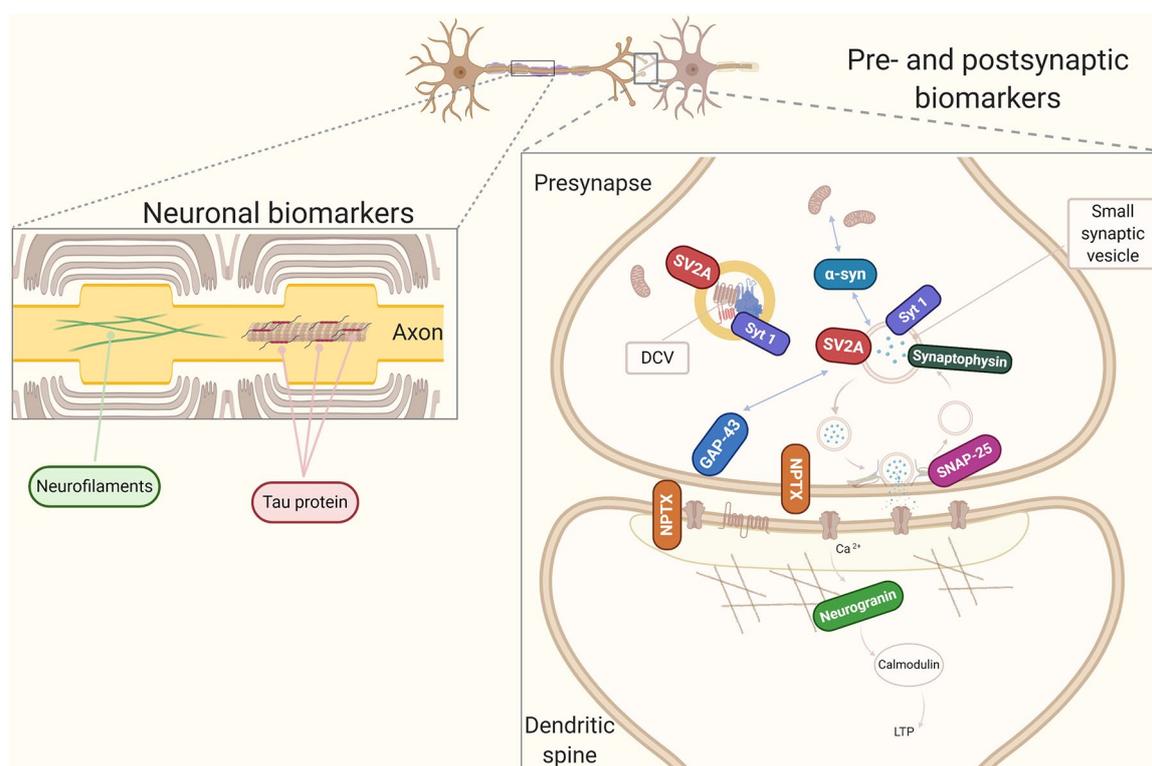
The Rab family are key synaptic proteins involved in both recycling of neurotransmitter receptors and exocytosis of neurotransmitters. Of special note is the family member ras-related protein 3a (*Rab3a*), highly abundant in brain tissues, which has been connected with several neurodegenerative diseases (AD, PD, and DLB) due to its regulation of A $\beta$  production and interaction with  $\alpha$ -syn.<sup>262</sup> The protein has been investigated by Berezki et al,<sup>153</sup> which however did not find any significant difference in CSF between patients with PD and control. A second important protein family for neurotransmitter exocytosis is the granin family, which is constituted of dense-core vesicle proteins involved, inter alia, in neuropeptide biogenesis and secretion. The proteins have not only been associated with

neurodegenerative diseases, such as AD, but also with other synaptopathies, such as schizophrenia and depression.<sup>263</sup> Three of the key granins: chromogranin-A, secretogranin-2, and neurosecretory protein VGF, have been found to have significantly lower CSF concentrations in AD.<sup>231,264</sup>

Another synaptic protein involved in the pathology of AD is *contactin-2*, a cell-adhesion protein that interacts with APP and beta-secretase 1 (BACE1). Chatterjee et al<sup>265</sup> found that the protein was reduced in both brain tissue and CSF in AD. The less well-studied members of the synuclein family, beta-synuclein ( $\beta$ -syn) and gamma-synuclein ( $\gamma$ -syn), are also present in proteinaceous aggregates in some  $\alpha$ -synucleinopathies.<sup>266</sup> Oeckl et al<sup>167</sup> was the first to measure all 3 synucleins protein family members,  $\alpha$ ,  $\beta$ ,  $\gamma$  in CSF. They found increased concentrations of all synucleins in AD and CJD; however for PD, DLB, and atypical parkinsonian syndromes the concentrations were not altered. Furthermore, a high correlation between the 3 synucleins was seen. In another study by Oeckl et al,<sup>267</sup>  $\beta$ -syn was quantified in blood and found it to be increased in AD and CJD compared with controls but not in other neurodegenerative diseases, such as PDD, DLB, amyotrophic lateral sclerosis (ALS), and FTD.

**14-3-3.** 14-3-3 proteins refer to a family of 7 isoforms which are highly expressed in the brain, accounting for 1% of its soluble protein content. They are also particularly enriched at synapses (presynaptic) and important modulators of synaptic functions, such as neurotransmission and plasticity. 14-3-3 protein detection by Western blot has since long been used to detect CJD, albeit this technique is only semi-quantitative. However, more recently, 14-3-3 have been studied in the context of other neurodegenerative pathologies. 14-3-3 isoforms have not only been found to co-localize in LB in PD and NFTs in AD, but also been found to interact with key proteins such as tau and  $\alpha$ -syn. They have also been genetically linked to both neurodegenerative diseases (PD, AD, and CJD) and neuropsychiatric disorders (schizophrenia and bipolar disorder).<sup>268,269</sup> A recent study by Antonell et al<sup>270</sup> found significantly increased *gamma* 14-3-3 concentrations in both FTD and AD compared with controls. For AD, increased concentrations were found already in a prodromal stage and the protein level was also significantly higher at later stages compared with FTD. Furthermore, when analyzing for 14-3-3, 96% of subjects were positive for neurodegeneration when applying the AT(N) system, compared with 94% for neurofilament light and 62% for neurogranin.<sup>270</sup>

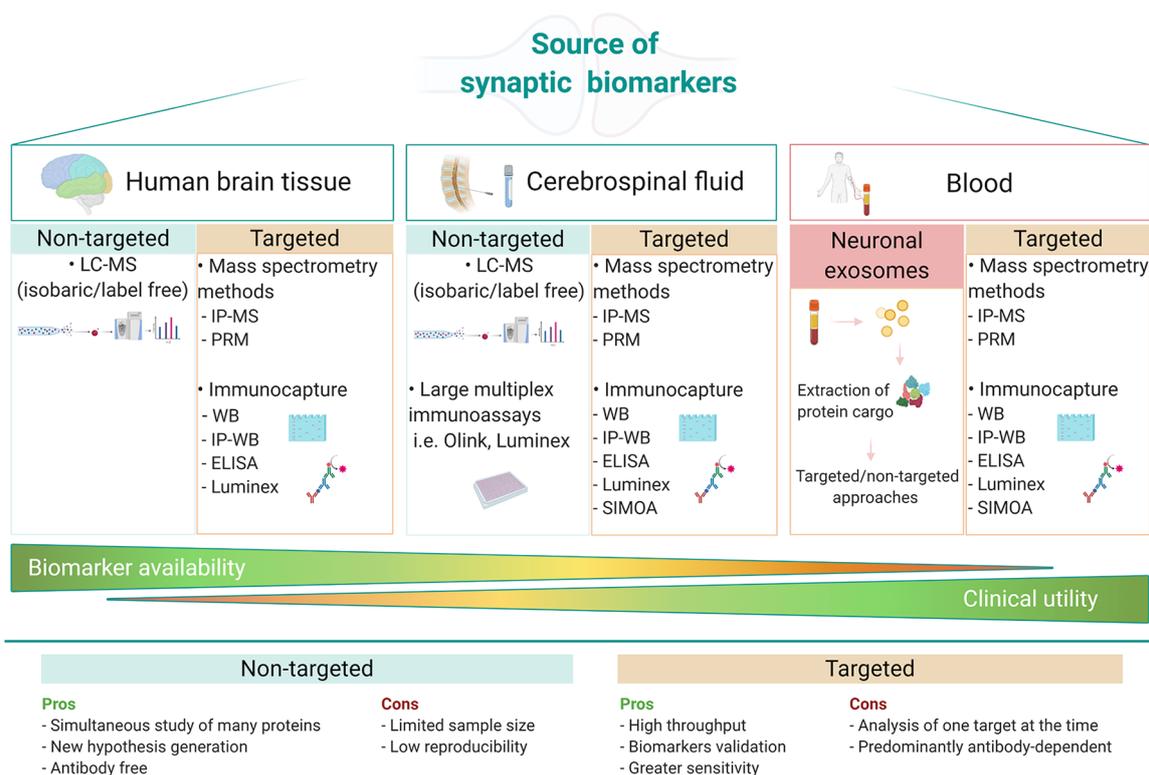
*Synaptophysin* is one of the most used synaptic biomarkers in immunohistochemistry since it is the most abundant integral synaptic vesicle and plasma membrane protein. In studies of AD postmortem brain tissue, it has been shown that the synaptophysin content is reduced.<sup>271,272</sup> Several studies have reported that the protein is not detectable in CSF,<sup>139,138,273</sup> possibly due to its high hydrophobic profile.<sup>139</sup> However, it has recently been reported to be detected in exosome preparations from body fluids.<sup>274,275</sup>



**Figure 1.** Synaptic and neuronal biomarkers location. The picture is a schematic representation of the most studied synaptic biomarkers described in this review. As it can be noticed, most of the candidate biomarkers are localized presynaptically, with the exception of *neurogranin* and neuronal pentraxins (*NPTX*), which has also been described to be present presynaptically.<sup>260</sup> Many proteins are involved in synaptic vesicle assembly and neurotransmitters release, like *synaptotagmin-1 (syt 1)*, *synaptophysin*, *SNAP-25*, and *SV2A*.<sup>248</sup>  $\alpha$ -Synuclein ( $\alpha$ -syn) can be found as a soluble form in the cytoplasm, but also associating with membrane lipids as, for instance, with synaptic vesicles and mitochondria.<sup>87</sup> *GAP-43* shows high density in the presynaptic terminal, where depending on its phosphorylation status, participates in neuronal growth modulating actin or in synaptic plasticity modulating synaptic vesicle trafficking.<sup>141</sup> Together with actin filaments and microtubules, *neurofilaments* are cytoskeletal elements of the neurons, providing mechanical strength and stability.<sup>131</sup> *Tau* protein, mainly expressed in axons, binds to tubulin and induce its polymerization into microtubules, which support axon outgrowth and elongation.<sup>261</sup>  $\alpha$ -syn indicates synuclein; DCV, dense-core vesicles; GAP-43, growth-associated protein 43; LTP, long-term potentiation; NPTX, neuronal pentraxin; SNAP-25, synaptosomal-associated protein 25. Figure made with www.biorender.com.

**Neuronal-derived exosomes.** A recent approach for the discovery of new synaptic biomarkers has been based on isolating neuronal exosomes from blood (plasma). As discussed previously, blood is an easily accessible peripheral fluid, preferred to CSF, which entails a more invasive extraction procedure. However, blood has the disadvantage of being further away from the brain and give peripheral contribution to the levels of the protein. Studying neuronal exosomes enriched from blood gives the advantage to use blood while hopefully better reflecting brain pathogenic processes. Explorative proteomic analysis has tried to map the protein content of the neuronal exosomes and confirmed the presence of several synaptic proteins such as Rab3a and GRIA4.<sup>276</sup> In plasma samples, Goetzl et al<sup>274</sup> reported significantly decreased neuronal-derived levels of synaptophysin together with synaptopodin, synaptotagmin-2, and neurogranin in patients with AD and FTD compared with controls. In the same study, GAP-43 and synapsin-1 were also detected, but were found to have significantly lower levels only in AD. Furthermore, in

another study by Goetzl et al,<sup>277</sup> plasma neuronal-derived exosome levels of NPTX2, neurexin 2, GRIA4, and neuroligin 1 were found to be significantly decreased in AD, where also GluR4 and neuroligin 1 correlated with cognitive loss. Another protein that has been quantified in neuronal exosomes is  $\alpha$ -syn, found to have increased concentrations in PD compared with controls.<sup>278</sup> For proteins such as neurogranin or  $\alpha$ -syn, where peripheral expression complicates the quantification in blood, neuronally derived exosomes seem like an excellent option. However, even if this has promise, it is limited by expensive and time-consuming sample preparation, which as of today restricts its potential for high-throughput biomarker screening and its use in clinical routine. Nevertheless, exosomes are being connected to an increasing number of synaptopathies and they have even been implicated in the propagation of disease-associated proteins such as tau, A $\beta$ , PrPC, and  $\alpha$ -syn.<sup>279,280</sup> They are a relatively unexplored source for synaptic biomarkers, which makes them a vital part of the field (Figure 2).



**Figure 2.** Proteomic approaches in synaptic biomarkers discovery and validation. Proteomic studies can start with large explorative investigations in brain tissue, which might lead to the discovery of new candidate biomarkers. However, these studies can be seen as starting points, and they have no clinical utilities. Thus, investigations in CSF are needed to be able to translate the biomarker discovery into a tool of clinical use. Once the biomarker has been validated in CSF, further investigations can be carried in blood, a biofluid with higher accessibility and cheaper to use. On the other hand blood is further away from the brain and the targeted protein level might be susceptible to peripheral contribution, resulting in lower biomarker specificity and confounding results. A possible approach to overcome this problem is the use of plasma-derived neuronal exosomes. These investigations can be carried out with a targeted or non-targeted approach. In the diagram, pros and cons of both approaches are highlighted. ELISA indicates enzyme-linked immunosorbent assay; IP, immunoprecipitation; LC-MS, liquid chromatography-mass spectrometry; PRM, parallel reaction monitoring; SIMOA, single molecule array; WB, Western blot.

Figure made with [www.biorender.com](http://www.biorender.com).

## Conclusions and Future Perspective

Synapses are essential interconnecting points for neurons and are primarily affected in neurodegenerative and neurodevelopmental disorders.<sup>72</sup> Accumulation of misfolded proteins seems to directly affect them,<sup>35</sup> leading to their dysfunction and loss, which is closely related to the cognitive deficits seen in these aging disorders. This review summarizes latest studies on more established and newly investigated synaptic proteins as candidate biomarkers for synapse dysfunction and neuronal injury in different neurodegenerative diseases, in relation to both CSF and blood (Table 1).

Current CSF synaptic biomarkers are altered in AD but seemingly not in other neurodegenerative disorders. This can reflect a higher response of synapses and neurons to A $\beta$ -mediated damage, probably making AD the pathology with the highest synaptic damage. However, more efforts are needed to characterize synaptic loss in non-AD dementias and other synaptopathies. Increasing evidence suggests that synaptic dysfunction is also involved in neurodevelopmental diseases<sup>290,291</sup> and neuropsychiatric disorders.<sup>26,292</sup> Thus, the study of these

conditions may help understanding differences or commonalities between synaptopathies.<sup>293</sup>

It can be noticed that most of the synaptic biomarkers described are represented by presynaptic proteins<sup>294</sup> and, in AD, glutamatergic synapses appear to be primarily affected.<sup>6,294-297</sup> Among the reviewed synaptic proteins, neurogranin is the most extensively studied and the evidence presented thus far is seemingly specific for AD or A $\beta$  deposition. The other synaptic proteins also show changed levels in relation to AD, with most of them showing increased CSF concentrations, but also in non-AD neurodegenerative diseases (eg, PD, tauopathies), even though in these diseases they are less investigated. NfL is a good marker for general neuronal loss and it would be suitable to represent the “N” in the ATN criteria<sup>119,298</sup> given that CSF t-tau also mainly changes in AD and CJD. Blood NfL strongly reflects CSF NfL.<sup>299</sup> Elucidating the mechanisms of release of these proteins into biofluids would be of importance to understand their changes in concentration, thus connecting pathological mechanisms to biological responses and increase the interpretability of this biomarker category.



Table 1. (Continued)

PATHOLOGY COMPARED WITH CONTROLS	CEREBROSPINAL FLUID											REFERENCES			
	AMYLOID- $\beta$			LEWY BODY			TAUOPATHIES			INFLAM.			BLOOD		
	AD	CJD	PRION	PD	DLB	MSA	PSP	CBD	FTD	MS	AD		AMYLOID	LEWY BODY	PD
SV2A	↓														In CSF <sup>259</sup>
Contactin-2	↓														In CSF <sup>265</sup>
Neurofascin	↓														In CSF <sup>231</sup>
Neurexin															
1	↓														In CSF <sup>231</sup>
2	↑										↓ <sup>E</sup>				In CSF <sup>232</sup> , in blood <sup>277</sup>
3	↑														In CSF <sup>232</sup>
Syntaxin-1	↑														In CSF <sup>232</sup>
Calsynenin-1	↑														In CSF <sup>232</sup>
Glutamate receptor 4	↑										↓ <sup>E</sup>				In CSF <sup>232</sup> , in blood <sup>277</sup>
Thy-1 membrane glycoprotein	↑														In CSF <sup>232</sup>
Synaptopodin											↓ <sup>E</sup>				In blood <sup>274</sup>
Synaptotagmin-2											↓ <sup>E</sup>				In blood <sup>274</sup>
Synapsin 1											↓ <sup>E</sup>				In blood <sup>274</sup>
Rab3a															In CSF <sup>153</sup>
Neurologin 1											↓ <sup>E</sup>				In blood <sup>277</sup>
14-3-3 Gamma	↑														In CSF <sup>270,289</sup>
Granins	↓														In CSF <sup>231,264</sup>

Abbreviations: ↑, statistical increase; ↓, statistical decrease; =, no change; AD, Alzheimer's disease; CBD, corticobasal degeneration; CJD, Creutzfeldt-Jakob disease; CSF, cerebrospinal fluid; DLB, dementia with Lewy body; E, plasma-derived exosomes; FTD, frontotemporal dementia; GAP-43, growth-associated protein 43; MS, multiple sclerosis; MSA, multiple system atrophy; P, plasma; PD, Parkinson's disease; PSP, progressive supranuclear palsy; R, red blood cells (RBCs); S, serum; SNAP-25, synaptosomal-associated protein 25.

Understanding the pathological mechanisms responsible for synaptic damage is of central importance also during synaptic biomarker investigation. Brain studies could be a starting point, helping to understand the pathophysiological events and for selecting biomarker candidates. The next steps may involve the investigation of biofluids, like CSF, ideally followed by studies in blood, representing the way to bring the investigation further and possibly find synaptic biomarkers of clinical utility. The future of biomarkers ideally would be able to rely on sampling blood, which is a more accessible source than CSF. However, the possible contribution of peripheral expression of the biomarker protein, as discussed for neurogranin and  $\alpha$ -syn, can represent a problem and, to date, we still have no blood biomarkers reflecting synaptic pathology. Neuronal-derived exosomes in blood can represent an alternative; however the complexity and variability of the exosome enrichment procedure is currently a drawback for large studies and routine use.

Future directions of research should consider more longitudinal studies, to compare protein time-related changes with the disease progression. The contribution of sex differences should be also considered in more detail, as developing evidence suggests that differing biomarker profiles do exist but is protein-specific.<sup>300,301</sup>

In conclusion, the available evidence on CSF synaptic biomarkers points toward the possible use of these proteins as indicators of synaptic alteration and elimination in synaptopathies, and their use to follow cognitive deficits in neurodegenerative diseases. More efforts are needed to assess their possible use in blood. Mechanistic studies will possibly help understanding how those proteins are affected in pathological processes thus increasing their value as potential biomarkers. Moreover, developing assays for their quantification using highly sensitive and high-throughput platforms will push synaptic protein quantification toward broader investigations. This overview of the field will hopefully highlight possible gaps and guide future studies.

### Author Contributions

EC, JN and NJA provided the initial idea and outline of content of the manuscript; EC created figures 1 and 2. JN created the table. All authors contributed to the content of the article and critically reviewed and edited the manuscript.

### ORCID iD

Elena Camporesi  <https://orcid.org/0000-0003-1044-0192>

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**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 10/14/2021 01:08:15 PM  
**To:** Hoau-yan Wang  
**Cc:** Jim Kupiec <jkupiec@cassavasciences.com>  
**Subject:** [EXTERNAL] RE: CSF synaptic markers

So after a more careful read, it appears that GAP-43 or SNAP-25 would be the best as these are high in AD and the only two that are higher in AD than in MCI-AD. Synaptotagmin is higher in MCI-AD than in AD. NPTX1 and SV2A are reduced in AD, so an increase might not be the best signal, but we wouldn't know until we measure.

Lindsay

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**From:** Lindsay Burns  
**Sent:** Thursday, October 14, 2021 11:30 AM  
**To:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Subject:** CSF synaptic markers

POL 87(2)(d)

Hi Hoau,

[REDACTED]

Any thoughts on both biomarkers and vendors? I want to be sure that we don't select a biomarker that is high in MCI but then lower in more moderate disease. No rush. We probably won't have 25 Month 12 CSFs until early December.

Thanks,  
Lindsay

**Lindsay H. Burns, PhD**  
SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)



**From:** Hoau-yan Wang  
**Sent time:** 10/14/2021 05:44:39 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Cc:** Jim Kupiec <jkupiec@cassavasciences.com>  
**Subject:** Re: CSF synaptic markers

---

Lindsay,

OK. Let me read a little bit more before answering your questions. GAP-43 and SNAP-25 both had been used to assess presynaptic destruction. I would not consider synaptotagmin that is a family of 17 proteins. To pick a good ELISA or antibodies to use in ELISA format will take some times to validate its selectivity (and sensitivity). Small vendor itself is not the problem so long as their QC is solid. Many components including some antibodies in the ELISA kits are not made here, hopefully the availability won't be affected.

I know a little bit about GAP-43 as I had worked on modulation of this protein. GAP-43 also called F1, B-50 or pp46 is distributed widely in the brain and associated with many proteins and lipids such as PKC synaptophysin, PIP2 etc. It is also a prominent PKC substrate (phosphorylated by PKC). Some antibodies have preference to non-phosphorylated form, this must be checked since in the CSF GAP-43 must have both forms and given AD has altered phosphorylation/dephosphorylation (reduced) I would be careful.

About SNAP-25, although it was mostly recognized as a component of SNARE complex that regulates exo-/endo-cytosis in the prejunctional terminals, SNAP-25 has more recently shown to participate in the postsynaptic functions such as postsynaptic trafficking and spine morphogenesis. Just like GAP-43, SNAP-25 antibodies have to be checked carefully for their specificity and sensitivity since SNAP-25 is also post-translationally modified. A lot of control experiments have to be done before moving forward.

Hopefully, this can be help in moving forward.

Thanks.

Best,

Hoau

---

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent:** Thursday, October 14, 2021 1:08 PM  
**To:** Hoau-yan Wang  
**Cc:** Jim Kupiec  
**Subject:** [EXTERNAL] RE: CSF synaptic markers

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**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 10/14/2021 05:58:36 PM  
**To:** Hoau-yan Wang  
**Cc:** Jim Kupiec <jkupiec@cassavasciences.com>  
**Subject:** [EXTERNAL] Re: CSF synaptic markers  
**Attachments:** image001.png

---

Hoau,

Thanks for this assessment. I agree we'll have to do some control expts with whatever marker and vendor we choose.

Lindsay

On Oct 14, 2021, at 4:44 PM, Hoau-yan Wang <hywang@med.cuny.edu> wrote:

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

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O: 512-501-2484 C: 512-574-4238

[www.cassavasciences.com](http://www.cassavasciences.com)

<image001.png>



**From:** Gokhan Yilmaz

**Sent time:** 10/15/2021 08:56:52 AM

**To:** Kaliris gmail [REDACTED]@gmail.com [REDACTED]@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Hoau-Yan Wang <[REDACTED]@gmail.com>; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka; Gonzalo Torres

**Cc:** Syed Abdali

**Subject:** IMPORTANT - SAMPLES FREEZER REFRIGERATOR MARSHAK 920

---

Dear All,

The -80 freezer and the refrigerators in Marshak 920 will be cleaned and repaired.

Would you please remove your samples from the freezers and refrigerators by Tuesday evening?

All the remaining samples will have to be discarded.

Please contact Mr Syed Amir Abdali ([saabdali@med.cuny.edu](mailto:saabdali@med.cuny.edu)) if you need help.

Sincerely,

Gokhan

**From:** Marc Scullin

**Sent time:** 10/18/2021 08:39:50 AM

**To:** Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hou-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** CSOM Office of Research - NIH Funding Opportunities for the week ending October 15, 2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending October 15, 2021. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 10/15/2021, [Click HERE](#)

## Funding Opportunities

- [Cancer Center Support Grants \(CCSGs\) for NCI-designated Cancer Centers \(P30 Clinical Trial Optional\)](#)  
(PAR-21-321)  
National Cancer Institute  
Application Receipt Date(s): January 25, 2022, January 25, 2023, January 25, 2024 All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s).
- [Exploratory Grants in Cancer Control \(R21 Clinical Trial Optional\)](#)  
(PAR-21-341)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [NHLBI Career Transition Award for Intramural Postdoctoral Fellows and Research Trainees \(K22 Independent Clinical Trial Not Allowed\)](#)  
(PAR-22-034)  
National Heart, Lung, and Blood Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Neuromodulation/Neurostimulation Device Development for Mental Health Applications \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-22-038)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Neuromodulation/Neurostimulation Device Development for Mental Health Applications \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-039)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [NHLBI Career Transition Award for Intramural Postdoctoral Fellows and Research Trainees \(K22 Clinical Trial Required\)](#)  
(PAR-22-040)  
National Heart, Lung, and Blood Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Clinical Relevance of the Linkage between Environmental Toxicant Exposures and Alzheimers Disease and Related Dementias \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-048)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): March 11, 2022
- [Advancing Group A Streptococcus Vaccine Discovery \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-21-070)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): February 18, 2022
- [NIH Health Care Systems Research Collaboratory - Pragmatic and Implementation Trials of Embedded Interventions \(UG3/UH3, Clinical Trials Optional\)](#)

(RFA-AT-22-001)  
National Center for Complementary and Integrative Health  
Application Receipt Date(s): June 17, 2022

- [Diabetes Research Centers \(P30 Clinical Trial Optional\)](#)  
(RFA-DK-21-029)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): March 08, 2022
- [Pelvic Floor Disorders Network \(UG1 Clinical Trial Required\)](#)  
(RFA-HD-22-021)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Office of Research on Women's Health  
Application Receipt Date(s): December 06, 2021
- [Pelvic Floor Disorders Network \(U24 Clinical Trial Required\)](#)  
(RFA-HD-22-022)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): December 06, 2021
- [NIH Blueprint for Neuroscience Research Short Courses in Neurotherapeutics Development \(R25 Clinical Trial Not Allowed\)](#)  
(RFA-NS-21-025)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): November 1, 2021, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on this date.
- [Occupational Safety and Health Training Project Grants \(T03\)](#)  
(RFA-OH-22-003)  
National Institute for Occupational Safety and Health  
Application Receipt Date(s): October 23, 2025

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 10/19/2021 11:46:15 AM

**To:** Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hou-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** Funding Opportunity Reminder - CSOM Bridge & Pilot Project Program - DEADLINE 10/31/21

---

Greetings CUNY School of Medicine Research Faculty. I am writing to remind you that the CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**. Eligibility information and a brief FAQ are listed below. If you have any additional questions, please contact Dr. Lima or myself.

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

The purpose of the Bridge grant is to give investigators resources to resubmit a grant for which they applied and were not granted; in this case, the investigator would be applying for a resubmission and responding to the summary statement they received. Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Maria D Lima

**Sent time:** 10/19/2021 03:01:43 PM

**To:** Tashuna Albritton; Keosha Bond; Lisa Coico; Patricia Cortes; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Marisol Hernandez; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Preston Williams; Gokhan Yilmaz; Jun Yoshioka

**Cc:** Marc Scullin

**Subject:** Re: NIH R grant resources

---

Dear Faculty:

For those of you planning to submit NIH grants, Dr. Michaela Kiernan from Stanford teaches a fantastic R01 course and has posted key handouts, for investigators at Stanford and beyond: <https://purl.stanford.edu/yy394gb6954>

Dr. Wesson distributed this earlier, so please forgive me for sending it again. This is valuable information, and not restricted to the R01.

Best,

Rose

**From:** Marc Scullin

**Sent time:** 10/20/2021 09:06:17 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lianne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** HIV News from NIDA newsletter

Good morning CSOM faculty. Please see below for NIDA's latest edition of *HIV News from NIDA* newsletter. If any of the highlights, opportunities, or events listed in the newsletter are of interest to you, please reach out to Dr. Lima or myself. Have a great day.

The CSOM Office of Research

[View this email in your browser](#)



*HIV News from NIDA* is a periodic newsletter sponsored by the National Institute on Drug Abuse (NIDA) [HIV Research Program](#). It highlights key research findings and gaps at the intersection of HIV and substance use disorders, and it features HIV-related funding opportunity announcements and scientific workshops and events supported by NIDA.

## ***HIV News from NIDA*** **October 2021**

### **LEAD STORIES**

#### **Introducing our new name: The NIDA HIV Research Program**

We are pleased to announce that NIDA is renaming our AIDS Research Program the **NIDA HIV Research Program (HRP)** to better characterize our scientific investment. NIDA's HIV research has historically illuminated the science at the intersection of HIV and substance use disorders, helping to turn what began as a fatal disease into a manageable and livable condition.



NIDA's evolving research landscape focuses even more on the HIV virus itself and how it manifests itself within the intertwining epidemic of substance use disorders. The name change also provokes less stigmatizing language and fewer images of

people seriously ill and dying from a disease without hope of a future. Finally, this change in name recognizes the tremendous work of the scientists, clinicians, and activists who have helped transform the science of HIV over the past 30 years. You can read more about the name change in this [blog](#) from NIDA Director Nora D. Volkow, M.D., who describes NIDA's continued commitment to a broad range of HIV research, from the basic science of HIV pathogenesis in the presence of addictive substances to research on new pre-exposure prophylaxis (PrEP) products among people who use drugs, including the impact of racial inequity and COVID-19. See the HRP [historical timelines](#) for a look at the program's accomplishments.

## FEATURED FUNDING OPPORTUNITIES

### **NIDA seeks early career investigators**

[PAS-21-270: AIDS-Science Track Award for Research Transition \(A-START\) \(R03 Clinical Trial Optional\)](#)—Applications due January 7, 2022

This funding opportunity announcement (FOA) seeks to facilitate the entry of both newly independent and early career investigators to the area of drug use and use disorder research and HIV/AIDS. This FOA, the AIDS-Science Track Award for Research Transition (A-START), encourages Small Research Grant (R03) applications to support research projects on drug use and/or use disorder and HIV/AIDS that can be carried out in a short period of time with limited resources. This FOA welcomes applications integrating substance use and/or substance use disorder and HIV/AIDS across all areas of research supported by NIDA.

### **Use existing data to promote substance use research**

[PAR-19-368: Accelerating the Pace of Drug Abuse Research Using Existing Data \(R01 Clinical Trial Optional\)](#)—Applications due January 7, 2022

The purpose of this funding opportunity announcement (FOA) is to invite applications proposing innovative analysis of existing social science, behavioral, administrative, and neuroimaging data to study the etiology and epidemiology of substance-using behaviors (substances defined as alcohol, tobacco, prescription, and other substances) and related disorders, prevention of substance use and HIV, and health service utilization. This FOA encourages the analyses of public use and other extant community-based or clinical datasets to their full potential in order to increase our knowledge of etiology; trajectories of substance-using behaviors and their consequences including morbidity and mortality; risk and resilience in the development of psychopathology; and strategies to guide the development, testing, implementation, and delivery of high-quality, effective, and efficient services for the prevention and treatment of substance use disorder and HIV.

### **Support for research into HIV-associated neurological disorders (HAND)**

[RFA-DA-22-009: Organoid Modeling of Neural Stimulants and HIV Comorbidity of Human Brain \(R01- Clinical Trial Optional\)](#)—Applications due November 17, 2021

This funding opportunity announcement invites grant applications to study mechanisms underlying the neuropathophysiology of HIV-associated neurological disorders (HAND) using induced microglia and cerebral organoids generated from human-derived induced pluripotent stem cell lines. Specific emphasis is on the comorbidity of HIV and neural stimulants, including methamphetamine, amphetamine, cocaine, and nicotine, studied at the single cell and neural circuits levels.

## Other recent funding opportunities

- [NOT-DA-21-020: Notice of Special Interest \(NOSI\): Evaluation of sex differences on HIV-associated comorbidities in the context of stimulant use](#)—Applications due January 7, 2022
- [NOT-DA-21-007: Notice of Special Interest \(NOSI\): Using Data to Advance HIV Epidemic Knowledge and Program Planning](#)—Applications due January 7, 2022
- [PA-21-205: Development and Testing of Novel Interventions to improve HIV Prevention, Treatment, and Program Implementation for People Who Use Drugs \(R34 Clinical Trial Required\)](#)—Applications due January 7, 2022
- [PAR-20-147: Extracellular RNA carrier subclasses in processes relevant to substance use disorders or HIV infection \(R01- Clinical Trial Not Allowed\)](#)—Applications due January 7, 2022
- [PAR-22-027: Mechanism for Time-Sensitive Drug Abuse Research \(R21 Clinical Trial Optional\)](#)—Applications due January 11, 2022
- [NOT-DA-21-074: Notice of NIDA's Participation in RFA-AI-20-076, "New Technologies for the In vivo Delivery of Gene Therapeutics for an HIV Cure \(R01 Clinical Trial Not Allowed\)"](#)—Applications due March 17, 2022

[View all NIDA funding opportunities at the intersection of HIV and substance use.](#)

## RESEARCH HIGHLIGHTS

### Studies highlight the need for additional research and comprehensive strategies to maximize PrEP among people with substance use disorders

A [NIDA-funded review](#) suggests a need for more research on why people who use drugs have such a low rate of pre-exposure prophylaxis (PrEP) use, despite its proven effectiveness. Initial studies suggest that structural, health care, interpersonal, and individual-level interventions can improve PrEP use for this population, but



future studies are needed to optimize the use of new PrEP modalities (e.g., injectable PrEP); how to address multilevel challenges to PrEP use; and to evaluate the integration of PrEP into other service settings and substance use treatment modalities.

Analyzing data from electronic health records, [NIDA-funded research](#) published in *JAMA Network Open* suggests that gaps in the PrEP care continuum are

concentrated in populations disproportionately impacted by HIV, including African Americans, Latinx individuals, young adults (aged 18-25 years), people with lower socioeconomic status, and individuals with substance use disorders. This study reflects one of the largest cohorts to date, with more than 26,000 person-years of follow-up. The authors note that comprehensive strategies are needed on how to improve the PrEP care continuum to maximize PrEP impact and equity.

## **Marijuana use changes among people living with HIV during the pandemic**

The COVID-19 pandemic has resulted in changes in marijuana use among a considerable proportion (45 percent) of people living with AIDS. A [NIDA-funded study](#) suggests that increased marijuana use in this population during the COVID-19 crisis was associated with post-traumatic stress disorder symptoms at baseline, worsened mental health during the pandemic, and a lack of perception that marijuana use is a risk factor for COVID-19 infection. Future research is needed to understand the temporality of the increases in marijuana use with worsening mental health.

## **Research highlights a new host defense mechanism that downregulates HIV replication**

[NIDA-funded research](#) has investigated host-virus interactions during HIV infection, discovering a new role for the protein-coding gene, PCIF1. PCIF1 influences host genetic machinery to suppress HIV replication in macrophages and T cells. HIV overcomes this restriction by targeting PCIF1 for degradation via a viral protein, Vpr. This finding illuminates the complexity of host-HIV interactions and identifies new potential targets to block HIV replication.

## **UPCOMING EVENT**

**December 1:** [World AIDS Day](#)

[CONTACT US](#)

Let us know what other content you would like to see in this newsletter.

### **About NIDA's HIV Research Program**

NIDA's HIV Research Program (HRP, formerly the AIDS Research Program) supports the development, planning, and coordination of high-priority research at the intersection of HIV, substance use, and substance use disorders, working across the federal government and with communities. [Get more information about the program.](#)

Since its creation in 2004, the HRP has explored the complex intersection of HIV/AIDS and substance use disorders. Nearly two decades later, we have grown into a substantial portion of NIDA's mission, resources, and research portfolio, overseeing interdisciplinary initiatives and critical funding opportunities that have advanced the field around our core research priority areas:

- Prevent new infections and transmission of HIV among people who use drugs and their sexual and/or injection partners.

- Increase understanding of etiology, pathogenesis, spread, and persistence of HIV among people who use drugs.
  - Address comorbidities and improve health outcomes among people living with HIV who use drugs.
  - Accelerate scientific discoveries in HIV and substance use research.
-

**From:** Marc Scullin

**Sent time:** 10/26/2021 11:38:56 AM

Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** Funding Opportunity Reminder - CSOM Bridge & Pilot Project Program - DEADLINE - 10/31/2021

Greetings CUNY School of Medicine Research Faculty. I am writing to remind you that the CUNY School of Medicine Office of Research will be accepting proposals for Bridge and for Pilot Project Funding through our portal from **September 1, 2021 – October 31, 2021**. Eligibility information and a brief FAQ are listed below. If you have any additional questions, please contact Dr. Lima or myself.

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

The purpose of the Bridge grant is to give investigators resources to resubmit a grant for which they applied and were not granted; in this case, the investigator would be applying for a resubmission and responding to the summary statement they received. Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

If you have submitted a proposal to a granting agency as Principal Investigator and were not funded, have a summary statement, and need funds for preliminary data to resubmit your application, we would suggest that you take advantage of the Bridge Funding Opportunity.

### **Pilot Project Eligibility**

Applicants with no current external funding are eligible. Applicants with money in a startup account are also eligible. In addition, consideration will be given to applicants who have been disproportionately affected by COVID-19, have large teaching loads, and/or are course directors (justification should be described in Section A – Personal Statement of NIH Bio sketch). The maximum award is \$20,000, and the intramural grant is for one year with no extensions.

If you are planning to submit a proposal and need more support to obtain preliminary data in preparation for an external grant submission, we would recommend a pilot project award.

### **Common questions/answers:**

**Q.** Can my graduate students/post-docs submit a proposal using this mechanism?

**A.** No, these awards are restricted to faculty

**Q.** Is personnel allowed in the grants?

**A.** Yes, a budget justification is required for all proposed expenses

**Q.** Will the grants be reviewed?

**A.** Yes, the grants will be reviewed by peer scientists.

**Q.** How many grants will be awarded?

**A.** We are anticipating funding two pilot projects and one bridge grant in 2022.

**Q.** When will the award start?

**A.** We anticipate funding to begin January 2022.

**Q.** Will there be another opportunity for submission?

**A.** Yes, we anticipate that the program funding cycle will run annually.

**Q.** Is planning to submit an extramural grant a requirement?

**A.** Yes, this initiative is in support of faculty to receive extramural grant support.

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702



**From:** Maria D Lima  
**Sent time:** 10/26/2021 01:26:50 PM  
Tashuna Albritton; Jude-Marie A Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiecezorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**To:**  
**Cc:** Marc Scullin  
**Subject:** Re: CCNY/DISRUPT Cancer Health Inequities Grant Funding Opportunities and Networking Events  
**Attachments:** CCNY/DISRUPT Cancer Health Inequities Networking Events

Dear all,

We would like to invite you to our upcoming networking events to hear more about upcoming pilot funding opportunities as well learn about what the newly funded DISRUPT grant will be doing here at CCNY and beyond.

Please see below for more info on each of our 3 events. The first will be next Wednesday November 3<sup>rd</sup>, and will focus on Prostate Cancer. Our first speaker will be Dr. Robert Klein, Associate Professor of Genetics and Genomic Science from Mt. Sinai. Other speakers TBA.

The link to register for November 3 is here:

[https://ccny.zoom.us/meeting/register/tZYodeirTIsHtl9FP88\\_HuDgIHjImekp3C](https://ccny.zoom.us/meeting/register/tZYodeirTIsHtl9FP88_HuDgIHjImekp3C)

**SAVE THE DATE**

**CANCER HEALTH INEQUITIES NETWORKING EVENT**

Prostate Cancer Wednesday, November 3, 2021  
Breast Cancer Wednesday, November 10, 2021  
Liver Cancer Wednesday, November 17, 2021  
ALL 6:00 - 7:30 PM

**DISRUPT**  
TO MAKE CANCER RESEARCH EQUITABLE

Learn about Stand Up To Cancer (SU2C) and how to get involved!

Mount Sinai Medical Center, City College of New York, Columbia University Medical Center and Albert Einstein Medical Center are partnering to address diversity, equity and inclusion in biomedical research for prostate, breast and liver cancers as they are major health inequities in New York City.

**JOIN US IF YOU ARE OR WANT TO BE A NYC CANCER HEALTH EQUITY ALLY, ADVOCATE OR ACTIVIST OR IF YOU ARE:**

- A Community member or patient advocate interested in prostate, breast or liver cancer
- A pre or postdoctoral fellow in basic, clinical and population science including engineering and data science
- Faculty and providers and allied health care providers at the four institutions
- Faculty and providers at medical institutions serving cancer cases in Harlem, Upper Manhattan and the Bronx

Mount Sinai | The City College of New York | COLUMBIA | COLUMBIA UNIVERSITY IRVING MEDICAL CENTER | EINSTEIN | Albert Einstein College of Medicine

The CUNY School of Medicine is involved through the City College of New York.

**Purpose of Networking Event:** To meet and network with individuals specific to a cancer site and learn more about Stand Up To Cancer (SU2C) initiatives and how to get involved including learning about **pilot grant opportunities**.

You can register at the following links to the event(s) of your choice:

[Prostate Cancer Event Registration](#) 11/3 –

[https://ccny.zoom.us/meeting/register/tZYodeirTIsHtI9FP88\\_HuDgIHjImekep3C](https://ccny.zoom.us/meeting/register/tZYodeirTIsHtI9FP88_HuDgIHjImekep3C) –

[Breast Cancer Event Registration 11/10](#) –

<https://ccny.zoom.us/meeting/register/tZArcu6rqT0vGdWmYJU6TBOICnLUZH7QiWQ5> –

[Liver Cancer Event Registration 11/17](#) –

<https://ccny.zoom.us/meeting/register/tZckde-urD0sGdJH4Kqe6iaKI7WVVHvNPXaU> –

**Tentative Agenda (more to come)**

**6:00 – 6:10 pm**      **Overview of SU2C Educational and Pilot RFAs**  
**6:10 – 6:50pm**      **Keynote speed talks from Leaders in the Field**  
**6:50 – 7:20 pm**      **Breakout rooms based on interested selected at registration**  
**7:20 – 7:30pm**      **Next steps**

---

**Save The Date – Cancer Health Inequities Networking Event**

Prostate Cancer – Wednesday November 3, 2021

Breast Cancer – Wednesday November 10, 2021

Liver Cancer – Wednesday November 17, 2021

ALL 6:00 – 7:30 PM

**Learn about Stand Up To Cancer (SU2C) and how to get involved!**

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**JOIN US if you are or want to be a NYC Cancer Health Equity Ally, Advocate or Activist or if you are:**

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- Faculty and providers and allied health care providers at the four institutions
- Faculty and providers at medical institutions serving cancer cases in Harlem, Upper Manhattan and the Bronx

Please send to your interested networks. As always, I am happy to answer any questions

Best,  
Maria

**From:** No-Reply  
**Sent time:** 10/15/2021 10:56:01 AM  
**To:** Ebony West  
**Subject:** CCNY/DISRUPT Cancer Health Inequities Networking Events



# SAVE THE DATE

## CANCER HEALTH INEQUITIES NETWORKING EVENT

Prostate Cancer    Wednesday, November 3, 2021  
 Breast Cancer      Wednesday, November 10, 2021  
 Liver Cancer        Wednesday, November 17, 2021  
 ALL 6:00 - 7:30 PM

**DISRUPT**  
 TO MAKE CANCER RESEARCH EQUITABLE

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The City College  
of New York



COLUMBIA | COLUMBIA UNIVERSITY  
IRVING MEDICAL CENTER



EINSTEIN  
Albert Einstein College of Medicine

Greetings! We wanted to share an exciting opportunity with you - a series of virtual events this November:

**Purpose of Networking Event:** To meet and network with individuals specific to a cancer site and learn more about Stand Up To Cancer (SU2C) initiatives and how to get involved including learning about **pilot grant opportunities**. You can register at the following links to the event(s) of your choice:

[Prostate Cancer Event Registration](#) 11/3 –

[https://ccny.zoom.us/meeting/register/tZYodeirTIsHtI9FP88\\_HuDgIHjImekep3C](https://ccny.zoom.us/meeting/register/tZYodeirTIsHtI9FP88_HuDgIHjImekep3C) –

[Breast Cancer Event Registration 11/10](#) –

<https://ccny.zoom.us/meeting/register/tZArcu6rqT0vGdWmYJU6TBOICnLUZH7QIWQ5> –

[Liver Cancer Event Registration 11/17](#) –

<https://ccny.zoom.us/meeting/register/tZckde-urD0sGdJH4Kqe6iaKI7WVvHvNPXaU> –

---

### **Save The Date – Cancer Health Inequities Networking Event**

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**From:** Marc Scullin  
**Sent time:** 10/28/2021 08:41:39 AM  
Tashuna Albritton; Jude-Marie A Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**To:**  
**Subject:** FINAL Reminder - CSOM Bridge & Pilot Project Program - DEADLINE - 10/31/2021

---

Greetings CUNY School of Medicine Research Faculty. I am writing to remind you that the deadline for proposals to the Bridge and Pilot Project Funding program is **October 31, 2021**. Eligibility information and a brief FAQ are listed below.

If you have any additional questions, please contact Dr. Lima or myself. **I am available this weekend @ 914 497 6008 should any issues arise with your proposal. Please contact me if needed.**

[Click Here to Access the Submission Portal](#)

### **Bridge Funding Eligibility**

The purpose of the Bridge grant is to give investigators resources to resubmit a grant for which they applied and were not granted; in this case, the investigator would be applying for a resubmission and responding to the summary statement they received. Extramural grant proposals submitted within the past 3 years (36 months) are eligible, with priority given to those submitted within the past 1 year (12 months). Both scored and unscored grant proposals qualify for bridge funding, with priority given to scored proposals. Summary Statements and responses to critiques are required. Prior to receipt of funding, awardees will identify a collaboration committee. The maximum award is \$40,000, and the intramural grant is for one year with no extensions.

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CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Anthony Daher <adaher@lumentruss.com>  
**Sent time:** 10/29/2021 01:36:53 PM  
**To:** Rosemarie Wesson; Hoau-yan Wang  
**Subject:** [EXTERNAL] Rebuttal of allegations- WB/WANG/

---

Dr Wesson,

Finding a treatment for Alzheimer and supporting amazing researchers and scientists has been my new « why »

I believe it is important to read this paper/blog(link attached)

<https://ad-science.org/2021/10/21/notes-from-a-molecular-biologist/amp/>

Please take a closer look and I would appreciate anything that could lead to believe that there is hope behind CUNY/WANG's work for the past decade

We believe CUNY should issue a statement soon as these false allegations and lies are tainting decades of work from multiple scientists

Warm regards

#ENDALZ  
#INWANGWETRUST

Thank you

**Anthony Daher**  
*Lumen truss*  
**VP Sales & Mktg**  
C :514-815-9998  
O: 514-448-1574 #241  
Anthony@lumentruss.com  
www.lumentruss.com  
**#inlumenwetruss**  
☐ ☞ ☐☐☐☐

**From:** Marc Scullin

**Sent time:** 11/01/2021 09:40:25 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 10/29/2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending October 29, 2021. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 10/29/2021, [Click HERE](#)

## Funding Opportunities

- [Understanding the Role of Bilingualism in Cognitive Reserve/Resilience in Aging and AD/ADRD \(R01 Clinical Trial Optional\)](#)  
(RFA-AG-23-001)  
National Institute on Aging  
Application Receipt Date(s): March 03, 2022
- [Cell-Specific Impact of Liquid-Liquid Phase Separation in Aging and AD/ADRD \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-AG-23-002)  
National Institute on Aging  
Application Receipt Date(s): March 03, 2022
- [Limited Competition: NIH Health Care Systems Research Collaboratory - Coordinating Center \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-AT-22-002)  
National Center for Complementary and Integrative Health  
Application Receipt Date(s): December 15, 2021
- [HEAL Initiative: Pragmatic and Implementation Studies for the Management of Sickle Cell Disease Pain \(UG3/UH3, Clinical Trials Optional\)](#)  
(RFA-AT-22-004)  
National Center for Complementary and Integrative Health  
Application Receipt Date(s): December 15, 2021
- [HEAL Initiative: Sickle Cell Disease Pain Management Trials Utilizing the Pain Management Effectiveness Research Network Cooperative Agreement \(UG3/UH3, Clinical Trial Required\)](#)  
(RFA-AT-22-005)  
National Center for Complementary and Integrative Health  
Application Receipt Date(s): December 15, 2021
- [Coordinating Center for HIV/Cervical Cancer Prevention 'CASCADE' Clinical Trials Network \(U24 Clinical Trial Required\)](#)  
(RFA-CA-21-045)  
National Cancer Institute  
Application Receipt Date(s): December 28, 2021
- [Research Bases for HIV/Cervical Cancer Prevention 'CASCADE' Clinical Trials Network \(UG1 Clinical Trial Required\)](#)  
(RFA-CA-21-046)  
National Cancer Institute  
Application Receipt Date(s): December 28, 2021
- [Clinical Sites for HIV/Cervical Cancer Prevention 'CASCADE' Clinical Trials Network \(UG1 Clinical Trial Required\)](#)  
(RFA-CA-21-047)  
National Cancer Institute  
Application Receipt Date(s): December 28, 2021
- [Home and Community-Based Physical Activity Interventions to Improve the Health of Wheelchair Users \(R01 Clinical Trial Required\)](#)  
(RFA-HD-22-017)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): March 30, 2022

- [Elucidating the Role of Nutrition in Care and Development of Preterm Infants \(R01 Clinical Trial Optional\)](#)  
(RFA-HD-22-023)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): March 30, 2022
- [Promoting Reproductive Health for Adolescents and Adults with Disabilities \(R01 Clinical Trial Optional\)](#)  
(RFA-HD-23-005)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Office of Research on Women's Health  
Application Receipt Date(s): March 30, 2022
- [Cellular Senescence Network: Murine Tissue Mapping Centers \(U54 - Clinical Trial Not Allowed\)](#)  
(RFA-RM-22-003)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): January 19, 2022
- [Cellular Senescence Network: Technology Development and Application in Human Systems \(UG3/UH3 Clinical Trial Not Allowed\)](#)  
(RFA-RM-22-004)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): January 18, 2022
- [Cellular Senescence Network: Technology Development and Application in Murine Systems \(UG3/UH3 Clinical Trial Not Allowed\)](#)  
(RFA-RM-22-005)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): January 19, 2022

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin  
**Sent time:** 11/01/2021 10:01:25 AM  
**To:** Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**Subject:** IRB Manager Transition - Memo #5  
**Attachments:** IRBManager Announcement #5.pdf

---

Good morning CSOM faculty. Please see the attached PDF for an update on the transition from IDEATE to IRB Manager. For your convenience, I have also included the contents of the memo below.

If you have any questions regarding the transition, please feel free to reach out to Dr. Lima or myself. Have a great day.

#### HRPP TRANSITION UPDATE #5

October 22, 2021

To: Senior Research Officers

Re: IRB Manager Accounts

As you may recall, the CUNY Office of Research, division of Research Integrity and Compliance, recently switched its Human Research Protections Program IRB protocol management software from IDEATE to IRB Manager. In the past, all IDEATE accounts needed to be created manually. With IRB Manager, accounts are created automatically through CUNYFirst. Any student, faculty or staff with a CUNYFirst account will have immediate access to the new system.

However, CUNY-affiliated research staff who do not have a CUNYFirst account will need to follow a different process to get access to IRB Manager. CUNY CIS has developed a process to create non-authoritative CUNYFirst accounts for these individuals, and it will require that an authority at each college or school provides a list of such vetted individuals to CUNY CIS so they can get access to IRB Manager. CUNY CIS has provided the attached Excel Spreadsheet that should be filled out by providing basic information about the person so they can get IRB Manager access via CUNYFirst. An authority on campuses, who are more familiar with faculty and research staff, would be in the best position to properly vet researchers who seek IRB Manager access. As such, part of the information on the spreadsheet includes the EMPLID of their "sponsor". The "sponsor" must have CUNYFirst credentials. The sponsor might be the research supervisor or equivalent who can verify that the person should have IRB Manager access. It would be most helpful for CUNY CIS if the information was sent to them via one representative from campuses, perhaps the CARS member or HRPP Coordinator, but that is for campuses to work out. The exact information needed from each user is as follows:

- First Name
- Last Name
- EMPLID
- DoB (does not need to be true DoB)
- PIN (4 digits 0 you can make something up but please no "0000" or "1234")
- CUNY email address
- Sponsor EMPLID

For each user, the sponsor EMPLID needs to be entered.

Users will then be able to claim their account using their first name, last name, DoB and the PIN assigned by the person filling out the spreadsheet (employees may choose to use the last 4 of their SSN).

Please note - if the person does not want to share their DoB, then one can be made up. The users will need to be notified of their PIN and potentially their DoB.

When a campus representative has been identified, please have them confirm their role to [HRPP@cuny.edu](mailto:HRPP@cuny.edu).

The Office of Research and RIC hope the CARS members will develop and implement an appropriate solution at their college or school to ensure that their researchers have access to IRB Manager with as few delays as possible.

The contact person from each campus would open a support ticket with their campus IT. The Excel Spreadsheet with the information will need to be attached.

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702

[CSOM Office of Research Home Page](#)



Office of Research

The City University of New York  
205 East 42<sup>nd</sup> Street  
New York NY 10017

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Re: IRB Manager Accounts

As you may recall, the CUNY Office of Research, division of Research Integrity and Compliance, recently switched its Human Research Protections Program IRB protocol management software from IDEATE to IRB Manager. In the past, all IDEATE accounts needed to be created manually. With IRB Manager, accounts are created automatically through CUNYFirst. Any student, faculty or staff with a CUNYFirst account will have immediate access to the new system.

However, CUNY-affiliated research staff who do not have a CUNYFirst account will need to follow a different process to get access to IRB Manager. CUNY CIS has developed a process to create non-authoritative CUNYFirst accounts for these individuals, and it will require that an authority at each college or school provides a list of such vetted individuals to CUNY CIS so they can get access to IRB Manager. CUNY CIS has provided the attached Excel Spreadsheet that should be filled out by providing basic information about the person so they can get IRB Manager access via CUNYFirst. An authority on campuses, who are more familiar with faculty and research staff, would be in the best position to properly vet researchers who seek IRB Manager access. As such, part of the information on the spreadsheet includes the EMPLID of their "sponsor". The "sponsor" must have CUNYFirst credentials. The sponsor might be the research supervisor or equivalent who can verify that the person should have IRB Manager access. It would be most helpful for CUNY CIS if the information was sent to them via one representative from campuses, perhaps the CARS member or HRPP Coordinator, but that is for campuses to work out. The exact information needed from each user is as follows:

- First Name
- Last Name
- EMPLID
- DoB (does not need to be true DoB)
- PIN (4 digits 0 you can make something up but please no "0000" or "1234")
- CUNY email address
- Sponsor EMPLID

For each user, the sponsor EMPLID needs to be entered.

Users will then be able to claim their account using their first name, last name, DoB and the PIN assigned by the person filling out the spreadsheet (employees may choose to use the last 4 of their SSN).

Please note - if the person does not want to share their DoB, then one can be made up.

The users will need to be notified of their PIN and potentially their DoB.

When a campus representative has been identified, please have them confirm their role to [HRPP@cuny.edu](mailto:HRPP@cuny.edu).

The Office of Research and RIC hope the CARS members will develop and implement an appropriate solution at their college or school to ensure that their researchers have access to IRB Manager with as few delays as possible.

The contact person from each campus would open a support ticket with their campus IT. The Excel Spreadsheet with the information will need to be attached.

**From:** Marc Scullin  
**Sent time:** 11/04/2021 10 28 28 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Jungheon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kalliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwele Undieh; Hoau-yan Wang; Rosemary Wiecezorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**To:**  
**Subject:** CSOM Office of Research Seminar Series - Dr. Jaime S. Rubin - Opportunities for NIH Support of Research and Best Practices for Competitive Applications - Thursday, 11/11/21 3 00 PM - 4 30 PM  
**Attachments:** Jaime\_Rubin\_Seminar\_2021NOV11.pdf

Join the CUNY School of Medicine Office of Research on Thursday, 11/11/21 @ 3:00 PM in hosting a seminar by Jaime S. Rubin, PhD, Vice Chair for Investigator Development, Professor of Medical Sciences (in Medicine) at CUIMC Columbia University.

The Seminar, titled *Opportunities for NIH Support of Research and Best Practices for Competitive Applications* will review best Practices for Developing a Competitive NIH Research Grant or Cooperative Agreement Applications and NIH Career Development Grant Applications for the Support of Junior Faculty.

To join the seminar, click the link below

<https://cuny.zoom.us/j/83548759437>

All are welcome. Even if you are an experienced researcher, you can always discover something you did not know! We hope to see you there!

CUNY School of Medicine

The City College  
of New York

## CSOM Faculty Development Seminar

*Opportunities for NIH Support of Research and Best Practices for  
Competitive Applications*



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Jaime S Rubin, PhD  
Vice Chair Investigator  
Development, Professor of  
Medical Sciences  
CUIMC Columbia University

Thursday, November 11, 2021

3:00 PM – 4:30 PM

To join, click the link below

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ALL ARE WELCOME!



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**From:** Marc Scullin

**Sent time:** 11/04/2021 10:42:33 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** CSOM Office of Research Seminar Series - Dr. Jaime S. Rubin - Opportunities for NIH Support of Research and Best Practices for Competitive Applications - Thursday, 11/11/21 3:00 PM - 4:30 PM

---

Zoom Link for the meeting is below

<https://cuny.zoom.us/j/83548759437>



**From:** Marc Scullin

**Sent time:** 11/08/2021 08:55:21 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 11/05/2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending November 05, 2021. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 11/05/2021, [Click HERE](#)

## Funding Opportunities

- [Clinical Trial Readiness for Functional Neurological Disorders \(U01 Clinical Trial Optional\)](#)  
(PAR-22-053)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): November 05, 2024
- [Discovery of the Genetic Basis of Childhood Cancers and of Structural Birth Defects: Gabriella Miller Kids First Pediatric Research Program \(X01 Clinical Trial Not Allowed\)](#)  
(PAR-22-054)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): February 23, 2022
- [Limited Competition: Research Resource for Human Organs and Tissues \(U42 Clinical Trial Not Allowed\)](#)  
(PAR-22-056)  
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs  
Application Receipt Date(s): September 25, 2022
- [Prodromal Synaptic and Circuit Changes that Contribute to AD/ABRDR Onset and Progression \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-059)  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging  
Application Receipt Date(s): February 05, 2022
- [Modulating Human Microbiome Function to Enhance Immune Responses Against Cancer \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-061)  
National Cancer Institute  
Application Receipt Date(s): January 07, 2025
- [Modulating Human Microbiome Function to Enhance Immune Responses Against Cancer \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-22-062)  
National Cancer Institute  
Application Receipt Date(s): January 07, 2025
- [Transition to Aging Research for Predoctoral Students \(F99/K00 Clinical Trial Not Allowed\)](#)  
(RFA-AG-22-026)  
National Institute on Aging  
Application Receipt Date(s): October 22, 2021
- [RePORT International Coordinating Center \(RICC\) \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-21-078)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): March 17, 2022
- [NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers \(K99/R00 - Independent Clinical Trial Not Allowed\)](#)  
(RFA-CA-21-060)  
National Cancer Institute  
Application Receipt Date(s): February 28, 2022

- [NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers \(K99/R00 - Independent Clinical Trial Required\)](#)  
(RFA-CA-21-061)  
National Cancer Institute  
Application Receipt Date(s): February 28, 2022 No late applications will be accepted for this Funding Opportunity Announcement. All applications are due by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on the listed date(s). Applications are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
- [NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers \(K99/R00 - Independent Basic Experimental Studies with Humans Required\)](#)  
(RFA-CA-21-062)  
National Cancer Institute  
Application Receipt Date(s): February 28, 2022
- [Innovative Biospecimen Science Technologies for Basic and Clinical Cancer Research \(R61 Clinical Trial Not Allowed\)](#)  
(RFA-CA-22-003)  
National Cancer Institute  
Application Receipt Date(s): September 22, 2022
- [Advanced Development and Validation of Emerging Biospecimen Science Technologies for Basic and Clinical Cancer Research \(R33 Clinical Trial Not Allowed\)](#)  
(RFA-CA-22-004)  
National Cancer Institute  
Application Receipt Date(s): September 22, 2022
- [Renewal - Cooperative Agreement to Support the Joint Institute for Food Safety and Applied Nutrition, JIFSAN \(U01\) Clinical Trial Not Allowed](#)  
(RFA-FD-22-004)  
Food and Drug Administration  
Application Receipt Date(s): January 07, 2022

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin  
**Sent time:** 11/09/2021 09:15:38 AM  
Tashuna Albritton; Jade-Marie A. Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Rosalinda Guce; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Maxine Nwigwe; Danielle D Pritchett; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiweh Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**To:**  
**Subject:** CSOM Office of Research Seminar Series - Dr. Jaime S. Rubin - Opportunities for NIH Support of Research and Best Practices for Competitive Applications - Thursday, 11/11/21 3:00 PM - 4:30 PM  
**Attachments:** Jaime\_Rubin\_Seminar\_2021NOV11.pdf

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To join, click the link below  
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ALL ARE WELCOME!



Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

CUNY School of Medicine

The City College  
of New York

## CSOM Faculty Development Seminar

*Opportunities for NIH Support of Research and Best Practices for  
Competitive Applications*



Jaime S Rubin, PhD

Vice Chair Investigator  
Development, Professor of  
Medical Sciences

CUMC Columbia University

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3:00 PM – 4:30 PM

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<https://cuny.zoom.us/j/83548759437>

ALL ARE WELCOME!



**From:** Raquel Morales

**Sent time:** 11/10/2021 03:59:04 PM

Hoau-Yan Wang [redacted]@gmail.com [redacted]@gmail.com>; Kaliris gmail ([redacted]@gmail.com) <[redacted]@gmail.com>;  
Dr. Broderick ([redacted]@gmail.com) [redacted]@gmail.com>; Rosemary Wieczorek [redacted]@outlook.com)

**To:**

<[redacted]@outlook.com>; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang;  
Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi  
<[redacted]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul  
Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka

**Cc:** Gonzalo Torres

**Subject:** FW: Email to faculty

---

Dear All,

Hope you are all having a good week. I have been a bit absent over the past few weeks; busy working on my R01 renewal (submitted last Friday) and reviewing faculty and staff reappointments. I would like to have a faculty meeting next Wednesday November 17, at 4PM. Raquel will send the details before the meeting.

Best,  
Gonzalo

**From:** Jun Yoshioka  
**Sent time:** 11/10/2021 04:17:56 PM  
**To:** Hoau-Yan Wang ( [REDACTED]@gmail.com) [REDACTED]@gmail.com>; Kaliris gmail [REDACTED]@gmail.com) < [REDACTED]@gmail.com>; Dr.Broderick [REDACTED]@gmail.com) < [REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com) < [REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi < [REDACTED]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert  
**Cc:** Gonzalo Torres; Jun Yoshioka  
**Subject:** Re: Email to faculty  
**Attachments:** image002.png

---

Hi Gonzalo and all,  
We will have Student Research Day on Nov 17, 3:30pm-6pm. See attached.  
Some of us will need to be there for our students.  
Just wanted to let you know.  
Jun

---

**From:** Raquel Morales  
**Sent:** Wednesday, November 10, 2021 3:59 PM  
**To:** Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Hoau-Yan Wang ( [REDACTED]@gmail.com); Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail [REDACTED]@gmail.com); Khosrow Kashfi; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr.Broderick [REDACTED]@gmail.com); Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Rosemary Wieczorek ([REDACTED]@outlook.com); Sanna Goyert; Jun Yoshioka  
**Cc:** Gonzalo Torres  
**Subject:** FW: Email to faculty

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Gonzalo

# Save the date

CUNY School of Medicine  
SOPHIE DAVIS BIOMEDICAL EDUCATION PROGRAM

The City College  
of New York

## Student Research Day

THE GREAT HALL

Wednesday, November 17, 2021

3:30PM – 6:00PM

Research students from several fellowship and independent study programs will present a poster session highlighting their research results. Programs highlighted will include the The Leonard Davis Community-Based Research Fellowship and The Rudin Research Fellowship and numerous other outside programs.

**From:** Geri Kreitzer

**Sent time:** 11/10/2021 04:19:13 PM

Hoau-Yan Wang [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>;  
Dr. Broderick [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com)

**To:** [REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi <[REDACTED]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka

**Cc:** Gonzalo Torres

**Subject:** RE: Email to faculty

---

Gonzalo, I also have students presenting at the research day.

Geri

---

**From:** Raquel Morales

**Sent:** Wednesday, November 10, 2021 3:59 PM

**To:** Andreas Kottmann <AKottmann@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Hoau-Yan Wang [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Khosrow Kashfi <kashfi@med.cuny.edu>; Khosrow Kashfi <drkho@verizon.net>; Kiran Matthews <kmatthews@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Dr. Broderick [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Rosemary Wieczorek <RWieczorek@med.cuny.edu>; Rosemary Wieczorek [REDACTED]@outlook.com <[REDACTED]@outlook.com>; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>

**Cc:** Gonzalo Torres <GTorres@med.cuny.edu>

**Subject:** FW: Email to faculty

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**Sent time:** 11/10/2021 04 34 05 PM  
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**To:**  
**Subject:** CSOM Office of Research Seminar Series - Dr. Jaime S. Rubin - Opportunities for NIH Support of Research and Best Practices for Competitive Applications - Thursday, 11/11/21 3 00 PM - 4 30 PM

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Vice Chair Investigator  
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Medical Sciences  
CUIMC Columbia University

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To join, click the link below

<https://cuny.zoom.us/j/83548759437>

ALL ARE WELCOME!



**From:** Itzhak (Itzik) Mano  
**Sent time:** 11/10/2021 04:41:51 PM  
Hoau-Yan Wang ( [redacted]@gmail.com) [redacted]@gmail.com>; Kaliris gmail ( [redacted]@gmail.com) [redacted]@gmail.com>; Dr. Broderick ( [redacted]@gmail.com) < [redacted]@gmail.com>; Rosemary Wiczorek ( [redacted]@outlook.com) < [redacted]@outlook.com>; Jun Yoshioka; Raquel Morales; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi < [redacted]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert  
**To:**  
**Cc:** Gonzalo Torres  
**Subject:** Re: Email to faculty

I also have students presenting, but I was planning in being there only for the first 60-90min. Will 5pm work for PIs from presenting labs (and all others)?

i

On 11/10/2021 4:17 PM, Jun Yoshioka wrote:

Hi Gonzalo and all,  
We will have Student Research Day on Nov 17, 3:30pm-6pm. See attached.  
Some of us will need to be there for our students.  
Just wanted to let you know.  
Jun

---

**From:** Raquel Morales  
**Sent:** Wednesday, November 10, 2021 3:59 PM  
**To:** Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Hoau-Yan Wang ( [redacted]@gmail.com); Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail ( [redacted]@gmail.com); Khosrow Kashfi; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr. Broderick ( [redacted]@gmail.com); Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Rosemary Wiczorek ( [redacted]@outlook.com); Sanna Goyert; Jun Yoshioka  
**Cc:** Gonzalo Torres  
**Subject:** FW: Email to faculty

Dear All,

Hope you are all having a good week. I have been a bit absent over the past few weeks; busy working on my R01 renewal (submitted last Friday) and reviewing faculty and staff reappointments. I would like to have a faculty meeting next Wednesday November 17, at 4PM. Raquel will send the details before the meeting.

Best,  
Gonzalo

-- \_\_\_\_\_ Itzhak (Itzik) Mano, Ph.D. Associate Medical Professor Department of Molecular, Cellular and Biomedical Sciences Center for Discovery & Innovation, Cluster on Neural Development and Repair The CUNY School of Medicine at City College & The CUNY Graduate Center The City University of New York CDI building, Office: 3-382 Lab: 3-235 85 St. Nicholas Terrace, New York, NY 10031 E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu) Office Phone: (212) 6507965 Lab Phone: (212) 6505334 [www.manolab.org](http://www.manolab.org)

**From:** Lisa Coico

**Sent time:** 11/10/2021 04:58:57 PM

Hoau-Yan Wang ( [REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Kaliris gmail [REDACTED]@gmail.com) <[REDACTED]@gmail.com>;  
Dr. Broderick ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wieczorek ([REDACTED]@outlook.com)  
**To:** [REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz;  
Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi  
<[REDACTED]@verizon.net>; Kiran Matthews; Linda Spatz; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb;  
Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**Cc:** Gonzalo Torres  
**Subject:** Re: Email to faculty

---

I will be at the poster session

Lisa Staiano-Coico, Ph.D.  
Medical Professor  
CUNY School of Medicine  
Dept. of Molecular Cellular and Biomedical Sciences

---

**From:** Raquel Morales

**Sent:** Wednesday, November 10, 2021 3:59:04 PM

**To:** Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Hoau-Yan Wang ([REDACTED]@gmail.com); Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Kaliris gmail ([REDACTED]@gmail.com); Khosrow Kashfi; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Dr. Broderick ([REDACTED]@gmail.com); Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Rosemary Wieczorek ([REDACTED]@outlook.com); Sanna Goyert; Jun Yoshioka

**Cc:** Gonzalo Torres

**Subject:** FW: Email to faculty

Dear All,

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Best,  
Gonzalo



Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

*Annabel Santana-Colón, Assistant Dean for Academic & Faculty Affairs*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

The Undergraduate Segment Review concluded that CSOM grading system needs to be revised to allow students and faculty to better identify students who might benefit from academic support. (In other words, the current A/B/Fail grading system might allow students with low-passing grades who may lack complete mastery of content from the undergraduate part of the program to graduate into the medical part of our program, making it more likely that some students will struggle in the M1/M2 years. Failures in the medical part of our program are financially and otherwise more consequential for students.) It suggested the CCNY grading system.

The purpose of allowing a “C” grade on the students’ records would be to better identify students who pass the requirements, but might not have complete mastery of the material, and provide extra support; the LRC is sufficiently staffed to be the mechanism of this support both during and after the undergraduate part of our program.

The SAPC passed a policy that outlines explicitly the mechanism of identifying students who may need additional support before/when transitioning to the medical part of our program (see policy below).

An advantage of narrower definitions for each letter grade will allow students who excel to be better identified.

While many courses in the undergraduate part of the program teach the content that is typically taught in medical schools (Fundamentals of Organ Systems courses, CHASM courses, etc.), course directors have developed these courses to be appropriately calibrated for undergraduate students.

Use of “MED” course numbers identifies courses as medical school courses rather than traditional undergraduate school courses.

The Curriculum Committee considered three grading systems: The current system, CUNY Professional Schools system, and the system that is in place currently in Chemistry. A modified version was voted on and passed:

- 100-97 (A+)
- 96-93 (A)
- 92-90 (A-)
- 89-87 (B+)
- 86-83 (B)
- 82-80 (B-)
- 79-77 (C+)
- 76-70 (C)
- Below 70 is failing

This does not change the reassessment policies.

This change would take place with the incoming U1 class. It would not change the way grades are assigned for any current student.

Along with this motion, we propose that the Curriculum Committee monitor this on an annual basis, including comparing grade distribution on final exams as well as overall course for each year with the new grade system with the previous year with the old system. (Retrospective review of current students is flawed because of multiple curricular changes, including those related to COVID.)

### ***SAPC Policy***

#### *Requirements for Progression to the CUNY School of Medicine MD Program*

The final decision about promotion into the medical school portion of the program (Years M1-4) is made upon completion of the spring semester the U3 Year. The process occurs as follows:

1. The Office of Academic Records provides a list of all students' GPAs and any adverse reporting information from the Student Academic Progress Committee, including instances of probation, repeat academic year, or serious lapses in professionalism that have been reviewed by the SAPC.

2. This information is reviewed by the Student Academic Progress Committee.

- Students with GPAs higher than 3.2 and no adverse reports from the Student Academic Progress Committee seamlessly transfer into the medical school portion of the seven-year continuum.

- Students with GPAs lower than 3.2 and/or an adverse report in their record may be required to appear before the SAPC. Students will have an opportunity to submit a statement and present information (personal, medical, etc.) relevant to their academic and professional performance. The Committee will review the student's academic and professional record and may decide to:

- a. promote the student to the M1 year without imposing any additional requirements;
- b. promote the student to the M1 year on Monitored Academic Status (MAS) with specific requirements for advisement and support;
- c. place the student on Administrative Leave for one year, impose requirements for remediation, and allow the student to petition to advance to the M1 year the following year; or
- d. prohibit the student's progression to the M1 year. A student deemed not suitable to enter medical school may have completed sufficient credits to be awarded a BS, or can decide to transfer to another CCNY major in order to graduate with a BS degree.

3. All students are notified of their final progression status via official letter from the Chair of the Student Academic Progress Committee preceding the start of the medical school portion of the program.

**From:** Patricia Broderick  
**Sent time:** 11/11/2021 01:20:22 PM  
**To:** Annabel Santana; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters; Carmen R Green  
**Cc:** Priscilla Daniel  
**Subject:** Re: CSOM Faculty meeting: Agenda & Meeting Document - Thurs, 11/11/21 @ 4:30 pm

---

Good afternoon, Annabel,

Be assured of my attendance as is my custom.

My best,  
Patricia

---

**From:** Annabel Santana  
**Sent:** Thursday, November 11, 2021 12:37 PM  
**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters; Carmen R Green  
**Cc:** Priscilla Daniel; Carmen R Green  
**Subject:** CSOM Faculty meeting: Agenda & Meeting Document - Thurs, 11/11/21 @ 4:30 pm

Dear Faculty,

The agenda for today's faculty meeting includes discussion of a proposed grading policy, presented by the Curriculum Committee. A copy of the proposed policy is attached for your review.

The meeting agenda follows. Zoom details appear at the end of this email stream below.

We hope to see you then!  
a.s.

### **CSOM Faculty Meeting – November 11, 2021**

#### Agenda

- Remarks by Dean Carmen Green
- Curriculum Committee Grading Policy proposal – N Sohler
- Faculty Senate report – P Cortes
- PSC-CUNY update – I Mano
- Research update - M. Lima
- CHASM news – A. Soliman (for Dr. Manyindo)
- USMLE Step 1, Step 2 update – D McBeth
- Announcements
  - Student Research Day – Wed, 11/17 @ 3:30pm, The Great Hall
  - BS/MD Admissions Open House – Thurs, 11/18 @ 12pm (Virtual)

---

**From:** Annabel Santana

**Sent:** Friday, November 5, 2021 1:58 PM

**Cc:** Priscilla Daniel <PDaniel@med.cuny.edu>; Carmen R Green <carmeng@med.cuny.edu>

**Subject:** CSOM Faculty meeting - Thurs, 11/11/21 @ 4:30 pm

Dear Faculty,

This is a reminder that the next CSOM Faculty meeting will be held **Thursday, November 11, 2021 at 4:30 pm** via Zoom.

A preliminary agenda will be circulated next week. Zoom details are provided below.

Annabel

**CSOM Faculty Council meeting**

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

*Annabel Santana-Colón, Assistant Dean for Academic & Faculty Affairs*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Maria D Lima

**Sent time:** 11/12/2021 10:06:45 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegritti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Carol Moore; Joao Nunes; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Dani Mcbeth; Nicole Roberts; Carmen R Green

**Cc:** Marc Scullin

**Subject:** Re: Grant writing seminar slides

---

Dear all,

I hope you had a chance to join us yesterday for the outstanding seminar given by Jaime Rubin, Vice Chair for Investigator Development at Columbia University. It was truly outstanding and many tips and suggestions were shared with the faculty. Please find attached her slides which she kindly shared with us.

Best,

Maria

**From:** Maria D Lima  
**Sent time:** 11/12/2021 10:09:18 AM  
**To:** Tashuna Albritton; Jude-Marie A. Smalec; Gina Allegretti; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Carol Moore; Joao Nunes; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Lynn Hernandez; Rosa Lee; Dani Mcbeth; Nicole Roberts; Carmen R Green  
**Cc:** Marc Scullin  
**Subject:** Re: Funding and Grantsmanship seminar slides  
**Attachments:** Rubin\_Jaime CUNY SOM - Competitive R01 applications 11-2021.pdf

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My apologies. With attachment this time.  
maria

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**From:** Maria D Lima <mlima@med.cuny.edu>  
**Date:** Friday, November 12, 2021 at 10:06 AM  
**To:** Tashuna Albritton <TAlbritton@med.cuny.edu>, "Jude-Marie A. Smalec" <JSmalec@med.cuny.edu>, Gina Allegretti <GAllegretti@med.cuny.edu>, Anabelle Andon <AAndon@med.cuny.edu>, Samantha Barrick <SBarrick@med.cuny.edu>, Keosha Bond <kbond@med.cuny.edu>, Patricia Broderick <broderick@med.cuny.edu>, Jose Cobo <jcobo@med.cuny.edu>, Lisa Coico <LSCoico@med.cuny.edu>, Patricia Cortes <pcortes@med.cuny.edu>, Victoria Frye <vfrye@med.cuny.edu>, Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Sanna Goyert <sgoyert@med.cuny.edu>, Khosrow Kashfi <kashfi@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, Lily Lam <llam@med.cuny.edu>, Wenhua Lu <wlu1@med.cuny.edu>, Erica Lubetkin <lubetkin@med.cuny.edu>, "Itzhak (Itzik) Mano" <imano@med.cuny.edu>, Noel Manyindo <nmanyindo@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Joao Nunes <nunes@med.cuny.edu>, Sandy Saintonge <SSaintonge@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, Nancy Sohler <nsohler@med.cuny.edu>, Amr Soliman <asoliman@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Gonzalo Torres <GTorres@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, Preston Williams <pwilliams@ccny.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>, Olga Waters <owaters@med.cuny.edu>, Emine Ercikan Abali <EAbali@med.cuny.edu>, Lisa Auerbach <lauerbach@med.cuny.edu>, Jaelyn N Churchill <JChurchill@med.cuny.edu>, Erica Friedman <ericafriedman@med.cuny.edu>, Lynn Hernandez <LHernandez@med.cuny.edu>, Rosa Lee <RLee@med.cuny.edu>, Dani Mcbeth <dmbeth@med.cuny.edu>, Nicole Roberts <nroberts@med.cuny.edu>, Carmen R Green <carmeng@med.cuny.edu>  
**Cc:** Marc Scullin <mscullin@med.cuny.edu>  
**Subject:** Re: Grant writing seminar slides

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Best,  
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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## “Opportunities for NIH Research Funding and Best Practices for Competitive Applications”

Jaime S. Rubin, Ph.D.  
Dept. of Medicine  
College of Physicians and Surgeons  
Columbia University

Course: “Funding and Grantsmanship for Research and Career Development Activities”  
<http://grantscourse.columbia.edu/>

1

## Topics to be Discussed

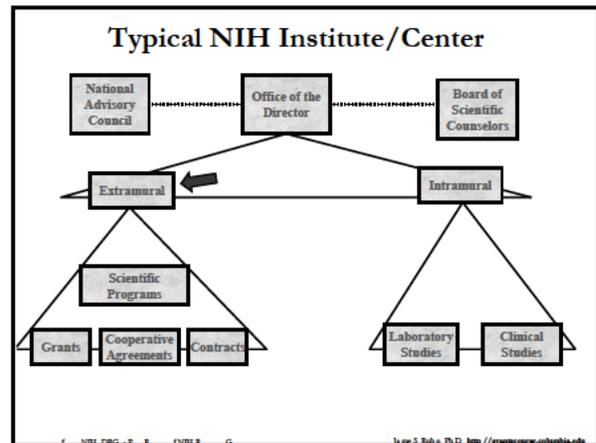
- Overview of the NIH R01 Funding Mechanism
- NIH’s Grant Review Scoring System
- NIH’s Grant Review Criteria
- Responding to the Reviewers’ Comments
- Components of the NIH R01 Grant Application
- Best Practices for Competitive Applications

2

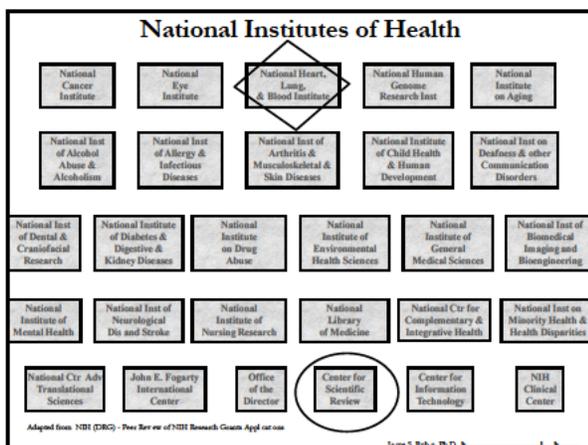
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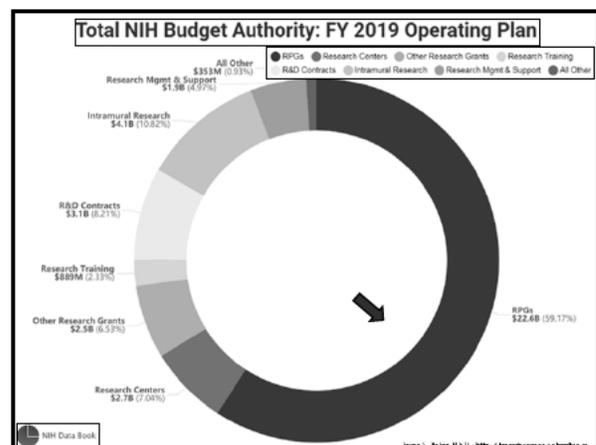
3



4



5



6

# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

### NIH Extramural Program

Mechanism	NIH Role
<b>Grant</b> e.g., R01	Patron (Assistance, encouragement)
Cooperative Agreement	Partner (Assistance but substantial program involvement)
Contract	Purchaser (Procurement)

Adapted from NIH (2010) - The Review of NIH Research Grant Applications. Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

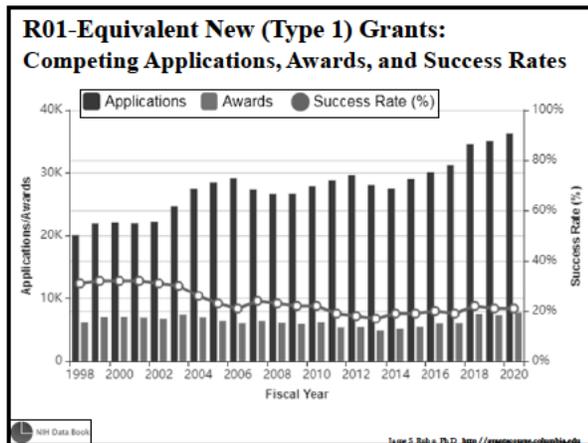
7

### NIH R01 Application

- Model for other NIH research (e.g. R03, R21, P01) applications
- Model for other research grant programs supported by voluntary health organizations, private foundations, and professional societies

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

8



9

### Research Grant (NIH R01)

- Supports a discrete, specified project
  - Specific Aims
- “Comprehensive” funding
- Modular budgets up to \$250,000/year
- Multi-year
- Flexibility
- Most NIH-supported investigator-initiated research is through this funding mechanism

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

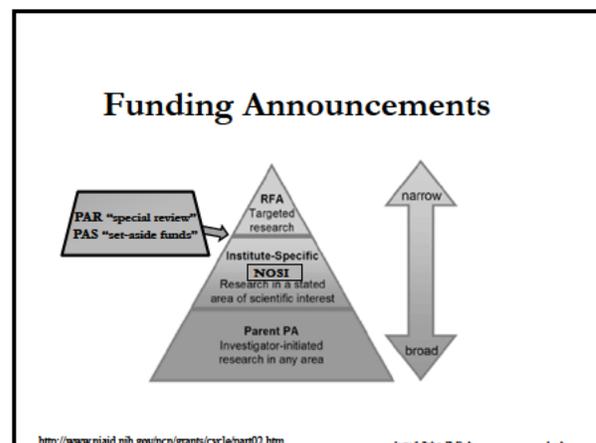
10

### Research Grant (NIH R01)

- Funds research project
  - Salaries of PI and other research personnel
  - Supplies, reagents, etc
  - Animal costs
  - Patient care costs
  - Core facilities
  - Travel to national meetings
- Multi-Year (4yrs – 5yrs)
- Renewable
  - e.g., original grant + 2 renewals = 15yrs

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

11



12

# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

### Research (R) Announcements

Activity Code(s)	Title	Announcement Number
R01	NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)	PA-20-185
R01	Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)	PA-20-184
R01	Research Project Grant (Parent R01 Clinical Trial Required)	PA-20-183

<https://grants.nih.gov/grants/guide/parent-announcements.htm>

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### NEW APPLICATIONS

Application Due Dates

Activity Codes	Program Description	Cycle I Due Date	Cycle II Due Date	Cycle III Due Date
R01	Research Grants	February 5	June 5	October 5
K series	Research Career Development	February 12	June 12	October 12
R03, R21, R34, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99	Other Research Grants and Cooperative Agreements	February 16	June 16	October 16

<https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>

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### RESUBMISSION AND COMPETITIVE RENEWAL APPLICATIONS

Application Due Dates

Activity Codes	Program Description	Cycle I Due Date	Cycle II Due Date	Cycle III Due Date
R01 renewal, resubmission, revision	Research Grants	March 5	July 5	November 5
K series renewal, resubmission, revision	Research Career Development	March 12	July 12	November 12
R03, R21, R34, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99	Other Research Grants and Cooperative Agreements	March 16	July 16	November 16

<https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>

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### AIDS and AIDS-Related Applications

Application Due Dates

Activity Codes	Program Description	Due Date
All Activity Codes (Check Above)	AIDS and AIDS-Related Applications	May 7, September 7, January 7

\*Effective Sept 5, 2015 - NIA for SBIR/STTR Applications using Standard Due Dates

NOTE: See Key Dates section of funding opportunity announcement to determine if AIDS dates apply.

<https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>

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### Review and Award Cycles

	Cycle I	Cycle II	Cycle III
Application Due Dates	January 25 - May 7	May 25 - September	September 25 - January 7
Scientific Merit Review	June - July	October - November	February - March
Advisory Council Round	August or October *	January	May
Earliest Project Start Date	September or December *	April	July

<https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## Topics to be Discussed

- Overview of the NIH R01 Funding Mechanisms
- **NIH’s Grant Review Scoring System**
- NIH’s Grant Review Criteria
- Responding to Reviewers’ Comments
- Components of the NIH R01 Grant Application
- Best Practices for Competitive Applications

<http://grantscourse.columbia.edu>

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Impact	Score	Descriptor	Additional Guidance on Strengths/Weaknesses
High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Medium	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses

**Minor Weakness:** An easily addressable weakness that does not substantially lessen impact  
**Moderate Weakness:** A weakness that lessens impact  
**Major Weakness:** A weakness that severely limits impact

[http://grants.nih.gov/grants/peer/guidelines\\_general\\_scoring\\_system\\_and\\_procedure.pdf](http://grants.nih.gov/grants/peer/guidelines_general_scoring_system_and_procedure.pdf)

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## Impact Score

- Preliminary Impact Scores determine which applications discussed at study section
- Impact Score given by each member of the study section
- Overall Impact Score (for discussed applications): Mean of reviewers’ Impact Scores  $\times 10$
- 81 possible overall Impact Scores (10 – 90, whole numbers)

<http://enhancing-peer-review.nih.gov/timelines.html>  
<http://www.niaid.nih.gov/researchfunding/grant-idea-egy-pages?payline.aspx>

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## Early Stage Investigator (ESI)

- Has not previously been awarded “significant NIH independent research award”
  - Includes R01’s, projects on P01
  - Does not include: R03’s, R21’s, F’s, K’s, loan repayment
- Within 10 years of terminal research degree/ completion of medical residency
  - Extensions permitted (e.g., medical, clinical training, military service, disability)
  - “effective immediately, NIH will approve an ESI extension of one year for childbirth within the ESI period”  
<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-235.html>

<http://grantscourse.columbia.edu>

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## Early Stage Investigators: NHLBI

Payline		
Grant Program	Grant Program Description	Percentile
R01	Research Project Grant	16
R01 ESI	Early Stage Investigators	26

**FY2020**  
<https://www.nhlbi.nih.gov/current-operating-guidelines>

<http://grantscourse.columbia.edu>

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## Topics to be Discussed

- Overview of the NIH R01 Funding Mechanisms
- NIH’s Grant Review Scoring System
- **NIH’s Grant Review Criteria**
- Responding to the the Reviewers’ Comments
- Components of the NIH R01 Grant Application
- Best Practices for Competitive Applications

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## NIH's Review Criteria

- **Overall Impact Score**
  - “Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved”  
(using five core review criteria, and additional review criteria)
  - “An application does not need to be strong in all categories to be judged likely to have major scientific impact.”
- **Core Review Criteria**  
A separate score is given for each

For Research Project Grant (Parent R01 Clinical Trial Not Allowed) (PA-20-185)  
Check individual funding announcement if applying to another

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## NIH's Review Criteria

### Core Review Criteria

A separate score is given for each for each.

- (A) Significance
- (B) Investigators
- (C) Innovation
- (D) Approach
- (E) Environment

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## Separate Scores for the 5 Individual Criteria

- All applications receive scores  
(even those not discussed at study section)
- Individually reported in summary statement
- Major strengths and weaknesses that influenced the overall impact/priority score - ¼ page per criterion

<b>1. Significance</b>	Please limit text to ¼ page
Strengths	
•	
•	
Weaknesses	
•	
•	
•	

[http://enhancing-peer-review.nih.gov/docs/ReviewerVideosides030609\\_Modified.ppt](http://enhancing-peer-review.nih.gov/docs/ReviewerVideosides030609_Modified.ppt) Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## NIH's Review Criteria

### (A) Significance:

- (1) “Does the project address an important problem or a critical barrier to progress in the field?”
- (2) Is the prior research that serves as the key support for the proposed project rigorous?”
- (3) If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved?”
- (4) How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?”

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## NIH's Review Criteria

### (B) Investigators:

- (1) “Are the PD(s)/PI(s), collaborators, and other researchers well suited to the project?”
- (2) If Early Stage Investigators or those in the early stages of independent careers, do they have appropriate experience and training?”
- (3) If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)?
- (4) If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?”

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## NIH's Review Criteria

### (C) Innovation:

- (1) “Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?”
- (2) Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense?”
- (3) Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?”

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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The City College of New York School of Medicine:  
“Opportunities for NIH Research Funding and Best Practices for Competitive Applications”  
November 11, 2021

### NIH's Review Criteria

**(D) Approach:**

- (1) “Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?”
- (2) Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project?
- (3) Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed?”

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html>

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### NIH's Review Criteria

**(D) Approach:**

- (4) “Are potential problems, alternative strategies, and benchmarks for success presented?”
- (5) If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?”
- (6) Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?”

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html>

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### NIH's Review Criteria

**(D) Approach:**

“If the project involves human subjects and/or NIH-defined clinical research, are the plans to address

- 1) the protection of human subjects from research risks and
- 2) inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion or exclusion of individuals of all ages (including children and older adults), justified in terms of the scientific goals and research strategy proposed?”

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html>

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### NIH's Review Criteria

**(E) “Environment:**

- (1) “Will the scientific environment in which the work will be done contribute to the probability of success?”
- (2) Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed?”
- (3) Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?”

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html>

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### Additional Review Criteria & Considerations

**Additional Review Criteria** – Evaluated for the overall impact score, but not given an individual score

- Protections for Human Subjects
- Inclusion of Women, Minorities, and Individuals Across the Lifespan
- Vertebrate Animals
- Biohazards
- Resubmissions
  - Response to previous reviewers’ comments and subsequent changes made to the proposal
- Renewals
  - Progress made in the last funding period

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html>

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### Additional Review Criteria & Considerations

**Additional Review Considerations** - Not given an individual score and not considered for the overall impact score

- Select Agent Research
- Resource Sharing Plans
  - 1) Data Sharing Plan; 2) Sharing Model Organisms; and 3) Genomic Data Sharing Plan (GDS)
- Authentication of Key Biological and/or Chemical Resources
  - Plans for identifying and ensuring the validity of resources
- Budget and Period of Support

<https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html>

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## Guidance for NIH Reviewers

[https://grants.nih.gov/grants/policy/review/rev\\_prep/applications.htm](https://grants.nih.gov/grants/policy/review/rev_prep/applications.htm)

<ul style="list-style-type: none"> <li>■ Rigor and Transparency</li> <li>■ Sex as a Biological Variable</li> <li>■ Vertebrate Animals</li> <li>■ Human Subjects Section</li> <li>■ Clinical Trials</li> <li>■ Single IRB for multi-site studies</li> <li>■ Inclusion on the Basis of Sex/Gender, Race, Ethnicity, and Age in Clinical Research</li> </ul>	<ul style="list-style-type: none"> <li>■ Human Embryonic Stem Cells</li> <li>■ Authentication of Key Biological and/or Chemical Resources</li> <li>■ Select Agents</li> <li>■ Resource Sharing Plans</li> <li>■ Budget Information</li> <li>■ Revision Applications</li> </ul>
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<http://www.columbia.edu/~jrs1>

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## Guidance for NIH Reviewers

<https://grants.nih.gov/grants/policy/review-guidelines.htm>

R	R and U Awards (Research Project Grants; R01, R03, R21, SBIR/STTR, etc. and Cooperative Agreements; U01, etc.).	+
K	K Awards (Career Development)	+
F	F Awards (Fellowships)	+
S	S10 Awards (Shared Instrumentation)	+
T	T Awards (Training)	+

<http://www.columbia.edu/~jrs1>

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## Guidance: Rigor and Reproducibility in Grant Applications

NIH research grant and career development award application **instructions** and **review** language focus on **four key areas**:

1. The rigor of the prior research
2. Rigorous experimental design for robust and unbiased results
3. Consideration of relevant biological variables
4. Authentication of key biological and/or chemical resources

<http://www.columbia.edu/~jrs1>

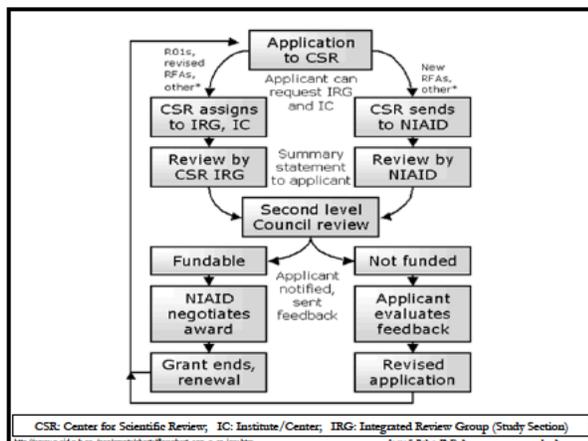
39

## Topics to be Discussed

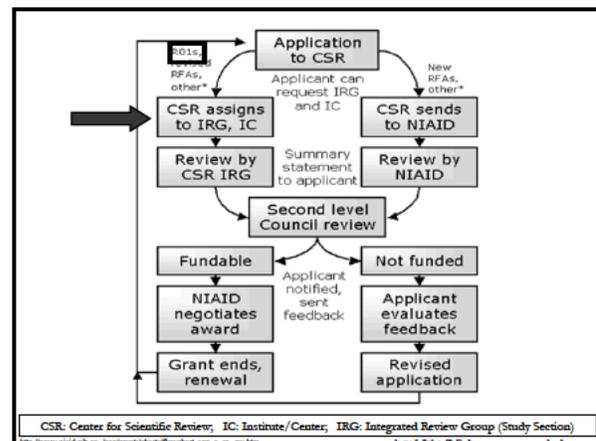
- Overview of the NIH R01 Funding Mechanisms
- NIH’s Grant Review Scoring System
- NIH’s Grant Review Criteria
- Responding to the Reviewers’ Comments
- Components of the NIH R01 Grant Application
- Best Practices for Competitive Applications

<http://www.columbia.edu/~jrs1>

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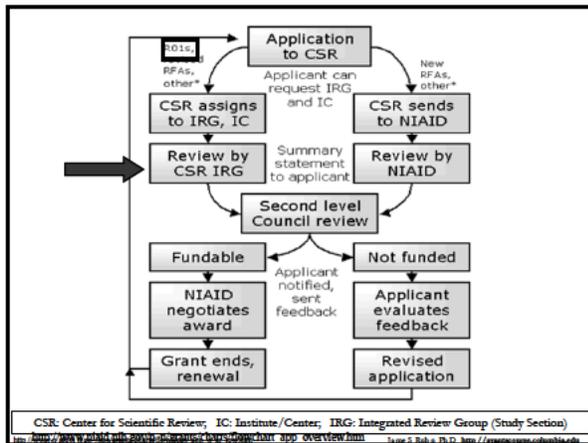


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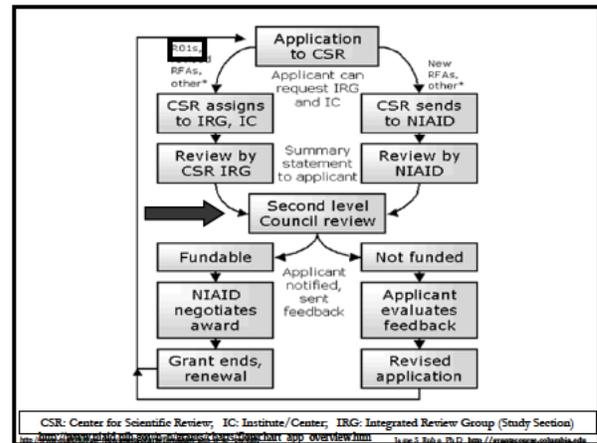


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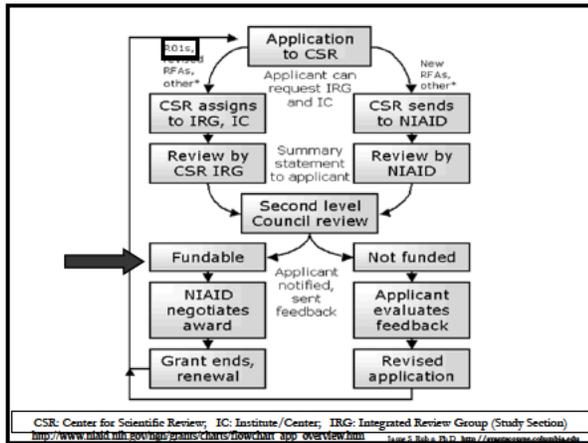
# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021



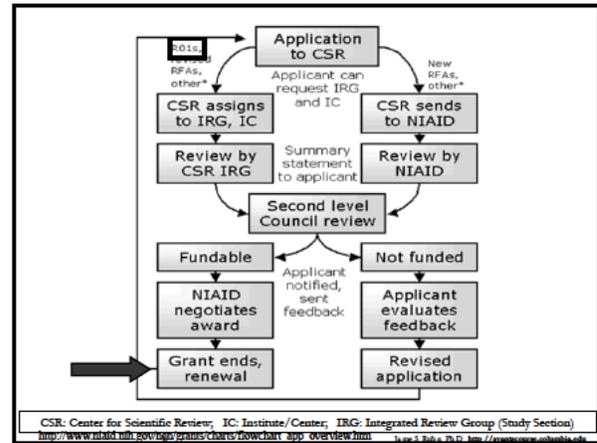
43



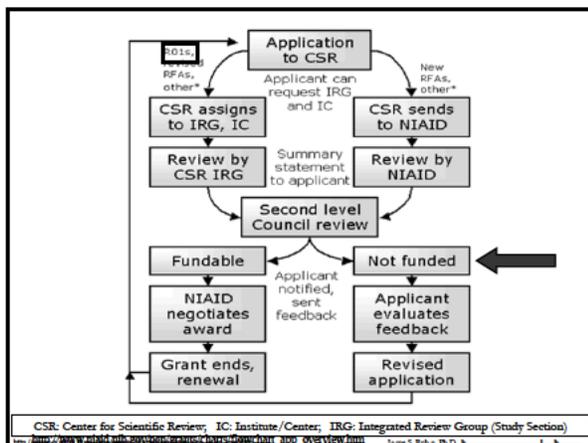
44



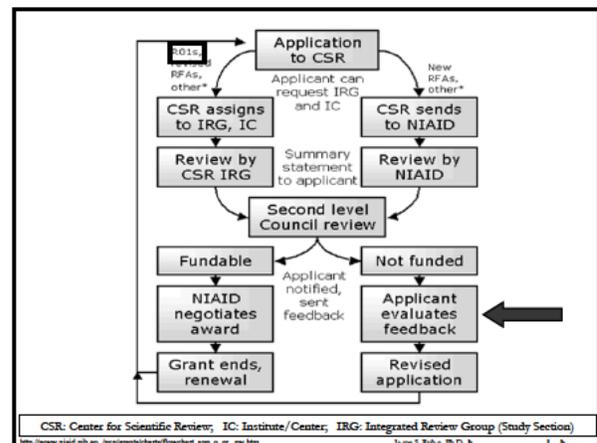
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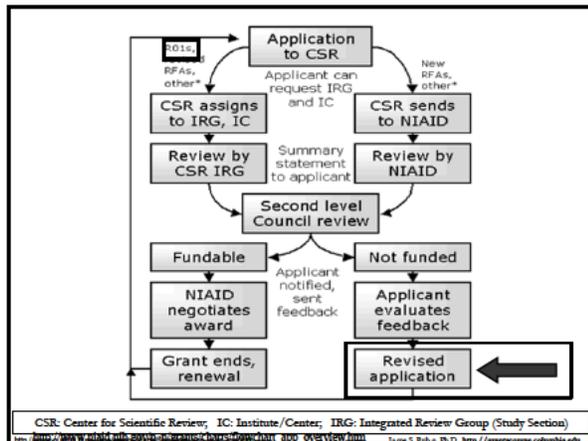


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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021



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### NIH R01-Equivalent Grants Success Rates - FY2020

Fiscal Year	Competing Status (Type) and Submission Number <sup>2</sup>	R01-EQUIVALENT GRANTS <sup>1</sup>		
		Number of Applications Reviewed	Number of Applications Awarded	Success Rate <sup>3</sup>
2020	New First Submission (A0)	24,948	3,789	15.2%
2020	New with Resubmissions (A1)	8,222	2,636	32.1%
2020	Continuations (A0)	1,906	788	41.3%
2020	Continuations with Resubmissions (A1)	1,085	505	46.5%
2020	Supplements	89	49	55.1%
2020	<b>FY Total</b>	<b>36,250</b>	<b>7,767</b>	<b>21.4%</b>

Total Funding: \$2,571,229,221 (New First Submission), \$1,556,646,621 (New with Resubmissions), \$465,791,723 (Continuations), \$268,639,045 (Continuations with Resubmissions), \$31,341,034 (Supplements), \$4,891,647,646 (FY Total)

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### NIH R01-Equivalent Grants Success Rates - FY2020

Fiscal Year	Competing Status (Type) and Submission Number <sup>2</sup>	Success Rate <sup>3</sup>
2020	New First Submission (A0)	15.2%
2020	New with Resubmissions (A1)	32.1%
2020	Continuations (A0)	41.3%
2020	Continuations with Resubmissions (A1)	46.5%
2020	Supplements	55.1%
2020	<b>FY Total</b>	<b>21.4%</b>

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### NIH's Review Criteria

**Core Review Criteria**  
 A separate score is given for each for each.

- (A) Significance
- (B) Investigators
- (C) Innovation
- (D) Approach
- (E) Environment

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### Separate Scores for the 5 Individual Criteria

- All applications receive scores (even those not discussed at study section)
- Individually reported in summary statement
- Major strengths and weaknesses that influenced the overall impact/priority score - ¼ page per criterion

**1. Significance** Please limit text to ¼ page

Strengths

- 
- 
- 

Weaknesses

- 
- 
-

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### PHS 398 Research Plan

**Introduction**

1. Introduction to Application (for Resubmission and Revision applications)

**Research Plan Section**

2. Specific Aims

3. \*Research Strategy

4. Progress Report Publication List

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

For R01, R03, R01, S00, U01, and all other Applications

Section of Application	Activity Codes	Page Limits * (if different from FOA; FOA supersedes)
Project Summary/Abstract	For all Activity Codes	30 lines of text
Project Narrative	For all Activity Codes excluding COLUCE and G03.	three sentences
Introduction to Resubmission and Revision Applications	For all Activity Codes (including each applicable component of a multi-component application)	1
Specific Aims	For all Activity Codes that use an application form with the Specific Aims section (including each component of a multi-component application)	1
Research Strategy	For Activity Code DP1	5
	For Activity Codes R03, R13, U13, R13, U13, R18, R21, R35, R36, R41, R43, SC2, SC3, R01, R02, R50, U71	6
	For Activity Code DP2	10
	For Activity Codes DP3, DP5, G08, G11, G13, RC2, RC4, RF1, R01, R15, R19, R21, R03, R4, R28, R33, R34, R42, R44, R60, R61, R03, R13, S01, SC1, SC2, U80, U82, U83, U84, U85, U86, U87, U88, U89, U90, U91, U92, U93, U94, U95, U96, U97, U98, U99, U00, U01, U02, U03, U04, U05, U06, U07, U08, U09, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20	12
For all other Activity Codes	Follow FOA instructions	

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## Frequently Asked Questions (FAQs)

### Applicant Guidance: Next Steps

- ▼ A. Scores [Expand/Collapse Headers]
- ▼ B. Funding Decisions
- ▲ C. Resubmitting

[Expand/Collapse Questions]

1. When should I resubmit?
2. My application was not discussed. Should I develop a new application or try to address the reviewers' comments in a Resubmission application?
3. May I request that my Resubmission application be reviewed by a different study section or have primary assignment to a different NIH IC than my original application?
4. Do I need to respond to all of the reviewers' comments, or can I disregard comments that seem to me to be unjustified?
5. What is the page limit for the introduction to a Resubmission application and how do I indicate changes?
6. Are all submissions to RFAs new applications?
7. If an application submitted in response to an RFA is not successful, is it considered new if I submit to a different funding opportunity?
8. Can I submit the same application to two different FOAs simultaneously?
9. Can a Resubmission application have a different title than the original submission?
10. Can an additional PD/PI be added or removed before submitting a Resubmission application?
11. When can an application no longer be resubmitted?

<https://grants.columbia.edu/faq/#next-steps> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## Frequently Asked Questions (FAQs)

### Applicant Guidance: Next Steps

2. My application was not discussed. Should I develop a new application or try to address the reviewers' comments in a Resubmission application?

This issue should be considered on a case-by-case basis. Read the summary statement carefully and note weaknesses that you could address in a reasonable length of time. Discuss the critiques with your collaborators, colleagues, and/or senior researchers/mentors to get their suggestions. The PO also can discuss your options going forward. It is possible for an application that carefully addresses the reviewers' comments to go from being "not-discussed" to receiving outstanding scores upon resubmission.

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## Frequently Asked Questions (FAQs)

### Applicant Guidance: Next Steps

- ▼ A. Scores [Expand/Collapse Headers]
- ▼ B. Funding Decisions
- ▲ C. Resubmitting

[Expand/Collapse Questions]

1. When should I resubmit?
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<https://grants.columbia.edu/faq/#next-steps> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## Frequently Asked Questions (FAQs)

### Applicant Guidance: Next Steps

4. Do I need to respond to all of the reviewers' comments, or can I disregard comments that seem to me to be unjustified?

The introduction of your resubmission application should address all of the weaknesses described in the summary statement. If you disagree with a reviewer's statement, explain why, and provide additional information. Avoid responses that could be seen as argumentative. Ask a colleague to read the reviewers' critiques and your responses prior to resubmission, to confirm that you have addressed the critique in a way that is informative and non-confrontational.

<https://grants.columbia.edu/faq/#next-steps> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## Introduction to NIH Resubmission (Amended) Application

- Thank the reviewers for their constructive comments
- Highlight the “strengths” from the Summary Statement
- Recognize the “weaknesses” from the Summary Statement
- Address all the “weaknesses”
- To adequately respond, might not be wise to submit at the next deadline
  - e.g., Additional pilot data would demonstrate feasibility and significantly strengthen the application

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## Frequently Asked Questions

### Resubmissions of NIH Applications

- A. Resubmission Policy Basics
- B. Understanding a New Application vs a Resubmission Application
- C. Preparing Your Application
- D. Time Limits for Resubmission Applications
- E. Implications of Various Changes to Your Application
- F. Review Issues
- G. Guidance for Reviewers

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## Topics to be Discussed

- Overview of the NIH R01 Funding Mechanisms
- NIH’s Grant Review Scoring System
- NIH’s Grant Review Criteria
- Responding to the Reviewers’ Comments
- Components of the NIH R01 Grant Application
- Best Practices for Competitive Applications

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## New NIH "FORMS-G" Grant Application Forms and Instructions Coming for Due Dates on or after January 25, 2022

**Notice Number:  
NOT-OD-21-169**

<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-169.html>

High-level Grant Application Form Change Summary: FORMS-G  
<https://grants.nih.gov/grants/electronicreceipt/files/high-level-form-change-summary-FORMS-G.pdf>

NIH will require the use of the updated Biographical Sketch and Other Support format pages for submissions on or after January 25, 2022. See NOT-OD-21-073, NOT-OD-21-110, and NOT-OD-21-122 for more information.

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FORMS VERSION G SERIES  
Released: October 25, 2021



**RESEARCH INSTRUCTIONS FOR NIH  
AND OTHER PHS AGENCIES**

SF424 (R&R) APPLICATION PACKAGES

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### GENERAL APPLICATION GUIDE FOR NIH AND OTHER PHS AGENCIES

SF424 (R&R) - Forms Version G  
Released: October 25, 2021  
Last Revised: October 25, 2021

## G.400 - PHS 398 Research Plan Form

The PHS 398 Research Plan form is used only for research, multi-project, and SBIR/STTR applications.

This form includes fields to upload several attachments, including the Specific Aims and Research Strategy.

The Research Plan, together with the rest of your application, should include sufficient information needed for evaluation of the project, independent of any other documents (e.g., previous application). Be specific and informative, and avoid redundancies.



Quick Links  
Introduction View larger image

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Section of Application	Activity Codes	Page Limits * (if different from FOA, FOA supersedes)
<b>Project Summary/Abstract</b>	For all Activity Codes	30 lines of text
<b>Project Narrative</b>	For all Activity Codes excluding C06,UC6 and G20.	three sentences
<b>Introduction to Resubmission and Revision Applications</b>	For all Activity Codes (including each applicable component of a multi-component application)	1
<b>Specific Aims</b>	For all Activity Codes that use an application form with the Specific Aims section (including each component of a multi-component application)	1
<b>Biographical Sketch</b>	For all Activity Codes (including DP1 and DP2 which previously had special page limits)	5

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Section of Application	Activity Codes	Page Limits * (if different from FOA, FOA supersedes)
Research Strategy	For Activity Code DP1	5
	For Activity Codes R01, R13, U13, R13, U13, R21, R5, R36, R41, R43, SC2, SC3, X01, X02, R50, UT1	6
	For Activity Code DP2	10
	For Activity Codes DP3, DP5, G08, G11, G13, RC2, RC4, RF1, R15, R18, R21/R33, R24, R26, R33, R34, R42, R44, R33, SB1, SC1, S12, UB1, UC2, UH2/UH3, UG1, UC4, UF1, UG3/UH3, UH2/UH3, U01, U18, U24, U2C, U34, U42, U44, U72, X01, X02	12
For all other Activity Codes	Follow FOA instructions	

**\* FOA instructions always supersede these instructions.**

https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/page-limits.htm

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## Components of the NIH R01 Grant Application

### SF 424 (R&R) APPLICATION FOR FEDERAL ASSISTANCE

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**SF 424 (R&R) APPLICATION FOR FEDERAL ASSISTANCE**

1. TYPE OF ASSISTANCE:  New  Renewal  Extension  Other

2. DATE SUBMITTED: [ ]

3. AGENCY INFORMATION: [ ]

4. FUNDING INFORMATION: [ ]

5. PROPOSED PROJECT: [ ]

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**SF 424 (R&R) APPLICATION FOR FEDERAL ASSISTANCE** Page 2

14. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR CONTACT INFORMATION: [ ]

15. ESTIMATED PROJECT FUNDING: [ ]

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? [ ]

17. By signing this application, I certify (1) to the statements contained in the list of certifications\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

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## Cover Letter Attachment

SF 424 (R&R) APPLICATION FOR FEDERAL ASSISTANCE Page 2

21. Cover Letter Attachment [ ] Add Attachment

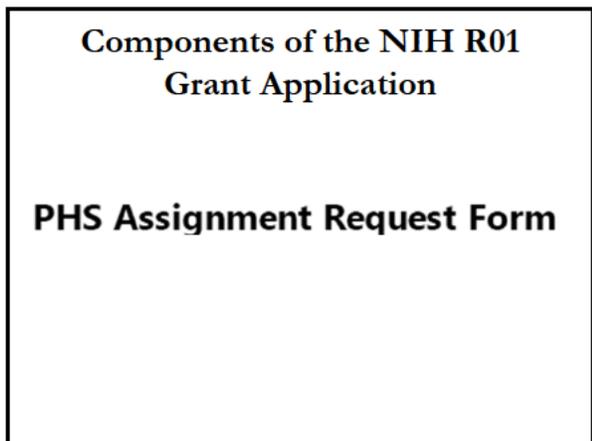
71

## Cover Letter Attachment

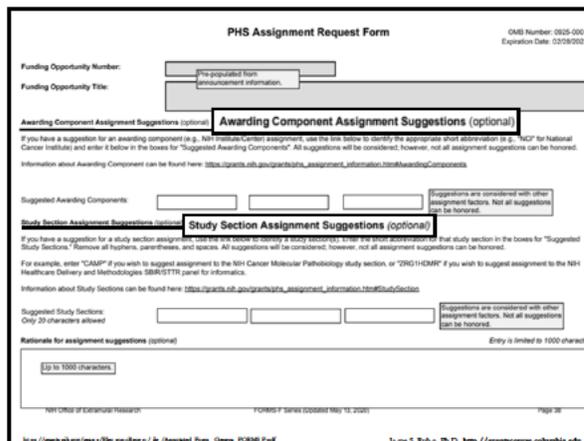
- Not usually required for R grants
- Administrative use only, not seen by peer reviewers
- Application title, PA or RFA title
- Special circumstances
  - Agency approval documentation
    - e.g., budget > \$500,000
  - Subaward not active for all years
  - Proposed studies will generate large-scale genomic data
  - Human fetal tissue (HFT) obtained from elective abortions
- Not review assignment requests

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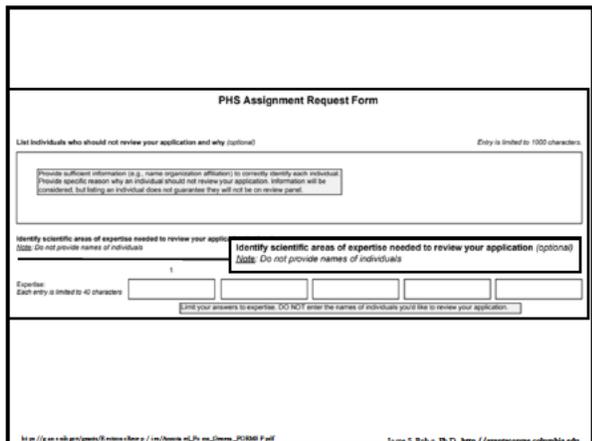
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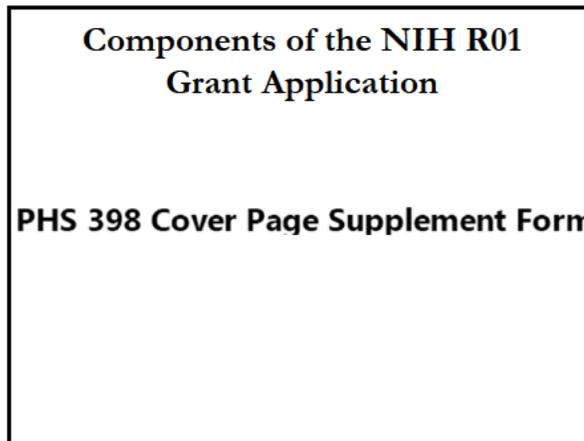
73



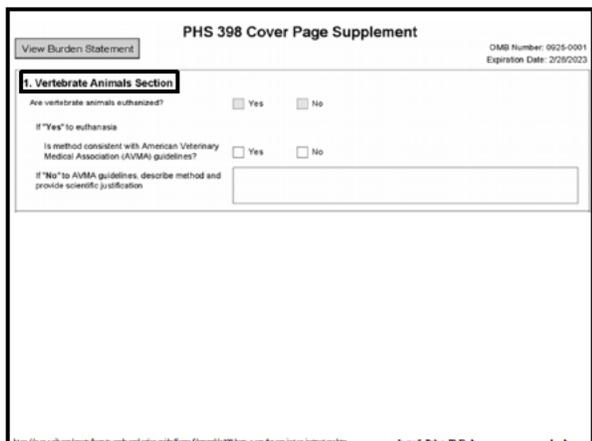
74



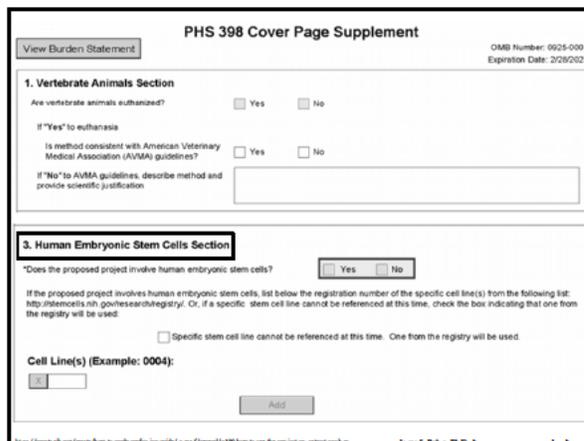
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**4. Human Fetal Tissue Section**

\*Does the proposed project involve human fetal tissue obtained from elective abortions?  Yes  No

If "yes" then provide the HFT Compliance Assurance

If "yes" then provide the HFT Sample IRB Consent Form

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## Components of the NIH R01 Grant Application

### Project/Performance Site Location(s) Form

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View Burden Statement OMB Number: 4048-0193  
Expiration Date: 12/31/2022

**Project/Performance Site Location(s)**

I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

**Project/Performance Site Primary Location**

Organization Name:

DUNS Number:

\* Street1:

Street2:

\* City:  County:

\* State:

Province:

\* Country: USA | UNITED STATES

\* ZIP / Postal Code:  \* Project/Performance Site Congressional District:

**Project/Performance Site Location 1**

I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

Organization Name:

DUNS Number:

\* Street1:

Street2:

\* City:  County:

\* State:

Province:

\* Country: USA | UNITED STATES

\* ZIP / Postal Code:  \* Project/Performance Site Congressional District:

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## Project/Performance Site(s)

Where the work described in the Research Plan will be conducted

- Applicant organization (i.e., your institution)
- Collaborating institutions (subcontracts)
  - Domestic and foreign institutions
  - e.g., Additional patient recruitment sites
- Include “Facilities and Resources” on each later in the application
- Applicant organization also responsible for compliance
  - e.g., lab animals, human subjects, financial management

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## Components of the NIH R01 Grant Application

### R&R Other Project Information Form

#### RESEARCH & RELATED Other Project Information

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### RESEARCH & RELATED Other Project Information

1. Are Human Subjects Involved?  Yes  No

1.a. If YES to Human Subjects

Is the Project Exempt from Federal regulations?  Yes  No

If yes, check appropriate exemption number.  1  2  3  4  5  6  7  8

If no, is the IRB review Pending?  Yes  No

IRB Approval Date:

Human Subject Assurance Number:

2. Are Vertebrate Animals Used?  Yes  No

2.a. If YES to Vertebrate Animals

Is the IACUC review Pending?  Yes  No

IACUC Approval Date:

Animal Welfare Assurance Number:

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**R&R Other Project Information:**  
**6. Activities outside the US/  
 Partnerships with International  
 Collaborators**  
 If “Yes”, must include “Foreign Justification” under “12. Other Attachments”: “Describe special resources or characteristics of the research project (e.g., human subjects, animals, disease, equipment, and techniques), including the reasons why the facilities or other aspects of the proposed project are more appropriate than a domestic setting.”

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**R&R Other Project Information:**  
**7. Project Summary/Abstract**  
 “Succinct and accurate description of the proposed work and should be able to stand on its own... understandable to a scientific literate reader... be concise... State the application’s broad, long-term objectives and specific aims, making reference to the health relatedness of the project (i.e., relevance to the mission of the agency). Describe the research design and methods for achieving the stated goals...”  
 30 lines of text

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**R&R Other Project Information:**  
**8. Project Narrative**  
 “Describe the relevance of this research to public health in, at most, three sentences.”

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**RESEARCH & RELATED Other Project Information**

7. Project Summary/Abstract  Add Attachment

8. Project Narrative  Add Attachment

9. Bibliography & References Cited  Add Attachment

10. Facilities & Other Resources  Add Attachment

11. Equipment  Add Attachment

12. Other Attachments  Add Attachments

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**R&R Other Project Information:**  
**9. Bibliography/References Cited**

- Full citations of all references cited in the Research Plan and the Human Subjects/Clinical Trials Information Form
- Relevant and current literature
- No page limit
- Include PMCID # or NIH Manuscript Submission Reference # as required for articles that fall under NIH’s Public Access Policy (authored/co-authored by the applicant)

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**RESEARCH & RELATED Other Project Information**

7. Project Summary/Abstract  Add Attachment

8. Project Narrative  Add Attachment

9. Bibliography & References Cited  Add Attachment

10. Facilities & Other Resources  Add Attachment

11. Equipment  Add Attachment

12. Other Attachments  Add Attachments

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**R&R Other Project Information:**  
**10. Facilities & Other Resources**

- Facilities to be used for the conduct of the proposed research
  - Laboratory
    - Animal
    - Clinical
      - Research subject populations
  - Other: Core facilities [e.g. research pharmacy, biostatistics, technical cores (microscopy, biomarkers)]
  - Computer
  - Office
- Describe for each performance site
- Discuss how each Facility (unique features, if appropriate) will be utilized in the proposed research plan – e.g. capabilities, availability

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**R&R Other Project Information:**  
**10. Facilities & Other Resources**

- How will the scientific environment “contributes to the probability of success (e.g., institutional support, physical resources, intellectual rapport)?”
- Discuss how the proposed studies will benefit from unique aspects of the scientific environment (subject populations, collaborative arrangements)
- Facilities for research involving biohazards or other potentially dangerous substances

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**RESEARCH & RELATED Other Project Information**

7. Project Summary/Abstract  Add Attachment

8. Project Narrative  Add Attachment

9. Bibliography & References Cited  Add Attachment

10. Facilities & Other Resources  Add Attachment

11. Equipment  Add Attachment

12. Other Attachments  Add Attachments

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**R&R Other Project Information:**

## 11. Equipment

- Major items of equipment available for project
- Relevant capabilities
- Especially important if specialized, unusual, or expensive instrumentation is involved in the study
- Core facilities “housing” equipment

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**RESEARCH & RELATED Other Project Information**

7. Project Summary/Abstract

8. Project Narrative

9. Bibliography & References Cited

10. Facilities & Other Resources

11. Equipment

12. Other Attachments

**Review specific Funding Opportunity Announcement to see if any “Other Attachments” are to be included.**

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## Components of the NIH R01 Grant Application

### PHS 398 Research Plan

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**PHS 398 Research Plan** OMB Number: 0938-0001  
Expiration Date: 3/31/2023

**Introduction**

1. Introduction to Application (for Resubmission and Revision applications)

**Research Plan Section**

2. Specific Aims

3. \*Research Strategy

4. Progress Report Publication List

**Other Research Plan Section**

5. Vertebrate Animals

6. Genetically Modified Animals

7. Multiple PDP/Leadership Plan

8. Consortium/Contractual Arrangements

9. Letters of Support

10. Resource Sharing Plan(s)

11. Authentication of Key Biological and/or Chemical Resources

**Appendix**

12. Appendix

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**Introduction**

1. Introduction to Application (for Resubmission and Revision applications)

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**Research Plan Section**

2. Specific Aims   **1 page**

3. \*Research Strategy   **12 pages**

4. Progress Report Publication List

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## PHS Research Plan

Section 2 [Specific Aims]: 1 page  
Section 3 [Research Strategy]: 12 pages

### “Answer these questions:

1. What do you intend to do?
2. Why is the work important?
3. What has already been done?
4. How are you going to do the work?”

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## 2. Specific Aims (1 page)

- State goals of proposed research
- Summarize expected outcomes
  - Impact on the fields involved
- List specific objectives
  - Describe hypotheses to be tested
  - Specific problem to be solved
  - Novel design to be created
  - New technology to be developed
  - Existing paradigm or clinical practice to be challenged
  - Critical barrier to research area’s progress to be addressed
- Can include a schematic figure relating Hypothesis and Specific Aims to scientific problem to be studied

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## 3. Research Strategy

- If there is >1 Specific Aims, the Significance, Innovation, and Approach may be discussed for each Specific Aim separately, or all Specific Aims together
- “Overall strategy, methodology and analyses”
- Human Subjects/Clinical Trial Form will contain detailed information on eligibility, demographics, protection, monitoring, etc. However, Form cannot be used as a way to avoid Research Strategy’s page limit

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## 3. Research Strategy

- (a) Significance
- (b) Innovation
- (c) Approach
- Includes Preliminary Studies/ Progress Report

12 pages for an R01 application  
6 pages for R03 and R21 applications

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## 3. Research Strategy - (a) Significance

- Importance of the problem/ Impact on a critical barrier to progress in the field
- “Strengths and weaknesses in the rigor of the prior research” (e.g., preliminary data), published/ unpublished, that supports the proposed research
- How “scientific knowledge, technical capability, and/or clinical practice” will be improved
- How the “concepts, methods, technologies, treatments, services, or preventative interventions” will be impacted if research is successful

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## 3. Research Strategy – (b) Innovation

- How proposal changes “current research or clinical practice paradigms”
- “Novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used” - advantages over current practice
- Improvements/ new applications of current “concepts, approaches, methodologies, instrumentation, or interventions”

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### 3. Research Strategy – (c) Approach

- “Overall strategy, methodology, and analyses to be used to accomplish the specific aims”
- “Plans to address weaknesses in the rigor of the prior research” that support the proposed research
- How will experimental design and methods lead to “robust and unbiased results”
- How “data will be collected, analyzed, and interpreted”
- Potential problems (challenges/limitations), alternative strategies/approaches
- Benchmarks (milestones) for success, strategies to establish feasibility

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### 3. Research Strategy – (c) Approach

- How relevant biological variables (e.g., sex) are incorporated into the research design and analyses. Studies with only one sex must provide strong justification
- “Sex as a Biological Variable” is evaluated by reviewers
- Involvement of human research subjects discussed here as well as in following appropriate sections
- For trials with randomized groups/interventions, describe methods for sample size and analysis

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## Reviewer Guidance to Evaluate Sex as a Biological Variable (SABV)

Reviewer Guidance to Evaluate Sex as a Biological Variable (SABV)

Main points

- NIH expects that sex as a biological variable will be factored into research designs, analyses, and reporting in vertebrate animal and human studies.
- Strong justification from the scientific literature, preliminary data, or other relevant considerations must be provided for applications proposing to study only one sex.
- This decision tree is meant to be used as a guide, but does not encompass the entire policy. See [NOT-OD-15-102](#) for more information.

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## Reviewer Guidance to Evaluate Sex as a Biological Variable (SABV)

Does the study involve vertebrate animals or humans?<sup>1</sup>

NO

No further consideration of SABV required; not considered a weakness

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## Reviewer Guidance to Evaluate Sex as a Biological Variable (SABV)

Flowchart for SABV evaluation:

- Are both sexes included in the study?
  - NO: Acknowledge as a weakness in the critique and discussion and score accordingly
  - YES: Proceed to next question
- Is the study intended to test for sex differences?<sup>2</sup>
  - NO: Acknowledge as a weakness in the critique and discussion and score accordingly
  - YES: Proceed to next question
- Is the design/analysis adequately rigorous to test for sex differences?
  - YES: Acknowledge as a strength in the critique and discussion and score accordingly
  - NO: Acknowledge as a weakness in the critique and discussion and score accordingly
- Does the proposal demonstrate plans to report data disaggregated by sex?<sup>3</sup>
  - NO: Acknowledge as a weakness in the critique and discussion and score accordingly
  - YES: Proceed to next question
- Is strong justification provided for the single sex study?<sup>4</sup>
  - NO: Acknowledge as a weakness in the critique and discussion and score accordingly
  - YES: Acknowledge as a strength in the critique and discussion and score accordingly

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### 3. Research Strategy – Preliminary Studies

- Aids reviewers in assessing the likelihood of project’s success
- Helps establish competence and experience of PI and research team

### 3. Research Strategy – Progress Report

- For competitive renewal applications

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**5. Vertebrate Animals**

- 1) Description of Procedures: In addition to description of procedures, identify “species, strains, ages, sex, and total numbers of animals”
- 2) Justifications: Justify use of species, why the proposed research could not be accomplished with an alternative model (e.g., “computational, human, invertebrate, *in vitro*”).
- 3) Minimization of Pain and Distress: “Describe the interventions, including analgesia, anesthesia, sedation, palliative care, and humane endpoints... to minimize discomfort, distress, pain and injury”.

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**7. Multiple PD/PI Leadership Plan**

Leadership plan must be included:

- Rationale for choosing Multiple PDs/PIs
- Governance and organizational structure, “communication plans, process for making joint decisions on scientific direction, and procedures for resolving conflicts”
- “Roles and administrative, technical, and scientific responsibilities” for each of the PDs/PIs and other collaborators
- Distribution of budget and resources to specific components of the project or the individual PDs/PIs

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**7. Multiple PD/PI Leadership Plan**

- Can strengthen a multi-disciplinary application
- Multiple PI's do not need to be at the same institution.
  - Award document (Notice of Grant Award) made to the institution of the Contact PI
  - If other MPI's are at other institutions, then they are funded via a subcontract from the Contact PI's institution (prime)
- To meet the requirements for the ESI payroll, all MPI's must be ESI's

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**Other Research Plan Section**

5. Vertebrate Animals	<input type="text"/>	<input type="button" value="Add Attachment"/>
6. Select Agent Research	<input type="text"/>	<input type="button" value="Add Attachment"/>
7. Multiple PD/PI Leadership Plan	<input type="text"/>	<input type="button" value="Add Attachment"/>
8. Consortium/Contractual Arrangements	<input type="text"/>	<input type="button" value="Add Attachment"/>
9. Letters of Support	<input type="text"/>	<input type="button" value="Add Attachment"/>
10. Resource Sharing Plan(s)	<input type="text"/>	<input type="button" value="Add Attachment"/>
11. Authentication of Key Biological and/or Chemical Resources	<input type="text"/>	<input type="button" value="Add Attachment"/>

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**8. Consortium/Contractual Agreements**

- Provide a detailed explanation of “programmatically, fiscal, and administrative arrangements”
- If this component is “a significant portion of the overall project, explain why applicant organization,” not the subcontract, should be grantee
- In addition to official administrative and budgetary documentation from the subcontracted organization, a Letter of Support/Collaboration from the lead subcontract investigator is included as well as her/his NIH Biosketch

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**Other Research Plan Section**

5. Vertebrate Animals	<input type="text"/>	<input type="button" value="Add Attachment"/>
6. Select Agent Research	<input type="text"/>	<input type="button" value="Add Attachment"/>
7. Multiple PD/PI Leadership Plan	<input type="text"/>	<input type="button" value="Add Attachment"/>
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**9. Letters of Support**

e.g., Consultants, Subcontract PI's, Collaborators, Individuals providing special research resources, access to core facilities, Advisory Board member

All letters in one single PDF file

Many of these individuals will also provide an NIH Biosketch (different section)

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**9. Letters of Support**

Not “Letters of Reference” from those not involved in the project

Should not contain information that should instead be in the Research Plan Section (Specific Aims, Research Strategy); e.g., Background, Significance, preliminary data, graphs, tables, other figures

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**Other Research Plan Section**

5. Vertebrate Animals	<input type="text"/>	<input type="button" value="Add Attachment"/>
6. Select Agent Research	<input type="text"/>	<input type="button" value="Add Attachment"/>
7. Multiple PD/PI Leadership Plan	<input type="text"/>	<input type="button" value="Add Attachment"/>
8. Consortium/Contractual Arrangements	<input type="text"/>	<input type="button" value="Add Attachment"/>
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11. Authentication of Key Biological and/or Chemical Resources	<input type="text"/>	<input type="button" value="Add Attachment"/>

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**10. Resource Sharing (I)**

- **Data Sharing Plan**
  - For grants requesting >\$500,000 in direct costs in any year (not including subcontract's I.C.)
  - Brief description of how final research data will be shared or, if not possible, why not
  - Funding announcement may have additional requirements (e.g., regardless of Direct Costs level)
- **Sharing Model Organisms**
  - If developing a model organism, describe a “plan for sharing and distributing” this unique research resource
  - If sharing is impossible or restricted, provide reasons
  - Not dependent of \$ value of grant

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**10. Resource Sharing (II)**

- **Genomic Data Sharing (GDS)**
  - For research that generates large-scale human or non-human genomic data
  - Includes “genome-wide association studies (GWAS), single nucleotide polymorphisms (SNP) arrays, and genome sequence, transcriptomic, epigenomic, and gene expression data”
  - Institutional certification required before award
  - NIH Genomic Data Sharing Policy <https://osp.od.nih.gov/scientific-sharing/policies/>

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**Other Research Plan Section**

5. Vertebrate Animals	<input type="text"/>	<input type="button" value="Add Attachment"/>
6. Select Agent Research	<input type="text"/>	<input type="button" value="Add Attachment"/>
7. Multiple PD/PI Leadership Plan	<input type="text"/>	<input type="button" value="Add Attachment"/>
8. Consortium/Contractual Arrangements	<input type="text"/>	<input type="button" value="Add Attachment"/>
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11. Authentication of Key Biological and/or Chemical Resources	<input type="text"/>	<input type="button" value="Add Attachment"/>

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**11. Authentication of Key Biological and/or Chemical Resources**

- “Briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposed studies”
- 1 page is suggested

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**11. Authentication of Key Biological and/or Chemical Resources**

- Key biological and/or chemical resources: (generated with or without NIH funds)
  - **1)** May differ from laboratory to laboratory or over time
  - **2)** May have qualities and/or qualifications that could influence the research data; and
  - **3)** Are integral to the proposed research” [e.g., “cell lines, specialty chemicals, antibodies, and other biologics”]
- Standard laboratory reagents [e.g., common biologicals/chemicals] that are not expected to vary do not need to be included”

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

**Appendix**

12. Appendix Add Attachments

- Limited listing of allowed documents, includes:
  - Blank informed consent/assent forms, Blank data collection instruments, survey forms, questionnaires, interview questions
- Not permitted, includes:
  - Page of acronyms, larger versions of figures, publications
- Additional items may be specified in the Funding Announcement

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## Components of the NIH R01 Grant Application

### PHS Human Subjects and Clinical Trials Information

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### PHS Human Subjects and Clinical Trials Information

Use of Human Specimens and/or Data

\* Does any of the proposed research in the application involve human specimens and/or data?  Yes  No Answer required for all applications.

Provide an explanation for any use of human specimens and/or data not considered to be human subjects research.

Only include attachment if proposed research uses human specimens and/or data not considered to be human subjects research.

Please complete the human subjects section of the Research & Related Other Project Information form prior to completing this form.

The following items are taken from the Research & Related Other Project Information form and displayed here for your reference. Any changes to these fields must be made on the Research & Related Other Project Information form and may impact the data fields you are required to complete on this form.

Are Human Subjects Involved?  Yes  No

Is the Project Exempt from Federal regulations?  Yes  No

Exemption number:  1  2  3  4  5  6  7  8

Information published from RAR Other Project Information form.

### Research Involving Private Information or Biospecimens flowchart

<https://grants.nih.gov/grants/policy/hs/private-information-biospecimens-flowchart.pdf>

If No to Human Subjects

Skip the rest of the PHS Human Subjects and Clinical Trials Information Form.

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### Research Involving Private Information or Biospecimens

<https://grants.nih.gov/grants/policy/hs/private-information-biospecimens-flowchart.pdf>

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### PHS Human Subjects and Clinical Trials Information

- A separate study record is included for each protocol involving human subjects proposed in the application
- Each study record contains the following sections:
  - Section 1 - Basic Information
    - e.g., Study title, Exemption Number, Clinical Trial Questionnaire
  - Section 2 – Study Population Characteristics
    - Including: Eligibility; Age limits; Inclusion of Women, Minorities, and Children; Recruitment; Inclusion Enrollment Report
  - Section 3 – Protection and Monitoring Plans
  - Section 4 – Protocol Synopsis
  - Section 5 – Other Clinical Trial-related Attachments

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### PHS Human Subjects and Clinical Trials Information

#### NIH Definition of a Clinical Trial

“A research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of those interventions on health-related biomedical or behavioral outcomes”

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## PHS Human Subjects and Clinical Trials Information

Use the following four questions to determine the difference between a clinical study and a clinical trial:

1. “Does the study involve human participants?”
2. Are the participants prospectively assigned to an intervention?
3. Is the study designed to evaluate the effect of the intervention on the participants?
4. Is the effect that will be evaluated a health-related biomedical or behavioral outcome?

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## PHS Human Subjects and Clinical Trials Information

“Note that if the answers to the 4 questions are yes, your study meets the NIH definition of a clinical trial, even if...

- You are studying healthy participants
- Your study does not have a comparison group (e.g., placebo or control)
- Your study is only designed to assess the pharmacokinetics, safety, and/or maximum tolerated dose of an investigational drug
- Your study is utilizing a behavioral intervention

Studies intended solely to refine measures are not considered clinical trials.

Studies that involve secondary research with biological specimens or health information are not clinical trials.”

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## PHS Human Subjects and Clinical Trials Information

Form Section	If you answered “yes” to <u>all</u> the questions in the Clinical Trial Questionnaire	If you answered “no” to <u>any</u> of the questions in the Clinical Trial Questionnaire
Section 2 - Study Population Characteristics	Required	Required
Section 3 - Protection and Monitoring Plans	Required	Required
Section 4 - Protocol Synopsis	Required	Do not complete
Section 5 - Other Clinical Trial-related Attachments	Required if specified in the FOA	Do not complete

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## PHS Human Subjects and Clinical Trials Information

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  - Section 1 - Basic Information
    - e.g., Study title, Exemption Number, Clinical Trial Questionnaire
  - **Section 2 – Study Population Characteristics**
    - Including: Eligibility; Age limits, Inclusion of Individuals Across the Lifespan, Women and Minorities, Recruitment and Retention Plan, Timeline, Inclusion Enrollment Report
  - Section 3 – Protection and Monitoring Plans
  - Section 4 – Protocol Synopsis
  - Section 5 – Other Clinical Trial-related Attachments

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## PHS Human Subjects and Clinical Trials Information

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    - e.g., Study title, Exemption Number, Clinical Trial Questionnaire
  - Section 2 – Study Population Characteristics
    - Including: Eligibility; Age limits; Inclusion of Women, Minorities, and Children; Inclusion Enrollment Report
  - **Section 3 – Protection and Monitoring Plans**
  - Section 4 – Protocol Synopsis
  - Section 5 – Other Clinical Trial-related Attachments

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## PHS Human Subjects and Clinical Trials Information

### 3.1 Protection of Human Subjects

- 1. Risks to Human Subjects
  - a. Human Subjects Involvement, Characteristics, and Design
  - b. Study Procedures, Materials, and Potential Risks
- 2. Adequacy of Protection Against Risks
  - a. Informed Consent and Assent
  - b. Protections Against Risk
  - c. Vulnerable Subjects (if appropriate)
- 3. Potential Benefits of the Proposed Research to Research participants and Others
- 4. Importance of the Knowledge to be Gained

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**PHS Human Subjects and Clinical Trials Information**

- 3.2 Use of single IRB for multi-site (domestic) study using the same protocol
- 3.3 Data and Safety Monitoring Plan
- 3.4 Data and Safety Monitoring Board
- 3.5 Structure of Study Team
  - Organizational and administrative structure
    - Administrative site(s), Data coordinating site(s), Enrollment site(s), Lab or testing site(s)
  - Roles, Governance, Decision-making

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**PHS Human Subjects and Clinical Trials Information**

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- Each study record contains the following sections:
  - Section 1 – Basic Information
    - e.g., Study title, Exemption Number, Clinical Trial Questionnaire
  - Section 2 – Study Population Characteristics
    - Including: Eligibility; Age limits; Inclusion of Women, Minorities, and Children; Recruitment; Inclusion Enrollment Report
  - Section 3 – Protection and Monitoring Plans
  - Section 4 – Protocol Synopsis
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**PHS Human Subjects and Clinical Trials Information**

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    - e.g., Study title, Exemption Number, Clinical Trial Questionnaire
  - Section 2 – Study Population Characteristics
    - Including: Eligibility; Age limits; Inclusion of Women, Minorities, and Children; Recruitment; Inclusion Enrollment Report
  - Section 3 – Protection and Monitoring Plans
  - Section 4 – Protocol Synopsis
  - Section 5 – Other Clinical Trial-related Attachments

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## Components of the NIH R01 Grant Application

**R&R Senior/Key Person Profile (Expanded) Form**  
 RESEARCH & RELATED Senior/Key Person Profile (Expanded)

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RESEARCH & RELATED Senior/Key Person Profile (Expanded)

**PROFILE - Project Director/Principal Investigator**

Profile: [ ] \* First Name: [ ] Middle Name: [ ] Last Name: [ ] Gender: [ ]  
 Position/Title: [ ] Department: [ ]  
 Organization Name: [ ] Division: [ ]  
 \* Street1: [ ]  
 \* Street2: [ ]  
 \* City: [ ] County: [ ]  
 \* State: [ ] Province: [ ]  
 \* Country: [ ] \* Zip / Postal Code: [ ]  
 \* Phone Number: [ ] Fax Number: [ ]  
 \* E-Mail: [ ]  
 Credential, e.g., agency login: [ ]  
 \* Project Role: [ ] Other Project Role Category: [ ]  
 \* Attach Biographical Sketch [ ] Add Attachment [ ] Delete Attachment [ ] View Attachment [ ]  
 Attach Current & Pending Support [ ] Add Attachment [ ] Delete Attachment [ ] View Attachment [ ]

Credential, agency login: NIH eRA Commons username - required field

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RESEARCH & RELATED Senior/Key Person Profile (Expanded)

### Multiple Principal Investigators (MPI)

- The contact PI is listed first
- If there is more than one Principal Investigator, all are given the role of “PD/PI” (even if not at applicant organization)
- NIH does not use the term co-PD/PI  
 [PD = Project Director]

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## Senior/Key Personnel

Senior/Key Personnel “are defined as all individuals who contribute in a substantive, meaningful way to the scientific development or execution of the project, whether or not salaries are requested... List individuals that meet the definition of senior/key regardless of what organization they work for.”

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## Senior/Key Personnel

“Senior/key personnel must devote measurable effort to the project whether or not salaries or compensation are requested. "Zero percent" effort or "as needed" are not acceptable levels of involvement for those designated as Senior/Key Personnel.”

List alphabetically by last name after principal investigator.

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- ## Other Significant Contributors
- “contribute to the scientific development or execution of the project”
  - No committed measureable effort - “zero person months” or “as needed”
  - Listed after Senior/Key Personnel
  - Biosketch, including Research Support information
  - e.g., Advisors

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

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## Components of the NIH R01 Grant Application

**R&R Senior/Key Person Profile (Expanded) Form**  
 [RESEARCH & RELATED Senior/Key Person Profile (Expanded)]  
**Biosketch Format**

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## Biographical Sketch

- For Key Personnel (e.g., PI’s, Co-Investigators, Collaborators), Other Significant Contributors, Advisors, Consultants, etc.
- Used by reviewers to assess each investigator’s qualifications for their proposed role, in addition to the overall competence of the entire research team
- <https://grants.nih.gov/grants/forms/biosketch.htm>
- No graphics, figures, pictures, tables, etc.
- 5 pages in length total

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### Biosketch Format Pages, Instructions and Samples

<b>Form Name</b>	Biographical Sketch Format Page (non-fellowship) - Due Dates on/after January 25, 2022
<b>Description</b>	Prepare biographical sketches for applications and progress reports for all applications and awards, except fellowships.
<b>How to Access</b>	Non-fellowship Biosketch (blank format page, Word)
<b>Instructions</b>	Instructions for Biographical Sketch These instructions will be incorporated into the NIH Application Form Instructions with the next update by FY 2022.
<b>Additional information</b>	<ul style="list-style-type: none"> <li>• SAMPLE: Non-fellowship biosketch</li> <li>• FAQs</li> </ul> Try SciENcE to help you develop your biosketch and automatically format it according to NIH requirements. Reflects removal of Section D per NDF-02-21-073 first guide notice.
<b>Updated Date</b>	October 2021

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**ADMINISTRATIVE NOTE:**  
 During the review of this application, reviewers and/or NIH staff noted that one or more biosketches did not comply with the required format (NDF-02-15-032). An electronic notification has been sent to the contact Program Director/Principal Investigator and Signing Official for this application, to ensure that future applications use the correct biosketch format. NIH has the authority to withdraw such applications from review or consideration for funding.

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## Biographical Sketch

- **Education Block: Education and Training**
- **A. Personal Statement**
  - Why you have the expertise for your role in the proposed project (e.g., training, previous relevant experimental experience, technical expertise; collaborations, scientific environment, past relevant performance, etc.)
  - Up to four relevant publications/“research products” relevant to proposed project (e.g., conference proceedings/abstracts/ posters/presentations, databases, software)
  - “Contributions to Science” not included in Section C.
  - “Impediments” to past productivity (e.g. family responsibilities, illness, disability, military service) (optional)

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## Biographical Sketch

- **Education Block: Education and Training**
- **A. Personal Statement (cont.)**
  - Ongoing and recently completed research projects (last 3 years)
    - Relevant to the proposed research
    - Other projects that you want to highlight for the reviewers (e.g., another large/complex project that you lead or had another significant role, competitive fellowship award)

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## Biographical Sketch

- **B. Positions, Scientific Appointments and Honors** (reverse chronological order)
  - Domestic and Foreign
    - “Including affiliations with foreign entities or governments. This includes titled academic, professional, or institutional appointments whether or not remuneration is received, and whether full-time, part-time, or voluntary (including adjunct, visiting, or honorary)”
  - Professional experience
  - Previous positions/employment
  - Honors, awards, fellowships
  - Professional achievements/recognition
  - Advisory/review committees
  - Professional memberships
  - Clinical licensures, specialty board certifications

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## Biographical Sketch

- **C. Contributions to Science**
  - Describe your most significant contributions to science (up to five) Include:
    - Historical background of scientific problem
    - Main finding(s) – Impact on the field/progress of science and/or the application to health or technology
    - Describe your specific role in each “Contribution”
  - Reference up to 4 publications or “research products” (e.g., abstracts, presentations, patents, databases, protocols)
    - May describe your specific contribution/role in “Contribution”
  - May include URL to a full list of publications
    - If included, must be a federal website (e.g., My Bibliography)

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PMB No. 0925-0001 and 0925-0002 (Rev. 12/2020 Approved Through 02/28/2023)

**BIOGRAPHICAL SKETCH**  
Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Hunt, Morgan Casey

eRA COMMONS USER NAME (credential, e.g., agency login): huntmc1

POSITION TITLE: Associate Professor of Psychology

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of California, Berkeley	BS	05/2003	Psychology
University of Vermont	PHD	05/2009	Experimental Psychology
University of California, Berkeley	Postdoctoral	08/2013	Public Health and Epidemiology

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**A. Personal Statement**

I am an Associate Professor of Psychology, and my research is focused on neuropsychological changes associated with addiction. I have a broad background in psychology, with specific training and expertise in ethnographic and survey research and secondary data analysis on psychological aspects of drug addiction. As PI or co-investigator on several university- and NIH-funded grants, I laid the groundwork for the proposed research by developing effective measures of disability, depression, and other psychosocial factors relevant to the aging substance abuser, and by establishing strong ties with community providers that will make it possible to recruit and track participants over time as documented in the following publications. In addition, I successfully administered the projects (e.g. staffing, research projections, budget), collaborated with other researchers, and produced several peer-reviewed publications from each project. As a result of these previous experiences, I am aware of the importance of frequent communication among project members and of constructing a realistic research plan, timeline, and budget. The current application builds logically on my prior work. During 2015-2016, my career was disrupted due to family obligations. However, upon returning to the field, I immediately resumed my research projects and collaborations and successfully completed for NIH support. In summary, I have the expertise, leadership, training, expertise and motivation necessary to successfully carry out the proposed research project.

Ongoing and recently completed projects that I would like to highlight include:

R01 DA942367  
Hunt (PI)  
09/01/16-08/31/21  
Health trajectories and behavioral interventions among older substance abusers

R01 MH922731  
Merry (PI), Role: co-investigator  
12/15/17-11/30/22  
Physical disability, depression and substance abuse in the elderly

R21 AA998075  
Hunt (PI)  
01/01/19-12/31/21  
Community-based intervention for alcohol abuse

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Citations:

- Merryle, R.J. & Hunt, M.C. (2015). Independent living, physical disability and substance abuse among the elderly. *Psychology and Aging*, 23(4), 10-22.
- Hunt, M.C., Jensen, J.L. & Crenshaw, W. (2018). Substance abuse and mental health among community-dwelling elderly. *International Journal of Geriatric Psychiatry*, 24(9), 1124-1135.
- Hunt, M.C., Wiechelt, S.A. & Merryle, R. (2019). Predicting the substance-abuse treatment needs of an aging population. *American Journal of Public Health*, 45(2), 236-245. PMID: PMC9162292
- Merryle, R. & Hunt, M.C. (2020). Randomized clinical trial of cotinine in older nicotine addicts. *Age and Ageing*, 38(2), 9-23. PMID: PMC9002364

<https://grants.nih.gov/grants/forms/biosketch.htm> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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**B. Positions, Scientific Appointments, and Honors**

**Positions and Scientific Appointments**

2021 – Present Associate Professor, Department of Psychology, Washington University, St. Louis, MO  
 2020 – Present Adjunct Professor, McGill University Department of Psychology, Montreal, Quebec, Canada  
 2018 – Present NIH Risk, Adult Addictions Study Section, members  
 2015 – 2017 Consultant, Coastal Psychological Services, San Francisco, CA  
 2014 – 2021 Assistant Professor, Department of Psychology, Washington University, St. Louis, MO  
 2014 – 2015 NIH Peer Review Committee, Psychology of Aging, ad hoc reviewer  
 2014 – Present Board of Advisors, Senior Services of Eastern Missouri  
 2013 – 2014 Lecturer, Department of Psychology, Middlebury College, Middlebury, VT  
 2011 – Present Associate Editor, *Psychology and Aging*  
 2009 – Present Member, American Geriatrics Society  
 2009 – Present Member, Gerontological Society of America  
 2009 – 2013 Fellow, Division of Intramural Research, National Institute of Drug Abuse, Bethesda, MD  
 2006 – Present Member, American Psychological Association

**Honors**

2020 Award for Best in Interdisciplinary Ethnography, International Ethnographic Society  
 2019 Excellence in Teaching, Washington University, St. Louis, MO  
 2018 Outstanding Young Faculty Award, Washington University, St. Louis, MO

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**C. Contributions to Science**

1. My early publications directly addressed the fact that substance abuse is often overlooked in older adults. However, because many older adults were raised during an era of increased drug and alcohol use, there are reasons to believe that this will become an increasing issue as the population ages. These publications found that older adults appear in a variety of primary care settings or seek mental health providers to deal with emerging addiction problems. These publications document this emerging problem and guide primary care providers and geriatric mental health providers to recognize symptoms, assess the nature of the problem and apply the necessary interventions. By providing evidence and simple clinical approaches, this body of work has changed the standards of care for addicted older adults and will continue to provide assistance in relevant medical settings well into the future. I served as the primary investigator or co-investigator in all of these studies.

- Gryczynski, J., Shaft, B.M., Merryle, R., & Hunt, M.C. (2013). Community based participatory research with late-life addicts. *American Journal of Alcohol and Drug Abuse*, 15(3), 222-238.
- Shaft, B.M., Hunt, M.C., Merryle, R., & Venturi, R. (2014). Policy implications of genetic transmission of alcohol and drug abuse in female nonusers. *International Journal of Drug Policy*, 30(5), 46-58.
- Hunt, M.C., Marks, A.E., Shaft, B.M., Merryle, R., & Jensen, J.L. (2015). Early-life family and community characteristics and late-life substance abuse. *Journal of Applied Gerontology*, 28(2), 26-37.
- Hunt, M.C., Marks, A.E., Venturi, R., Crenshaw, W. & Ratonian, A. (2018). Community-based intervention strategies for reducing alcohol and drug abuse in the elderly. *Addiction*, 104(9), 1436-1606. PMID: PMC9000292

**Complete List of Published Work in MyBibliography:**  
<https://www.ncbi.nlm.nih.gov/myncbi/1IC1fFV4YYQZE/bibliography/public/>

<https://grants.nih.gov/grants/forms/biosketch.htm> Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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## Components of the NIH R01 Grant Application

# R&R Budget Form

## RESEARCH & RELATED BUDGET

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### Budget - overview

- NIH and other agencies require detailed budgets and budget justifications
- Make sure that the requested funding ‘matches’ the scientific project proposed
  - Peer reviewers will be able to detect if:
    - The budget is ‘padded’
    - The budget is insufficient to support the project, evoking questions concerning how well the investigator understands scope of project
- Describe additional funding for project, if any

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### Budget - overview

- Categories are sometimes increased 2%-3% per year
  - NIH may not award (fund) “cost-of-living” increases
- Equipment is usually purchased early in the research
- Plans for unusual changes in future years (e.g., additional personnel, reduction in the number of patient care costs) should be “built into” the budget and explained in the budget justification

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### Budget - categories

- A. and B. Senior/Key and Other Personnel
- C. Equipment
- D. Travel
- F. Other Direct Costs, e.g.,:
  - Material and Supplies
  - Patient Care Costs
  - Animals
  - Subawards/Consortiums
  - Publication Costs
  - Core Facilities
  - Consultant Costs
  - Service Agreements

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### Indirect Costs

- Also called Facilities and Administration (F&A)
- Federally negotiated rate
- Percentage of direct costs
- MTDC-Modified Total Direct Costs:
  - Some items (equipment, patient care costs, tuition, subaward/consortium > \$25K) not included in direct costs base
- Some institution’s rate is based on “Salary & Wages”

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### Budget Justification

- Complete
- Comprehensive
- Concise
- Calculated correctly

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### Budget Justification

- Must be included
- Detailed information on personnel and their expertise and role in proposed project
- Budget calculations for other categorical items
- Separate budget justification for subcontract/consortium
- Discuss significant increases or decreases
- Discuss and explain budget categories that use more than the standard yearly increase (NIH may not fund standard yearly increases)
- Can include price quotes (e.g., for equipment)

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### Components of the NIH R01 Grant Application

## PHS 398 Modular Budget Form

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# The City College of New York School of Medicine: “Opportunities for NIH Research Funding and Best Practices for Competitive Applications” November 11, 2021

## Modular Budgets

- Applies to all new/competing R01, R03, and R21 proposals with up to \$250,000 requested direct costs in every year
- \$250,000 “cap” does not include Indirect Costs of subaward/consortium
- RFAs with budgets of more than \$250,000 may be modular at NIH Institute/Center’s discretion
- Direct costs requested in module amounts of \$25,000 (e.g., 10 modules = \$250,000)

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## Modular Budgets

- If Direct Costs > \$250,000 in any year, then detailed budget format (non-modular) must be used for the full application
- For most proposals, the same number of modules are requested in each year; no modules are added for inflationary increases
- Cannot be used for projects involving human fetal tissue obtained from elective abortions (HFT)

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## Modular Budgets

- Additional Direct Costs can be added in \$25,000 modules (up to \$250,000) for increases due to large, one-time equipment purchases or major changes in budget due to research needs (e.g., varying patient costs or the short term need for specific personnel)
- Yearly variations in the number of modules must be justified in narrative form
- Institutes/Centers may adjust award amount as per their cost management plan

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## How to Determine the Standard Number of Modules

- Determine the total project’s Direct Costs  
Divide by \$25,000 and by number of years. Round to a whole number.
- Example:
  - Year 01: \$150,000, Year 02: \$153,000, Year 03: \$156,060, Year 04: \$159,181, and Year 05: \$162,365 (2% yearly increase)
  - Total for the five years: \$780,606
  - Divided by \$25,000: 31.22
  - Divided by 5 years: 6.24
  - 6 modules: \$150,000; 7 modules: \$175,000

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### PHS 398 Modular Budget

OMB Number: 0925-0001

Budget Period: 1

Delete Period    Start Date: 10/01/2014    End Date: 09/30/2015    Next Period

A. Direct Costs		Funds Requested (\$)	
Direct Cost less Consortium F&A		\$250,000.00	
Consortium F&A		\$13,750.00	
<b>Total Direct Costs</b>		<b>\$263,750.00</b>	

B. Indirect Costs		Indirect Cost Rate (%)	Indirect Cost Base (\$)	Funds Requested (\$)
1. MTDC		55.00	\$245,000.00	\$134,750.00
2.				
3.				
4.				

Cognizant Agency (Agency Name, POC Name and Phone Number)    NRS Name of Regional Negotiator  
 Phone Number of Regional Negotiator

Indirect Cost Rate Agreement Date: 01/01/2014    Total Indirect Costs: \$134,750.00

[http://grants.nih.gov/grants/forms/424/5F424R.R\\_PHS398\\_MainForm\\_Sample.pdf](http://grants.nih.gov/grants/forms/424/5F424R.R_PHS398_MainForm_Sample.pdf)    <http://grantscourse.columbia.edu>

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### Cumulative Budget Information

**1. Total Costs, Entire Project Period**

Section A. Total Direct Cost less Consortium Indirect (F&A) for Entire Project Period \$

Section A. Total Consortium Indirect (F&A) for Entire Project Period \$

Section A. Total Direct Costs for Entire Project Period \$

Section B. Total Indirect (F&A) Costs for Entire Project Period \$

Section C. Total Direct and Indirect (F&A) Costs (A+B) for Entire Project Period \$

**2. Budget Justifications**

? Personnel Justification

? Consortium Justification

? Additional Narrative Justification

<http://grants.nih.gov/grants/how-to-apply-to-grants/a-new/grant/510-how-to-use-the-app-for-one-entire-project.html>    <http://grantscourse.columbia.edu>

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### Modular Budgets: Budget Justification

- Information, in narrative form:
  - All Personnel
  - Subaward/Consortium arrangements, when applicable
  - Significant budget items that result in a yearly change in the number of \$25,000 modules

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### NIH Grant Forms and Instructions

- **How to Apply - Application Guide**  
<https://grants.nih.gov/grants/how-to-apply-application-guide.html>
- **Annotated Application Forms**  
<https://grants.nih.gov/grants/how-to-apply-application-guide/resources/annotated-form-sets.htm>
- **Submitting an Application**  
<https://grants.nih.gov/grants/forms/format-pages.htm>
- **Page Limits**  
<https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/page-limits.htm>
- **Forms Library**  
<https://grants.nih.gov/grants/forms.htm>

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### Topics to be Discussed

- Overview of the NIH R01 Funding Mechanisms
- NIH's Grant Review Scoring System
- NIH's Grant Review Criteria
- Responding to the Reviewers' Comments
- Components of the NIH R01 Grant Application
- **Best Practices for Competitive Applications**

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### Approaches for Competitive Applications

- **Identify Funding**
- Prepare to Write the Grant Application
- Complete the Grant Application

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### Identify Funding

- Identify appropriate funding agencies
  - Government
  - Non-government
- Identify appropriate funding mechanisms
  - Research
  - Training/Career Development
- Create a calendar of application deadlines for identified funding programs
  - Known current year deadlines
  - Possible future deadlines based on last year's deadlines

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### Approaches for Competitive Applications

- Identify Funding
- **Prepare to Complete the Grant Application**
- Complete the Grant Application

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 “Opportunities for NIH Research Funding and Best Practices for Competitive Applications”  
 November 11, 2021

### Prepare to Complete the Grant Application

- Speak with Agency Program Officer
- Speak with colleagues who are/were awardees
- Review funded applications if possible
- Review agency’s review criteria
- Review agency’s review process
- Identify what will make the application more competitive
  - Research and/or career development arrangements
    - Access to core facilities/research resources
- Strengthen “Preliminary Work/ Pilot Data”
- Who will write confidential letters of reference?

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### Research and Career Development Arrangements

- Multiple Principal Investigators (research awards)
- Multiple Mentors (mentored awards)
- Advisors (mentored awards)
- Co-investigators/Collaborations
- Subcontracts to other institutions
- Multidisciplinary/Interdisciplinary

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### Prepare to Complete the Grant Application

- Identify and meet with Co-investigators, Collaborators, Consultants, Advisors
  - Identify roles and responsibilities
  - Administrative requirements  
(e.g. if other countries/institutions are involved)
- Identify necessary core facilities and other research resources
- Meet with research administrators
- Human subjects, lab animals, and any other regulatory issues?

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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### Approaches for Competitive Applications

- Identify Funding
- Prepare to Complete the Grant Application
- Complete the Grant Application

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

196

### Complete the Grant Application

- Review the application instructions
- Identify the different components
- Create a checklist (sequence, date of completion)
- Create an outline
  - Content, Length of section (*vis a vis* page limits)
- Identify and delegate responsibilities for the different components
  - Technical/Scientific
  - Administrative – e.g. budget
  - Regulatory
  - Draft letters of collaboration/support

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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**ADMINISTRATIVE NOTE:**  
 During the review of this application, reviewers and/or NIH staff noted that one or more biosketches did not comply with the required format (NOT-OD-15-032). An electronic notification has been sent to the contact Program Director/Principal Investigator and Signing Official for this application, to ensure that future applications use the correct biosketch format. NIH has the authority to withdraw such applications from review or consideration for funding.

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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The City College of New York School of Medicine:  
 “Opportunities for NIH Research Funding and Best Practices for Competitive Applications”  
 November 11, 2021

### Complete the Grant Application

- Review the application instructions
- Identify the different components
- Create a checklist (sequence/date of completion)
- Create an outline
  - Content, Length of section (*vis a vis* page limits)
- Identify and delegate responsibilities for the different components
  - Technical/Scientific
  - Administrative – e.g. budget
  - Regulatory
  - Draft letters of collaboration/support

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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### Complete the Grant Application

- Confirm page limits for each component
- Create a schedule for any required meetings
- Determine:
  - Shared computer drive/folders
  - Naming of files (e.g., by version # or date)
  - Track changes?
  - Font, margin, format of literature citation
- Set a firm time-line for each responsibility
  - Writing milestones
  - Absolute deadline date for final compilation

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

200

### Complete the Grant Application

- Read instructions
- Never assume that reviewers “will know what you mean”
- Refer to literature thoroughly and thoughtfully
- Explicitly state the rationale of the proposed investigation (“the hypothesis of my study is...”)
- Discuss limitations and potential “challenges” and how these will be addressed (e.g., “alternate approaches”)
- Include well-designed tables and figures
- Present an organized, lucid write-up (use an outline)
- Ask colleagues (“pseudo reviewers”) to review/comment
- “See” application from reviewer’s perspective

201

### Complete the Grant Application

- Read instructions
- Never assume that reviewers “will know what you mean”
- Refer to literature thoroughly and thoughtfully
- Explicitly state the rationale of the proposed investigation (“the hypothesis of my study is...”)
- Discuss limitations and potential “challenges” and how these will be addressed (e.g., “alternate approaches”)
- **Include well-designed tables and figures**
- Present an organized, lucid write-up (use an outline)
- Ask colleagues (“pseudo reviewers”) to review/comment
- “See” application from reviewer’s perspective

202

### Include Well-Designed Tables and Figures

- Include explanatory caption with the figure (not buried in text)
- Not overly complicated
- Informative, even if printed in black and white
  - Relying too much on colors may be problematic
- Easy for the reviewers to read and understand
- Not too small (including text)
- Not every figure from a presentation (oral, poster) is appropriate for a grant application
- Tips:
  - Bold label in text (e.g., **Fig. 4**) so it’s easier for reviewers to locate relevant text for individual Figure
  - Try to have Figure and relevant text on the same page

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

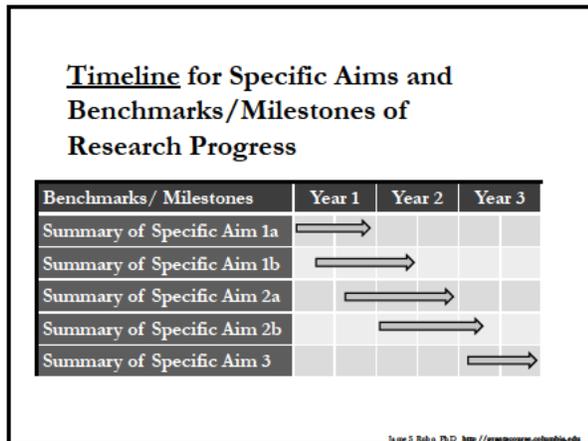
203

### Complete the Grant Application

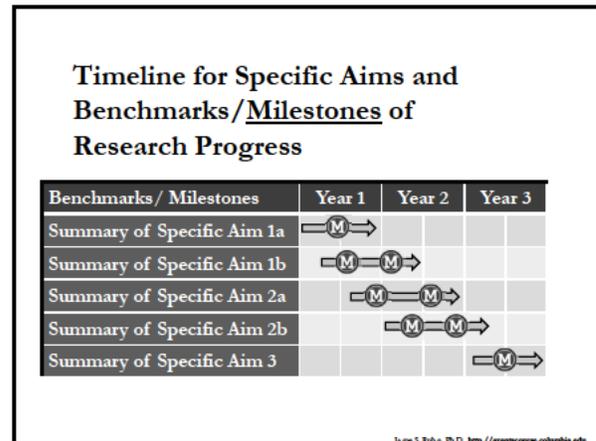
- Read instructions
- Never assume that reviewers “will know what you mean”
- Refer to literature thoroughly and thoughtfully
- Explicitly state the rationale of the proposed investigation (“the hypothesis of my study is...”)
- Discuss limitations and potential “challenges” and how these will be addressed (e.g., “alternate approaches”)
- Include well-designed tables and figures
- Present an organized, lucid write-up (use an outline)
- Ask colleagues (“pseudo reviewers”) to review/comment
- **“See” application from reviewer’s perspective**

204

The City College of New York School of Medicine:  
 “Opportunities for NIH Research Funding and Best Practices for Competitive Applications”  
 November 11, 2021



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- ### Specific Aims: Milestones
- (M) Specific Aim 1a Milestone:
  - (M) Specific Aim 1b Milestone #1:
  - (M) Specific Aim 1b Milestone #2:
  - (M) Specific Aim 2a Milestone #1:
  - (M) Specific Aim 2a Milestone #2:
  - (M) Specific Aim 2b Milestone #1:
  - (M) Specific Aim 2b Milestone #2:
  - (M) Specific Aim 3 Milestone:

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- ### Elements of a Good Proposal
- Feasible
  - Relevant
  - Unique
  - Innovative
  - Clear
  - Brief
  - Consistent

208

**Anticipate Questions  
and  
Answer them before  
they are asked**

209

- ### Don't Do the Minimum
- “Optional”: Does not mean don't do
  - PHS Assignment Request Form: Request an Institute, specific Study Section, reviewers' areas of expertise
  - F and K applications:
    - 3-5 Letters of Reference; May submit up to 5 strong letters
  - Research applications:
    - Letters of Support: e.g., from collaborators, core facility directors, provider of a “unique research resource” (in some cases, would also include Biosketch)
  - When appropriate, fill the page – 1/2 page of text means you have nothing more to say
  - K awards: “10. Description of Institutional Environment”

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The City College of New York School of Medicine:  
“Opportunities for NIH Research Funding and Best Practices for Competitive Applications”  
November 11, 2021

**Avoid the 3 D's!!**  
**Day of Deadline Drama!!**

- Missing/Incomplete required component
- Missing/Incomplete component that would have made the application more competitive
- Just realized that research involves human subjects
- Problem with research compliance issue
- Problem with the budget
- Missing signature
- Component does not meet formatting requirements

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

211

**From:** YYYY <YYYY@cumc.columbia.edu>  
**Sent:** Tuesday, June 16, 2020 4:50 PM  
**To:** a number of recipients  
**Cc:** a number of recipients  
**Subject:** URGENT: DUE today before 5pm Dr. ZZZ's proposal, [application ID #]  
**Importance:** High

Hello XXXX,

[We have less than 10 minutes (must be done by 5pm)] or Dr. ZZZ's DOD ... approved.  
Please confirm by email once you have approved this as this is extremely urgent.

Thank you!

Regards,  
YYYY

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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**Investigator**

- Competent
- Enthusiastic
- Thorough
- Professional

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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**Besides Funding....**

- Diversity and Inclusion are Important
- Role Models are Important
- Mentors are Important
- Colleagues are Important
- Be Open to New Ideas and Challenges
- Take Advantage of Unique Opportunities
- Networking – whether by accident or on purpose - is Important

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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**Common Problems with Grant Applications from New Investigators**

- Does not address/follow funding agency's mission, specific instructions, budget limits, etc.
- Overly ambitious
  - e.g., \$, time, expertise, career level, resources
- Fishing expedition
- Not hypothesis driven
- Descriptive, not mechanistic project
- No or insufficient preliminary data
  - Demonstrates feasibility of project, scientifically as well as by investigator's team

Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

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**Common Problems with Grant Applications from New Investigators**

- Study design
  - e.g., Control groups(s), Unfocussed
- Issues with Statistical aspects/Power analysis/Data analysis
- Does not adequately describe access to “research resources”
- Unrealistic budget (too large or too small)
- Methodologies beyond the expertise of investigator or research team
- Not independent of previous mentor's research

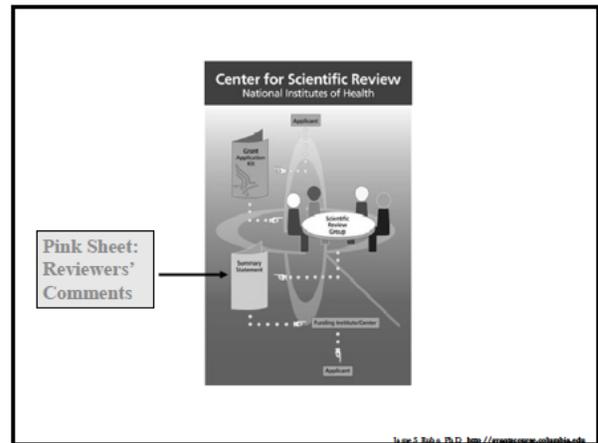
Jaime S. Rubin, Ph.D. <http://grantscourse.columbia.edu>

216

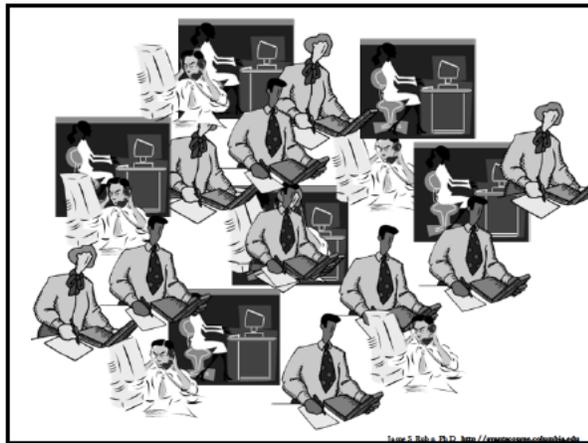
# The City College of New York School of Medicine: "Opportunities for NIH Research Funding and Best Practices for Competitive Applications" November 11, 2021



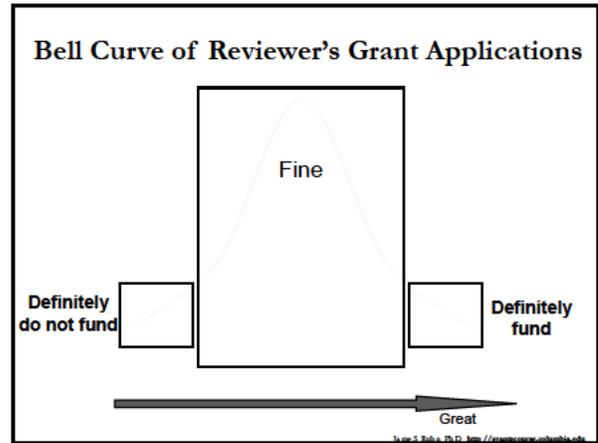
217



218



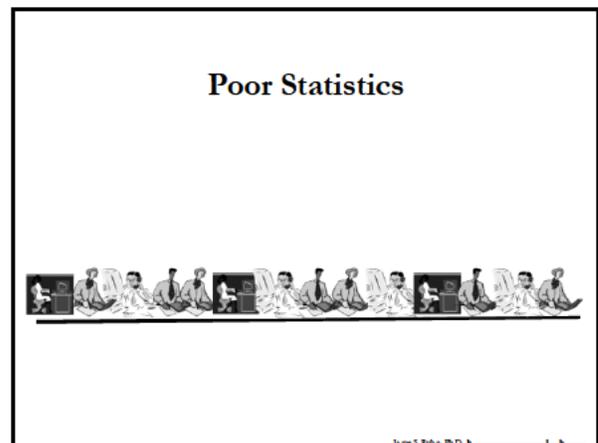
219



220

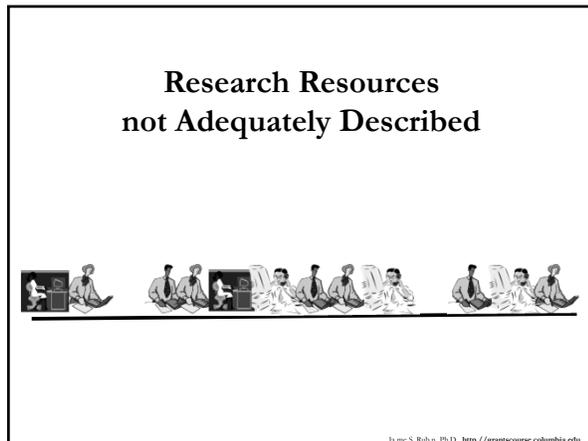


221

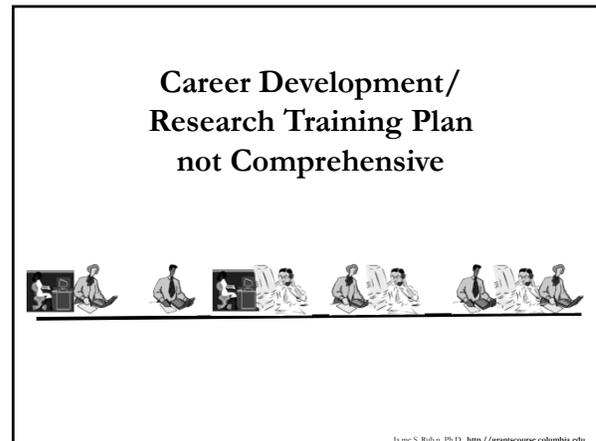


222

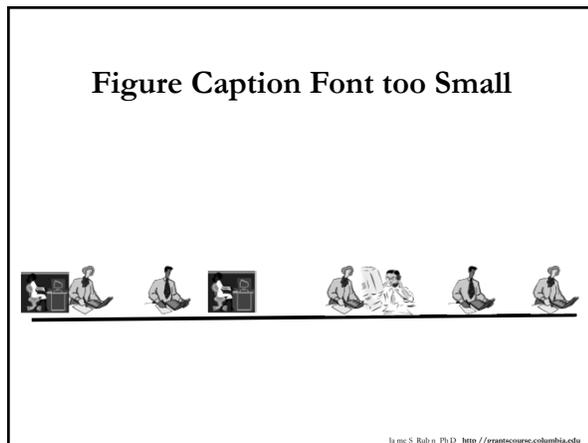
The City College of New York School of Medicine:  
“Opportunities for NIH Research Funding and Best Practices for Competitive Applications”  
November 11, 2021



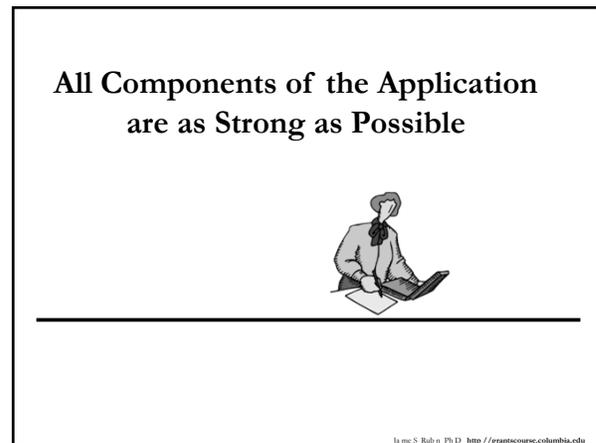
223



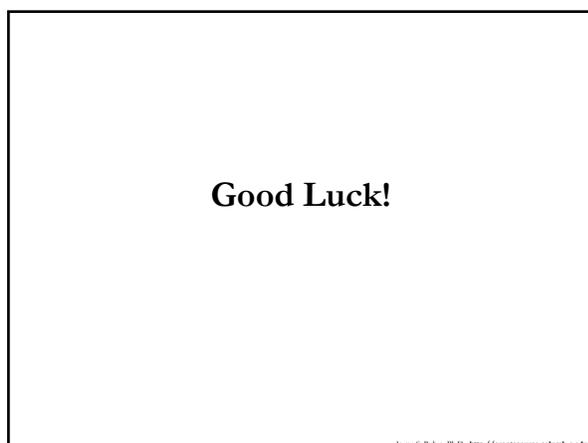
224



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**From:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Sent time:** 11/15/2021 10:51:42 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>; Hoau-yan Wang  
**Cc:** Weerd-Wilson, Donna (ELS-AMS) <D.Weerd-Wilson@elsevier.com>  
**Subject:** [EXTERNAL] Suspicious figures in your Neuroscience 2005 paper

---

Dear Drs. Wang and Burns,

Thanks very much for your responses, Please be advised that we have requested information from Professor Wesson on the research that CUNY appears to be conducting. In the mean time, we decided to publish an expression of concern until a conclusion arises from this investigation. This is the text of the note:

## Expression of concern

### **Ultra-low-dose naloxone suppresses opioid tolerance, dependence and associated changes in mu opioid receptor-G protein coupling and G $\beta$ y signaling**

[H.-Y.Wang](#), [E.Friedman](#), [M.C. Olmstead](#), [L.H.Burns](#)

Neuroscience [Volume 135, Issue 1](#), 2005, Pages 247-261. <https://doi.org/10.1016/j.neuroscience.2005.06.003>

The Editor in Chief would like to note an expression of concern related to the above-mentioned publication, arising from the apparent duplication and insertion of spurious bands in Western Blots that raise concerns about the data in the article. Upon request to the authors, no evidence has so far been submitted to the journal to confirm that these bands are authentic, instead the author informed us that this and other issues are currently under investigation by the academic authorities at the City University of New York (CUNY). The Editor in Chief and Publisher await the outcome of that investigation before taking further action.

I hope you understand that we must keep our readers informed of any vicissitudes that may arise from the data published in the Journal.

Best regards,

Juan

Prof. Juan Lerma  
**Editor-in-Chief of Neuroscience, the IBRO Journal.**  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39



[Brain Imaging Special Issue](#)

On 30 Sep 2021, at 15:35, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

It is not appropriate to call these figures fraudulent before any investigation. This has been guilty until proven innocent. We have already responded to JNS with original blots (exonerating claims of fraud) and a corrected IHC figure that was human error. We are having trouble accessing files for this 16-year-old paper. Hopefully Dr. Wesson can be helpful to you.

Thank you,  
Lindsay

---

**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>  
**Sent:** Thursday, September 30, 2021 8:09 AM  
**To:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Cc:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Dr. Gomez,

Sorry for my late reply. Please contact Dr. Rosemarie Wesson.

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

Thank you.

Sincerely,

Hoau-Yan Wang

---

**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Sent:** Monday, September 27, 2021 9:01 AM  
**To:** Lindsay Burns  
**Cc:** Hoau-yan Wang  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Burns,

Thanks very much for your email. Before making any further movement, I wonder whether you could please

provide the name of the CUNY committee and a contact person.

Thanks very much.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

<image001.jpg>

[Brain Imaging Special Issue](#)

On 20 Sep 2021, at 21:34, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

Dr. Wang has handed over all electronic files for an investigation. CUNY has committed to making their findings of this investigation public. I do not have any files from this paper that is 16 years old.

Thank you,  
Lindsay Burns

**Lindsay H. Burns, PhD**

SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)  
<image001.png>

---

**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>  
**Sent:** Monday, September 20, 2021 1:30 PM  
**To:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>  
**Subject:** Fw: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I don't have access to anything at the moment. Can you please help with dealing with this.

Thanks.

Best,

Hoau

---

**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Sent:** Wednesday, September 15, 2021 7:35 AM  
**To:** Hoau-yan Wang  
**Cc:** Weerd-Wilson, Donna (ELS-AMS)  
**Subject:** [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Wang,

It has been brought to our attention that several figures from your 2005 Neuroscience paper (<https://doi.org/10.1016/j.neuroscience.2005.06.003>) have problems that make some figures

fraudulent. Please see <https://pubpeer.com/publications/5E71DFFFC843817787A90968A16765> for understanding what the problems are. I have personally checked these issues and I find them reasonable source of concern so I am requesting your collaboration to clarify the situation, as the Ctte of Publication Ethics (COPE) requires.

We will wait to a maximum of 30 days for your response. In case we don't have a reasonable explanation, we will proceed to retract your paper from our Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

[The Neurobiology of Social and Affective Touch](#)

<PastedGraphic-5.tiff>

**From:** Marc Scullin

**Sent time:** 11/15/2021 11:01:07 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 11/12/2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending November 12, 2021. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 11/12/2021, [Click HERE](#)

## Funding Opportunities

- [Innovative Screening Approaches and Therapies for Screenable Disorders in Newborns \(R01 - Clinical Trial Optional\)](#)  
(PAR-21-353)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 05, 2024
- [Innovative Screening Approaches and Therapies for Screenable Disorders in Newborns \(R03 - Clinical Trial Optional\)](#)  
(PAR-21-354)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 16, 2024
- [Innovative Screening Approaches and Therapies for Screenable Disorders in Newborns \(R21 - Clinical Trial Optional\)](#)  
(PAR-21-355)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): November 16, 2024
- [Ultra-Rare Gene-based Therapy \(URGenT\) Network Resource Access \(X01, Clinical Trial Not Allowed\)](#)  
(PAR-22-028)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): September 30, 2024
- [Translational Efforts to Advance Gene-based Therapies for Ultra-Rare Neurological and Neuromuscular Disorders \(U01 - Clinical Trial Optional\)](#)  
(PAR-22-030)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): June 07, 2024

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 11/16/2021 03:54:23 PM  
**To:** Juan Lerma Gomez <jlerma.nsc@umh.es>; Hoau-yan Wang  
**Cc:** Weerd-Wilson, Donna (ELS-AMS) <D.Weerd-Wilson@elsevier.com>  
**Subject:** [EXTERNAL] RE: Suspicious figures in your Neuroscience 2005 paper  
**Attachments:** Guidelines since 2014.docx Acta Pharmacologica Sinica.pdf JBC.pdf

Dear Juan,

Thanks for speaking with me again today. We are still looking for the original blots in backup drives, since the original hard drive melted years ago. In the meantime, attached are the guidelines that we could find about WB images in publications. These guidelines were not implemented until 2014, in response to a meeting of NIH and Science and Nature.

Here are two commentaries by another Western blot expert who does ~1000 blots per year, refuting these allegations:

<https://ad-science.org/2021/10/21/notes-from-a-molecular-biologist/>

<https://ad-science.org/2021/10/21/of-shorts-and-blots/>

POL 87(2)(d)

Thanks again, and we will see if we can find and return any original blot images for you.

Lindsay

---

**From:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Sent:** Monday, November 15, 2021 9:52 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>; Hoau-yan Wang <hywang@med.cuny.edu>  
**Cc:** Weerd-Wilson, Donna (ELS-AMS) <D.Weerd-Wilson@elsevier.com>  
**Subject:** Suspicious figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks very much for your responses, Please be advised that we have requested information from Professor Wesson on the research that CUNY appears to be conducting. In the mean time, we decided to publish an expression of concern until a conclusion arises from this investigation. This is the text of the note:

## Expression of concern

### Ultra-low-dose naloxone suppresses opioid tolerance, dependence and associated changes in mu opioid receptor-G protein coupling and G $\beta$ signaling

[H.-Y.Wang, E.Friedman, M.C.Olmstead, L.H.Burns](#)

Neuroscience [Volume 135, Issue 1](#), 2005, Pages 247-261. <https://doi.org/10.1016/j.neuroscience.2005.06.003>

The Editor in Chief would like to note an expression of concern related to the above-mentioned publication, arising from the apparent duplication and insertion of spurious bands in Western Blots that raise concerns about the data in the article. Upon request to the authors, no evidence has so far been submitted to the journal to confirm that these bands are authentic, instead the author informed us that this and other issues are currently under investigation by the academic authorities at the City University of New York (CUNY). The Editor in Chief and Publisher await the outcome of that investigation before taking further action.

I hope you understand that we must keep our readers informed of any vicissitudes that may arise from the data published in the Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member



[Brain Imaging Special Issue](#)

On 30 Sep 2021, at 15:35, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

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Thank you,  
Lindsay

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**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>  
**Sent:** Thursday, September 30, 2021 8:09 AM  
**To:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Cc:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Dr. Gomez,

Sorry for my late reply. Please contact Dr. Rosemarie Wesson.

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

Thank you.

Sincerely,

Hoau-Yan Wang

---

**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Sent:** Monday, September 27, 2021 9:01 AM  
**To:** Lindsay Burns  
**Cc:** Hoau-yan Wang  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Burns,

Thanks very much for your email. Before making any further movement, I wonder whether you could please provide the name of the CUNY committee and a contact person.

Thanks very much.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

<image001.jpg>  
[Brain Imaging Special Issue](#)

On 20 Sep 2021, at 21:34, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

Dr. Wang has handed over all electronic files for an investigation. CUNY has committed to making their findings of this investigation public. I do not have any files from this paper that is 16 years old.

Thank you,  
Lindsay Burns

**Lindsay H. Burns, PhD**  
SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)  
<image001.png>

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**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>

**Sent:** Monday, September 20, 2021 1:30 PM

**To:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>

**Subject:** Fw: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I don't have access to anything at the moment. Can you please help with dealing with this.

Thanks.

Best,

Hoau

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**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>

**Sent:** Wednesday, September 15, 2021 7:35 AM

**To:** Hoau-yan Wang

**Cc:** Weerd-Wilson, Donna (ELS-AMS)

**Subject:** [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Wang,

It has been brought to our attention that several figures from your 2005 Neuroscience paper (<https://doi.org/10.1016/j.neuroscience.2005.06.003>) have problems that make some figures fraudulent. Please see <https://pubpeer.com/publications/5E71DFFFC843817787A90968A16765> for understanding what the problems are. I have personally checked these issues and I find them reasonable source of concern so I am requesting your collaboration to clarify the situation, as the Ctte of Publication Ethics (COPE) requires.

We will wait to a maximum of 30 days for your response. In case we don't have a reasonable explanation, we will proceed to retract your paper from our Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

[The Neurobiology of Social and Affective Touch](#)

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## EDITORIAL

## A brief guide to good practices in pharmacological experiments: Western blotting

*Acta Pharmacologica Sinica* (2021) 42:1015–1017; <https://doi.org/10.1038/s41401-020-00539-7>

Western blotting (WB) is an antibody-based experimental technique used to detect and quantify target proteins, which are often within a complex mixture extracted from cells or tissue. Although there are many new alternative technologies, such as enzyme-linked immunosorbent assay (ELISA), immunofluorescence, and mass spectrometry (MS), they all have their own limitations to some extent. ELISA lacks loading controls, immunofluorescence is an in situ technique and is semiquantitative, while MS is expensive and depends on the experimental technique and conditions. Therefore, WB remains the most commonly used methodology in the lab for protein detection. However, concerns about WB have been voiced by many scientific journals in an effort to reduce potential mistakes and increase reproducibility [1]. Here, we will focus on some essential caveats during the WB experiment. This guide, therefore, aims to provide an updated and more concise and useable reference for future experiments and paper writing.

WB includes the following steps. First, proteins are separated from the mixture by sodium dodecyl sulfate–polyacrylamide gel electrophoresis according to their molecular weights. Next, the separated proteins are transferred and bound to a solid membrane. Then, the target protein on the membrane is detected by the immunological method. The identification of a specific protein is based on two parameters: molecular weight and signal intensity. Molecular weight could be estimated by prestained molecular weight markers. The signal is determined by a secondary antibody following the addition of primary antibodies to detect the protein blotted onto the membrane.

Since WB involves multiple steps for detection of different proteins, there is no one particular set of optimal conditions suitable for all proteins. Researchers usually spend considerable time optimizing the conditions to obtain the best signal-to-noise ratios, yet difficulties persist in obtaining consistent and high-quality results. Many specific techniques used in the experiment influence the result of WB, among which the experimental controls, the characterization of antibodies, the choice of loading controls, and the image processing and presentation are the most noticeable challenges. Next, we will discuss those important aspects of WB.

Sample preparation will directly affect the quality of the results, so the choice of correct lysis buffer is a critical step. In general, lysis buffers containing nonionic detergents such as NP-40 or Triton X-100 are sufficient to release proteins from cells, while ionic detergents such as SDS and sodium deoxycholate can be considered for harsh extraction conditions. Thus, the most commonly used commercial lysis buffers are radioimmunoprecipitation assay buffer containing SDS and NP-40 buffer without SDS. In special cases, guanidine-HCl, a chaotropic agent, can be added into lysis buffer to denature oligomerized proteins into their native conformations. Moreover, proteolysis could be inhibited by protease inhibitors, such as PMSF, pepstatin, and

EDTA; and protein dephosphorylation could be prevented by phosphatase inhibitors, such as NaF and  $\text{Na}_3\text{VO}_4$ . Thus, the appropriate commercial protease inhibitor cocktail could be used according to specific needs.

After sample lysis, the protein concentration is measured before the next procedure. Various methods for protein concentration detection can be applied, including the Bradford assay, Lowry assay, and bicinchoninic assay (BCA). The Bradford assay is based on the absorption of the dye Coomassie Blue G-250 by proteins. The principles of the Lowry assay and BCA assay are similar and rely on color development from the Biuret reaction based on the concentrations of the proteins dissolved in samples. The advantages of the Bradford assay are that it is easy and quick to perform with one reagent, while the advantages of the Lowry assay and BCA assay are their extreme sensitivity and improved compatibility with a wide range of detergents (SDS, Triton X-100, Tween 20, etc.).

It is important to set both positive and negative controls for the detected proteins to validate the WB results. Genetically modified animal tissue or cells are suggested as choices for controls. We can verify the correct molecular weight by comparing the wild-type sample with the knockout or knockdown animal or cell sample. Controls lacking the primary antibody or the blocking peptide of the antibody can verify the specificity of the antibody used in WB. Although the above-mentioned controls may not always be available for all proteins, positive and negative controls need to be included as much as possible.

The selectivity of antibodies directly affects WB results, and poor selectivity may lead to the misinterpretation of the results. There are currently databases that can be used for choosing characterized antibodies with high selectivities, such as Antibodypedia (<https://www.antibodypedia.com/>), the Human Protein Atlas (<http://www.proteinatlas.org/>), and the Antibody Registry (<https://antibodyregistry.org/>). For unvalidated antibodies, there are suggested methodologies to validate the selectivity of the antibodies [2]. These methods include detection of whether the signal is eliminated or significantly reduced after genetic knockout or knockdown of the target gene; analysis of the correlation between WB signals and signals of other detection methods (e.g., MS) in a set of different samples with variable expression of the target protein; analysis of the correlation of protein levels by using two or more independent antibodies targeting different epitopes of the same protein; expression of the target protein with a tag, and analysis of the correlation between antibody labeling and the detection of the tag. If the results are highly correlated, then the antibody is validated for WB analysis.

Usually, there are multiple secondary antibodies suitable for the subsequent detection of the target protein, and the selection can be optimized in specific experiments. When selecting a secondary antibody, both the type of primary antibody and the requirements of subsequent detection schemes should be considered comprehensively:

- (1) Species source of the primary antibody: the reactivity of the secondary antibody should be consistent with the species

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source of the primary antibody used. For example, if the primary antibody is a mouse-derived monoclonal antibody, an anti-mouse secondary antibody (goat anti-mouse or rabbit anti-mouse) should be selected.

- (2) Type of primary antibody: the secondary antibody must match the class or subclass of the primary antibody. This is usually applicable for monoclonal antibodies. Polyclonal antibodies are mainly IgG immunoglobulins, so the corresponding secondary antibodies are anti-IgG antibodies. If the primary antibody is mouse IgM, then the corresponding secondary antibody should be anti-mouse IgM. If the primary monoclonal antibody is of a certain subclass of mouse IgG (IgG1, IgG2a, IgG2b, or IgG3), then almost all anti-mouse IgG can bind to it, or the secondary antibody can be selected to specifically target this subclass. If the type of the primary antibody is not clear, IgG against the corresponding species can be used.
- (3) Species source of the secondary antibody: there is usually no predictable connection between species source and the quality of the secondary antibody. However, the use of secondary antibodies from the same species as the primary antibodies should be avoided, especially in double-labeling experiments. If one of the primary antibodies is derived from goat, whereas the other is derived from mice, the corresponding secondary antibodies must be anti-goat and anti-mouse secondary antibodies, respectively. The secondary antibody cannot be derived from goat or mice.
- (4) Coupling of probes to the secondary antibody: probes coupled to secondary antibodies mainly include enzymes (such as horseradish peroxidase and alkaline phosphatase), fluorescent molecules (FITC, rhodamine, Texas Red, PE, Dylight, etc.), biotin, and gold particles. The probes can be selected according to the detection system used for WB. For WB and ELISA, the most commonly used secondary antibody is an enzyme-labeled secondary antibody, while cell or tissue labeling experiments (cellular immunocytochemistry, histoimmunocytochemistry, and flow cytometry) usually use fluorescent molecule-labeled secondary antibodies.

Another critical issue is the selection of the loading control, which has been widely used in the normalization of WB results to adjust for systematic differences between samples or even between experiments. Housekeeping proteins, such as  $\beta$ -actin and GAPDH, have been commonly used as loading controls. However, the expression of these proteins can change under certain conditions [3, 4]. The selected housekeeping proteins need to be proven stable under the experimental conditions. An alternative to the use of a specific protein as the loading control is the staining of total protein. Some methods used for staining of total protein on the membrane, such as Ponceau S [5] and Fast Green [6], have been found to be reliable as loading controls. Ponceau S is the most commonly used removable stain and can be conveniently used before immunodetection, but it is relatively insensitive. Fast Green is a more permanent dye used for staining in histology and electrophoresis. It cannot be easily removed and may inhibit subsequent immunodetection. Alternatively, staining with Fast Green after immunodetection has been used in some recent publications. Moreover, some housekeeping proteins are also used as markers for subcellular compartments according to their intracellular distribution [7] (Table 1).

Therefore, to achieve reproducible WB results, the following information should be provided in "Materials and Methods" of a paper:

- (1) The primary antibody species (for monoclonal or polyclonal antibodies), isotype (IgG, IgY, etc.), and epitopes generated.
- (2) Secondary antibody species, isotype, and labeling.
- (3) Source of the primary and secondary antibodies; catalog

**Table 1.** Markers for subcellular compartments.

Compartments	Markers
Nucleus	Histone H4, Lamin B1, TCF4, RanBP3
Cytosol	GAPDH
Cytoskeleton	Actin, Tubulin, Vimentin, $\alpha$ actinin
Plasma membrane	Caveolin, Cadherins, LRP6, Flotillin
Lysosome, Late endosome	Lamp1
Early endosome	EEA1
Golgi	Golgin97
Mitochondria	Tom20, COX IV, VDAC1
Endoplasmic reticulum	Calreticulin, Calnexin

and lot numbers are needed if they were obtained from a commercial company.

- (4) Dilution and incubation conditions of the primary and secondary antibodies.
- (5) Type of blotting membrane (nitrocellulose, polyvinylidene fluoride, etc.).
- (6) Blocking agents (bovine serum albumin (0.2%–5.0%), nonfat milk, casein, gelatin, etc.).

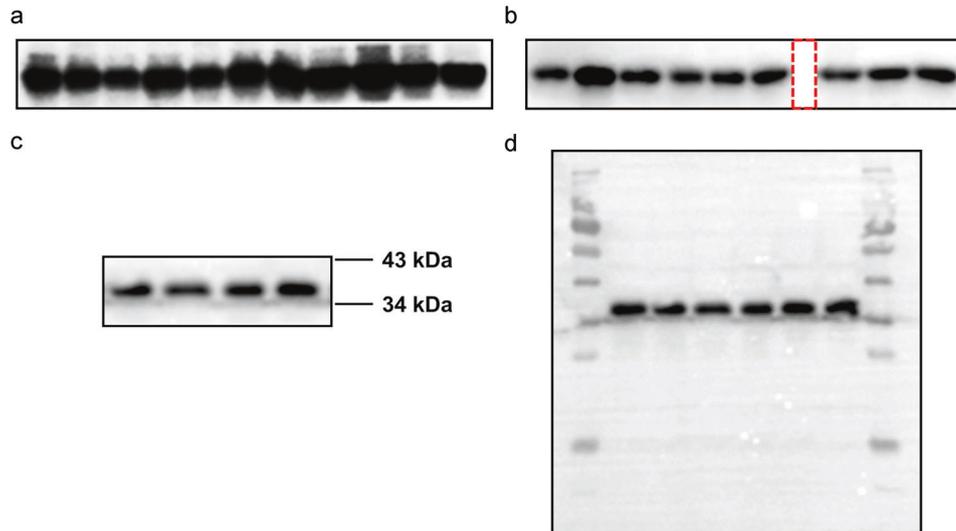
The most critical rule for image processing and presentation is to maximally preserve the integrity of the original immunoblots. Full scans or images of uncropped blots should be provided (as supplementary files) to reviewers and editors during the submission of papers. If pre-cut blots are used for the antibody treatment, this must be clearly stated and justified by the authors in the Methods section or figure legends. In addition, the number of repetitions performed for the same WB experiment (usually more than two) should also be stated, especially when representative images from only one experiment are shown.

Oversaturated exposure of blots should be avoided to maintain the band signal intensity (expressed either as optical density or fluorescence units) in the linear range for quantitation. Trial experiments aiming to generate a standard curve are recommended, especially when new antibodies or methods are employed. Fig. 1a shows an example of oversaturated bands, which may have masked or at least reduced the differences among samples.

Comparisons (whether statistical or not) between bands and normalization to loading controls should only be conducted on the same blot. In case the number of samples exceeds the capacity of one single gel, the same control sample in the exact same amount can be included on separate gels. However, comparison with this control sample should still be limited to samples within the same blot.

Separate blots should never be merged into one image. If multiple blots are organized side by side in one figure panel, there should be clearly visible space between them (as shown in Fig. 1b). If certain lanes contain data not relevant to the topic, they can be cut out from the blot, but the full blot should still be provided to editors or reviewers according to the journals' requirements (Fig. 1c, d). However, if these irrelevant lanes were located in the middle of a blot, they should not be simply removed. In this case, the gel should be rerun with reorganized samples. The positions of molecular weight markers should be shown or marked on all the blot images. If the blots have been cropped horizontally, at least two neighboring marker positions (i.e., above and below the bands) should be indicated, as shown in Fig. 1c.

Any image adjustments (e.g., brightness, contrast, rotation, and resizing) should be applied to the whole blot (not just a certain portion of it) to ensure that no specific feature of the original data



**Fig. 1 Representative WB bands.** **a** Oversaturated bands in the WB panel. **b** The space (red dotted line) indicates blot splicing. **c** The cut blot. **d** The full blot.

is eliminated or misrepresented. Figures in TIFF format are preferred. For WB images, a minimum resolution of 300 dpi is required.

#### ADDITIONAL INFORMATION

**Competing interests:** The authors declare no competing interests.

Lu Tie<sup>1</sup>, Han Xiao<sup>2</sup>, Da-lei Wu<sup>3</sup>, Ye Yang<sup>4</sup> and Pei Wang<sup>5,6</sup>

<sup>1</sup>Department of Pharmacology, School of Basic Medical Sciences, Peking University and Beijing Key Laboratory of Tumor Systems Biology, Peking University, Beijing 100191, China; <sup>2</sup>Department of Cardiology and Institute of Vascular Medicine, Peking University Third Hospital, NHC Key Laboratory of Cardiovascular Molecular Biology and Regulatory Peptides, Key Laboratory of Molecular Cardiovascular Science, Ministry of Education, Beijing Key Laboratory of Cardiovascular Receptors Research, Beijing 100191, China; <sup>3</sup>Helmholtz International Lab, State Key Laboratory of Microbial Technology, Shandong University, Qingdao 266237, China; <sup>4</sup>School of Medicine & Holistic Integrative Medicine, Nanjing University of Chinese Medicine, Nanjing 210023, China; <sup>5</sup>Department of Pharmacology, Second Military Medical University, Shanghai 200433, China and <sup>6</sup>Department of Pharmacy, Shanghai Tenth People's Hospital, Tongji University School of Medicine, Shanghai 200072, China

Correspondence: Lu Tie (tielu@bjmu.edu.cn) or Han Xiao (xiaohan@bjmu.edu.cn) or Da-lei Wu (dlwu@sdu.edu.cn)

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# Transparency Is the Key to Quality

Amanda J. Fosang and Roger J. Colbran

A workshop held last June by the National Institutes of Health (NIH) Director's Office, Nature Publishing Group, and *Science* focused on the role that journals play in supporting scientific research that is reproducible, robust, and transparent. The "Principles and Guidelines for Reporting Preclinical Research" (<http://www.nih.gov/research-training/rigor-reproducibility/principles-guidelines-reporting-preclinical-research>) that emerged from the workshop have since been endorsed by nearly 80 societies, journals, and associations.

Rigorous, objective peer review was widely acknowledged as the key to publication of high quality science. The expert, dedicated members of the JBC Editorial Board provide an invaluable service to the community of JBC authors and readers by ensuring the rigor, reproducibility, and transparency of research reported in the Journal. Over the past year, the JBC Associate Editors have been working to make sure that JBC reviewing editors, and ultimately our readers, have the information they need from authors for rigorous evaluation of the scientific content of JBC manuscripts. This effort has led to extensive revisions of our Instructions for Authors (<http://www.jbc.org/site/misc/ifora.xhtml>) for reporting experimental uncertainty, animal studies, biological materials, immunoblot data, and imaging results.

The JBC has identified three major gaps in overall data reporting. We expect that filling these gaps will have an immediate impact on improving transparency in our journal. These gaps, which will be readily recognized by much of the bioscience community, include the need for (i) more complete disclosure of experimental design and reporting of experimental uncertainty and reproducibility, (ii) improved statistical and graphical presentation of quantitative data, and (iii) revised guidelines for the presentation and quantitation of immuno ("Western") blots.

## Experimental Design and Reporting of Experimental Uncertainty and Reproducibility

Editors, reviewers, and the general JBC readership want to know about the reproducibility and also the variation in the observations among multiple experiments. To this end it is critically important that the number of independent biological replicates, the number of technical replicates, and the number of repeated experiments are clearly separated and specified. Surprisingly, this simple rule is often broken or misrepresented. Sometimes, the value of  $N$  is, and can only be, one. An example of this is an experiment to compare drug treatments in a line of patient-derived stem cells. Although there may be numerous technical replicates for such an experiment, and the experiment could be repeated several times, the patient is one *independent biological sample*. As another example, if six metatarsals were harvested from the front paws of a single mouse and cultured as six individual explant cultures, the number of biological replicates (again, the value of  $N$ ) is equal to one, but with six technical replicates. The JBC now requires authors to include explicit information describing  $N$  and its value in the figure legends and to distinguish between the biological (independent) and technical replicates for each experiment. More uncertainty is generally seen in the former.

### Statistical and Graphical Presentation of Quantitative Data

Many experiments published in the JBC yield qualitative data that are not amenable to statistical analyses, *e.g.* electrophoresis, histology, chromatography, electron microscopy. In these cases authors need to clearly indicate the number of independent replicates that the figure represents. However, when quantitative data are presented, appropriate statistical analyses to portray experimental reproducibility and support an interpretation that experimental manipulations yield significant differences are needed. The JBC encourages the use of the 95% confidence interval (CI) as error bars because they are easier to interpret; the 95% CI is defined as the interval that encompasses 95 out of 100 independent samples from a population. Use of standard deviation (S.D.) or standard error of the mean (S.E.) is also permitted. Both S.E. and CI are inferential statistics, which are used to make inferences about the data; when  $N = 3$ , the 95% CI is  $\sim \text{mean} \pm 4 \text{ S.E.}$ , but when  $N \geq 10$ , the 95% CI is  $\sim \text{mean} \pm 2 \text{ S.E.}$

As a complementary measure to graphically improve transparency, the JBC now strongly encourages the use of scatter plots for small data sets (<30 independent samples) or box and whisker plots to compare large data sets. These plots, inclusive of appropriate error bars, provide more transparent information about the variability within the data than the ubiquitous dynamite plunger plots (bar graphs) that historically dominate scientific publications, including JBC (1). Statistical analyses of variation and precision for establishing differences between experimental groups can be reported in the same plot, preferably using the S.D. or 95% CI. The JBC now requires authors to include specific information describing experimental uncertainty and reproducibility of each data set in the figure legends.

### Presentation and Quantitation of Western Blots

Western blots have become a standard technology in the tool kit of most biology or biochemistry laboratories, particularly because commercial antibodies are now available for many proteins, even those that have barely appeared in the literature. The JBC requires users of Western blot technologies to define the species of origin and source of all antibodies used, including catalogue/lot numbers, in the "Experimental Procedures" section of their manuscripts. A description of the data supporting the specificity of all antibodies is required. In cases where novel antibodies are used, we are asking authors to describe how the antibody was made, including preparation and purification of the epitope/antigen, and also to provide data validating the specificity of the antibody. As far as possible, data showing loss of immunoreactivity in samples following genetic or other molecular modifications to the antigen are a welcome addition to confirm monospecificity of the antibodies. The specificity of antibodies designed to specifically detect post-translational modifications, *e.g.* methylation, oxidation, phosphorylation, glycosylation, or neoepitopes (2), should also be validated as appropriate and be reported.

An increasing number of journals, including the JBC, do *not* allow surreptitious splicing of Western blots. If it is essential to remove lanes from an original blot for presentation purposes, then the splice positions must be clearly marked and explained in the figure legend. Of course, splicing together lanes from more than one blot is not allowed under any circumstances.

Authors should also be careful to avoid "overcropping" sections of Western blots for presentation in figures. Sufficient surrounding background regions should be retained including the positions of at least one, but preferably more, molecular weight markers above and below the band of interest.

Quantitation of Western blots is not always required but it can be fraught with traps for the unwary investigator and often sparks lively debate among scientists. It is not uncommon to "correct" Western blot signals for protein loading by normalizing to a second Western blot for a housekeeper protein, *e.g.*  $\beta$ -actin,  $\alpha$ -tubulin, transferrin, GAPDH, HPRT1. The problem with this approach is that a linear relationship between signal intensity and the mass or volume of sample loaded must be confirmed for every antigen. This is further complicated by the fact that some detection methods, in particular enhanced chemiluminescence using x-ray film, have a very restricted linear range, and careful attention to the experimental conditions is necessary to ensure linearity. It is typically better to normalize Western blots using total protein loading as the denominator (3–11). To avoid potential pitfalls and with a focus on improving transparency, the JBC strongly recommends that authors describe their methods used to quantify signal intensity, how the linearity of signal intensity with antigen loading was established, and how protein loading was normalized between lanes. We prefer that signal intensities are normalized to total protein by staining membranes with Coomassie Blue, Ponceau S, or other protein stains, and we strongly caution against the use of housekeeping proteins for normalization, unless there is a clear demonstration that expression of the housekeeping protein is unaffected by the experimental treatments.

Authors should be prepared to submit raw data showing original Western blots or validating their reagents and quantitative analyses during the review of a manuscript upon request from the reviewers or an Associate Editor. JBC also reserves the right to digitally analyze all figures for undisclosed splicing of gels or other inappropriate image manipulation (<http://www.jbc.org/site/misc/ifora.xhtml#manipulation>).

It is worth reiterating a point made by other transparency advocates (12–15) that while statistics is a necessary mainstay for data interpretation by clinical researchers, psychologists, and epidemiologists, whose conclusions depend wholly on statistics, the interpretation of data in papers published in the biological sciences, including the JBC, do not always require sophisticated statistical analyses. JBC papers are selected because they provide novel and important mechanistic insights into cellular or biological processes at the molecular level. To this end, the JBC requires diligent data reporting and transparency so that readers, reviewers, and journal editors can identify sound papers with reliable data.

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*Acknowledgments—We acknowledge Prof. Susan Donath, University of Melbourne, Australia, and Prof. David Vaux, Walter & Eliza Hall Institute, Melbourne, Australia, for their advice and helpful discussions.*

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Publications have developed more stringent review guidelines for western blot data, based on recommendations arising from a 2014 meeting organized by the National Institutes of Health (NIH), and the journals Science and Nature.

<https://www.sciencedirect.com/science/article/pii/S0021925820394801?via%3Dihub>

Nature:

<https://www.nature.com/nature-portfolio/editorial-policies/image-integrity#electrophoretic-gels-and-blots>

## **Electrophoretic gels and blots**

- Quantitative comparisons between samples on different gels/blots are strongly discouraged; if this is unavoidable, the figure legend must state that the samples derive from the same experiment or parallel experiments and that gels/blots were processed in parallel.
- Re-arranged lanes that are non-adjacent in the gel must be clearly indicated in a manner that delineates the boundary between the lanes. Re-arrangement of lanes should be stated as such in the figure legend.
- Loading controls (e.g. GAPDH, actin) must be run on the same blot. When sample processing controls are run on different gels, they must be identified as such in the figure legend. Cropped gels in the paper must retain all important bands.
- High-contrast gels and blots are discouraged, as overexposure may mask additional bands.
- Authors should take care to check their manuscripts for the following (1) check figures for duplications (2) check blots and gels for splicing of lanes (3) indicate whether panels are sample processing or loading controls (4) ensure that the unprocessed scans provided match the figures.

J Mol Med (springer) :

<https://www.springer.com/journal/109/submission-guidelines>

Western blots and protein quantification

For manuscripts that contain cropped gels/blots, J Mol Med requests the additional submission of a file\* containing whole uncropped/unedited images of the original blots (for example Western blots) from which figures have been derived.

For studies reporting semi-quantitative analyses of immunoblots, authors should clearly explain how quantitative data were obtained, and how protein loading was normalized among lanes.

Housekeeping proteins should not be used for normalization without evidence that experimental manipulations do not affect their expression.

Authors must state the number of independent samples (biological replicates) and the number of replicate samples (technical replicates) and report how many times each experiment was repeated.

Key statements about increases, decreases, or lack of changes in protein abundance, phosphorylation, posttranslational modification, association, and activation must be supported by quantification of data amalgamated from at least 3 Western blots (that represent independent biological replicates) and statistical analysis where appropriate. Showing the densitometry from a single Western blot is not acceptable. When quantifying signals from lysates, the signal for the protein of interest must be normalized to that of a loading control. The signal for a phosphorylated form of a protein must be normalized to that for the total abundance of that protein, a requirement that also applies to other posttranslational modifications. When quantifying changes in protein-protein interactions, the signal for the immunoprecipitated protein must be normalized to that in the total lysate.

\*Please submit as Supplementary Figure(s). Each gel should be annotated as “full unedited gel for Figure X,” and the authors should highlight which lanes of the unedited gel correspond to those shown in the cropped images within the manuscript.

neuropharmacology

<https://www.elsevier.com/journals/neuropharmacology/0028-3908/guide-for-authors#txt5002>

## **Electrophoretic blots and gels**

Whilst *Neuropharmacology* appreciates the value of concise representation of electrophoretic blots or gels in the main figures of a manuscript, authors should provide the full, untruncated image of the gel or blot as a supplemental figure (DOC, PDF or PPT), not as a compressed file.

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 11/17/2021 11:51:44 AM  
**To:** Hoau-yan Wang  
**Subject:** [EXTERNAL] Re: Gel and blot-guidelines

---

Thanks. He confirmed that he does not care about that ridiculous claim. So sorry for all this time.

Lindsay

On Nov 17, 2021, at 10:41 AM, Hoau-Yan Wang <hywang@med.cuny.edu> wrote:

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Just hold on - I am getting somewhere for the blots. I had been on this for almost 20 hours.... I will NOT respond to the ridiculous claim that I reuse a portion of b-Actin from 2005 neuroscience paper for a 2010 paper.

Did JPAD make any announcement?

Thanks.

Hoau

Hoau

On Wed, Nov 17, 2021 at 10:52 AM Lindsay Burns <lburns@cassavasciences.com> wrote:

Hoau,

Are you still looking or do say at this point we do not have the 16-year-old images? I have to get back to him soon.

Lindsay

---

**From:** Hoau-Yan wang <[REDACTED]@gmail.com>  
**Sent:** Tuesday, November 16, 2021 12:07 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fwd: Gel and blot-guidelines

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Not until 2014, blots and individual protein bands were cut and paste to compose the representative figures. Many journals mostly the high profile ones will ask for whole blots if the reviewers want to see the whole instead of the strip of blots. That is the reason I show whole blots for the primary signals of interest but only show strips of loading controls (the primary targets of CP). They purposely mislead the laypersons about loading controls by saying the loading controls are the equivalence of control subjects in the clinical trials).

They flagged the merge of blots in large experimental sets that have more than 8 conditions that requires additional lands run on a different blot since the instigators have very limited experience if any in Western or any blotting.

In any case, let me know which figures in 2005 Neuroscience paper need to be addressed. As for the appear to be duplicated panels in 2008 plos one paper, we just leave it as it is - an honest mistake that doesn't influence a bit of conclusion.

Thanks.

Hoau

Sent from my iPhone

Begin forwarded message:

**From:** Zhe Pei <[REDACTED]@hotmail.com>  
**Date:** November 16, 2021 at 8:05:41 AM EST  
**To:** Hoau-Yan wang <[REDACTED]@gmail.com>  
**Subject: Gel and blot-guidelines**

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 11/17/2021 12:53:58 PM  
**To:** Juan Lerma Gomez <jlerma.nsc@umh.es>; Hoau-yan Wang  
**Cc:** Weerd-Wilson, Donna (ELS-AMS) <D.Weerd-Wilson@elsevier.com>  
**Subject:** [EXTERNAL] RE: Suspicious figures in your Neuroscience 2005 paper

---

Dear Prof. Lerma,

Dr. Wang has spent 20 hours looking for these 16-year-old files in back-up disks (since his hard drive was destroyed a decade or so ago), and he is making some progress. Please stay tuned. We hope that your statement can also address the other paper you examined of Dr. Wang that showed no evidence of duplication of bands.

Best regards,  
Lindsay

---

**From:** Juan Lerma Gomez <jlerma.nsc@umh.es>  
**Sent:** Monday, November 15, 2021 9:52 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>; Hoau-yan Wang <hywang@med.cuny.edu>  
**Cc:** Weerd-Wilson, Donna (ELS-AMS) <D.Weerd-Wilson@elsevier.com>  
**Subject:** Suspicious figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Drs. Wang and Burns,

Thanks very much for your responses, Please be advised that we have requested information from Professor Wesson on the research that CUNY appears to be conducting. In the mean time, we decided to publish an expression of concern until a conclusion arises from this investigation. This is the text of the note:

## Expression of concern

### **Ultra-low-dose naloxone suppresses opioid tolerance, dependence and associated changes in mu opioid receptor-G protein coupling and G $\beta$ $\gamma$ signaling**

[H.-Y.Wang](#), [E.Friedman](#), [M.C. Olmstead](#), [L.H.Burns](#)

Neuroscience [Volume 135, Issue 1](#), 2005, Pages 247-261. <https://doi.org/10.1016/j.neuroscience.2005.06.003>

The Editor in Chief would like to note an expression of concern related to the above-mentioned publication, arising from the apparent duplication and insertion of spurious bands in Western Blots that raise concerns about the data in the article. Upon request to the authors, no evidence has so far been submitted to the journal to confirm that these bands are authentic, instead the author informed us that this and other issues are currently under investigation by the academic authorities at the City University of New York (CUNY). The Editor in Chief and Publisher await the outcome of that investigation before taking further action.

I hope you understand that we must keep our readers informed of any vicissitudes that may arise from the data published in the Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39



[Brain Imaging Special Issue](#)

On 30 Sep 2021, at 15:35, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

It is not appropriate to call these figures fraudulent before any investigation. This has been guilty until proven innocent. We have already responded to JNS with original blots (exonerating claims of fraud) and a corrected IHC figure that was human error. We are having trouble accessing files for this 16-year-old paper. Hopefully Dr. Wesson can be helpful to you.

Thank you,  
Lindsay

---

**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>  
**Sent:** Thursday, September 30, 2021 8:09 AM  
**To:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Cc:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Dr. Gomez,

Sorry for my late reply. Please contact Dr. Rosemarie Wesson.

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

Thank you.

Sincerely,

Hoau-Yan Wang

---

**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Sent:** Monday, September 27, 2021 9:01 AM  
**To:** Lindsay Burns  
**Cc:** Hoau-yan Wang  
**Subject:** Re: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Burns,

Thanks very much for your email. Before making any further movement, I wonder whether you could please provide the name of the CUNY committee and a contact person.

Thanks very much.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

<image001.jpg>

[Brain Imaging Special Issue](#)

On 20 Sep 2021, at 21:34, Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)> wrote:

Dear Dr. Gomez,

Dr. Wang has handed over all electronic files for an investigation. CUNY has committed to making their findings of this investigation public. I do not have any files from this paper that is 16 years old.

Thank you,  
Lindsay Burns

**Lindsay H. Burns, PhD**  
SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)  
<image001.png>

---

**From:** Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>  
**Sent:** Monday, September 20, 2021 1:30 PM  
**To:** Lindsay Burns <[lburns@cassavasciences.com](mailto:lburns@cassavasciences.com)>  
**Subject:** Fw: [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I don't have access to anything at the moment. Can you please help with dealing with this.

Thanks.

Best,

Hoau

---

**From:** Juan Lerma Gomez <[jlerma.nsc@umh.es](mailto:jlerma.nsc@umh.es)>  
**Sent:** Wednesday, September 15, 2021 7:35 AM  
**To:** Hoau-yan Wang  
**Cc:** Weerd-Wilson, Donna (ELS-AMS)  
**Subject:** [EXTERNAL] Fraudulent figures in your Neuroscience 2005 paper

Dear Dr Wang,

It has been brought to our attention that several figures from your 2005 Neuroscience paper (<https://doi.org/10.1016/j.neuroscience.2005.06.003>) have problems that make some figures fraudulent. Please see <https://pubpeer.com/publications/5E71DFFFC843817787A90968A16765> for understanding what the problems are. I have personally checked these issues and I find them reasonable source of concern so I am requesting your collaboration to clarify the situation, as the Ctte of Publication Ethics (COPE) requires.

We will wait to a maximum of 30 days for your response. In case we don't have a reasonable explanation, we will proceed to retract your paper from our Journal.

Best regards,

Juan

Prof. Juan Lerma  
Editor-in-Chief of Neuroscience, the IBRO Journal.  
EMBO Member

Instituto de Neurociencias CSIC-UMH  
San Juan de Alicante, Spain

P.A.: Laura Navío, PhD  
[lnavio@umh.es](mailto:lnavio@umh.es)  
Tel: +34 965919238/39

[The Neurobiology of Social and Affective Touch](#)

<PastedGraphic-5.tiff>

**From:** Annabel Santana

**Sent time:** 11/18/2021 11:33:06 AM

**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Holly Atkinson; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters

**Subject:** FW: Links to details about New Deal for CUNY

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Dear Faculty,

On behalf of Prof. Itzhak Mano (PSC representative), please find below links to additional information about the *New Deal for CUNY* campaign, which Dr. Mano discussed briefly at last week's CSOM Faculty Meeting.

For more details or for questions re: other PSC matters, please contact Dr. Mano at [imano@med.cuny.edu](mailto:imano@med.cuny.edu).

a.s.

-----Original Message-----

From: Itzhak (Itzik) Mano

Sent: Wednesday, November 17, 2021 9:37 AM

To: Annabel Santana <santana@med.cuny.edu>

Cc: Dean (CUNY School of Medicine) <Dean-CSOM@med.cuny.edu>

Subject: Links to details about New Deal for CUNY

Dear Annabel,

On our last school meeting, Dean Green asked me about the New Deal for CUNY campaign, and I promised I will send out more info.

Do you think we could circulate the following links to the attendees of the meeting?

Many thanks

Itzik

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PSC CUNY - A New Deal for CUNY: for free tuition and more investment

<https://www.psc-cuny.org/clarion/april-2021/new-deal-cuny-free-tuition-and-more-investment>

Gotham Gazette - State Legislators, Advocacy Coalition Launch Push for 'New Deal for CUNY'

<https://www.gothamgazette.com/state/10143-state-legislators-push-new-deal-cuny-tuition-free>

Elements of A NEW DEAL FOR CUNY

<https://cunyrisingalliance.org/nd4csummary>

Senate Bill S4461 / Assembly Bill A5843 - Enacts The New Deal for CUNY

<https://www.nysenate.gov/legislation/bills/2021/s4461>

<https://www.nysenate.gov/legislation/bills/2021/a5843>

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Itzhak (Itzik) Mano, Ph.D.

Associate Medical Professor

Department of Molecular, Cellular and Biomedical Sciences Center for Discovery & Innovation, Cluster on Neural Development and Repair

The CUNY School of Medicine at City College & The CUNY Graduate Center The City University of New York

CDI building, Office: 3-382 Lab: 3-235

85 St. Nicholas Terrace, New York, NY 10031

E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu)

Office Phone:(212) 6507965 Lab Phone:(212) 6505334

[www.manolab.org](http://www.manolab.org)

**From:** Raquel Morales  
**Sent time:** 11/18/2021 03:29:30 PM  
**To:** Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**Cc:** Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** DEPARTMENTAL FACULTY MEETING

---

Dear All,

The faculty meeting will be held this Monday, November 22<sup>nd</sup> at 4PM.

Below is the zoom link:

Topic: MCBS Faculty Meeting  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
<https://zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)  
+13017158592,,3783139420# US (Washington D.C)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington D.C)  
+1 312 626 6799 US (Chicago)  
+1 669 900 9128 US (San Jose)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)

Meeting ID: 378 313 9420  
Find your local number: <https://zoom.us/u/adLxaYt1zx>

Best,  
Gonzalo

**From:** Raquel Morales  
**Sent time:** 11/22/2021 03:48:17 PM  
Hoau-Yan Wang [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Kaliris gmail [REDACTED]@gmail.com <[REDACTED]@gmail.com>;  
Dr. Broderick [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Rosemary Wieczorek [REDACTED]@outlook.com  
**To:** [REDACTED]@outlook.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres;  
Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow  
Kashfi [REDACTED]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia  
Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**Subject:** REMINDER: DEPT FAC MEETING  
**Attachments:** Meeting Minutes 10.6.21.pdf

---

Dear All,

This is a reminder for today's Departmental faculty meeting at 4pm.  
Last minutes are attached.

Best Regards,

*Raquel Morales*

Assistant to Chair  
Department of Molecular, Cellular & Biomedical Sciences  
CUNY School of Medicine  
160 Convent Ave, Harris Hall suite 202  
New York, NY 10031



# Meeting Minutes – MCBS Department Faculty Meeting

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**Location:** Zoom

**Date:** October 6, 2021

**Members Present on zoom**

- Gonzalo Torres-Dept. Chair- Organizer
- Paul Gottlieb
- Patricia Cortes
- Jose Cobo
- Gokhan Yilmaz
- Khosrow Kashfi
- Eitan Friedman
- John Martin
- Itzhak Mano
- João Nunes
- Kiran Matthews

- Geri Kreitzer
- Junghoon Kim
- Sanna Goyert
- Jun Yoshioka
- Linda Spatz
- Rosemary Wieczorek
- Ashiwel Undieh
- Carol Moore
- Kaliris Salas-Ramirez
- Lisa Coico
- Maria Lima

**Members not present**

- Hoau-Yan Wang
- Maria Felice Ghilardi
- Patricia Broderick
- Andreas Kottmann

**Other attendees**

- Raquel Morales

**The meeting was called to order at 4:05PM**

**Discussion:**

**Dr. Torres announcement**– Kaliris just received the 2021 Champions of Education Award from the Alliance for Quality Education for her continuous work and fight to make sure that students have access to a quality education.

**Kaliris Salas-Ramirez respond** - Thank you Dr. Torres. I am very humbled by this recognition. The Alliance for Quality Education has been fighting for 30 years to fully fund our Public schools and in that has championed different policies for equity in public education.

**Dr. Torres updates** – LCME visit went well according to some of you.

**Linda Spatz** - LCME recommend we bring back the basic science in our curriculum.

**Yilmaz/Goyert/Moore** – Discussed how to integrate the basic science, reviewing lectures and student responsibilities.

**Torres** – Reviews before exams is necessary for student to refresh their memories before an exam.

**Linda** - States that this will not take place until a year from now and the committee and the faculty would have to vote on it. She also states that she would gather all that are involved and will ask them for feedback before moving forward.

**Coico** - There is a big challenge because of the curriculum.

**Torres** – We also need more research opportunities.

**Lima** – The students are satisfied with how we work with them in research.

**Torres** – Teaching is a challenge for those who teach in person and online.

**Cobo** – A good number of students come in person. All the exams are in the campus.

**Matthews** – The lab is open for students in M1 and M2. They are tested during every model.

**Cortes** – The school are requiring all students should get the Covid-19 vaccinated.

**Torres** - The spring semester will be full in person teaching. An email will be coming soon to all. I will need three things. 1- Teaching evaluation forms 2- research hiring follow up and 3- discussion with the Dean on a new faculty line in our department.

**Cortes** – Minority hiring is necessary and we should be responsible in letting them know about the hiring package.

**Gottlieb** – the school budget is the problem.

**Spatz** – Ordering is always a problem.

**Torres** – I agree; this and the department offices should have full control of the ordering. With the new Dean, hiring packages will be another issue due to the new budget. Tax levy is a major issue. We know the problem and need solutions.

**Friedman** – There were always issues with the budget and managing. RF has a big input on research.

**Yilmaz**–Our Department is based on research. Teaching is a major question.

**Torres** – Primary research with teaching support.

**Mano** – Several CSOM faculty stepped down as our union representative for the PSC CCNY chapter. I was certified as a new rep for faculty & staff and as an *alternate* delegate to the PSC- wide delegate assembly (DA). I posted a group email to discuss this further.

**Torres** – Cortes and Kashfi still need one more person in the committee. We will discuss this further.

**The meeting adjourned at 5:28PM**

**From:** Itzhak (Itzik) Mano  
**Sent time:** 11/22/2021 05:13:43 PM  
Hoau-Yan Wang ([REDACTED]n@gmail.com) [REDACTED]@gmail.com>; Kaliris gmail [REDACTED]@gmail.com) [REDACTED]@gmail.com>; Dr.Broderick ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Rosemary Wieczorek ([REDACTED]@outlook.com)  
**To:** <[REDACTED]@outlook.com>; Raquel Morales; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi <[REDACTED]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**Subject:** Working draft for new teaching title proposal suggested for the new union contract  
**Attachments:** PSC CUNY Contract Lecturer Levels 11\_15\_21 CL IM.docx

---

Hi everyone,

I attach the current working draft of the proposal for a new Teaching Prof title with promotion and CCE. I look forward to your comments.

I am working to promote this through the union, while others are working at the faculty senate level. We are starting the discussion at the CCNY chapter of the union, but the ultimate intention is to bring it to the CUNY-wide contract.

In addition to our department, I already contacted our Dean, and chairs of CHASM, Med Ed, and the PA program, with initial information. I hope to be able to talk with people in these departments directly, and I'll mention this in the next school-wide meeting.

We can discuss it one-on-one, but maybe people would prefer to have a dedicated zoom meeting, or a committee for this - let me know what you find preferable.

As mentioned in today's meeting, I am also sending other updates on union issues to people who sign up to the Google group I set up for CSom PSC. So just a reminder - if you want to be on it, please send me a non-CUNY email address and I'll add you to the group (including HEOs & CLTs).

happy Thanksgiving!

Itzik

On 11/22/2021 3:48 PM, Raquel Morales wrote:

Dear All,

This is a reminder for today's Departmental faculty meeting at 4pm.  
Last minutes are attached.

Best Regards,

***Raquel Morales***

Assistant to Chair

Department of Molecular, Cellular & Biomedical Sciences

CUNY School of Medicine

160 Convent Ave, Harris Hall suite 202

New York, NY 10031

Renaming the Doctoral Lecturer series and establishing new titles for a Doctoral Lecturer series.

The Doctoral Lecturer Series will be renamed to Assistant Teaching Professor. In addition, two new titles will be added.

### **Associate Teaching Professor**

Doctoral Lecturer faculty who have attained CCE will be eligible for promotion to Associate Teaching Professor. The candidate shall present evidence of achievement following attainment of CCE. Three main criteria will be considered: 1. Teaching effectiveness; 2. Educational Leadership; and 3. Community service. Some departments may also use an additional criterion: 4. Grant support for pedagogy, research, or artistic endeavors. Examples for each criterion are indicated below, but specific criteria will be set by each department:

#### Teaching Effectiveness & Pedagogy

- a. Teaching of exceptional quality (e.g., receiving a college teaching award).
- b. Teaching courses so specialized that the courses cannot be taught by any other faculty member in the department.
- c. Design or implementation of new courses, independent of courses that were taught to achieve CCE.
- d. Presentation of new pedagogical methods at conferences.
- e. Implementation of new pedagogical methods.

#### Educational Leadership

- a. Supervision of undergraduate research projects.
- b. Supervision of undergraduate artistic endeavors.
- c. Supervision of undergraduate community projects.
- d. Evidence of commitment to diversifying the campus, such as visits to high schools, personal presentations to young applicants for college recruitment days, phone calls to prospective students.
- e. Participation on the College Board to develop AP exams.

#### Community Service (college, university, and public service)

- a. Effective service on departmental, college, and university committees.
- b. Implementation of lecture series to educate the community.
- c. Implementation of exercises/exhibits/etc. to educate the community.
- d. Implementation of teaching workshops for high school teachers on topics of expertise.
- e. Participate in outreach programs to high schools, such as serving as a judge at high school competitions.

(Optional: Department specific as appropriate) Grant support for pedagogy, research, or artistic endeavors

- a. Local grant support (e.g., PSC CUNY grants  $\leq$ \$12,000) for pedagogical research or artistic endeavors.

### **Teaching Professor**

Associate Teaching Professors will be eligible for promotion to Teaching Professor. The candidate must meet all the qualifications for an Associate Teaching Professor. In addition, the candidate must have established a reputation for continued excellence in teaching following promotion to Associate Teaching Professor. Three main criteria will be considered: 1. Teaching effectiveness; 2. Educational Leadership; and 3. Community service. Some departments may also use an additional criterion: 4. Grant support for pedagogy, research, or artistic endeavors. Examples for each criterion are indicated below, but specific criteria will be set by each department:

### Teaching Effectiveness & Pedagogy

- a. Teaching of exceptional quality (e.g., receiving a professional teaching award).
- b. Teaching courses so specialized that the courses cannot be taught by any other faculty member in the department.
- c. Publication of pedagogical papers.
- d. Aid in re-designing the departmental major.
- e. Author of new course/lab manuals for the department.
- f. Conducting workshops at professional association conventions.

### Educational leadership

- a. Sustained supervision of small undergraduate research projects (e.g., for  $\geq 5$  years).
- b. Sustained supervision of undergraduate artistic endeavors (e.g., for  $\geq 5$  years).
- c. Sustained supervision of undergraduate community projects (e.g., for  $\geq 5$  years).
- d. Participation in outreach on international level through educational and artistic engagements in other cities and countries.
- e. Helping other colleges revise their curricula (e.g., as a consultant or part of an advisory board)
- f. Serving as a reviewer for an undergraduate textbook.
- g. Receiving recognition from professional organizations for education-related activities.

### Community Service (college, university, and public service)

- a. Sustained lecture series to educate the community (e.g., for  $>5$  years).
- b. Annual exercises/exhibits/etc. to educate the community (e.g., for  $>5$  years).
- c. Sustained participation in outreach programs to high schools, such as serving as a judge at high school competitions.
- d. Reviewer of educational or creative articles.

### 4. (Optional: Department specific) Grant support for pedagogy, research, or artistic endeavors

- a. Federal or State grant support for pedagogical research or artistic endeavors.

Establishing a Lecturer series with new titles

The current Lecturer position remains the same.

### **Senior Lecturer (Lecturer, Level II)**

Lecturer faculty who have attained CCE will be eligible for promotion to Senior Lecturer. The candidate shall present evidence of achievement following attainment of CCE. Three main criteria will be considered: 1. Teaching effectiveness; 2. Educational Leadership; and 3. Community service. Some departments may also use an additional criterion: 4. Grant support for pedagogy, research, or artistic endeavors. Examples for each criterion are indicated below, but specific criteria will be set by each department:

#### Teaching Effectiveness & Pedagogy

- a. Teaching of exceptional quality (e.g., receiving a college teaching award).
- b. Teaching courses so specialized that the courses cannot be taught by any other faculty member in the department.
- c. Design or implementation of new courses, independent of courses that were taught to achieve CCE.
- d. Presentation of new pedagogical methods at conferences.
- e. Implementation of new pedagogical methods.

#### Educational Leadership

- a. Supervision of undergraduate research projects.
- b. Supervision of undergraduate artistic endeavors.
- c. Supervision of undergraduate community projects.
- d. Evidence of commitment to diversifying the campus, such as visits to high schools, personal presentations to young applicants for college recruitment days, phone calls to prospective students.
- e. Participation on the College Board to develop AP exams.

#### Community Service (college, university, and public service)

- a. Effective service on departmental, college, and university committees.
- b. Implementation of lecture series to educate the community.
- c. Implementation of exercises/exhibits/etc. to educate the community.
- d. Implementation of teaching workshops for high school teachers on topics of expertise.
- e. Participate in outreach programs to high schools, such as serving as a judge at high school competitions.

(Optional: Department specific as appropriate) Grant support for pedagogy, research, or artistic endeavors

- a. Local grant support (e.g., PSC CUNY grants  $\leq$ \$12,000) for pedagogical research or artistic endeavors.

### **Master Lecturer (Lecturer, Level III)**

Senior Lecturers will be eligible for promotion to Master Lecturer. The candidate must meet all the qualifications for a Senior Lecturer. In addition, the candidate must have established a reputation for continued excellence in teaching following promotion to Senior Lecturer. Three main criteria will be considered: 1. Teaching effectiveness; 2. Educational Leadership; and 3. Community service. Some departments may also use an additional criterion: 4. Grant support for pedagogy, research, or artistic endeavors. Examples for each criterion are indicated below, but specific criteria will be set by each department:

#### Teaching Effectiveness & Pedagogy

- a. Teaching of exceptional quality (e.g., receiving a professional teaching award).
- b. Teaching courses so specialized that the courses cannot be taught by any other faculty member in the department.
- c. Publication of pedagogical papers.
- d. Aid in re-designing the departmental major.
- e. Author of new course/lab manuals for the department.
- f. Conducting workshops at professional association conventions.

#### Educational leadership

- a. Sustained supervision of small undergraduate research projects (e.g., for  $\geq 5$  years).
- b. Sustained supervision of undergraduate artistic endeavors (e.g., for  $\geq 5$  years).
- c. Sustained supervision of undergraduate community projects (e.g., for  $\geq 5$  years).
- d. Participation in outreach on international level through educational and artistic engagements in other cities and countries.
- e. Helping other colleges revise their curricula (e.g., as a consultant or part of an advisory board)
- f. Serving as a reviewer for an undergraduate textbook.
- g. a. Receiving recognition from professional organizations for education-related activities.

#### Community Service (college, university, and public service)

- a. Sustained lecture series to educate the community (e.g., for  $>5$  years).
- b. Annual exercises/exhibits/etc. to educate the community (e.g., for  $>5$  years).
- c. Sustained participation in outreach programs to high schools, such as serving as a judge at high school competitions.
- d. Reviewer of educational or creative articles.

4. (Optional: Department specific) Grant support for pedagogy, research, or artistic endeavors
  - a. Federal or State grant support for pedagogical research or artistic endeavors.

**From:** Maria D Lima  
**Sent time:** 11/22/2021 05:17:16 PM  
**To:** Hoau-Yan Wang [redacted]@gmail.com [redacted]@gmail.com>; Kaliris gmail [redacted]@gmail.com [redacted]@gmail.com>; Dr. Broderick [redacted]@gmail.com [redacted]@gmail.com>; Rosemary Wieczorek [redacted]@outlook.com [redacted]@outlook.com>; Itzhak (Itzik) Mano; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi <[redacted]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka  
**Cc:** Raquel Morales  
**Subject:** Re: Working draft for new teaching title proposal suggested for the new union contract

---

Thanks Itzik. I will read and send comments.

Maria

---

**From:** "Itzhak (Itzik) Mano" <imano@med.cuny.edu>  
**Date:** Monday, November 22, 2021 at 5:13 PM  
**To:** Raquel Morales <rmorales@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Eitan Friedman <friedman@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Gonzalo Torres <GTorres@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, "Hoau-Yan Wang [redacted]@gmail.com)" <[redacted]@gmail.com>, Joao Nunes <nunes@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Jose Cobo <jcobo@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, "Kaliris gmail [redacted]@gmail.com)" <[redacted]@gmail.com>, Khosrow Kashfi <kashfi@med.cuny.edu>, Khosrow Kashfi <drkho@verizon.net>, Kiran Matthews <kmatthews@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Lisa Coico <LSCoico@med.cuny.edu>, Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>, Maria D Lima <mlima@med.cuny.edu>, Patricia Broderick <broderick@med.cuny.edu>, "Dr. Broderick [redacted]@gmail.com)" <[redacted]@gmail.com>, Patricia Cortes <pcortes@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Rosemary Wieczorek <RWieczorek@med.cuny.edu>, "Rosemary Wieczorek [redacted]@outlook.com)" <[redacted]@outlook.com>, Sanna Goyert <sgoyert@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>  
**Subject:** Working draft for new teaching title proposal suggested for the new union contract

Hi everyone,

I attach the current working draft of the proposal for a new Teaching Prof title with promotion and CCE. I look forward to your comments.

I am working to promote this through the union, while others are working at the faculty senate level. We are starting the discussion at the CCNY chapter of the union, but the ultimate intention is to bring it to the CUNY-wide contract.

In addition to our department, I already contacted our Dean, and chairs of CHASM, Med Ed, and the PA program, with initial information. I hope to be able to talk with people in these departments directly, and I'll mention this in the next school-wide meeting.

We can discuss it one-on-one, but maybe people would prefer to have a dedicated zoom meeting, or a committee for this - let me know what you find preferable.

As mentioned in today's meeting, I am also sending other updates on union issues to people who sign up to the Google group I set up for CSom PSC. So just a reminder - if you want to be on it, please send me a non-CUNY email address and I'll add you to the group (including HEOs & CLTs).

happy Thanksgiving!

Itzik

On 11/22/2021 3:48 PM, Raquel Morales wrote:

Dear All,

This is a reminder for today's Departmental faculty meeting at 4pm.  
Last minutes are attached.

Best Regards,  
*Raquel Morales*

Assistant to Chair  
Department of Molecular, Cellular & Biomedical Sciences  
CUNY School of Medicine  
160 Convent Ave, Harris Hall suite 202  
New York, NY 10031

**From:** Marc Scullin

**Sent time:** 12/06/2021 08:47:19 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** CSOM Office of Research - NIH Funding Opportunities - Week ending 12/03/2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending December 03, 2021. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 12/03/2021, [Click HERE](#)

## Funding Opportunities

- [Limited Competition: Research Resource for the National Swine Resource and Research Center \(U42 Clinical Trial Not Allowed\)](#)  
(PAR-21-356)  
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs  
Application Receipt Date(s): September 25, 2023
- [Drug Discovery For Nervous System Disorders \(R01 Clinical Trials Not Allowed\)](#)  
(PAR-22-031)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Drug Discovery For Nervous System Disorders \(R21 Clinical Trials Not Allowed\)](#)  
(PAR-22-032)  
National Institute of Mental Health  
Application Receipt Date(s): January 07, 2025
- [NIGMS National and Regional Resources \(R24 - Clinical Trial Not Allowed\)](#)  
(PAR-22-065)  
National Institute of General Medical Sciences  
Application Receipt Date(s): June 14, 2024
- [Continuation or Revision of NIDCR Clinical Trial Implementation Cooperative Agreement \(UH3 Clinical Trial Required\)](#)  
(PAR-22-068)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Multiple dates, see announcement.
- [High Impact, Interdisciplinary Science in NIDDK Research Areas \(RC2 Clinical Trial Optional\)](#)  
(PAR-22-069)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): October 30, 2024
- [Stimulating Urology Interdisciplinary Team Opportunity Research \(SUITOR\) \(R01 Clinical Trial Optional\)](#)  
(PAS-22-074)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): May 07, 2025
- [Resource Networks for Protein Polymorphisms in Alzheimers Disease and its Related Dementias \(AD/ADRD\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-AG-22-030)  
National Institute on Aging  
Application Receipt Date(s): January 10, 2022
- [National Centers for Metabolic Phenotyping in Live Models of Obesity and Diabetes \(MPMOD\) \(U2C - Clinical Trial Not Allowed\)](#)  
(RFA-DK-21-027)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): March 08, 2022
- [New Investigator Gateway Awards for Collaborative T1D Research \(R03 Clinical Trial Not Allowed\)](#)

(RFA-DK-21-030)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): Multiple dates, see announcement.

- [Fostering Research With Additional Resources and Development \(FORWARD\) Urology Centers \(P20 Clinical Trial Not Allowed\)](#) (RFA-DK-21-032)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): March 24, 2022
- [Coordinating Unit for the National Centers for Metabolic Phenotyping in Live Models of Obesity and Diabetes \(MPMOD\) \(U24 - Clinical Trial Not Allowed\)](#) (RFA-DK-21-035)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): March 08, 2022
- [Conformance with the Egg Regulatory Program Standards \(U2F\) \[Clinical Trial Not Allowed\]](#) (RFA-FD-22-006)  
Food and Drug Administration  
Application Receipt Date(s): January 31, 2022 by 11:59 PM Eastern Time. Late applications will not be accepted for this FOA.
- [Child Health Research Career Development Award \(CHRCDA\) Program \(K12 Clinical Trial Not Allowed\)](#) (RFA-HD-23-010)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): March 30, 2022
- [Adolescent Medicine Trials Network for HIV/AIDS Interventions \(ATN\) Scientific Leadership Center \(UM2 Clinical Trial Optional\)](#) (RFA-HD-23-020)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): March 31, 2022
- [Adolescent Medicine Trials Network for HIV/AIDS Interventions \(ATN\) Operations and Collaborations Center \(UM2 Clinical Trial Optional\)](#) (RFA-HD-23-021)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): March 31, 2022
- [BRAIN Initiative: Research Resource Grants for Technology Integration and Dissemination \(U24 Clinical Trial Not Allowed\)](#) (RFA-NS-22-011)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): October 11, 2024

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Annabel Santana

**Sent time:** 12/08/2021 09:38:38 AM

**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters; Carmen R Green

**Cc:** Priscilla Daniel

**Subject:** CSOM Faculty meeting - Thurs, 12/09/21 @ 4:30 pm

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Dear Faculty,

This is a reminder that the monthly CSOM Faculty meeting will be held as scheduled, tomorrow - **Thursday, December 9, 2021 at 4:30 pm** via Zoom; Zoom details are provided below. This will be a relatively short meeting, and agenda will include faculty senate and PSC reports/updates, information regarding faculty scholarship in Med Ed, and comments from the Dean.

**PLEASE NOTE:** Effective next semester, the CSOM Faculty Council Meetings will resume on a **quarterly basis** (as per our governance plan), rather than monthly. Accordingly, the Spring 2022 meetings will be held in **February and early May 2022** (dates to be confirmed). Additional meetings may be called as-needed, to address any urgent/time-sensitive matters that may arise requiring more immediate faculty discussion or action.

Annabel

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CSOM Faculty Council meeting

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBzdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

*Annabel Santana-Colón, Assistant Dean for Academic & Faculty Affairs*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Marc Scullin

**Sent time:** 12/13/2021 08:42:29 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts

**Subject:** Office of Research - NIH Funding Opportunities - Week ending 12/10/2021

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending December 10, 2021. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 12/10/2021, [Click HERE](#)

## Funding Opportunities

- [AHRQ Patient-Centered Outcomes Research \(PCOR\) Mentored Research Scientist Career Development Award \(K01\)](#)  
(PA-22-049)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): March 12, 2025
- [AHRQ Patient-Centered Outcomes Research \(PCOR\) Mentored Clinical Scientist Career Development Award \(K08\)](#)  
(PA-22-050)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): March 12, 2025
- [AHRQ Mentored Career Enhancement Awards for Established Investigators in Patient-Centered Outcome Research \(K18\)](#)  
(PA-22-051)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): July 12, 2025
- [Technology Development to Reduce Health Disparities \(R01 Clinical Trial Optional\)](#)  
(RFA-EB-21-001)  
National Institute of Biomedical Imaging and Bioengineering  
National Institute on Minority Health and Health Disparities  
Application Receipt Date(s): Multiple dates, see announcement.
- [BRAIN Initiative-Related Research Education: Short Courses \(R25 Clinical Trial Not Allowed\)](#)  
(RFA-EY-21-003)  
National Eye Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Ocular Surface Innervation from Cell Types to Circuit Functions \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-EY-21-004)  
National Eye Institute  
Application Receipt Date(s): March 07, 2022
- [Supporting Talented Early Career Researchers in Genomics \(R01 Clinical Trial Optional\)](#)  
(RFA-HG-22-001)  
National Human Genome Research Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Pilot Projects Enhancing Utility and Usage of Common Fund Data Sets \(R03 Clinical Trial Not Allowed\)](#)  
(RFA-RM-22-007)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): February 18, 2022

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Raquel Morales  
**Sent time:** 12/13/2021 09:43:30 AM  
**To:** Hoau-Yan Wang [redacted]@gmail.com [redacted]@gmail.com>; Kaliris gmail [redacted]@gmail.com [redacted]@gmail.com>; Dr. Broderick [redacted]@gmail.com <[redacted]@gmail.com>; Rosemary Wiczorek [redacted]@outlook.com) <[redacted]@outlook.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi [redacted]@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka  
**Cc:** Gonzalo Torres  
**Subject:** FW: [EXTERNAL] Could you circulate a zoom invitation in our units to discuss the union perspective of the Teaching Prog title?

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Good morning Raquel,  
Could you forward this email message to the MCBS faculty?  
Thanks, Gonzalo

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**From:** Itzik Mano, PSC CUNY  
**Sent:** Sunday, December 12, 2021 12:55:30 PM  
**To:** Gonzalo Torres; Noel Manyindo; Erica Friedman; Jaclyn N Churchill  
**Cc:** Dean (CUNY School of Medicine)  
**Subject:** [EXTERNAL] Could you circulate a zoom invitation in our units to discuss the union perspective of the Teaching Prog title?

Dear Gonzalo, Noel, Erica, and Jaclyn,

As I mentioned on Thursday's faculty meeting, we will need to develop what the CSOM union membership would like to ask the contract negotiation team to ask for on our behalf regarding the newly suggested replacement of the Lecturer with CCE title with a Teaching Prof title.

Do you think you might be able to circulate this invitation in your units?

Many thanks & all the best

Itzik

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Itzik Mano (Home) is inviting you to a scheduled Zoom meeting.

**Topic:** Itzik Mano Zoom Meeting - CSOM PSC discussion of Teaching Prof title  
**Time:** Dec 13, 2021 12:00 PM Eastern Time (US and Canada)

Join Zoom Meeting  
[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_us02web.zoom.us\\_j\\_83520685340-3Fpwd-3DWEU5YU51QWszVDF0dzd0MyttNEJFZz09&d=DwIDAQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=fDY5ATrIaoA\\_7FJYeI0NVKRh0qucuV-qIKUd0IOXJzM&m=dK\\_xlabumsnxGNHEpNwAOgm7hrjfOZPBfreTSdoU1lg&s=rxCrCcvQFU7xSZw-DeCuj9MbTEm6el14fFMe8QD6o3Ck&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__us02web.zoom.us_j_83520685340-3Fpwd-3DWEU5YU51QWszVDF0dzd0MyttNEJFZz09&d=DwIDAQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=fDY5ATrIaoA_7FJYeI0NVKRh0qucuV-qIKUd0IOXJzM&m=dK_xlabumsnxGNHEpNwAOgm7hrjfOZPBfreTSdoU1lg&s=rxCrCcvQFU7xSZw-DeCuj9MbTEm6el14fFMe8QD6o3Ck&e=)

Meeting ID: 835 2068 5340  
Passcode: 672712  
One tap mobile  
+13126266799,,83520685340#,,,,\*672712# US (Chicago)  
+16465588656,,83520685340#,,,,\*672712# US (New York)

Dial by your location  
+1 312 626 6799 US (Chicago)  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 346 248 7799 US (Houston)  
+1 669 900 9128 US (San Jose)  
+1 253 215 8782 US (Tacoma)

Meeting ID: 835 2068 5340  
Passcode: 672712

Find your local number: [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_us02web.zoom.us\\_u\\_kcBc98Q8k&d=DwIDAQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=fDY5ATrIaoA\\_7FJYeI0NVKRh0qucuV-qIKUd0IOXJzM&m=dK\\_xlabumsnxGNHEpNwAOgm7hrjfOZPBfreTSdoU1lg&s=3G6kuvyWlA228\\_HybMKKDCd8pTmmCtz-XYfYCy\\_krbg&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__us02web.zoom.us_u_kcBc98Q8k&d=DwIDAQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=fDY5ATrIaoA_7FJYeI0NVKRh0qucuV-qIKUd0IOXJzM&m=dK_xlabumsnxGNHEpNwAOgm7hrjfOZPBfreTSdoU1lg&s=3G6kuvyWlA228_HybMKKDCd8pTmmCtz-XYfYCy_krbg&e=)



**From:** Joao Nunes  
**Sent time:** 12/13/2021 12:12:06 PM  
Hoau-Yan Wang [redacted]@gmail.com [redacted]@gmail.com; Kaliris gmail [redacted]@gmail.com [redacted]@gmail.com; Dr Broderick [redacted]k@gmail.com [redacted]@gmail.com; Rosemary Wiecezorek [redacted]@outlook.com [redacted]@outlook.com; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; [redacted]@verizon.net; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiecezorek; Sanna Goyert; Jun Yoshioka; Raquel Morales  
**Cc:** Gonzalo Torres  
**Subject:** Re: [EXTERNAL] Could you circulate a zoom invitation in our units to discuss the union perspective of the Teaching Prog title?

Hi,  
Am I in the right link? It says the host will allow me in. No action, though.  
Thanks,  
João

Sent from my T-Mobile 4G LTE Device  
Get [Outlook for Android](#)

---

**From:** Raquel Morales <rmorales@med.cuny.edu>  
**Sent:** Monday, December 13, 2021 9:43:30 AM  
**To:** Andreas Kottmann <AKottmann@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Hoau-Yan Wang [redacted]@gmail.com [redacted]@gmail.com; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Kaliris gmail [redacted]@gmail.com [redacted]@gmail.com; Khosrow Kashfi <kashfi@med.cuny.edu>; Khosrow Kashfi <[redacted]@verizon.net>; Kiran Matthews <kmatthews@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Dr. Broderick [redacted] [redacted]; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Rosemary Wiecezorek <RWiecezorek@med.cuny.edu>; Rosemary Wiecezorek [redacted]@outlook.com [redacted]@outlook.com; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>  
**Cc:** Gonzalo Torres <GTorres@med.cuny.edu>  
**Subject:** FW: [EXTERNAL] Could you circulate a zoom invitation in our units to discuss the union perspective of the Teaching Prog title?

Good morning Raquel,  
Could you forward this email message to the MCBS faculty?  
Thanks, Gonzalo

---

From: Itzik Mano, PSC CUNY <[redacted]@gmail.com>  
Sent: Sunday, December 12, 2021 12:55:30 PM  
To: Gonzalo Torres; Noel Manyindo; Erica Friedman; Jaelyn N Churchill  
Cc: Dean (CUNY School of Medicine)  
Subject: [EXTERNAL] Could you circulate a zoom invitation in our units to discuss the union perspective of the Teaching Prog title?

Dear Gonzalo, Noel, Erica, and Jaelyn,

As I mentioned on Thursday's faculty meeting, we will need to develop what the CSOM union membership would like to ask the contract negotiation team to ask for on our behalf regarding the newly suggested replacement of the Lecturer with CCE title with a Teaching Prof title

Do you think you might be able to circulate this invitation in your units?

Many thanks & all the best

Itzik

---

Itzik Mano (Home) is inviting you to a scheduled Zoom meeting

Topic: Itzik Mano Zoom Meeting - CSOM PSC discussion of Teaching Prof title  
Time: Dec 13, 2021 12:00 PM Eastern Time (US and Canada)

Join Zoom Meeting  
[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_us02web.zoom.us\\_j\\_83520685340-3Fpwd-3DWEU5YU51QWszVDFODzd0MyttNEJFZz09&d=DwIDaQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtlMGmo&r=fDY5ATrlaoA\\_7FJYel0NVKRh0qucuV-IKlUd0IOXJzM&m=dK\\_x1abumsnxGNHEpNwAOgM7hrjfoZPBfireTSdoU1lg&s=rxCrCeVQFU7xSZw-DeCuj9MbTEm6el4fMe8QD6o3Ck&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A_us02web.zoom.us_j_83520685340-3Fpwd-3DWEU5YU51QWszVDFODzd0MyttNEJFZz09&d=DwIDaQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtlMGmo&r=fDY5ATrlaoA_7FJYel0NVKRh0qucuV-IKlUd0IOXJzM&m=dK_x1abumsnxGNHEpNwAOgM7hrjfoZPBfireTSdoU1lg&s=rxCrCeVQFU7xSZw-DeCuj9MbTEm6el4fMe8QD6o3Ck&e=)

Meeting ID: 835 2068 5340  
Passcode: 672712  
One tap mobile  
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+16465588656,,83520685340#,,,\*,672712# US (New York)

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+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 346 248 7799 US (Houston)  
+1 669 900 9128 US (San Jose)  
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Meeting ID: 835 2068 5340  
Passcode: 672712

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**From:** Hoau-yan Wang  
**Sent time:** 12/21/2021 09:25:23 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: [EXTERNAL] PLOS ONE: Response Requested - Regarding your article (doi: )  
**Attachments:** Author Query Form pone0001554 - SF case 07282710.docx

---

**From:** PLOS Pub Ethics <pub-ethics@plos.org>  
**Sent:** Tuesday, December 21, 2021 4:39 PM  
**To:** Hoau-yan Wang; Hoau-yan Wang  
**Subject:** [EXTERNAL] PLOS ONE: Response Requested - Regarding your article (doi: )

Dear Dr. Wang,

I hope this message finds you well. I am writing in regard to an article you published with PLOS ONE in 2008: "High-Affinity Naloxone Binding to Filamin A Prevents Mu Opioid Receptor–Gs Coupling Underlying Opioid Tolerance and Dependence" (<https://doi.org/10.1371/journal.pone.0001554>).

Questions have been raised about some results you reported in this article, as explained in the attached Word document. We kindly ask that you help address these issues by completing the attached document with your responses and comments, and by providing the requested data files to support your published results.

**Please reply to confirm receipt of this message by 04 January 2022 and provide your full response and supporting files by 28 January 2022.** If you have any questions, you can reach me directly by responding to this message.

Thank you in advance for your cooperation as we work to resolve this matter. I look forward to hearing from you soon.

Best regards,  
Maria

Maria Zalm, Ph.D  
Senior Editor Publication Ethics | she, her

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California (U.S.) corporation #C2354500, based in San Francisco

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Case Number: 07282710  
ref:\_00DU0Ifis\_5004P1dRVNC:ref

Case number: 07282710	Article ID: <a href="https://doi.org/10.1371/journal.pone.0001554">https://doi.org/10.1371/journal.pone.0001554</a>
<b>I. QUESTIONS FOR AUTHORS</b>  <p>Please comment on the following issues/questions that have been raised about your article, and explain how the figure(s) in question were generated.</p> <p><i>For example, clarify whether any data were rearranged relative to the original images, whether you intentionally showed the same data in multiple panels, and/or whether any images were cut/spliced in preparing the figures. If images were spliced, did the data in each panel originate from a single image?</i></p>	
<b>Queries to authors</b>	<b>Author comments</b>
<p><b>1. Figure 1A, all panels:</b> When adjusting the colour levels, unusually straight horizontal and vertical edges can be detected within the figure, suggesting the panel may contain spliced data. Please clarify how these figures were created. If the underlying blots were spliced to create the figure, please clarify whether the results shown in the figure originate from the same original blot or whether they were spliced from separate blots.</p>	
<p><b>2. Figure 6B, M2-vehicle and A7-VAKGL panels:</b> When the colour levels of these panels are adjusted, small blue dots can be detected among the background noise. Please clarify what dye was/dyes were used in the preparation of these data, and please comment on the appearance of these dots. In addition, please provide detailed methodology describing the preparation of these samples and image capturing.</p>	
<p><b>3. Figure 7A, NLX MOR and FLNA<sub>2550-2560</sub> MOR panels:</b> The MOR panels se two panels appear similar, despite being used to represent different experimental results.</p>	
<p><b>4. Figure 7A multiple panels:</b> When adjusting the colour levels of the panels presented in Figure 7A, multiple panels show signal that appears to be cut off at unusually straight horizontal and/or vertical</p>	

<p>edges. Please clarify how these figures were created. If the underlying blots were spliced to create the figure, please clarify whether the results shown in the figure originate from the same original blot or whether they were spliced from separate blots.</p>	
<p style="text-align: center;"><b>II. DATA AVAILABILITY</b></p> <p><b>Are the underlying data for all results reported in this article and its Supporting Information files still available?</b> I.e. would you be able to provide all underlying data for the article, including for figures not mentioned in Sections I, III, if requested? If not, specify which data are not available and explain why.</p> <p><i>The underlying data would include original raw image files (e.g. for microscopy, blot, and gel images), raw data tables with individual-level data from which you generated tables or graphs, raw FACS or mass spectrometry data, etc. Any data for human subjects research should be fully anonymized and de-identified. Sequencing and microarray data should be deposited at a public repository. See the journal's Data Availability Policy for more information.</i></p>	
<p>(Authors, please respond here.)</p>	
<p style="text-align: center;"><b>III. DATA FILES</b></p> <p><b>Please provide underlying data for the figures/tables listed below in order to support your responses in section I. In the second column, please enter the file name for each item and a brief description of the data, including reference to the figure or table that the file supports. If the requested underlying data is no longer available, please enter "Unavailable" in the second column.</b></p> <ul style="list-style-type: none"> <li>• Please note that any underlying data files you provide may be published as Supporting Information.</li> <li>• For image data supporting multi-panel figures, please compile the requested data for each figure (e.g. all images for Fig 1D) in a single .zip folder, or in a single PDF or Powerpoint file. If compiling multiple images into a single file be sure not to reduce the resolution or make any other adjustments when importing the original images.</li> <li>• You may provide quantitative data for multiple graphs in different tabs of an Excel file.</li> <li>• File names should indicate the figure, table, and/or experiment supported by the data therein (e.g. Fig 1a_ERK blot.jpg). Ensure that all experimental data provided are clearly labelled within each data file to identify the experiment(s) and the sample loaded in each lane. Within the data files, indicate which the data were used in the published figure(s).</li> </ul> <p><i>* Pending our editorial review of your responses we may request additional data files at a later date.</i></p>	
<p><b>Figures/tables for which data are required</b></p>	<p><b>File name &amp; description (to be completed by Author)</b></p>
<p style="text-align: center;"><b>Individual level data from which you generated all graphs, charts, or tables in the following:</b></p>	

Figure 1B	
Figure 6A	
Figure 7B	
Original uncropped and unadjusted image files captured at the time of the experiment, for all panels in each of the following figures:	
Figure 1A, C	
Figure 6B	
Figure 7A	
Please specify any other supporting documentation/files that you are providing to address the concerns in section I.	

**From:** Itzhak (Itzik) Mano  
**Sent time:** 12/22/2021 11:59:33 AM  
amedee.desGeorges@asrc.cuny.edu; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Molecular Biology Core for RCMI?

---

Hi everyone,

I am writing to you to ask for your input on a suggestion to establish a molecular biology core as part of our upcoming RCMI submission. I apologize for the short notice, I was only assigned this task a few days ago. Also, I do not have a good list of people who might be interested, so please spread this further to people who are not on the current list of recipients and who might be interested to join (I believe that all departments, but only CCNY- appointed people, count for this proposal; I do not know enough about people in other departments, e.g., Biochem).

There is an upcoming submission of a CCNY- wide RCMI proposal, and I have been asked by Maria Lima to coordinate some of the core facility part of the package. Requested core facilities have to promote the research proposed in the 3 specific proposal submitted, but can also fit with other groups.

Only one of the submitted proposals in the current package is based in biomedical research (the others are psych and engineering). The initial suggestion in that proposal was to establish an AAV / Virus Vector Core . However, when I asked some of our other molecular biologists on campus, I could not find sufficient demand for a dedicated viral vector core (demonstrable by current use) to make a compelling case for such a specific request.

I therefore thought of suggesting to establish a more general molecular biology core, run by a PhD level supervisor who can guide people in advanced molecular & cellular biology technologies. In this preliminary idea, the facility contains molecular biology instrumentation, so that labs who do not have all the facilities can do some of their work (such as preparation of samples or molecular reagents) in the proposed RCMI molecular core.

This is a very preliminary idea, and I am writing to you to ask for your collaborative input on the validity of such a proposal and on what the molecular core should include in terms of personnel, instrumentation, and services. Naturally, to be funded, the request needs to be very realistic and not over the top.

The key to a successful proposal is a VERY large number of labs who would sign up for it. I would therefore suggest that we include both very basic services that a large number of labs can sign up for, and more specific advanced services that will really promote the level of research we can pursue in house. Note that almost anything nowadays can be outsourced to a commercial service in a company or big universities' core facility; the question is what makes scientific and budgetary sense to request to have in house.

Here is a very preliminary suggestion, just to serve as a starting point for our discussion:

1) The core facility will be housed in Marshak by renovating and adding to existing space. (I would love for this to be in CDI, but is it realistic?)

2) The core will be run by a PhD level molecular biologist with great expertise in:

- a) Viral Vector Prep.
- b) Advanced plasmid building
- c) Cell sorting
- d) RNA and cDNA Library prep

3) The facility manager's role is not to conduct the experiments, but to train and guide people from labs on best practices, and supervise students and postdocs who would come to do their molecular biology prep in the core facility (bringing their own specialized reagents). Maybe the core should provide some basic reagents like gels as part of a fee system?

4) We could consider proposing to add a lab tech who would do actual preps for fee.

5) To have a wide user base, the core will make and provide (for fee) basic reagents that can be prepared by undergrad employed at the core (FWS?) and supervised by the core manager. These can include common molecular biology buffers, LB-Amp plates, growth media, highly used items for specific labs (e.g., worm plates, vials for flies, etc).

6) other widely used services? other ideas?

We also need to make a shopping list of what equipment will the core contain - both existing RCMI items and new ones. Here is a preliminary potential list ( many times this is not my field - so please add):

1) Two tissue culture stations (hoods, CO2 incubators, etc)

2) Viral vector prep items: growth tanks for liquid cultures? ultra-centrifuge?

3) Basic molecular biology setups (microfuges, pipettors, hot plates, gel boxes, power supply, vortex, PCR machines, pH meter, balance, 4c, -20c, -80c, bacterial culture incubator, water bath, plate pouring dispenser, etc).

4) Advanced instrumentation: qPCR, RNA Quality Control, nanodrop, spectrophotometer (please add)

5) try to interest companies to have a stock freezer/cabinet for common reagents, as done in other universities (e.g., NEB enzymes, Promega/Qiagen kits).

6) currently available instruments, such as cell sorter.

other ideas?

This will be a huge task to put this together and *we only have few days before our RCMI proposal is being sent out for external pre-review*. So I suggest :

1) please write to the group (reply all) or to me with your feedback : is this a good and feasible idea? do you think we can have enough buy-in of enough labs to justify this?

2) what structure and services do you thin will work the best?

3) what would you propose as a plan for a gradual buildup of such a core facility (we can not conjure it out of thin air from one day to the next - what should we start with, what should be steps 2 & 3 ?).

4) if the initial response from you is positive, lets have a zoom meeting (next week?) to discuss this and make a plan. We can further polish the proposal on this core while the package is in pre-review (prior to the actual RCMI submission)

looking forward for your input, happy holidays

Itzik

**From:** Karen Hubbard  
**Sent time:** 12/22/2021 12:03:14 PM  
**To:** amedee.desGeorges@asrc.cuny.edu; Itzhak (Itzik) Mano; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Re: Molecular Biology Core for RCMI?

---

Hi Itzhak

I would use the for RNA seq. Also, maybe there could be some bioinformatic support for this core?

Best

Karen

Karen Hubbard, PhD  
Professor  
MR 631  
The City College of New York  
160 Convent Ave  
New York, NY 10031  
Tel: 212 650-8566

---

**From:** "Itzhak (Itzik) Mano" <imano@med.cuny.edu>  
**Date:** Wednesday, December 22, 2021 at 11:59 AM  
**To:** Patricia Cortes <pcortes@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Sanna Goyert <sgoyert@med.cuny.edu>, Khosrow Kashfi <kashfi@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Gonzalo Torres <GTorres@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>, Robert Anderson <randerson@ccny.cuny.edu>, Ana Carnaval <acarnaval@ccny.cuny.edu>, Mark Emerson <memerson@ccny.cuny.edu>, Fardad Firooznia <ffirooznia@ccny.cuny.edu>, Shubha Govind <sgovind@ccny.cuny.edu>, Karen Hubbard <khubbard@ccny.cuny.edu>, Anuradha Janakiraman <anuj@ccny.cuny.edu>, Jonathan Levitt <jlevitt@ccny.cuny.edu>, Christine Li <cli@ccny.cuny.edu>, David Lohman <dlohman@ccny.cuny.edu>, Hysell Oviedo <hoviedo@ccny.cuny.edu>, Mark Pezzano <mpezzano@ccny.cuny.edu>, Stefan U Pukatzki <spukatzki@ccny.cuny.edu>, Adrian Rodriguez Contreras <arodriguezcontreras@ccny.cuny.edu>, Andrey Rudenko <arudenko1@ccny.cuny.edu>, Shireen Saleque <ssaleque@ccny.cuny.edu>, Tadmiri Venkatesh <tvenkatesh@ccny.cuny.edu>, Bao Vuong <bvuong@ccny.cuny.edu>, Osceola Whitney <owhitney@ccny.cuny.edu>, Zimei Bu <zbu@ccny.cuny.edu>, "amedee.desGeorges@asrc.cuny.edu" <amedee.desGeorges@asrc.cuny.edu>, Kevin Gardner <kgardner@ccny.cuny.edu>, Ranajeet Ghose <rghose@ccny.cuny.edu>, David Jeruzalmi <dj@ccny.cuny.edu>, Reza Khayat <rkhayat@ccny.cuny.edu>, Ronald Koder <rkoder@ccny.cuny.edu>, Kevin Ryan <kryan@ccny.cuny.edu>, Ruth Stark <rstark@ccny.cuny.edu>  
**Cc:** Maria D Lima <mlima@med.cuny.edu>, Susan Perkins <sperkins@ccny.cuny.edu>  
**Subject:** Molecular Biology Core for RCMI?

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  - 3) Basic molecular biology setups (microfuges, pipettors, hot plates, gel boxes, power supply, vortex, PCR machines, pH meter, balance, 4c, -20c, -80c, bacterial culture incubator, water bath, plate pouring dispenser, etc).
  - 4) Advanced instrumentation: qPCR, RNA Quality Control, nanodrop, spectrophotometer (please add)
  - 5) try to interest companies to have a stock freezer/cabinet for common reagents, as done in other universities (e.g., NEB enzymes, Promega/Qiagen kits).
  - 6) currently available instruments, such as cell sorter.
- other ideas?

This will be a huge task to put this together and *we only have few days before our RCMI proposal is being sent out for external pre-review*. So I suggest :

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- 4) if the initial response from you is positive, lets have a zoom meeting (next week?) to discuss this and make a plan. We can further polish the proposal on this core while the package is in pre-review (prior to the actual RCMI submission)

looking forward for your input, happy holidays

Itzik

**From:** Geri Kreitzer  
**Sent time:** 12/22/2021 02:52:30 PM  
amedee.desGeorges@asrc.cuny.edu; Itzhak (Itzik) Mano; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Re: Molecular Biology Core for RCMI?

---

Itzhak,

I would be very interested in a viral core (AAV/Lenti) associated with a molecular biology core with a specialist to help in construction of complex/difficult expression vectors. My lab uses both plasmid and viral vectors in our work (documentation can be provided if needed).

Another core service that might be widely appreciated and actively used would be an antibody production core. As we all know, the price of antibodies has skyrocketed to a nearly prohibitive cost - especially when exploring new research directions. Companies have stopped packaging trial size antibodies.

As noted by Reza, sorting, DNA/RNA library prep are available at ASRC.

Geri

Geri Kreitzer, PhD  
Associate Medical Professor  
Department of Molecular, Cellular and Biomedical Sciences  
CUNY School of Medicine  
160 Convent Ave  
New York, NY 10031  
Lab: Marshak Room 911  
212-650-8921

---

**From:** Itzhak (Itzik) Mano  
**Sent:** Wednesday, December 22, 2021 11:59 AM  
**To:** Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; amedeedesGeorges@asrc.cuny.edu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Molecular Biology Core for RCMI?

Hi everyone,

I am writing to you to ask for your input on a suggestion to establish a molecular biology core as part of our upcoming RCMI submission. I apologize for the short notice, I was only assigned this task a few days ago. Also, I do not have a good list of people who might be interested, so please spread this further to people who are not on the current list of recipients and who might be interested to join (I believe that all departments, but only CCNY- appointed people, count for this proposal; I do not know enough about people in other departments, e.g., Biochem).

There is an upcoming submission of a CCNY- wide RCMI proposal, and I have been asked by Maria Lima to coordinate some of the core facility part of the package. Requested core facilities have to promote the research proposed in the 3 specific proposal submitted, but can also fit with other groups.

Only one of the submitted proposals in the current package is based in biomedical research (the others are psych and engineering). The initial suggestion in that proposal was to establish an AAV / Virus Vector Core . However, when I asked some of our other molecular biologists on campus, I could not find sufficient demand for a dedicated viral vector core (demonstrable by current use) to make a compelling case for such a specific request.

I therefore thought of suggesting to establish a more general molecular biology core, run by a PhD level supervisor who can guide people in advanced molecular & cellular biology technologies. In this preliminary idea, the facility contains molecular biology instrumentation, so that labs who do not have all the facilities can do some of their work (such as preparation of samples or molecular reagents) in the proposed RCMI molecular core.

This is a very preliminary idea, and I am writing to you to ask for your collaborative input on the validity of such a proposal and on what the molecular core should include in terms of personnel, instrumentation, and services. Naturally,

to be funded, the request needs to be very realistic and not over the top.

The key to a successful proposal is a VERY large number of labs who would sign up for it. I would therefore suggest that we include both very basic services that a large number of labs can sign up for, and more specific advanced services that will really promote the level of research we can pursue in house. Note that almost anything nowadays can be outsourced to a commercial service in a company or big universities' core facility; the question is what makes scientific and budgetary sense to request to have in house.

Here is a very preliminary suggestion, just to serve as a starting point for our discussion:

- 1) The core facility will be housed in Marshak by renovating and adding to existing space. (I would love for this to be in CDI, but is it realistic?)
- 2) The core will be run by a PhD level molecular biologist with great expertise in:
  - a) Viral Vector Prep.
  - b) Advanced plasmid building
  - c) Cell sorting
  - d) RNA and cDNA Library prep
- 3) The facility manager's role is not to conduct the experiments, but to train and guide people from labs on best practices, and supervise students and postdocs who would come to do their molecular biology prep in the core facility (bringing their own specialized reagents). Maybe the core should provide some basic reagents like gels as part of a fee system?
- 4) We could consider proposing to add a lab tech who would do actual preps for fee.
- 5) To have a wide user base, the core will make and provide (for fee) basic reagents that can be prepared by undergrad employed at the core (FWS?) and supervised by the core manager. These can include common molecular biology buffers, LB-Amp plates, growth media, highly used items for specific labs (e.g., worm plates, vials for flies, etc).
- 6) other widely used services? other ideas?

We also need to make a shopping list of what equipment will the core contain - both existing RCMI items and new ones. Here is a preliminary potential list ( many times this is not my field - so please add):

- 1) Two tissue culture stations (hoods, CO2 incubators, etc)
- 2) Viral vector prep items: growth tanks for liquid cultures? ultra-centrifuge?
- 3) Basic molecular biology setups (microfuges, pipettors, hot plates, gel boxes, power supply, vortex, PCR machines, pH meter, balance, 4c, -20c, -80c, bacterial culture incubator, water bath, plate pouring dispenser, etc).
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This will be a huge task to put this together and *we only have few days before our RCMI proposal is being sent out for external pre-review*. So I suggest :

- 1) please write to the group (reply all) or to me with your feedback : is this a good and feasible idea? do you think we can have enough buy-in of enough labs to justify this?
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- 4) if the initial response from you is positive, lets have a zoom meeting (next week?) to discuss this and make a plan. We can further polish the proposal on this core while the package is in pre-review (prior to the actual RCMI submission) looking forward for your input, happy holidays  
Itzik

**From:** Itzhak (Itzik) Mano  
**Sent time:** 12/27/2021 10:11:46 AM  
amedee.desGeorges@asrc.cuny.edu; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Zoom meeting @noon Re: Molecular Biology Core for RCMI?

---

Hi everyone,

Thank you for all people who participated in the discussion last week. I would be happy if we can continue our discussion over zoom today to see what will work the best. See zoom invite (for 12noon) below.

From the email discussion last week, it seems that different people would have liked access to different molecular biology services, while at the same time, all these services can also be purchased from outside vendors (commercial companies or big universities' core facilities). In fact, only such big core facilities/companies can give assurance of consistent quality and service time.

Furthermore, in many places huge investments in ultra expensive product-specific instrumentation become obsolete in just a few years (because it is much cheaper to outsource the service). Therefore a core with a more dynamic framework might be better suited to adjust to changing needs at CCNY.

So here is my suggestion:

What becomes gradually clear to me is that the biggest need in molecular biology technologies on our campus is in the transition between a completely novel technology and techniques that have become complete standards: In this transition we have technologies that are gaining momentum in other big research universities but are not yet widespread at CCNY. We are specifically at a disadvantage here: While big universities will always include labs that already use the new technologies, it is much more difficult for CCNY people to introduce it because there is no one on campus to assist us. Therefore it becomes critical to facilitate the introduction of these momentum-gaining molecular technologies to CCNY.

I believe that a molecular core that is headed by a good PhD-level technologist who serves as a chief molecular tech *educator* can be really important for our campus in helping us introduce new mol bio technologies (e.g., new genomics approaches, new transgenic approaches, etc). I think we can set the priorities of this center on an ongoing basis by a committee of relevant PIs, and we can send our core manager for training in the approved upcoming technologies. The core manager will then work with people from the relevant labs to make the technology work, and use the core facility setup to allow additional lab to use the technology even if they do not have all the instruments in the lab.

I therefore suggest that in addition to being a core that houses and maintains key pieces of mol bio equipment, we propose in the grant to establish the CCNY's Molecular Biology Innovative Technologies (MBIT) Center, as a center that supports the implementation of new mol bio technologies at CCNY.

I'll be happy to get your feedback and a list of priorities of current and future technologies and equipment.

many thanks. hope to see you on zoom at noon, all the best

Itzik

---

Itzik Mano (Home) is inviting you to a scheduled Zoom meeting.

Topic: Itzik Zoom Meeting - Suggested core: Mol Bio Tech Center

Time: Dec 27, 2021 12:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/82060110437?pwd=cExETVJCeEZROE1Yb2VmZmthZktrZz09>

Meeting ID: 820 6011 0437

Passcode: 075545

One tap mobile

+13126266799,,82060110437#,,,,\*075545# US (Chicago)  
+16465588656,,82060110437#,,,,\*075545# US (New York)

Dial by your location

+1 312 626 6799 US (Chicago)  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 346 248 7799 US (Houston)  
+1 669 900 9128 US (San Jose)  
+1 253 215 8782 US (Tacoma)

Meeting ID: 820 6011 0437

Passcode: 075545

Find your local number: <https://us02web.zoom.us/j/kcEnP7y2k>

---

\_\_\_\_\_ Itzhak (Itzik) Mano, Ph.D. Associate Medical Professor Department of Molecular, Cellular and Biomedical Sciences Center for Discovery & Innovation, Cluster on Neural Development and Repair The CUNY School of Medicine at City College & The CUNY Graduate Center The City University of New York CDI building, Office: 3-382 Lab: 3-235 85 St. Nicholas Terrace, New York, NY 10031 E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu) Office Phone:(212) 6507965 Lab Phone:(212) 6505334 [www.manolab.org](http://www.manolab.org)

On 12/22/2021 11:59 AM, Itzhak (Itzik) Mano wrote:

Hi everyone,

I am writing to you to ask for your input on a suggestion to establish a molecular biology core as part of our upcoming RCMI submission. I apologize for the short notice, I was only assigned this task a few days ago. Also, I do not have a good list of people who might be interested, so please spread this further to people who are not on the current list of recipients and who might be interested to join (I believe that all departments, but only CCNY-appointed people, count for this proposal; I do not know enough about people in other departments, e.g., Biochem).

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looking forward for your input, happy holidays

Itzik

**From:** Rosemarie Wesson  
**Sent time:** 12/30/2021 01:59:17 PM  
**To:** Hoau-yan Wang; Beidel, Jennifer L. <jennifer.beidel@saul.com>  
**Subject:** Re: Research Misconduct Allegation

---

Dr. Wang,

Thank you for your response. This information will be included in the memo to President Boudreau regarding the research misconduct allegation. You will be notified whether or not President Boudreau refers the case for an Investigation.

Regards,

Rose

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

---

**From:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Date:** Thursday, December 23, 2021 at 4:39 PM  
**To:** Rose Wesson <rwesson@ccny.cuny.edu>, "Beidel, Jennifer L." <jennifer.beidel@saul.com>  
**Subject:** Re: Research Misconduct Allegation

Dear Dr. Wesson,

Please find the enclosed full response to the Research Misconduct Inquiry (Complainant - Division of Investigative Oversight (DIO) in the Office of Research Integrity of Department of Health & Human Services) together with supportive documents: EXHIBITS.

We appreciate the extension so that we can thoroughly respond to the inquiry.

Thank you.

Sincerely,

Hoau-Yan Wang

*Hoau-Yan Wang, Ph.D.*

*Medical Professor*

---

**From:** Rosemarie Wesson  
**Sent:** Tuesday, November 9, 2021 2:53 PM  
**To:** Beidel, Jennifer L.; Hoau-yan Wang  
**Subject:** Research Misconduct Allegation

Dear Ms. Beidel and Prof Wang,

The Research Misconduct Inquiry (Complainant - Division of Investigative Oversight (DIO) in the Office of Research Integrity of Department of Health & Human Services) has been completed and the preliminary Inquiry report is attached. Please review and provide comments. Please provide your comments in writing by Friday, November 19, 2021. If additional time is needed, please make this request in writing, prior to November 19, 2021. If you have no comments, please state "No Comments".

Subsequent to receiving your response, the report and your response will be sent to President Boudreau. President Boudreau, in consultation with CUNY Associate Vice Chancellor Schneider and me, will make the decision as to whether to refer the case for an Investigation. You will be notified of President Boudreau's decision.

Regards,

Rose

Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor of Chemical Engineering  
The Grove School of Engineering  
The City College of New York

Steinman Hall, Suite 152  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Fax: 212-650-5768  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

**From:** Annabel Santana

**Sent time:** 01/03/2022 05:27:06 PM

**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; ; ; ;

**Subject:** Quarterly CSOM Faculty meetings - effective 2/10/2022

---

Dear CSOM faculty,

Happy New Year!

Per my December 8<sup>th</sup> email (highlighted below), effective this semester the CSOM Faculty Council meetings will resume on a **quarterly** basis. Accordingly, we will **NOT** hold a meeting this month; faculty meetings will resume **Thursday, February 10, 2022** and every three months thereafter.

A revised calendar invite will follow.

Annabel

---

**From:** Annabel Santana

**Sent:** Wednesday, December 8, 2021 9:39 AM

**Subject:** CSOM Faculty meeting - Thurs, 12/09/21 @ 4:30 pm

Dear Faculty,

This is a reminder that the monthly CSOM Faculty meeting will be held as scheduled, tomorrow - **Thursday, December 9, 2021 at 4:30 pm** via Zoom; Zoom details are provided below. This will be a relatively short meeting, and agenda will include faculty senate and PSC reports/updates, information regarding faculty scholarship in Med Ed, and comments from the Dean.

**PLEASE NOTE:** Effective next semester, the CSOM Faculty Council Meetings will resume on a **quarterly basis** (as per our governance plan), rather than monthly. Accordingly, the Spring 2022 meetings will be held in **February and early May 2022** (dates to be confirmed). Additional meetings may be called as-needed, to address any urgent/time-sensitive matters that may arise requiring more immediate faculty discussion or action.

Annabel

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CSOM Faculty Council meeting

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBzdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

*Annabel Santana-Colón, Assistant Dean for Academic & Faculty Affairs*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Annabel Santana

**Sent time:** 01/03/2022 05:41:47 PM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas;

**To:** Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; ; ; ;

**Subject:** CSOM Faculty meeting

---

The CSOM Faculty Council meetings will resume on a **quarterly** basis effective February 10, 2022 and every 3 months thereafter.

Unless otherwise announced, the meetings will be held via Zoom (details below).

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Topic: CSOM Faculty Council meeting

Time: Quarterly, the 2<sup>nd</sup> Thursday of February, May, August/September, November at 4:30 PM.

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

Find your local number: <https://ccny.zoom.us/u/kdJQGKqIGV>

**From:** Jude-Marie A. Smalec

**Sent time:** 01/04/2022 01:32:35 PM

**To:** meyerjr@med.cuny.edu; jsmalec@med.cuny.edu; liceg@med.cuny.edu; Birgland Joseph; Carmen R. Green; Jaclyn N. Churchill; Gloria J. Mabry; Olga Waters; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ana Motta-Moss; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Danielle D. Pritchett; Darwin Deen; Donna Gooden; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gina Allegretti; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Joy Richards; Jun Yoshioka; Junghoon Kim; Keosha Bond; Kaliris Salas; Katherine Mendis; Kevin A. Ali; Kelly D. Robinson; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Bauman; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D. Lima; Maria Felice M. Ghilardi; Mario De La Cruz; Marisol Hernandez; Maxine Nwigwe; Nancy Sohler; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Priscilla Daniel; Raymond Robinson; Rosa Lee; Rosalinda Guce; ; ; ; ; ;

**Subject:** Faculty Development - For Clinical and Non-Clinical Faculty - January 6, 2021

**Attachments:** image002.png image003.png



Colleagues,  
The Faculty Development Team invites you to a session on the Master Adaptive Learner process. Join us to discuss interesting vignettes relating to the classroom and also to the 'bedside.' We look forward to seeing clinical and non-clinical faculty at the session!  
~ Nicole and Jude-Marie

### [Join the Faculty Development Session!](#)

One tap mobile: [US: +16465588656,,83989136354#,,,,\\*246402#](tel:+16465588656) or [+13017158592,,83989136354#,,,,\\*246402#](tel:+13017158592)

Meeting URL: [https://ccny.zoom.us/j/83989136354?](https://ccny.zoom.us/j/83989136354?pwd=c01LYXpmRFErWG0rbitmUDNHdTBhdz09)  
[pwd=c01LYXpmRFErWG0rbitmUDNHdTBhdz09](https://ccny.zoom.us/j/83989136354?pwd=c01LYXpmRFErWG0rbitmUDNHdTBhdz09)

Meeting ID: 839 8913 6354

Passcode: 246402

### Join by Telephone

For higher quality, dial a number based on your current location.

Dial:

US: +1 646 558 8656 or +1 301 715 8592 or +1 312 626 6799 or +1 346 248 7799 or +1 669 900 6833 or +1 253 215 8782

Meeting ID: 839 8913 6354

Passcode: 246402





**From:** Itzik Mano, PSC CUNY <[REDACTED]@gmail.com>

**Sent time:** 01/05/2022 08:19:50 AM

**To:** Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wieczorek; Sanna Goyert; Jun Yoshioka

**Subject:** [EXTERNAL] in person teaching?

---

Hi everyone,

I hope you had a good new year!

As you know, Fundamentals and other courses have started in person. As the CSoM union rep, I wanted to check in to see how you all feel about it.

As you know, we are learning more every day, and it seems we are dealing with a delicate balance: Unlike previous variants, the immunizations do not protect us from omicron. Although most people experience mild symptoms if any, for some (even boosted people) this is rather substantial.

For some of us, the average class occupancy of <50% is a good enough countermeasure. However, some classes are mandatory and occupancy is higher. Maybe you feel that we have enough distancing to go forward even in these full classes. I just want to do my due diligence as union rep and check in with you. Best, itzik -  
- [REDACTED] itzik mano mcbs, cuny sch of med psc cuny >

**From:** Maria D Lima  
**Sent time:** 01/05/2022 08:24:25 AM  
**To:** Tashuna Albritton; Anabelle Andon; Keosha Bond; Jose Cobo; Lisa Coico; Patricia Cortes; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Marisol Hernandez; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Carol Moore; Sandy Saintonge; Kaliris Salas; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Carmen R Green  
**Cc:** Marc Scullin  
**Subject:** Re: ASRC NSF CAREER Bootcamp  
**Attachments:** 2022 ASRC NSF CAREER bootcamp flyer&website info.pdf

---

Good morning and Happy New Year. Please see below for a Bootcamp opportunity for the NSF CAREER opportunity.

Best,  
Maria

---

Applications for the ASRC's NSF CAREER Bootcamp for the 2022-23 cycle are being accepted on the ASRC website until January 20, 2022 at 5 PM: <https://asrc.gc.cuny.edu/research-opportunities/faculty-opportunities/bootcamps/nsf-career-bootcamp/>

The flyer is attached. Eligibility to submit an NSF CAREER proposal and to participate in the bootcamp includes the following:

The ASRC CAREER Bootcamp Program is open to all *eligible* CUNY assistant professors. Tenure track assistant professors who meet the following criteria (as of July 26, 2021) are eligible to apply for the NSF CAREER award and to the Bootcamp:

- Hold a doctoral degree in a field supported by NSF;
- Be engaged in research in an area of science, engineering, or education supported by NSF;
- Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title);
- Be untenured as of the proposal submission deadline (July 26, 2021).
- Have not previously received a CAREER award. (Prior or concurrent Federal support for other types of awards for non-duplicative research does not preclude eligibility.) Have not previously submitted 3 CAREER proposals

If you have questions about the Bootcamp please contact Linda Vigdor.

**Linda Vigdor, MFA, PhD**

Associate Director of Proposal Development  
CUNY Advanced Science Research Center  
85 St. Nicholas Terrace  
New York, NY 10031  
[lvigdor@gc.cuny.edu](mailto:lvigdor@gc.cuny.edu)

## 2022 ASRC NSF CAREER Bootcamp

The NSF CAREER Bootcamp Program is designed to help **eligible tenure track faculty** across CUNY develop competitive proposals for NSF's Early Career Development Program See information about the program and NSF's eligibility details here:

[https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503214](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503214)

**Applications** to participate in the NSF CAREER Bootcamp are due by **5 PM on Jan 20, 2022**.

The application is available here:

[https://asrc.formstack.com/forms/nsf\\_career\\_award\\_bootcamp\\_application\\_2022](https://asrc.formstack.com/forms/nsf_career_award_bootcamp_application_2022)

Bootcamps will most likely start the third week of February 2022 and meet weekly (with occasional weeks off) through July 15 (with a possibility of extending through 7/22). (Note that proposals are due at NSF by July 25, 2022).

### Eligibility

The ASRC CAREER Bootcamp Program invites applications from all *eligible CUNY tenure track assistant professors*. Tenure track assistant professors who meet the following criteria (as of July 25, 2022) are eligible to apply for the NSF CAREER award and therefore, to the ASRC's Bootcamp:

- Hold a doctoral degree in a field supported by NSF;
- Be engaged in research in an area of science, engineering, or education supported by NSF;
- Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title);
- Be untenured as of the proposal submission deadline (July 25, 2022).
- Have not previously received a CAREER award. (Prior or concurrent Federal support for other types of awards for non-duplicative research does not preclude eligibility.) Have not previously submitted 3 CAREER proposals

### Broad focus of the CAREER Bootcamp:

- Turning your research idea into an impactful research question & project
- Integrating research and education plans for potential impact
- Designing and evaluating substantive Education and Broader Impacts activities
- Strategies for developing & writing a compelling, competitive, and compliant research proposal
- Using and receiving constructive feedback from peers

### Specific bootcamp activities:

- Weekly review of grant writing & specific CAREER proposal requirements and strategies (PPT slides with Q&A)
- Weekly assignments followed by constructive critiques of drafts
- *Participants must make sufficient progress in Part 1 in order to continue to Part 2 of the bootcamp* (see below for details)
- Possible mock panel review of full proposals 1st week of July (TBD)

### What PIs should be prepared for:

- Expect to participate in groups of 4-8 people.
- Participants must be able to use Dropbox and Zoom with video effectively.
- The bootcamps are **intensive** and require much work on the part of the participants (and Linda)

- PIs get out of the Bootcamp what they put into it
- Groups are **interdisciplinary**. Although there are some challenges in organizing the groups this way, there are significant benefits, such as helping to make proposals understandable to peers with broader levels of expertise
- PIs are advised to find mentors with expertise in their specific field who can advise them on the technical and advanced scientific aspects of their research

#### **Acceptance into a Bootcamp is dependent on:**

- Readiness of the PI, assessed via a completed Bootcamp application and possibly, a zoom chat with Linda
- Fit of the proposed research with NSF
- Sufficient writing skills (or regular access to a good editor)
- Scheduling fit – although extreme efforts are made to accommodate all accepted PIs' schedules, on occasion this just isn't possible.
- Number of applicants to the Bootcamp

#### **Bootcamp Parts 1 and 2**

- **Part 1** is focused on developing (or revising) a 1-2 page overview (i.e., white paper) of the proposal's components (research, education plan, intellectual merit, broader impacts, and integration of research and education) of sufficient quality to send to an NSF program officer
- **Part 2** is focused on: (a) fleshing out the remainder of the 15 page project description, project summary, and other required documents; (b) using feedback from the bootcamp group and Linda to improve drafts; incorporating comments from NSF program officers
- *The expectation is that bootcamp participants will have an overview ready to send (or sent) to program officer(s) no later than the end of April. It is possible that PIs who have not reached this milestone may not be invited to continue to Part 2.*

#### **Application Information**

Participation in the NSF CAREER Bootcamp is by application only.

[https://asrc.formstack.com/forms/nsf\\_career\\_award\\_bootcamp\\_application\\_2022](https://asrc.formstack.com/forms/nsf_career_award_bootcamp_application_2022)

*\*For PIs intending to work on a resubmission and who have not yet received a decision from NSF by the Bootcamp application deadline, please check the Tentative resubmission box and submit a completed application. If your 2021 proposal is subsequently declined and you want to activate your bootcamp application, please contact Linda Vigdor ASAP after hearing from NSF. Please include your 2021 proposal and reviews, as outlined in the application.*

#### **Scheduling and Attendance**

Scheduling of the Bootcamp groups will begin once PIs are notified of their acceptance into the Bootcamp and will be organized via Doodle poll. Every effort will be made to accommodate availabilities as well as consider disciplinary compatibilities.

**Once accepted, PIs are expected to attend all sessions and contribute respectfully to the group discussions. Meetings will be on Zoom and participation with video and a clear audio connection is required.** Participants should expect to allot a *minimum* of 2-5 hours per week to their proposal development or writing activities. Homework is to be uploaded to the Dropbox 48 hours in advance of the meeting it will be discussed.

**From:** Itzik Mano, PSC CUNY <[REDACTED]@gmail.com>

**Sent time:** 01/05/2022 04:38:48 PM

aaandon@med.cuny.edu; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka;

**To:** Victoria Frye; Keosha Bond; Tashuna Albritton; Erica Lubetkin; Donna Gooden; Amr Soliman; Wenhua Lu; Noel Manyindo; Samuel Soriano; Nancy Sohler; Danielle D Pritchett; Lisanne Hauck; Darwin Deen; Siobhan G Hollander; Samantha Barrick; Michelle Abreu; Daniel M Richter; Katherine Mendis; Sandy Saintonge; Lily Lam; Raymond Robinson

**Cc:** Pamela Stemberg [REDACTED]@gmail.com>

**Subject:** [EXTERNAL] CSoM employees crowd sourcing on in-person teaching in the time of omicron

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Dear CSoM colleagues,

I hope you had a good New Year! I am writing to suggest that we have a zoom meeting of CSoM union members tomorrow @5pm to discuss our position on the safety of in-person instruction, as seen from the perspective of the CSoM employees.

We are all excited with the beginning of the new semester and we are excited to see our students in person and fully vaccinated. We all know how important in-person teaching is for the effectiveness of our classes, and we know that our students are looking for the class engagement and the equal opportunity that comes with the communal presence on campus (without the differential contribution of the home setting).

However, the surge of the omicron variant puts a dent in our enthusiasm. It seems that fully vaccinated people who practice safety measures (masks, distancing, etc) are still getting breakthrough infections. This includes both students and instructors. Most break-through infections are mild, but some are considerable.

In response to my preliminary email to some members of our school I got a range of opinions - some people are determined to continue teaching in person, some insist on all remote, and many want to evaluate this on a rolling basis. Many of our classes are only partially occupied (where attendance is optional), but some classes have full attendance.

I want to gauge what is the consensus / majority opinion about this among our CSoM union members. We have a superb collection of medical and science experts, and I believe we can provide a well-informed collective view on this, which, if needed, we can then discuss with our school leadership.

I note that our situation is different than most of CUNY, because we are already fully engaged with the classes of the new semester, while the rest of CUNY can wait and see.

I therefore suggest that we meet for a zoom discussion ASAP, so we can form a consensus / majority opinion from the perspective of CSoM employees. I suggest we meet tomorrow after business hours, at 5pm. I paste a zoom invite below. I do not have a full email list of our school's PSC membership, so please disseminate this email to others.

Hope to see you tomorrow, all the best

Itzik

---

Itzik Mano (Home) is inviting you to a scheduled Zoom meeting.

Topic: Itzik Mano Zoom Meeting - CSoM PSC membership talk about in-person teaching during omicron

Time: Jan 6, 2022 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_us02web.zoom.us\\_j\\_84233429730-3Fpwd-3DWHQ4S0x4Vi9mYThSZEwvLlptc2p5dz09&d=DwIDaQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=YAnDdIh9IEWHiy\\_31avstLajOSlrKTXLS4AccHSzT3c&m=8i9Y6hKFHmoTvj94bATxOwNosVF7dgBJ7O3XcDwEbr4&s=NzwCUNB9hyvUtGTK0FGpOZq0oOEPfiQvef4odTpQ3ks&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__us02web.zoom.us_j_84233429730-3Fpwd-3DWHQ4S0x4Vi9mYThSZEwvLlptc2p5dz09&d=DwIDaQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=YAnDdIh9IEWHiy_31avstLajOSlrKTXLS4AccHSzT3c&m=8i9Y6hKFHmoTvj94bATxOwNosVF7dgBJ7O3XcDwEbr4&s=NzwCUNB9hyvUtGTK0FGpOZq0oOEPfiQvef4odTpQ3ks&e=)

Meeting ID: 842 3342 9730

Passcode: 905305

One tap mobile  
+16465588656,,84233429730#,,,,\*905305# US (New York)  
+13017158592,,84233429730#,,,,\*905305# US (Washington DC)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 312 626 6799 US (Chicago)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)  
+1 669 900 9128 US (San Jose)

Meeting ID: 842 3342 9730

Passcode: 905305

Find your local number: [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_us02web.zoom.us\\_u\\_k18p1lyyP&d=DwIDAQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=YAnDdIh9IEWHiy\\_31avsTLajOSlrKTXLS4AccHSzT3c&m=8i9Y6hKFHmoTvj94bATxOwNOSVF7dgBJ7O3XcDwEbr4&s=BFETvFD04ped0v6GHyhA8EkJ64n2kvAPV2CAPHxXq\\_w&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__us02web.zoom.us_u_k18p1lyyP&d=DwIDAQ&c=4NmamNZG3KTnUCoC6InoLJ6KV1tbVKrkZXHRwtIMGmo&r=YAnDdIh9IEWHiy_31avsTLajOSlrKTXLS4AccHSzT3c&m=8i9Y6hKFHmoTvj94bATxOwNOSVF7dgBJ7O3XcDwEbr4&s=BFETvFD04ped0v6GHyhA8EkJ64n2kvAPV2CAPHxXq_w&e=)

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-----  
Itzik Mano  
MCBS, CUNY Sch of Med  
PSC CUNY

**From:** Jerrold Erves

**Sent time:** 01/07/2022 11:55:36 AM

**To:** Karen Adamo-henry; Janine C Adjo; Tashuna Albritton; Kevin A Ali; Gina Allegretti; Anabelle Andon; Lisa Auerbach; Yasmine Azor; Samantha Barrick; Bell, Donnie <Donnie.Bell@nychhc.org>; Keosha Bond; Cynthia Civil [REDACTED]@hotmail.com>; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Emine Ercikan Abali; Eitan Friedman; Victoria Frye; Donna Gooden; Paul Gottlieb; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Jungmoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Rosa Lee; Maria D Lima; Wenhua Lu; Noel Manyindo; Kiran Matthews; Dani Mcbeth; Katherine Mendis; Jodie Meyer; Carol Moore; Ana Motta-Moss; Joao Nunes; Maxine Nwigwe; Ernest Patti; Leonie Peele; Danielle D Pritchett; Joy Richards; Daniel M Richter; Nicole Roberts; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Annabel Santana; Victor I Schwartz; Jude-Marie A. Smalec; Nancy Sohler; Amr Soliman; Linda Spatz; Hoau-yan Wang; Darryl R Warner; Chris Washington; Gokhan Yilmaz; Jun Yoshioka

**Subject:** Admissions Interviews

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Topic: Admissions Interviews

Jerrold is inviting you to a scheduled meeting for Class of 2029 admissions interviews.

Time: Jan 18, 2022 12:00 PM Eastern Time (US and Canada)

Please click accept to confirm your attendance.

Thanks.

Here is the Zoom meeting information

Join Zoom Meeting

<https://ccny.zoom.us/j/93446776918>

Meeting ID: 934 4677 6918

One tap mobile

+16465588656,,93446776918# US (New York)

+13017158592,,93446776918# US (Washington DC)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 934 4677 6918

Find your local number: <https://ccny.zoom.us/u/kdYVQcGwoy>

**From:** Leonie Peele  
**Sent time:** 01/07/2022 05:18:37 PM  
Karen Adamo-henry; Janine C Adjo; Tashuna Albritton; Kevin A Ali; Gina Allegritti; Anabelle Andon; Lisa Auerbach; Yasmine Azor; Samantha Barrick; Bell, Donnie <Donnie.Bell@nychhc.org>; Keosha Bond; Cynthia Civil <[REDACTED]@hotmail.com>; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Emine Ercikan Abali; Eitan Friedman; Victoria Frye; Donna Gooden; Paul Gottlieb; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Junghoon Kim; Susan Kornacki; Andreas Kottmann; Geri Kreitzer; Lily Lam; Rosa Lee; Maria D Lima; Wenhua Lu; Noel Manyindo; Kiran Matthews; Dani Mcbeth; Katherine Mendis; Jodie Meyer; Carol Moore; Ana Motta-Moss; Joao Nunes; Leonie Peele; Danielle D Pritchett; Joy Richards; Daniel M Richter; Nicole Roberts; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Annabel Santana; Victor I Schwartz; Jude-Marie A. Smalec; Nancy Sohler; Amr Soliman; Linda Spatz; Hoau-yan Wang; Darryl R Warner; Chris Washington; Gokhan Yilmaz; ; ; ;  
**To:**  
**Subject:** Admissions Interview Form  
**Attachments:** Spring 2022 CUNYSOM Admissions Interviewing Schedule.doc

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Good afternoon Everyone,

Happy New Year.

It is that time, time for the Sophie Davis/CUNY School of Medicine Interview Committee of faculty and staff members to prepare for helping in selecting our next class of students. See attached form for each of you to complete informing me of the times you can interview this year. Please return the form to me by Thursday, January 13<sup>th</sup> at this email address [SD\\_CSOM-AdmEval@med.cuny.edu](mailto:SD_CSOM-AdmEval@med.cuny.edu) . Similar to past years, all interviews will be conducted on Tuesdays and Wednesdays.

Hope to see everyone on January 18<sup>th</sup> for our first meeting in preparation for our upcoming interviews.

We look forward to this season of interviews and wish you all the best in this new year.

Sincerely,  
Leonie

*Leonie Peele*

Associate Director of Admissions  
The Sophie Davis Biomedical Education Program/CUNY School of Medicine  
212-650-6179

To all CUNY School of Medicine/Sophie Davis Biomedical Education Program faculty and staff interviewers, Complete the eight (8) week interview schedule below by selecting your available dates and times. Return your response as soon as possible and no later than Thursday, January 13, 2022. Faculty and staff interviewers should plan to interview two to three candidates per week. Committee members should plan to interview five (5) candidates per week.

What times are you available to interview on  
Tuesday, February 1, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Wednesday, February 2, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Tuesday, February 8, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Wednesday, February 9, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Tuesday, February 15, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Wednesday, February 16, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Tuesday, February 22, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
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- 1:00 PM
- 2:00 PM
- 3:00 PM

Wednesday, February 23, 2022

- 9:00 AM
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- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Tuesday, March 1, 2022

- 9:00 AM
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Wednesday, March 2, 2022

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Tuesday, March 8, 2022

- 9:00 AM
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Wednesday, March 9, 2022

- 9:00 AM
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Tuesday March 15, 2022

- 9:00 AM
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Wednesday, March 16, 2022

- 9:00 AM
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Tuesday, March 22, 2022

- 9:00 AM
- 10:00 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 2:00 PM
- 3:00 PM

Name: _____
Signature: <u>X</u> _____



**From:** Hoau-yan Wang  
**Sent time:** 01/10/2022 07:07:31 PM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: Concerns with publication in Alzheimer's Research & Therapy (MS ID AZRT-D-17-00036/ DOI 10.1186/s13195-017-0280-8)

---

**From:** Rebecca Pearce <rebecca.pearce@biomedcentral.com>

**Sent:** Tuesday, January 4, 2022 10:16 AM

**To:** PUEYO Maria IRIS; [REDACTED]@gmail.com; Isabelle.guignot@servier.com; [REDACTED]@yahoo.fr; karine.deschet@orange.fr; [REDACTED]@gmail.com; [REDACTED]@yahoo.fr; ousset.pj@chu-toulouse.fr; vellas.b@chu-toulouse.fr; Hoau-yan Wang

**Subject:** [EXTERNAL] Concerns with publication in Alzheimer's Research & Therapy (MS ID AZRT-D-17-00036/ DOI 10.1186/s13195-017-0280-8)

Wang, HY., Trocmé-Thibierge, C., Stucky, A. *et al.* Increased A $\beta$ <sub>42</sub>- $\alpha$ 7-like nicotinic acetylcholine receptor complex level in lymphocytes is associated with apolipoprotein E4-driven Alzheimer's disease pathogenesis. *Alz Res Therapy* 9, 54 (2017). <https://doi.org/10.1186/s13195-017-0280-8>

Dear Prof Wang et al,

After further careful consideration, the journal has taken the decision to retract the article in line with COPE guidelines. Our investigation has concluded that explanation provided for the inconsistencies in the Western blots were insufficient and therefore confidence in the integrity of the data presented in article is compromised.

In line with our protocols for retracting articles, we will be publishing a Retraction Notice which will be bi-directionally linked to your article. The proposed wording can be found below:

**Retraction for:** [10.1186/s13195-017-0280-8](https://doi.org/10.1186/s13195-017-0280-8)

The Editors-in-Chief have retracted this article. Following publication, concerns have been raised regarding the western blot images presented in Figs. 1, 5 and 6. The authors have provided the raw data, which have been assessed by independent experts and deemed insufficient to address the concerns. The Editors-in-Chief therefore no longer have confidence in the integrity of the data in this article.

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We would appreciate it if each author could **individually respond** in writing with whether they agree or disagree with the retraction and the retraction wording. Individual agreement will be logged in the retraction notice, but please note that while we give dissenting authors space to explain why they dissent, those reasons would not be included in the notice. We will include in the notification that Prof Morain has passed.

We look forward to hearing from you by January 14, 2022.

With best wishes,

Rebecca

**Rebecca Pearce**

Publisher

**Springer Nature**

One New York Plaza, Suite 4600, NY, NY 10004-1562

T + 1 (212) 451-8733

[rebecca.pearce@springernature.com](mailto:rebecca.pearce@springernature.com)

[www.springernature.com](http://www.springernature.com)



---

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**From:** Jude-Marie A. Smalec [JSmalec@med.cuny.edu](mailto:JSmalec@med.cuny.edu)

**Sent:** Tuesday, January 11, 2022 8:33 AM

**Subject:** IAMSE Winter 2022 Webcast Audio Seminar Series – Institutional Registration - #Faculty Development

Colleagues,

Thanks to quick action to obtain institutional registration, on the part of Emine, Monica, Erica and Dean Green, you have the opportunity to attend [IAMSE \(International Association of Medical Science Educators\) winter seminar series, “How Science Educators Still Matter: Leveraging the Basic Sciences for Student Success!”](#)

The next seminar *Research in Medical School—Impact on Career Path*, will be held on Thursday, January 13, 2022, 12:00 PM - 1:00 PM

You may use the login information below, to register:

[mmassenberg@ccny.cuny.edu](mailto:mmassenberg@ccny.cuny.edu)

**CSOMSopDav1**

Or try registering under your own name using the [Special Link For The CUNY School of Medicine](#)

Enjoy, share, and learn!

Thursday, January 6, 2022 - New Horizons: Restructuring the basic and clinical sciences beyond USMLE ([Archived](#))

**Thursday, January 13, 2022 - Research in Medical School—Impact on Career Path- 12:00 PM - 1:00 PM**

Thursday, January 20, 2022 - Integrating Basic Science in the Clerkships: Innovative Strategies and Persistent Challenges -12:00 PM - 1:00 PM

Thursday, January 27, 2022- Identity Shape Shifting: How basic science teaching practices can foster identity transformation from medical student to medical professional- 2:00 PM - 3:00 PM

Thursday, February 3, 2022- Rethinking Assessment Strategies in the Basic Sciences as Step 1 Goes Pass/Fail -12:00 PM - 1:00 PM

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**From:** Jodie Meyer  
**Sent time:** 01/12/2022 08:27:12 AM  
**To:** Amr Soliman; Ana Motta-Moss; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Birgland Joseph; Carol Moore; Dani Mabeth; Danielle D Pritchett; Darwin Deen; Donna Gooden; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gloria J Mabry; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Joy Richards; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Kelly D Robinson; Kevin A Ali; Khosrow Kashfi; Kiran Matthews; Jaclyn N Churchill; Maria Felice M Ghilardi; Lily Lam; Lisa Auerbach; Lisa Coico; Lianne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Mario De La Cruz; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Olga Waters; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Darryl R Warner; Raymond Robinson; Rosa Lee; Rosalinda Guce; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Chris Washington; Daniel M Richter; Carmen R Green; Priscilla Daniel; Annabel Santana; Preston Williams  
**Subject:** Wellness in the classroom?  
**Attachments:** U T guidebook to wellness.pdf

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Good (cold!!) morning,

As the new semester begins (or for some has been underway), I'm passing along this wellness guidebook from the University of Texas which is a thoughtful resource for the classroom & student well-being. Of course, some of it is not relevant to us, but there is much good food for thought.

I urge you to take a look - it's an easy read, and might be inspiring.

Together with Jude-Marie and the faculty development team, we will spend some time thinking about well-being for students in the classroom (AND for faculty!) over the next few months.

All best,  
Jodie

*Jodie Meyer, Ph.D.*

*Executive Director of Wellness and Counseling  
Sophie Davis Biomedical Education Program/  
CUNY School of Medicine*

City College of New York  
160 Convent Avenue  
Harris Hall 101  
New York, NY 10031  
(212) 650-8985

*pronouns: she/her/hers*



# TEXAS WELL★BEING

Promoting Well-being in UT Learning Environments



# INTRODUCTION

## PROJECT OVERVIEW

In partnership with colleges, schools and departments, Well-being in Learning Environments helps faculty make small shifts in teaching that could make a major difference in students' mental health and well-being.

## WHAT ARE “CONDITIONS FOR WELL-BEING”?

Research in the field of positive psychology and flourishing indicate that conditions for well-being include concepts such as social connectedness, mindfulness, growth mindset, resilience, gratitude, inclusivity, self-compassion and life purpose.

## WHY?

Students with mental-health concerns are more likely to have a lower grade-point average and a higher probability of dropping out (Eisenberg, Golberstein, & Hunt, 2009). According to El Ansari and Stock (2010): “It is widely accepted that health and well-being are essential elements for effective learning.” The demand for mental-health services at the Counseling and Mental Health Center (CMHC) has increased 62 percent from academic year 2009–2010 to academic year 2016–17, while the total number of students at The University of Texas at Austin increased by less than 1 percent (CMHC Fact Sheet, 2017; The University of Texas at Austin, 2017).

Engaging students in practices that promote mental health is the responsibility of not just one department on campus, but of the entire campus community. Students at UT Austin indicate that faculty members are often seen as the “missing link” when it comes to their own well-being (Stuart & Lee, 2013). Additionally, the Okanagan Charter, an international charter for health-promoting universities and colleges, published a call to action for higher-education institutions: embed health into all aspects of campus culture, across the administration, operations and academic mandates (Okanagan Charter, 2015).

## HOW TO USE THIS GUIDEBOOK

Think of this guidebook as you would a menu. It provides a variety of strategies, tools and resources from which to pick and choose.

The strategies in this guidebook are based on research. They are also based on ideas and techniques that other University of Texas faculty have found to be effective in supporting student well-being. When considering the strategies or ideas you'd like to try, think about your personal interactions and teaching style. Not every strategy is the right fit, so pick one that feels comfortable and do it well. Some are easier than others to embed. According to students, some of the simplest ideas can have a huge impact when done authentically.

**I CAME WELL-EQUIPPED WITH A WHOLE TOOLBOX OF COPING SKILLS AND EXPERIENCES, BUT EVEN I STRUGGLE WITH SOME OF THE THINGS WE HAVE TO DO.**

—Student



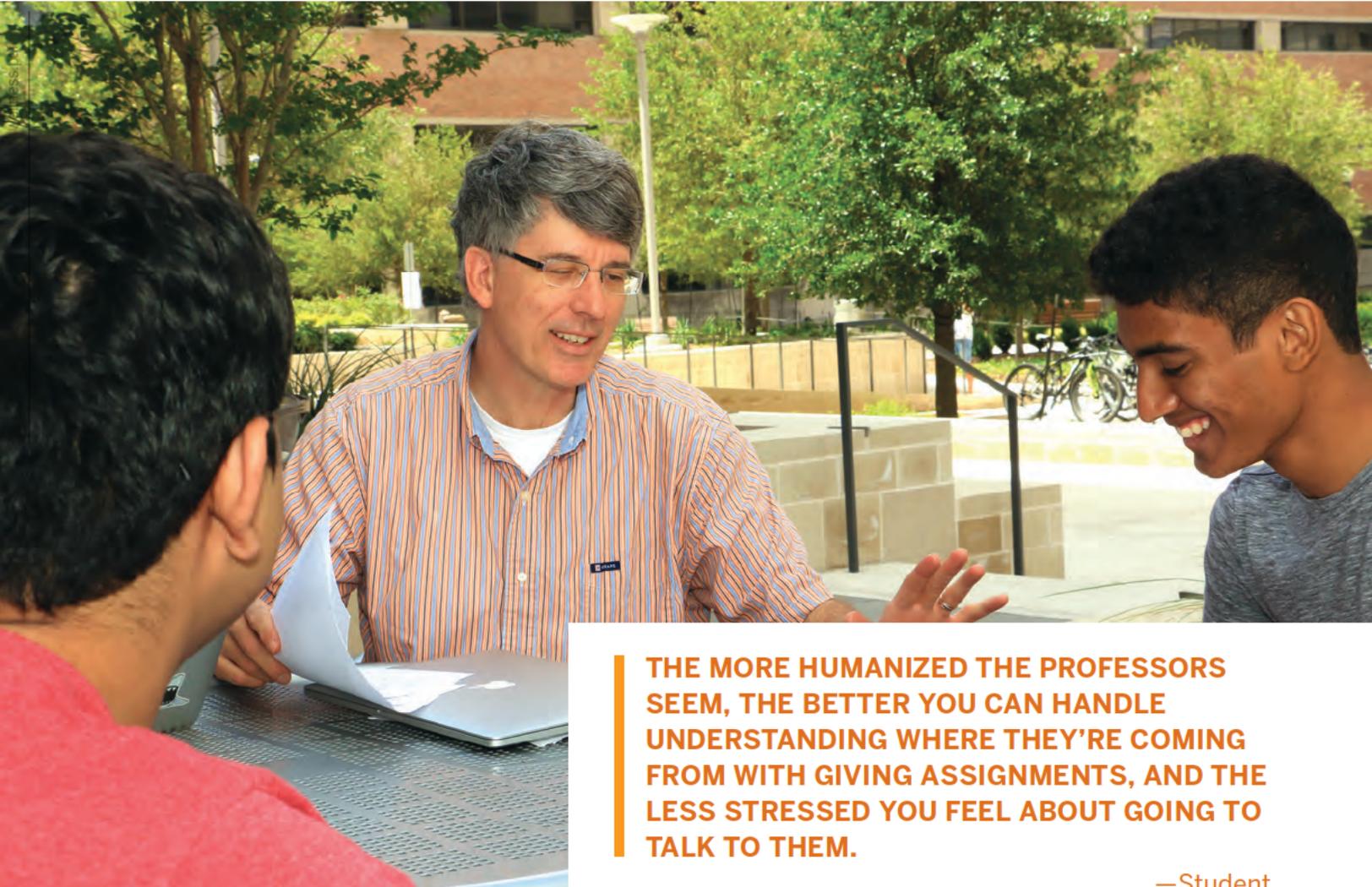
# THE WHOLE STUDENT

## GENERAL WELL-BEING PRACTICES

Students who reported poor mental health but did not qualify for a diagnosis were three times more likely to experience academic impairment than students who reported a flourishing mental health state (Keyes et al., 2013). This research suggests that the mere absence of a mental-health disorder does not indicate flourishing mental health, and that positive factors such as social connection, emotional well-being and psychological health can help to protect students from academic impairment.

- Remember your students are human, and so are you.
  - Be passionate about what you teach.
  - Use humor if possible.
  - Be happy about teaching.
  - Try to reduce the power dynamic between you and students.
  - Allow students to see your authentic self, including your mistakes and vulnerabilities.
  - Talk about mental health openly to destigmatize it.
  - Share ways that you practice self-care, and have students share how they practice it as well.
  - Include information in your syllabus about mental health (but avoid copying and pasting this information from somewhere else).
  - Let students know you are open to talking with them individually about their states of well-being. (Refer to “Supporting Students in Distress” at the end of the guidebook.)
- SHOW STUDENTS THE “THRIVE AT UT AUSTIN” APP** developed by the Counseling and Mental Health Center, and model how to use it. [cmhc.utexas.edu/thrive](http://cmhc.utexas.edu/thrive)





**THE MORE HUMANIZED THE PROFESSORS SEEM, THE BETTER YOU CAN HANDLE UNDERSTANDING WHERE THEY'RE COMING FROM WITH GIVING ASSIGNMENTS, AND THE LESS STRESSED YOU FEEL ABOUT GOING TO TALK TO THEM.**

—Student



**I try to be honest with students that although I'm a professor, and I went to grad school and got a job at UT Austin, I have been in their seats and their space. I have been overwhelmed, anxious and depressed. So I guess I try to humanize myself and our roles a little bit.**

—Mary Rose  
College of Liberal Arts



# CONDITIONS FOR WELL-BEING

## SOCIAL CONNECTEDNESS

Social connectedness has a direct effect on college student retention, according to Allen, Robbins, Casillas, and Oh (2008). Evidence also suggests that it has a positive correlation with achievement motivation (Walton, Cohen, Cwir, & Spencer, 2012), which may impact academic achievement. Social connectedness has also proved to be an important factor in maintaining student retention rates (Allen et al., 2008). Research suggests that supportive faculty members can have a significant positive impact on a student's intention to persist after the first year (Shelton, 2003). You can help your students by connecting with them or by helping them connect with each other!

- ❑ On the first day of class, use a survey to get to know students. Ask about their backgrounds, interests, strengths, needs and other topics.
- ❑ Use the survey information to make adjustments to teaching course content.
- ❑ Learn the names of your students.
- ❑ Get out from behind the podium or desk and move among the students. If you use a tablet that connects to the projector, you can allow students to write on the tablet themselves to show how they would solve a problem or answer a question.
- ❑ Incorporate welcoming rituals at the start of class. (See sidebar.)
- ❑ Share personal anecdotes.
- ❑ Share personal connections to content—areas where you struggled, concepts you were surprised to learn, etc.
- ❑ Close each class with something positive. For example, have students share something they learned or something they're interested in learning more about.
- ❑ Use various forms of cooperative or collaborative learning.

## INCORPORATE “WELCOMING RITUALS” AT THE START OF CLASS

- ❑ Smile and greet students.
- ❑ Carry on informal conversations before class.
- ❑ Play music before class. Allow students to choose the tunes.
- ❑ Ask students how they are doing.
- ❑ Start class by letting students share one WOW, POW or CHOW:
  - ❑ WOW: Something great that happened in the past week.
  - ❑ POW: Something disappointing that happened recently.
  - ❑ CHOW: A great new restaurant experience.
- ❑ Start with a brief writing assignment and/or peer conversations.
- ❑ Allow students to go over homework in pairs or cooperative groups.

**I THINK LEARNING WOULD IMPROVE... IF EVERYBODY WORKED TOGETHER... IF EVERYBODY'S COMPETING AGAINST EACH OTHER, THEN EVERYONE WANTS TO KEEP EVERYTHING TO THEMSELVES. BEING ABLE TO STUDY IN GROUPS WOULD HELP WITH WELL-BEING AND BEING SOCIALLY CONNECTED.**

—Student



**I like to go in early and talk with students before class starts. We don't talk about class content. We just talk about life stuff. It makes you more human in their eyes. I also like to stand outside the classroom door and say hi to students or tease and joke with them as they're walking by to other classes. These small things build connections between me and students.**

—Sharon Rush  
College of Pharmacy



## MINDFULNESS AND STRESS REDUCTION

Mindfulness is “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment” (p. 145, Kabat-Zinn, 2003; Kerrigan et al., 2017). Mindfulness has been shown to improve memory and testing performance, reduce stress levels, and foster better physical health (Bonamo, Legerski, & Thomas, 2015; Kerrigan et al., 2017). Mindfulness practice has also been shown to improve mental-health outcomes for students who are struggling in an academic setting (Dvořáková et al., 2017). While the goal of mindfulness is not to help people achieve more, it has remarkably reliable effects on well-being, academic performance, stress reduction and general health for its practitioners.

- ❑ Engage in “brain breaks” that allow students to take their minds off the learning content.
  - ❑ Allow for collaborative discussions or other interactions during instruction.
  - ❑ Allow for short periods of movement (e.g., get up and find one person with whom to share a thought, story or question).
- ❑ Provide a “mindfulness minute” at the beginning of class, before exams, etc., in which you encourage or allow students to sit quietly and use deep breathing techniques.
- ❑ Practice techniques for focusing attention.
- ❑ Teach students how to use effective self-talk and stress-reduction approaches to manage their emotions.
- ❑ Incorporate mindfulness activities at highly stressful times (e.g., before an exam).
- ❑ Organize mindfulness activities outside of the classroom. Examples include:
  - ❑ Visiting the Blanton Museum, where museum staff will collaborate with faculty to teach students mindfulness techniques.
  - ❑ Encouraging students to participate in a yoga, meditation or exercise class.
  - ❑ Encouraging students to participate in mindfulness classes or activities for extra credit.
- ❑ Let students know about resources for mindfulness on campus (e.g., the MindBody Labs at the Counseling and Mental Health Center and the Student Activity Center).

**I LOVED IT WHEN OUR PROFESSOR TAUGHT US A MINI MINDFULNESS TECHNIQUE TO USE BEFORE EACH CLASS STARTED. IT WAS A REALLY RIGOROUS CLASS AND IMPORTANT FOR ME TO DO WELL IN. HER TECHNIQUE HELPED ME NOT FREAK OUT BEFORE TESTS. NOW I AM USING IT IN OTHER CLASSES TOO!**

—Student





**I use mindfulness techniques within my class to teach self-care, and I haven't thrown any content away. For example, we went to the Blanton on the first day of class, and students found different pieces of artwork to consider things like the message and how the piece made them feel. They also focused on relaxing and breathing as they looked at the artwork. It took their minds off anything scientific.**

—Renee' Acosta  
College of Pharmacy



## GROWTH MINDSET

Growth mindset, or the belief that intelligence is not a fixed trait but one that can improve, is shown to be positively correlated with student achievement scores (Bostwick, Collie, Martin, & Durksen, 2017; Dweck, 2006). Students' mindsets can influence how they react to stressful situations, failures and challenges. Having a growth mindset is associated with more adaptive coping and learning strategies after failure. Alternately, a fixed mindset leads students to disengage from their challenges and feel helpless (Dweck & Leggett, 1988). Fortunately, a student's mindset is malleable. Here are some strategies to help your students change the way they see themselves in relation to challenging coursework.

- ❑ Teach students how to use mistakes/failures to their advantage.
- ❑ Let students see you make mistakes, then show them how you use those mistakes to learn.
- ❑ Struggle with concepts in front of students and allow them to help you work through the process.
- ❑ Explicitly talk with students about learning and deliberate practice.
- ❑ Discuss and model self-regulation strategies for learning and applying content. (See below.)

## DISCUSS AND MODEL SELF-REGULATION STRATEGIES FOR LEARNING AND APPLYING CONTENT. EXAMPLES INCLUDE:

- ❑ Setting goals and monitoring progress toward those goals.
- ❑ Using self talk effectively to motivate and support active learning.
- ❑ Creating time management plans to accomplish goals.
- ❑ Thinking about your approach, identifying misconceptions, and doing something to fix those misconceptions.
- ❑ Becoming aware of your emotions, such as anxiety and using techniques to address them.





**Mistakes are very important to encourage creativity and exploration when students can learn. Gladly, I make numerous mistakes during my lectures and frequently my students catch them. I prefer a class style where we are all trying to figure out interesting things together.**

—Alex Dimakis

Department of Electrical and Computer Engineering

- ❑ Focus less on competition and performance and more on learning and mastery. Examples include:
  - ❑ Not grading exams or other assignments based on a normal distribution.
  - ❑ Allowing students to retake exams or parts of exams to learn from mistakes.
  - ❑ Allowing students to rewrite papers or redo projects based on feedback provided.
  - ❑ Having students take exams both individually and in groups.
  - ❑ Giving students choices in how they demonstrate knowledge and mastery of content.
- ❑ Build in different ways for students to demonstrate learning and mastery of content. Examples include:
  - ❑ Using a variety of assignment types—exams, papers, presentations, videos, etc.
  - ❑ Letting students choose how they demonstrate their learning within individual assignments (e.g., creating a video, writing a paper, giving a presentation).
  - ❑ Allowing students to choose whether they work on assignments individually, in groups or with partners.
- ❑ Allow for students to fix mistakes and work through problems they've encountered so they can see the progress being made.
- ❑ Let students know you don't want perfection. Do this by using words like "learning" and "growing," rather than "achievement" or "performance."

## RESILIENCE

Resilience is the ability to recover from stress despite challenging life events that otherwise would overwhelm a person's normal ability to cope with that stress (Smith et al., 2008). Students with more resilience tend to have better mental health and wellness and academic outcomes (Johnson, Taasobshirazi, Kestler, & Cordova, 2014). Being able to bounce back from difficult experiences can mean coping after a bad grade or recovering from a stressful life event like the loss of a loved one. Fortunately, resilience seems to be a malleable psychological factor that, with work and time, can be strengthened. Studies have shown resilience is linked to mindfulness, a sense of purpose in life, an optimistic outlook and active coping styles (Smith, Epstein, Ortiz, Christopher, & Tooley, 2013).

- ❑ Talk about times that you've failed and how you worked through those failures.
- ❑ Teach students how to use mistakes/failures to their advantage.
- ❑ Use exams and other assignments as teaching tools, rather than the end of learning. Examples include:
  - ❑ Instead of simply giving students their grades, go over the exam or assignment and discuss areas of common struggle, what these mistakes mean for thinking and learning, and how they connect to new learning.
  - ❑ Allow students to correct mistakes and redo assignments to demonstrate continued mastery and learning.
  - ❑ Provide students with individual feedback on assignments, and model how to use this feedback to improve on future assignments.
- ❑ Explicitly teach strategies you use to overcome failure.
- ❑ Teach students how to self-assess accurately by modeling your own self-assessing behavior.
- ❑ Focus less on competition and performance and more on learning and mastery.
- ❑ Be optimistic about how students are doing in your class.





**In Fall 2017, I had taught a required second-year undergraduate course for the eighth time, and I took a very different approach. I mentioned to the students that I had struggled with specific topics in that same course when I was an undergraduate student. I told them that I had reordered the traditional presentation of the topics in the class to make it easier to grasp the more difficult concepts. I received several thank-yous during the semester from students who were repeating the course and had been overwhelmed by one of the more difficult topics due to the traditional order of topics.**

—Brian Evans  
Department of Electrical and Computer Engineering



## GRATITUDE

In simple terms, researchers define gratitude as “a felt sense of wonder, thankfulness, and appreciation for life” (Emmons & McCullough, 2003; Lyubomirsky, 2007). Emmons, McCullough, and their peers have demonstrated the beneficial impacts of expressing gratitude on physical and mental health (Bartlett & DeSteno, 2006; Emmons & McCullough, 2003; Neff, 2011). This research also shows that through consistent practice, gratitude can be developed over time, leading to higher levels of happiness and self-worth and stronger relationships (Emmons & McCullough, 2003; Lyubomirsky, 2007; McCullough, Emmons, & Tsang, 2002).

- ❑ Show students how to express gratitude. Examples include:
  - ❑ Share things in your life for which you are grateful.
  - ❑ In class, share student actions that have inspired gratitude.
  - ❑ Give individual students written notes describing something they’ve done that you appreciate.
  - ❑ Send emails to individual students listing things they’ve done that you appreciate.
- ❑ Have students think about or list things for which they’re grateful. Examples include:
  - ❑ Before an exam, give students two minutes to write about one object of gratitude.
  - ❑ During a break in class, have students contemplate a relationship for which they are grateful.
  - ❑ For homework, ask students to write a letter to someone who has made them feel grateful.
  - ❑ Have students keep a gratitude journal and write in it once a week.
- ❑ Be optimistic. Focus on the positive more than the negative. Examples include:
  - ❑ At the beginning of the semester, focus on the benefits of being in your class.
  - ❑ When going over an exam or assignment, focus on what students did correctly before addressing their mistakes.
  - ❑ At the end of the semester, share how teaching the class benefited you, and have students share how the class benefited them.



## INCLUSIVITY

Think of inclusive education as an ongoing effort with three distinct but related goals (Waitoller & Kozleski, 2013): to more equitably distribute learning opportunities; to recognize and honor the differences among students; and to provide opportunities for marginalized groups “to represent themselves in decision-making processes.”

As a conclusion to their meta-analysis of inclusive education research, Waitoller and Artiles (2013) argue that inclusivity should be treated more broadly. Rather than focusing on a unitary identity like “disabled” or “female,” for example, treat the question of inclusion in the classroom through a lens of intersectionality, considering all relevant identities and groups that have been historically marginalized in educational settings.

- ❑ Consider student needs when it comes to seating, visual/audio equipment, note taking, test taking, response opportunities, etc.
- ❑ Use inclusive language.
- ❑ Provide resource information in your syllabus or elsewhere. (See the “Resources” section.)
- ❑ Be prepared to allow for and respond to different student responses within the content.
- ❑ Explicitly talk about mental health and well-being to normalize difficulties.



**I've had students [confronting each other] in class, but I guess from my perspective, I don't really mind. I see that as I've created a safe space where everyone feels that they can be themselves...**

—UT faculty member



## INCLUSIVITY

### FACULTY RESOURCES:

- ❑ Faculty Innovation Center: [facultyinnovate.utexas.edu/inclusive](https://facultyinnovate.utexas.edu/inclusive)
- ❑ Division of Diversity and Community Engagement: [diversity.utexas.edu](https://diversity.utexas.edu)
- ❑ Services for Students with Disabilities: [diversity.utexas.edu/disability](https://diversity.utexas.edu/disability)
- ❑ Gender and Sexuality Center: [utgsc.org](https://utgsc.org)
- ❑ Multicultural Engagement Center: [diversity.utexas.edu/multiculturalengagement](https://diversity.utexas.edu/multiculturalengagement)
- ❑ Office for Inclusion and Equity: [equity.utexas.edu](https://equity.utexas.edu)
- ❑ Title IX: [titleix.utexas.edu](https://titleix.utexas.edu)
- ❑ BeVocal: The Bystander Intervention Initiative of the University of Texas at Austin: [wellnessnetwork.utexas.edu/BeVocal](https://wellnessnetwork.utexas.edu/BeVocal)
- ❑ Humanities Institute Difficult Dialogues Program: [liberalarts.utexas.edu/humanitiesinstitute/courses/About.php](https://liberalarts.utexas.edu/humanitiesinstitute/courses/About.php)
- ❑ Race and Curriculum Revision Project: Keffrelyn Brown, [keffrelyn@austin.utexas.edu](mailto:keffrelyn@austin.utexas.edu)
- ❑ Texas Center for Disability Studies: [disabilitystudies.utexas.edu/institute person centered practices](https://disabilitystudies.utexas.edu/institute-person-centered-practices)

This is not a comprehensive list of diversity and inclusion resources on campus. For information about a specific topic, please contact the Faculty Innovation Center ([facultyinnovate.utexas.edu](https://facultyinnovate.utexas.edu)).

## SELF-COMPASSION AND EMPATHY

Self-compassion is not the same thing as self-esteem; it is a practice of treating yourself like you would a close friend by accepting your shortcomings but also holding yourself accountable to grow and learn from failure (Neff, 2003, 2011). Research on this topic conducted here at UT Austin suggests that “self-compassionate individuals may be better able to see failure as a learning opportunity and to focus on accomplishing tasks at hand” (p. 274, Neff, Hsieh, & Dejitterat, 2005).

- ❑ Model how you have compassion for yourself and others.
  - ❑ When you make a mistake or struggle with something, share it with students and talk about strategies you use to be compassionate with yourself (e.g., self-talk).
  - ❑ When a student comes to you with a question or need, show that you are listening and understand where they’re coming from (e.g., smile, shake your head, repeat what they say to clarify).
- ❑ Discuss common humanity among you and students. Examples include:
  - ❑ When students struggle or fail, talk about a time when you had a similar experience.
  - ❑ Share your own positive and negative experiences at specific times (e.g., before or after giving an exam, when going over an assignment).
- ❑ Try seeing things from a student’s perspective, and help him or her see things from your perspective.
- ❑ Give students the benefit of the doubt. Don’t assume they’re lazy or trying to get out of work.
- ❑ Be flexible. Take into consideration students’ lives outside of class. These lives may include:
  - ❑ Families, including their own children
  - ❑ Jobs
  - ❑ Chronic illnesses
  - ❑ Other classes



## LIFE PURPOSE

Life purpose, or meaning in life, is a core component of positive psychology and refers to the belief that one lives a meaningful existence. This belief is associated with higher life satisfaction (Chamberlain & Zika, 1988), happiness (Debats, van der Lubbe, & Wezeman, 1993), and hope (Mascaro & Rosen, 2005). Having a sense of life purpose has multiple positive associations with coping, health, well-being and adaptive coping strategies (Thompson, Coker, Krause, & Henry, 2003). It's also related to a lower incidence of psychological disorders (Owens, Steger, Whitesell, & Herrera, 2009). Helping students understand how classroom happenings are linked to their sense of purpose in life may help them maintain motivation, hope and engagement with the course.

- ❑ Have students set goals for what they want to accomplish in the course.
- ❑ Share how content relates to your own life and goals.
- ❑ While teaching, explicitly connect content to students' goals.
- ❑ Set up times to talk informally with students about their goals and life plans.



**In all likelihood, someone has taken advantage of me in terms of asking for and getting extensions or make-ups. But I have to balance that risk against one in which I must scrupulously interrogate students' lives and put myself in the position to say, 'Well, I don't believe your word. Show me proof that your grandmother died.' Kindness to students who are struggling is important to me, and if I am going to err, I tend to err on the side of assuming that students are following the honor code and being truthful.**

—Mary Rose  
College of Liberal Arts

# NOTES

# EFFECTIVE LEARNING ENVIRONMENTS

## IN-CLASS INSTRUCTIONAL PRACTICES

The kinds of instructional practices used in a classroom will vary according to any number of factors, including the material taught, size of the classroom and learning objectives. One instructional practice that all students can benefit from is knowing what is expected of them by being given a clear framework they can use to anchor their knowledge and progress (Balgopal, Casper, Atadero, & Rambo-Hernandez, 2017). Finding ways to provide structured, intentional and transparent assessment practices can limit anxiety and improve a student's learning, retention and testing performance (Chiou, Wang, & Lee, 2014; Cross & Angelo, 1988). Encourage them to ask questions and seek help.

### SIMPLE IDEAS:

- ❑ Review previously learned content before introducing new information.
- ❑ Connect course content to the real world.
- ❑ Be explicit about objectives related to abstract learning such as thinking processes and problem-solving, and explicitly show students how these types of learning relate to content, activities, exams, etc.
- ❑ Plan instruction, including any activities or discussion, effectively.
- ❑ Incorporate “think, turn, talk” during lessons.
  - ❑ Think: Have students think about their responses to a question or idea.
  - ❑ Turn: Ask students to turn to a partner.
  - ❑ Talk: Have students share their thinking about the question or idea with their partners.
- ❑ Incorporate writing-to-learn activities such as admit or exit tickets, non-stop writes, silent conversations and write-arounds.
  - ❑ Admit ticket: A brief writing activity at the beginning of class to review previous learning.





- ❑ Exit ticket: A brief writing activity to review what was learned in class or preview what will be learned in the next class.
- ❑ Non-stop write: Timed writing activity in which students take two to four minutes to write about their thinking, questions or ideas related to what they've learned.
- ❑ Silent conversation: An activity similar to "think, turn, talk" but instead of talking about their thinking, partners write about their thinking, read what one another has written, and respond to it in writing. Each written response is usually timed for one to two minutes.
- ❑ Write-around: An activity similar to a silent conversation, but instead of partnering with one person, students pass their written responses around in a group of four to five.
- ❑ To check for understanding, ask students to give you a thumbs-up, thumbs-sideways or thumbs-down to represent how they're feeling about the content. If there are very few thumbs-ups, then you can probe further to learn the specific causes of difficulty.
- ❑ Incorporate quick, informal assessments to gauge student mastery of concepts and provide immediate feedback.

### MORE COMPLEX IDEAS:

- ❑ Allow students to apply knowledge and not only memorize information.
- ❑ Create cooperative learning activities to engage students in application, analysis and synthesis. Establish norms with students for how to work collaboratively.
- ❑ As students work in pairs or small groups, listen to their ideas and questions, and make note of what specific students say. During the whole-group discussion, ask different students if you can share their comments during the paired/small-group work. This technique is especially helpful for engaging students who are reticent about talking in front of the whole class.
- ❑ Use worked examples and non-examples. Non-examples are problems that have been done incorrectly. Have students find the mistakes and work in partners or groups to resolve them.
- ❑ Allow students to begin work on a homework, lab or other assignment in class to get support from you and their fellow students before completing the assignment on their own.
- ❑ Offer choices in assignments and tasks, including exam structure (e.g., multiple-choice vs. short-answer vs. oral response).
- ❑ Create assignments in which the results can be utilized by a community or campus initiative.
- ❑ Invite outside speakers who can connect learning to civic engagement.

**My course pairs students with elders residing in assisted-living/healthcare facilities to provide companionship and social support. By building long-term relationships, students develop the soft skills of empathy, respect and caring attitudes which are important in their future careers.**

—Holli Temple  
College of Pharmacy

## OUTSIDE OF CLASS ACTIVITIES

Office hours are often underutilized by students, but when a single check-in and reflection meeting is made mandatory students tend to improve their learning outcomes (McGrath, 2014). These findings suggest that personal recognition and engagement have an important augmentative effect above and beyond additional exposure to the material students were tasked with learning—statistics, in this case. See McGrath (2014) for a sample reflection exercise to conduct with students during office hours. In addition to office hours, consider conducting informal activities outside of class to get to know students on a personal level and help them make connections to other resources (e.g., museums, libraries).

- ❑ Provide informal opportunities such as Q&A sessions and study groups for students to discuss course content.
- ❑ Invite small groups of students to attend office hours.
- ❑ Create informal activities/get-togethers for faculty and students to get to know one another. Examples include:
  - ❑ Coffee chats
  - ❑ Cookies, donuts or ice cream with different faculty
  - ❑ Lunch with students
  - ❑ Informal weekly meetings to talk with students about their life goals, plans, etc.
- ❑ Visit different locations on campus with students. Examples include:
  - ❑ Blanton Museum of Art
  - ❑ Harry Ransom Center
  - ❑ Dolph Briscoe Center for American History
  - ❑ Lyndon Baines Johnson Library and Museum
  - ❑ Texas Performing Arts
  - ❑ Texas Memorial Museum
  - ❑ Department of Astronomy's Star Parties
- ❑ Respond to student emails or other forms of communication in a respectful and timely way.
- ❑ Mentor teaching assistants whom you're supervising in well-being practices.



**Our department had an ice-cream social where administrators gave out ice cream to students and faculty. It gave us a chance to come together as a department and get to know one another on a personal level. Many students told us they enjoyed getting to relax and not having to think about the next exam or lab. It was just about getting to know each other.**

—Bryson Duhon  
College of Pharmacy

## DEPARTMENTAL ACTIVITIES

In addition to the role of individual faculty members in supporting student well-being, administrators within colleges and departments can work to coordinate these efforts. Such coordination can help faculty more easily support students. Administrators may also consider embedding conditions for well-being into various departmental activities to positively impact the well-being of both students and faculty.

- ❑ Communicate the importance of faculty members taking care of their own states of well-being.
- ❑ Create a student-led wellness group that makes recommendations for improvements in departmental policies and practices.
- ❑ Provide training for faculty in recognizing and responding to students in distress. Contact the Counseling and Mental Health Center or Student Emergency Services to learn more.
- ❑ Create consistent systems for gathering and implementing faculty and student feedback within the department.
- ❑ Create a first-year (or longer) informal course that combines mentoring from both a faculty member and a peer mentor (e.g., third-year student) with well-being lessons/activities.
- ❑ Provide training and support to teaching assistants in well-being practices (e.g., through Faculty Innovation Center courses).
- ❑ Create informal activities/events for faculty and students to get to know one another.
- ❑ Allow time for faculty to share well-being practices they are incorporating into their classes.
- ❑ Plan wellness activities. Examples include:
  - ❑ A wellness week with different activities like a petting zoo, mindfulness group or self-care class.
  - ❑ Ongoing classes such as yoga, Zumba, or meditation.
- ❑ Support faculty well-being.
  - ❑ Within a professional development series, build in classes related to mindfulness, self-compassion, and self-care.
  - ❑ Set up ongoing classes for faculty in yoga or meditation.
  - ❑ Plan book studies related to wellness topics (e.g., using the book *The How of Happiness* by Sonja Lyubomirsky).



**We really need to make a cultural change. We need to ask ourselves how we can build relationships and connections with students not only in our classrooms but across our college. How can we get more folks on board with thinking about and supporting student well-being?**

—Renee' Acosta  
College of Pharmacy

# SUPPORTING STUDENTS IN DISTRESS

## CHECK IN. “HOW ARE YOU DOING?”

- ❑ **Talk to the student.** Talk in private when you are able to give the student your undivided attention. It is possible that just a few minutes of effective listening on your part may be enough to help the student feel comfortable about what to do next.
- ❑ **Be direct and nonjudgmental.** Express your concern in behavioral, nonjudgmental terms. Be direct and specific. For example, say something like “I’ve noticed you’ve been absent from class lately, and I’m concerned,” rather than “Why have you missed so much class lately?”
- ❑ **Listen sensitively.** Listen to thoughts and feelings in a sensitive, non-threatening way. Communicate understanding by repeating back the essence of what the student has told you. Try to include both content and feelings. For example, “It sounds like you’re not accustomed to such a big campus, and you’re feeling left out of things.” Remember to let the student talk.

## MENTION RESOURCES. “HAVE YOU TRIED CMHC’S MINDBODY LAB?”

- ❑ **Refer.** Point out that help is available, and that seeking help is a sign of strength. Make some suggestions about places to go for help. (See the list in the “Resources” section for ideas.) Tell the student what you know about the recommended person or service.
- ❑ **Take a walk.** Consider walking the student to the CMHC yourself if needed. You can also contact the Behavior Concerns Advice Line (BCAL) at (512) 232-5050 or make an online report at the Dean of Students website.

## ENCOURAGE SELF-CARE. “WHAT ARE YOU DOING TO TAKE CARE OF YOURSELF?”

- ❑ **Follow up.** This is an important part of the process. Check with the student later to find out how he or she is doing. Provide support as appropriate.
- ❑ **Be flexible.** Be willing to consider flexible arrangements, such as extensions on assignments, exams or deadlines.

## AVOID...

- ❑ Minimizing the student’s concerns (e.g., “Your grades are so good.”).
- ❑ Providing so much information that it overwhelms the student.
- ❑ Suggesting that students do not need treatment, or that their symptoms will stop without it.
- ❑ Denying or ignoring your observations of the student’s academic or behavioral changes.
- ❑ Assuming students are fully aware of the sources of their stress.



## SHIFT TO BE AN ALLY

### Students in Recovery

- Remember that recovery is about more than eliminating symptoms.
- Be aware of the environments you create, and work towards creating safe ones.
- Show up and show you care.
- Listen and have an open mind.
- Reduce stigmatizing language.
- Don't judge, and communicate from a place of respect.
- If you have a question about something, ask.

## SHIFT THE CULTURE AROUND SUBSTANCE MISUSE

Substance use can adversely affect students' attendance, participation in class discussion, performance on assignments and exams, and overall GPA. Faculty are well positioned to contribute to changing students' expectations around substance use and help shift the culture.

- If you hear students say, "Everyone gets wasted in college," interrupt and correct the misperception. Most UT students don't binge drink, and many choose not to drink at all. An even smaller minority use substances other than alcohol.
- Examine your own beliefs about college student substance use. If you carry the same misperception that all students are doing it, you may unintentionally reinforce this norm or expectation in your language.
- If appropriate, incorporate the topics into your course through assignments and case studies where substance use is the focus.

## HOW TO TALK TO A STUDENT ABOUT POTENTIAL SUBSTANCE MISUSE

- Set healthy boundaries.
- Adjust your approach based on the circumstances.
- Keep a student's trust and privacy in mind.
- Don't talk when the student is drunk or high.
- Remember and convey they aren't a bad person.
- Use "I" statements (e.g., "I feel concerned when you miss several classes in a row" vs. "You are missing classes, and you may receive a lower grade").
- Make a list of the warning signs you and/or your TA are witnessing, and share them thoughtfully.
- Don't take things personally; the student may react defensively.
- Always be kind, and offer support.
- Know that you can't fix them.
- Meet the student where they are.
- Encourage the student to seek any positive change, including harm reduction.
- Let them know resources are available. (See list on pages 25 and 26.)
- Talk with them sooner rather than later.

## WARNING SIGNS FOR SUBSTANCE MISUSE

- Sudden grade drop
- Excessive absenteeism
- Isolation or social anxiety
- Appearing under the influence of a substance (e.g., nodding off, mania, slurring, inappropriate responses to questions, inability to sit still, weight loss or gain, bags under eyes, hygiene difficulties)
- Numerous trips to bathroom
- Lack of willingness to engage; apathy

# RESOURCES

## TEACHING AND LEARNING

-  Faculty Innovation Center: [facultyinnovate.utexas.edu](http://facultyinnovate.utexas.edu)

The Faculty Innovation Center explores teaching style, subject matter, and creativity to help power innovations in higher education.
-  Office of the Provost: [provost.utexas.edu](http://provost.utexas.edu)

The Office of the Provost coordinates the academic mission of the university, manages the academic experience for students, and implements policies and procedures related to faculty and administration.
-  Sanger Learning Center: [ugs.utexas.edu/slc](http://ugs.utexas.edu/slc)

The Sanger Learning Center provides one-on-one assistance (such as peer academic coaching and tutoring) and group support (such as workshops and study sessions).
-  Public Speaking Center: [ugs.utexas.edu/slc/support/speaking-center](http://ugs.utexas.edu/slc/support/speaking-center)

The Public Speaking Center helps students plan or practice their presentations with a supportive public speaking consultant.
-  University Writing Center: [uwc.utexas.edu](http://uwc.utexas.edu)

The University Writing Center provides one-on-one consultation for student writers

## HEALTH AND WELLNESS

-  University Health Services: [healthyhorns.utexas.edu](http://healthyhorns.utexas.edu)

University Health Services (UHS) provides medical care and patient education to undergraduate, graduate, and professional students as well as public health leadership for the campus.
-  Counseling and Mental Health Center: [cmhc.utexas.edu](http://cmhc.utexas.edu)

The Counseling and Mental Health Center (CMHC) provides counseling, psychiatric, consultation, and prevention services that facilitate students' academic and life goals and enhance their personal growth and well-being.
-  Counselors in Academic Residence (CARE): [cmhc.utexas.edu/CARE.html](http://cmhc.utexas.edu/CARE.html)

The Counselors in Academic Residence (CARE) program is made up of licensed mental health professionals who work with students in the colleges they serve. Their mission is to provide access to mental health support for students who are struggling emotionally and/or academically.
-  Center for Students in Recovery (CSR): [recovery.utexas.edu](http://recovery.utexas.edu)

The Center for Students in Recovery (CSR) provides a supportive community where students in recovery and in hope of recovery can achieve academic success while enjoying a genuine college experience free from alcohol and other drugs.
-  Wellness Network: [wellnessnetwork.utexas.edu](http://wellnessnetwork.utexas.edu)

The Wellness Network is a campus-wide coalition committed to assessing and addressing the health and wellness needs of students, faculty, and staff at the university.
-  BeVocal: [wellnessnetwork.utexas.edu/BeVocal](http://wellnessnetwork.utexas.edu/BeVocal)

BeVocal is a university-wide initiative to promote the idea that individual Longhorns have the power to prevent high-risk behavior and harm. Their hope is that the reinforcement of bystander intervention through numerous partners will increase the odds that UT faculty, staff, and students will intervene to prevent harm and will create a culture of caring for one another's well-being.
-  Voices Against Violence (VAV): [cmhc.utexas.edu/vav.index.html](http://cmhc.utexas.edu/vav.index.html)

Voices Against Violence (VAV) offers comprehensive violence prevention and response programs

## DIVERSITY AND INCLUSION

- ❑ **Division of Diversity and Community Engagement: [diversity.utexas.edu](https://diversity.utexas.edu)**

The Division of Diversity and Community Engagement (DDCE) supports diverse students through initiatives to help them meet personal and academic goals and supports a positive campus culture through educational and innovative campus programming. The division also works with a broad range of student, faculty, and community constituents to help the university connect its intellectual resources to communities across Texas and offer education to those who may face the greatest challenges in accessing it.
- ❑ **Services for Students with Disabilities: [diversity.utexas.edu/disability](https://diversity.utexas.edu/disability)**

Services for Students with Disabilities (SSD) ensures students with disabilities have equal access to their academic experiences by determining eligibility and approving reasonable accommodations.
- ❑ **Gender and Sexuality Center: [diversity.utexas.edu/genderandsexuality](https://diversity.utexas.edu/genderandsexuality)**

The Gender and Sexuality Center is UT's women's center and LGBTQIA+ center. The office provides opportunities for all members of the UT Austin community to explore, organize, and promote learning around issues of gender and sexuality. The center is a hangout space for students, a resource for education and outreach, and a partner to over 25 student groups.
- ❑ **Multicultural Engagement Center: [diversity.utexas.edu/multiculturalengagement](https://diversity.utexas.edu/multiculturalengagement)**

The Multicultural Engagement Center is a student resource office that supports a culturally diverse campus and helps cultivate a positive campus climate.
- ❑ **Office for Inclusion and Equity: [equity.utexas.edu](https://equity.utexas.edu)**

The Office for Inclusion and Equity (OIE) advances a diverse, equitable, and supportive campus culture through their commitment to fulfilling the spirit of equal opportunity laws and policies, as well as building awareness within the university community.
- ❑ **Title IX: [titleix.utexas.edu](https://titleix.utexas.edu)**

The Title IX office supports the university's mission to create and maintain an educational and work environment free from all forms of sexual harassment, sex discrimination, exploitation, and intimidation where all students, faculty, and staff can learn, work, and thrive.

## GENERAL SUPPORT

- ❑ **Behavior Concerns Advice Line (BCAL): (512)232-5050; [besafe.utexas.edu/behavior-concerns-advice-line](https://besafe.utexas.edu/behavior-concerns-advice-line)**

The Behavior Concerns Advice Line (BCAL) provides advice and support about the behavior of someone connected to UT Austin. Our staff discusses options and strategies, provides referrals, and intervenes as needed.
- ❑ **Student Emergency Services (includes food pantry and career closet): [deanofstudents.utexas.edu/emergency](https://deanofstudents.utexas.edu/emergency)**

Through individualized consultation, Student Emergency Services in the Office of the Dean of Students provides assistance, intervention, and referrals to support students navigating challenging or unexpected issues that impact their well-being and academic success. Programs include the UT Outpost food pantry and career closet and Interpersonal Violence Peer Support.
- ❑ **Student/Staff Ombuds Services: [ombuds.utexas.edu/student](https://ombuds.utexas.edu/student)**

The ombuds provides a confidential environment for students and staff to voice concerns related to life at the university. The office provides information and referrals, explores options related to university policies and procedures, and coaches conflict resolution techniques.
- ❑ **Faculty Ombuds Services: [ombuds.utexas.edu/faculty](https://ombuds.utexas.edu/faculty)**

The Faculty Ombuds Office provides faculty with a prompt and professional way to resolve conflicts, disputes, or complaints beyond turning to their supervisors.
- ❑ **Employee Assistance Program: [hr.utexas.edu/current/eap](https://hr.utexas.edu/current/eap)**

The Employee Assistance Program (EAP) strives to transform lives to improve personal and organization effectiveness for the benefit of the entire UT community.

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## COUNSELING AND MENTAL HEALTH CENTER

Chris Brownson, Director and Associate Vice President for Student Affairs  
 Kathryn Redd, Associate Director for Prevention and Outreach  
 Althea L. Woodruff, Project Coordinator  
 Michael J. Balsan, Graduate Assistant  
 Andrew Mendoza, Art Director  
 Samuel Pitasky, Graduate Assistant

## FACULTY INNOVATION CENTER

### SHIFTING THE CAMPUS CULTURE AROUND SUBSTANCE MISUSE

Lori K. Holleran, Director of Undergraduate Studies Instruction, Engagement, and Wellness  
 and Steven Hicks Professor in Addictions and Substance Abuse Services  
 Tiffany Cunningham, Assistant to the Executive Leadership Team and Peer Coordinator

## UNIVERSITY MARKETING AND CREATIVE SERVICES

Leslie Ernst, Art Director  
 Laurie O'Meara, Project Manager  
 Tillie Policastro, Designer

## PARTICIPATING FACULTY

### Department of Electrical & Computer Engineering

Alexandros Dimakis, Associate Professor of Electrical Engineering  
 Brian Evans, Engineering Foundation Professor of Electrical and Computer Engineering  
 Christine Julien, Annis & Jack Bowen Professor in Engineering  
 Nina Telang, Senior Lecturer  
 Ahmed Tewfik, Department Chair  
 Ramesh Yerraballi, Distinguished Senior Lecturer

### College of Liberal Arts

Phillip Barrish, Tony Hilfer Professor of American and British Literature  
 Valerie Bencivenga, Director of Undergraduate Studies and Senior Lecturer in Economics  
 Susan Deans Smith, Associate Professor of History  
 Alison Frazier, Associate Professor of History  
 Marilyn Lehman, Graduate Program Administrator in the History Department  
 Marc Musick, Senior Associate Dean for Student Affairs in Liberal Arts  
 Abena Dove Osseo Assare, Associate Professor of History  
 Heather Pelletier, Lecturer in French  
 Mary R. Rose, Associate Professor of Sociology  
 Rajka Smiljanic, Associate Professor of Linguistics

### College of Pharmacy

Renee Acosta, Associate Dean for Academic Affairs and Clinical Professor  
 J. Nile Barnes, Clinical Assistant Professor  
 Patrick Davis, Eckerd Centennial Professor in Pharmacy  
 Bryson Duhon, Assistant Dean for Student Success and Clinical Assistant Professor  
 Diane Ginsburg, Associate Dean for Health Partnerships and Clinical Professor  
 Jennifer Ridings Myhra, Assistant Dean for Experiential and Professional Affairs and Clinical Associate Professor  
 Sharon Rush, Clinical Associate Professor  
 Holli Temple, Clinical Assistant Professor



The University of Texas at Austin  
**Counseling and Mental Health Center**  
*Division of Student Affairs*  
[cmhc.utexas.edu/wellbeing](http://cmhc.utexas.edu/wellbeing)



The University of Texas at Austin  
**Faculty Innovation Center**



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**From:** Marc Scullin  
**Sent time:** 01/12/2022 10:49:28 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kalliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ericikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Nicole Roberts  
**To:**  
**Subject:** Thursday 1/27/22 @ 12 PM - Dr. Khosrow Kashfi Webinar "Nitric oxide modified non-steroidal anti-inflammatory drugs (NSAIDs) as agents for cancer prevention: Rationale and promise"  
**Attachments:** Webinar Kho Kashfi\_January 27^J 2022.pdf

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Dear CSOM Faculty and Staff:

On Thursday, January 27, 2022 at 12:00 PM EST, Dr. Khosrow Kashfi from CUNY School of Medicine's Molecular, Cellular and Biomedical Sciences Department will be leading a webinar titled "Nitric oxide modified non-steroidal anti-inflammatory drugs (NSAIDs) as agents for cancer prevention: Rationale and promise" for The International Society for Nitric Oxide and Cancer (ISNOC).

All are welcome. Your attendance in support of Dr. Kashfi and his work is appreciated and encouraged.

**Link to meeting**

<https://us02web.zoom.us/j/87867654567?pwd=ZHdlUjNGbk9zRUtyNDM0NjNmcTVVdz09>

Meeting ID: 878 6765 4567

Access code: 648999



## Nitric oxide modified non-steroidal anti-inflammatory drugs (NO-NSAIDs) as agents for cancer prevention: Rationale and promise



**Khosrow Kashfi**

Associate Medical Professor  
CUNY School of Medicine  
Department of Molecular, Cellular  
and Biomedical Sciences  
New York

### **Seminar scheduled at:**

9:00 (Los Angeles)

12:00 (New York)

18:00 (Paris)

### **Link to meeting**

<https://us02web.zoom.us/j/87867654567?pwd=ZHdUINGbk9zRUtyNDM0NjNmTVVdz09>

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## **Nitric oxide modified non-steroidal anti-inflammatory drugs (NO-NSAIDs) as agents for cancer prevention: Rationale and promise**



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Department of Molecular, Cellular  
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Meeting ID: 878 6765 4567

Access code: 648999

**From:** Andreas Kottmann

**Sent time:** 01/12/2022 01:21:55 PM

**To:** Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres; Geri Kreitzer; Ashiwel Undieh

**Cc:** Maria D Lima

**Subject:** are you anticipating any graduate student openings in your labs by summer 2023?

---

Dear All,

Please respond to Maria Lima and me with the number of new graduate students you anticipate to host in summer 2023.

I would need that number by today.

Thank you, Andreas

**From:** Geri Kreitzer  
**Sent time:** 01/12/2022 01:24:10 PM  
**To:** Andreas Kottmann; Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres; Ashiwel Undieh  
**Cc:** Maria D Lima  
**Subject:** RE: are you anticipating any graduate student openings in your labs by summer 2023?

---

2023?  
Or 2022?

---

**From:** Andreas Kottmann  
**Sent:** Wednesday, January 12, 2022 1:22 PM  
**To:** Patricia Cortes <pcortes@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Khosrow Kashfi <kashfi@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Sanna Goyert <sgoyert@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Gonzalo Torres <GTorres@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Ashiwel Undieh <aundieh@med.cuny.edu>  
**Cc:** Maria D Lima <mlima@med.cuny.edu>  
**Subject:** are you anticipating any graduate student openings in your labs by summer 2023?

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**Sent time:** 01/12/2022 01:25:36 PM  
**To:** Geri Kreitzer; Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres; Ashiwe Undieh  
**Cc:** Maria D Lima  
**Subject:** RE: are you anticipating any graduate student openings in your labs by summer 2023?

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It's about admission this autumn (2022). They will then hit your labs as grad students in summer 2023. A

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**Cc:** Maria D Lima <mlima@med.cuny.edu>  
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2023?  
Or 2022?

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**Cc:** Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>  
**Subject:** are you anticipating any graduate student openings in your labs by summer 2023?

Dear All,

Please respond to Maria Lima and me with the number of new graduate students you anticipate to host in summer 2023.

I would need that number by today.

Thank you, Andreas

**From:** Ashiwel Undieh  
**Sent time:** 01/12/2022 01:39:56 PM  
**To:** Andreas Kottmann; Geri Kreitzer; Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres  
**Cc:** Maria D Lima  
**Subject:** RE: are you anticipating any graduate student openings in your labs by summer 2023?

---

What graduate program is this?

=====  
Ashiwel S. Undieh, PhD  
Professor in Neuroscience / Pharmacology / Pharmaceuticals  
City University of New York (CUNY) School of Medicine  
The City College of New York, 160 Convent Avenue  
Marshak Building Room 918 (Lab); Harris Hall Room 210 (Office)  
New York, NY 10031-9101  
Phone: +1-212-650-8283 (Lab); +1-212-650-8234 (Office)  
=====

"A good experiment answers at least one question and raises at least one new question" - ASU

---

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**Sent:** Wednesday, January 12, 2022 1:26 PM  
**To:** Geri Kreitzer <[gkreitzer@med.cuny.edu](mailto:gkreitzer@med.cuny.edu)>; Patricia Cortes <[pcortes@med.cuny.edu](mailto:pcortes@med.cuny.edu)>; Patricia Broderick <[broderick@med.cuny.edu](mailto:broderick@med.cuny.edu)>; Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>; Eitan Friedman <[friedman@med.cuny.edu](mailto:friedman@med.cuny.edu)>; Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>; Khosrow Kashfi <[kashfi@med.cuny.edu](mailto:kashfi@med.cuny.edu)>; John (Jack) Martin <[jmartin@med.cuny.edu](mailto:jmartin@med.cuny.edu)>; Maria Felice M Ghilardi <[MGhilardi@med.cuny.edu](mailto:MGhilardi@med.cuny.edu)>; Paul Gottlieb <[pgottl@med.cuny.edu](mailto:pgottl@med.cuny.edu)>; Sanna Goyert <[sgoyert@med.cuny.edu](mailto:sgoyert@med.cuny.edu)>; Jun Yoshioka <[jyoshioka@med.cuny.edu](mailto:jyoshioka@med.cuny.edu)>; Junghoon Kim <[jkim@med.cuny.edu](mailto:jkim@med.cuny.edu)>; Gonzalo Torres <[GTorres@med.cuny.edu](mailto:GTorres@med.cuny.edu)>; Ashiwel Undieh <[aundieh@med.cuny.edu](mailto:aundieh@med.cuny.edu)>  
**Cc:** Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>  
**Subject:** RE: are you anticipating any graduate student openings in your labs by summer 2023?

It's about admission this autumn (2022). They will then hit your labs as grad students in summer 2023. A

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**Cc:** Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>  
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**To:** Patricia Cortes <[pcortes@med.cuny.edu](mailto:pcortes@med.cuny.edu)>; Patricia Broderick <[broderick@med.cuny.edu](mailto:broderick@med.cuny.edu)>; Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>; Eitan Friedman <[friedman@med.cuny.edu](mailto:friedman@med.cuny.edu)>; Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>; Khosrow Kashfi <[kashfi@med.cuny.edu](mailto:kashfi@med.cuny.edu)>; John (Jack) Martin <[jmartin@med.cuny.edu](mailto:jmartin@med.cuny.edu)>; Maria Felice M Ghilardi <[MGhilardi@med.cuny.edu](mailto:MGhilardi@med.cuny.edu)>; Paul Gottlieb <[pgottl@med.cuny.edu](mailto:pgottl@med.cuny.edu)>; Sanna Goyert <[sgoyert@med.cuny.edu](mailto:sgoyert@med.cuny.edu)>; Jun Yoshioka <[jyoshioka@med.cuny.edu](mailto:jyoshioka@med.cuny.edu)>; Junghoon Kim <[jkim@med.cuny.edu](mailto:jkim@med.cuny.edu)>; Gonzalo Torres <[GTorres@med.cuny.edu](mailto:GTorres@med.cuny.edu)>; Geri Kreitzer <[gkreitzer@med.cuny.edu](mailto:gkreitzer@med.cuny.edu)>; Ashiwel Undieh <[aundieh@med.cuny.edu](mailto:aundieh@med.cuny.edu)>  
**Cc:** Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>  
**Subject:** are you anticipating any graduate student openings in your labs by summer 2023?

Dear All,

Please respond to Maria Lima and me with the number of new graduate students you anticipate to host in summer 2023.

I would need that number by today.

Thank you, Andreas

**From:** Patricia Broderick  
**Sent time:** 01/12/2022 04:32:11 PM  
**To:** Ashiwel Undieh; Andreas Kottmann; Geri Kreitzer; Patricia Cortes; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres  
**Cc:** Maria D Lima  
**Subject:** Re: are you anticipating any graduate student openings in your labs by summer 2023?

I anticipate 2 graduate doctoral students by autumn 2023. There are students waiting while I await my funds from India and from grants in progress. Thank you!

---

**From:** Ashiwel Undieh  
**Sent:** Wednesday, January 12, 2022 1:39 PM  
**To:** Andreas Kottmann; Geri Kreitzer; Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres  
**Cc:** Maria D Lima  
**Subject:** RE: are you anticipating any graduate student openings in your labs by summer 2023?

What graduate program is this?

=====  
Ashiwel S. Undieh, PhD  
Professor in Neuroscience / Pharmacology / Pharmaceuticals  
City University of New York (CUNY) School of Medicine  
The City College of New York, 160 Convent Avenue  
Marshak Building Room 918 (Lab); Harris Hall Room 210 (Office)  
New York, NY 10031-9101  
Phone: +1-212-650-8283 (Lab); +1-212-650-8234 (Office)  
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**Cc:** Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>

**Subject:** are you anticipating any graduate student openings in your labs by summer 2023?

Dear All,

Please respond to Maria Lima and me with the number of new graduate students you anticipate to host in summer 2023.

I would need that number by today.

Thank you, Andreas

**From:** Annabel Santana  
**Sent time:** 01/13/2022 10:29:54 AM  
Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwe Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; Gloria J Mabry; Jaclyn N Churchill; ; ; ;  
**To:**  
**Subject:** REMINDER: Quarterly CSOM Faculty meetings - effective 2/10/2022

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All,

This is a reminder that there will be NO faculty meeting this afternoon (January 13<sup>th</sup>).  
Per the email below, the CSOM Faculty Meetings will resume on a quarterly basis; the next meeting will be on **Thursday, February 10, 2022**.

Annabel

---

**From:** Annabel Santana  
**Sent:** Monday, January 3, 2022 5:27 PM  
**Subject:** Quarterly CSOM Faculty meetings - effective 2/10/2022

Dear CSOM faculty,

Happy New Year!

Per my December 8<sup>th</sup> email (highlighted below), effective this semester the CSOM Faculty Council meetings will resume on a quarterly basis. Accordingly, we will **NOT** hold a meeting this month; faculty meetings will resume **Thursday, February 10, 2022** and every three months thereafter.

A revised calendar invite will follow.

Annabel

---

**From:** Annabel Santana  
**Sent:** Wednesday, December 8, 2021 9:39 AM  
**Subject:** CSOM Faculty meeting - Thurs, 12/09/21 @ 4:30 pm

Dear Faculty,

This is a reminder that the monthly CSOM Faculty meeting will be held as scheduled, tomorrow - **Thursday, December 9, 2021 at 4:30 pm** via Zoom; Zoom details are provided below. This will be a relatively short meeting, and agenda will include faculty senate and PSC reports/updates, information regarding faculty scholarship in Med Ed, and comments from the Dean.

**PLEASE NOTE:** Effective next semester, the CSOM Faculty Council Meetings will resume on a **quarterly basis** (as per our governance plan), rather than monthly. Accordingly, the Spring 2022 meetings will be held in **February and early May 2022** (dates to be confirmed). Additional meetings may be called as-needed, to address any urgent/time-sensitive matters that may arise requiring more immediate faculty discussion or action.

Annabel

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CSOM Faculty Council meeting

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqc0ZlRmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

*Annabel Santana-Colón, Assistant Dean for Academic & Faculty Affairs*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York



**From:** Itzhak (Itzik) Mano  
**Sent time:** 01/14/2022 09:13:01 AM  
amedee.desGeorges@asrc.cuny.edu; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Re: Molecular Biology Core for RCMI?

---

Hi everyone again,

Thank you for participating in our group discussion (over email & zoom) on what can work as a Research Capacity core for our upcoming RCMI application.

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Most importantly, NIH has recently changed the required emphasis in the function of the core for RCMI applications. The review of our previous proposal and information we got in other ways indicates that they now move *away* from a core that specializes in instrumentation (which can be also obtained by dedicated instrumentation grants) and towards a core that specializes in other forms of *increasing the capacity of the institution to perform more & better research*.

To respond to this change we hone on an alternative approach (though it will also house, maintain, and train users on our current and future instruments). We are now proposing that the core will focus on introducing new molecular biology technologies to our campus, technologies that are rapidly gaining popularity in large institutions, but we do not have anyone to learn from. This will be done by a well-trained core director (who will continue to go to courses and get training in new technologies) working with you, specific labs for set periods of times. The core director will work together with PhD students/postdocs from the interested lab to develop the technique in the setup of the core facility (so that labs who do not have all the equipment can participate). The core director will also provide mentorship in experimental design and data analysis to enhance rigor and reproducibility and provide technological institutional memory. After the technology is running, the core director (with the participation of the initial trainee) will offer a workshop/training in the method for other interested labs. The core director will also train our lab personnel to prepare samples for extramural cores and to interpret the data received from those external services.

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The application includes budget for core director + technician, the standard equipment & supply for a molecular biology lab, and licenses for SnapGene and Prism to be distributed to the labs associated with the core. The core location is TBD, either in Marshak or 4th floor of CDI, as the senior offices on our campus will decide according to your input and all the other complicated factors in these decisions. Priorities for the next technologies to follow will be set by a steering committee made of PIs & the core director, according to the applicability of the technology to several labs, the likelihood that this will help us submit more competitive grant applications and better papers, support for junior and URM faculty, and support for previous RCMI or CCNY-MSKCC - funded labs (RCMI wants to support all NIH programs in our institution). Based on our previous discussions, our preliminary suggestion for initial technologies are in transcriptomics, CRISPR, and viral vectors (exact priorities will be set when we get the funding).

In a following section of the application we also ask for (a biostatistician and-) a bioinformatician who will help us with these technologies.

So I am writing to you now to ask if you will be willing to write a letter of support in our proposal (indicating that you are interested in being a future user of the new technologies, instruments, softwares, and bioinformatics services) and send it to me with your biosketch. We call it:

The CCNY Molecular Biology Innovative Technologies (MBIT) Center, a biomedical research training and enhancement core introducing cutting-edge molecular biology technologies

Please indicate in your letter if you were previously supported by our RCMI or MSKCC grants (because they are interested in continuous support of grant programs awardees). Please send it as soon as you can (so we can include it in the pre-review that we will have with external reviewers whom we ask to look at our grant before submission) and no later than Fri Jan 21.

I'll be happy to answer any question you may have about our proposal.

Many thanks, all the best

Itzik

On 12/22/2021 11:59 AM, Itzhak (Itzik) Mano wrote:

Hi everyone,

I am writing to you to ask for your input on a suggestion to establish a molecular biology core as part of our upcoming RCMI submission. I apologize for the short notice, I was only assigned this task a few days ago. Also, I do not have a good list of people who might be interested, so please spread this further to people who are not on the current list of recipients and who might be interested to join (I believe that all departments, but only CCNY-appointed people, count for this proposal; I do not know enough about people in other departments, e.g., Biochem).

There is an upcoming submission of a CCNY-wide RCMI proposal, and I have been asked by Maria Lima to coordinate some of the core facility part of the package. Requested core facilities have to promote the research proposed in the 3 specific proposal submitted, but can also fit with other groups.

Only one of the submitted proposals in the current package is based in biomedical research (the others are psych and engineering). The initial suggestion in that proposal was to establish an AAV / Virus Vector Core. However, when I asked some of our other molecular biologists on campus, I could not find sufficient demand for a dedicated viral vector core (demonstrable by current use) to make a compelling case for such a specific request.

I therefore thought of suggesting to establish a more general molecular biology core, run by a PhD level supervisor who can guide people in advanced molecular & cellular biology technologies. In this preliminary idea, the facility contains molecular biology instrumentation, so that labs who do not have all the facilities can do some of their work (such as preparation of samples or molecular reagents) in the proposed RCMI molecular core.

This is a very preliminary idea, and I am writing to you to ask for your collaborative input on the validity of such a proposal and on what the molecular core should include in terms of personnel, instrumentation, and services. Naturally, to be funded, the request needs to be very realistic and not over the top.

The key to a successful proposal is a VERY large number of labs who would sign up for it. I would therefore suggest that we include both very basic services that a large number of labs can sign up for, and more specific advanced services that will really promote the level of research we can pursue in house. Note that almost anything nowadays can be outsourced to a commercial service in a company or big universities' core facility; the question is what makes scientific and budgetary sense to request to have in house.

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1) The core facility will be housed in Marshak by renovating and adding to existing space. (I would love for this to be in CDI, but is it realistic?)

2) The core will be run by a PhD level molecular biologist with great expertise in:

- a) Viral Vector Prep.
- b) Advanced plasmid building
- c) Cell sorting
- d) RNA and cDNA Library prep

3) The facility manager's role is not to conduct the experiments, but to train and guide people from labs on best practices, and supervise students and postdocs who would come to do their molecular biology prep in the core facility (bringing their own specialized reagents). Maybe the core should provide some basic reagents like gels as part of a fee system?

4) We could consider proposing to add a lab tech who would do actual preps for fee.

5) To have a wide user base, the core will make and provide (for fee) basic reagents that can be prepared by undergrad employed at the core (FWS?) and supervised by the core manager. These can include common molecular biology buffers, LB-Amp plates, growth media, highly used items for specific labs (e.g., worm plates, vials for flies, etc).

6) other widely used services? other ideas?

We also need to make a shopping list of what equipment will the core contain - both existing RCMI items and new ones. Here is a preliminary potential list ( many times this is not my field - so please add):

1) Two tissue culture stations (hoods, CO2 incubators, etc)

2) Viral vector prep items: growth tanks for liquid cultures? ultra-centrifuge?

3) Basic molecular biology setups (microfuges, pipettors, hot plates, gel boxes, power supply, vortex, PCR machines, pH meter, balance, 4c, -20c, -80c, bacterial culture incubator, water bath, plate pouring dispenser, etc).

4) Advanced instrumentation: qPCR, RNA Quality Control, nanodrop, spectrophotometer (please add)

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This will be a huge task to put this together and *we only have few days before our RCMI proposal is being sent out for external pre-review*. So I suggest :

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4) if the initial response from you is positive, lets have a zoom meeting (next week?) to discuss this and make a plan. We can further polish the proposal on this core while the package is in pre-review (prior to the actual RCMI submission)

looking forward for your input, happy holidays

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**From:** Itzhak (Itzik) Mano  
**Sent time:** 01/14/2022 11:15:00 AM  
amedee.desGeorges@asrc.cuny.edu; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Re: Molecular Biology Core for RCMI?  
**Attachments:** Draft of the MBIT support letter.docx application-guide-biosketch-instructions-rev-12-2020.pdf biosketch-blank-format-rev-10-2021 (1)-1.docx

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Hi, its me again, sorry about the multiple emails. Two things:

1) to make it easier and more standardized, I attach a suggested template letter derived from our previous RCMI submission. If you want you can just stick the text on your letterhead (make sure your letterhead includes your CCNY affiliation if you are @ASRC) and sign. As you will see in the suggested draft, the letter should be addressed to the PIs of the overall proposal who are our Dean Dr Carmen Green and our Assoc Dean for Research, Maria Lima.

2) I was asked by Maria Lima to reset the deadline for your letter a bit sooner, to Jan 19th. This is because the format of NIH's Biosketch has recently changed, and our research office person (Marc Scullin) will need to go through each biosketch and make sure it complies with new regulations. For your convenience, I also attach a copy of the notice on the update to biosketch format and a current biosketch template.

Thanks again

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## Instructions for a Biographical Sketch

Updated March 2021 – See Guide Notice [NOT-OD-21-073](#)

(located in the SF424 R&R Instructions, G.240 R&R Senior/Key Person Profile Expanded Form)

These instructions apply to Research (R), Career Development (K), Training (T), Fellowship (F), Multi-project (M), and SBIR/STTR (B). Hyperlinks and URLs are only allowed when specifically noted in funding opportunity announcement (FOA) and form field instructions

### **Who must complete the "Biographical Sketch" section:**

All senior/key personnel and [other significant contributors \(OSCs\)](#) must include biographical sketches (biosketches).

### **Format:**

Use the sample format on the [Biographical Sketch Format Page](#) to prepare this section for all grant applications.

Figures, tables (other than those included in the provided format pages), or graphics are not allowed in the biosketch. Do not embed or attach files (e.g. video, graphics, sound, data).

The biosketch may not exceed 5 pages per person. This 5-page limit includes the table at the top of the first page.

Attach this information as a PDF file. See the [Format Attachments](#) page.

### **Content:**

Note that the instructions here follow the format of [Biographical Sketch Format Page](#).

### **Name:**

Fill in the name of the senior/key person or other significant contributor in the "Name" field of the Biosketch Format Page.

### **eRA Commons User Name:**

If the individual is registered in the [eRA Commons](#), fill in the eRA Commons User Name in the "eRA Commons User Name" field of the Biosketch Format Page.

The "eRA Commons User Name" field is required for the PD/PI (including career development and fellowship applicants), primary sponsors of fellowship applicants, all mentors of candidates for mentored career development awards, and candidates for diversity and reentry research supplements.

The "eRA Commons User Name" field is optional for other project personnel.

**The eRA Commons User Name should match the information provided in the [Credential field](#) of the R&R Senior/Key Person Profile (Expanded) Form in your grant application.**

### **Position Title:**

Fill in the position title of the senior/key person or other significant contributor in the "Position Title" field of the Biosketch Format Page.

## Education/Training

Complete the education block. Begin with the baccalaureate or other initial professional education, such as nursing. Include postdoctoral, residency, and clinical fellowship training, as applicable, listing each separately.

For each entry provide:

- the name and location of the institution
- the degree received (if applicable)
- the month and year of end date (or expected end date). For fellowship applicants only, also include the month and year of start date.
- the field of study (for residency entries, the field of study should reflect the area of residency training)

Following the education block, complete Sections A-D of the biographical sketch.

### A. Personal Statement

Briefly describe why you are well-suited for your role(s) in this project. Relevant factors may include: aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific environment; and/or your past performance in this or related fields, including ongoing and completed research projects from the past three years that you want to draw attention to (previously captured under Section D. Research Support).

You may cite up to four publications or research products that highlight your experience and qualifications for this project. Research products can include, but are not limited to, audio or video products; conference proceedings such as meeting abstracts, posters, or other presentations; patents; data and research materials; databases; educational aids or curricula; instruments or equipment; models; protocols; and software or netware. Use of hyperlinks and URLs to cite these items is not allowed.

You are allowed to cite interim research products. **Note:** interim research products have specific citation requirements. See related [Frequently Asked Questions](#) for more information.

#### **Note the following additional instructions for ALL applicants/candidates:**

- If you wish to explain factors that affected your past productivity, such as family care responsibilities, illness, disability, or military service, you may address them in this "A. Personal Statement" section.
- Indicate whether you have published or created research products under another name.
- You may mention specific contributions to science that are not included in Section C. Do not present or expand on materials that should be described in other sections of this Biosketch or application.
- Figures, tables, or graphics are not allowed.

**Note the following instructions for specific subsets of applicants/candidates:**

- For institutional research training, institutional career development, or research education grant applications, faculty who are not senior/key persons are encouraged, but not required, to complete the "A. Personal Statement" section.
- Applicants for dissertation research awards (e.g., R36) should, in addition to addressing the points noted above, also include a description of their career goals, their intended career trajectory, and their interest in the specific areas of research designated in the FOA.
- Candidates for research supplements to promote diversity in health-related research should, in addition to addressing the points noted above, also include a description of their general scientific achievements and/or interests, specific research objectives, and career goals. Indicate any current source(s) of educational funding.

**B. Positions, Scientific Appointments and Honors**

List in reverse chronological order all positions and scientific appointments both domestic and foreign, including affiliations with foreign entities or governments. This includes titled academic, professional, or institutional appointments whether or not remuneration is received, and whether full-time, part-time, or voluntary (including adjunct, visiting, or honorary). High school students and undergraduates may include any previous positions. For individuals who are not currently located at the applicant organization, include the expected position at the applicant organization and the expected start date.

List any relevant academic and professional achievements and honors. In particular:

- Students, postdoctorates, and junior faculty should include scholarships, traineeships, fellowships, and development awards, as applicable.
- Clinicians should include information on any clinical licensures and specialty board certifications that they have achieved.

**C. Contributions to Science****Who should complete the "Contributions to Science" section:**

All senior/key persons should complete the "Contributions to Science" section except candidates for research supplements to promote diversity in health-related research who are high school students, undergraduates, and post-baccalaureates.

**Format:**

Briefly describe up to five of your most significant contributions to science. The description of each contribution should be no longer than one half page, including citations.

While all applicants may describe up to five contributions, graduate students and postdoctorates may wish to consider highlighting two or three they consider most significant.

**Content:**

For each contribution, indicate the following:

- the historical background that frames the scientific problem;
- the central finding(s);

- the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and
- your specific role in the described work.
- Figures, tables, or graphics are not allowed.

For each contribution, you may cite up to four publications or research products that are relevant to the contribution. If you are not the author of the product, indicate what your role or contribution was. Note that while you may mention manuscripts that have not yet been accepted for publication as part of your contribution, you may cite only published papers to support each contribution. Research products can include audio or video products (see the [NIH Grants Policy Statement, Section 2.3.7.7: Post-Submission Grant Application Materials](#)); conference proceedings such as meeting abstracts, posters, or other presentations; patents; data and research materials; databases; educational aids or curricula; instruments or equipment; models; protocols; and software or netware. Use of hyperlinks and URLs to cite these items is not allowed.

You are allowed to cite interim research products. Note: interim research products have specific citation requirements. See related [Frequently Asked Questions](#) for more information.

You may provide a URL to a full list of your published work. This URL must be to a Federal Government website (a .gov suffix). NIH recommends using [My Bibliography](#). Providing a URL to a list of published work is not required.

Descriptions of contributions may include a mention of research products under development, such as manuscripts that have not yet been accepted for publication. These contributions do not have to be related to the project proposed in this application.

#### **\*D. Scholastic Performance**

***\*Note that only the following types of applicants must complete this section:***

- applicants for predoctoral and postdoctoral fellowships
- applicants to dissertation research grants (e.g., R36)
- candidates for research supplements to promote diversity in health-related research from the undergraduate through postdoctoral levels

#### **Scholastic Performance**

**Predocctoral applicants/candidates (including undergraduates and post-baccalaureates):** List by institution and year **all** undergraduate and graduate courses, with grades. In addition, explain any grading system used if it differs from a 1-100 scale; an A, B, C, D, F system; or a 0-4.0 scale. Also indicate the levels required for a passing grade.

**Postdoctoral applicants:** List by institution and year **all** graduate scientific and/or professional courses with grades. In addition, explain any grading system used if it differs from a 1-100 scale; an A, B, C, D, F system; or a 0-4.0 scale. Also indicate the levels required for a passing grade.

#### **Additional Instructions for Multi-Project:**

Each Senior/Key Person, including the PD/PI, is allowed one biosketch for the entire application. If an individual will participate on multiple components, attach the biosketch to any single component.

Carmen Green, MD  
Maria Lima, PhD  
CUNY School of Medicine  
City College of New York  
160 Convent Ave  
New York, NY 10031

Re: Support for the Molecular Biology Innovative Technologies Core of the RCMI proposal

Dear Drs. Green and Lima,

It is my pleasure to support the Molecular Biology Innovative Technologies Core of the NYCenter for Minority Health, Equity and Social Justice (NYC-MHESJ). My research will undoubtedly take advantage of this facility, as well as the students I train.

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Sincerely yours,

Name, affiliation.

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**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.  
 Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME:

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE:

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY

**A. Personal Statement**

**B. Positions, Scientific Appointments and Honors**

**C. Contributions to Science**

biosketch-blank-format-rev-10-2021 (1)-1.docx

**From:** Jerrold Erves

**Sent time:** 01/14/2022 04:03:44 PM

Karen Adamo-henry; Janine C Adjo; Tashuna Albritton; Kevin A Ali; Gina Allegretti; Anabelle Andon; Lisa Auerbach; Yasmine Azor; Samantha Barrick; Bell, Donnie <Donnie.Bell@nychhc.org>; Keosha Bond; Cynthia Civil <[REDACTED]@hotmail.com>; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Emine Ercikan Abali; Eitan Friedman; Victoria Frye; Donna Gooden; Paul Gottlieb; Lisanne Hauck; Marisol Hernandez; Junghoon

**To:** Kim; Susan Kornacki; Andreas Kottmann; Lily Lam; Rosa Lee; Maria D Lima; Wenhua Lu; Noel Manyindo; Kiran Matthews; Dani Mebeth; Katherine Mendis; Jodie Meyer; Carol Moore; Ana Motta-Moss; Joao Nunes; Maxine Nwigwe; Ernest Patti; Leonie Peele; Danielle D Pritchett; Joy Richards; Daniel M Richter; Nicole Roberts; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Annabel Santana; Victor I Schwartz; Jude-Marie A. Smalec; Nancy Sohler; Amr Soliman; Linda Spatz; Hoau-yan Wang; Darryl R Warner; Chris Washington; Gokhan Yilmaz; Jun Yoshioka

**Cc:** Cynthia Civil; Erica Friedman; Dean (CUNY School of Medicine)

**Subject:** Admissions Interviews

---

Topic: Admissions Interviews

Jerrold is inviting you to a scheduled meeting for Class of 2029 admissions interviews.

Time: Jan 18, 2022 12:00 PM Eastern Time (US and Canada)

Please click accept to confirm your attendance.

Thanks.

Here is the Zoom meeting information

Join Zoom Meeting

<https://ccny.zoom.us/j/93446776918>

Meeting ID: 934 4677 6918

One tap mobile

+16465588656,,93446776918# US (New York)

+13017158592,,93446776918# US (Washington DC)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 934 4677 6918

Find your local number: <https://ccny.zoom.us/u/kdYVQcGwoy>





**From:** Marc Scullin  
**Sent time:** 01/19/2022 08:52:16 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiecezrek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth  
**To:**  
**Subject:** Thursday 1/27/22 @ 12 PM - Dr. Khosrow Kashfi Webinar "Nitric oxide modified non-steroidal anti-inflammatory drugs (NSAIDs) as agents for cancer prevention: Rationale and promise"  
**Attachments:** Webinar Kho Kashfi\_January 27^J 2022.pdf

---

Dear CSOM Faculty and Staff:

On Thursday, January 27, 2022 at 12:00 PM EST, Dr. Khosrow Kashfi from CUNY School of Medicine's Molecular, Cellular and Biomedical Sciences Department will be leading a webinar titled "Nitric oxide modified non-steroidal anti-inflammatory drugs (NSAIDs) as agents for cancer prevention: Rationale and promise" for The International Society for Nitric Oxide and Cancer (ISNOC).

All are welcome. Your attendance in support of Dr. Kashfi and his work is appreciated and encouraged.

**Link to meeting**

<https://us02web.zoom.us/j/87867654567?pwd=ZHdlUjNGbk9zRUtyNDM0NjNmcTVVdz09>

Meeting ID: 878 6765 4567

Access code: 648999



**Nitric oxide modified non-steroidal anti-inflammatory drugs (NO-NSAIDs) as agents for cancer prevention: Rationale and promise**



**Khosrow Kashfi**  
Associate Medical Professor  
CUNY School of Medicine  
Department of Molecular, Cellular  
and Biomedical Sciences  
New York

**Seminar scheduled at:**

9:00 (Los Angeles)

12:00 (New York)

18:00 (Paris)

**Link to meeting**

<https://us02web.zoom.us/j/87867654567?pwd=ZHUINGbk9zRUtyNDM0NjNmTVVdz09>

Meeting ID: 878 6765 4567

Access code: 648999



## **Nitric oxide modified non-steroidal anti-inflammatory drugs (NO-NSAIDs) as agents for cancer prevention: Rationale and promise**



### **Khosrow Kashfi**

Associate Medical Professor  
CUNY School of Medicine  
Department of Molecular, Cellular  
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Meeting ID: 878 6765 4567

Access code: 648999

**From:** Itzhak (Itzik) Mano  
**Sent time:** 01/19/2022 12:02:27 PM  
amedee.desGeorges@asrc.cuny.edu; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Re: Molecular Biology Core for RCMI?

---

Hi everyone,

A reminder - (if you haven't sent it already-) we really need your letters of support today. I paste below a standard text that you can just copy-paste on your letterhead and attach any reasonable biosketch (does not have to be the most updated).

Please note - the core will also host & maintain many of our molecular biology instruments and provide basic support, so even if you do not expect your specific technology to be enhanced by the training component, you will still benefit from this core (instruments, SnapGene, Prism, collaboration, etc).

RCMI also wants to know if you were a previous awardee of a RCMI or MSKCC-CCNY funding, so please indicate this in your replay to me (e.g., "I had a MSKCC pilot grant funding in 2018-2019").

many thanks

Itzik

---

Carmen Green, MD

Maria Lima, PhD

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City College of New York

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Sincerely yours,

Name, affiliation.

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\_\_\_\_\_ Itzhak (Itzik) Mano, Ph.D. Associate Medical Professor Department of Molecular, Cellular and Biomedical Sciences Center for Discovery & Innovation, Cluster on Neural Development and Repair The CUNY School of Medicine at City College & The CUNY Graduate Center The City University of New York CDI building, Office: 3-382 Lab: 3-235 85 St. Nicholas Terrace, New York, NY 10031 E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu) Office Phone:(212) 6507965 Lab Phone:(212) 6505334 [www.manolab.org](http://www.manolab.org)

On 12/22/2021 11:59 AM, Itzhak (Itzik) Mano wrote:

Hi everyone,

I am writing to you to ask for your input on a suggestion to establish a molecular biology core as part of our upcoming RCMI submission. I apologize for the short notice, I was only assigned this task a few days ago. Also, I do not have a good list of people who might be interested, so please spread this further to people who are not on the current list of recipients and who might be interested to join (I believe that all departments, but only CCNY-appointed people, count for this proposal; I do not know enough about people in other departments, e.g., Biochem).

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Only one of the submitted proposals in the current package is based in biomedical research (the others are psych and engineering). The initial suggestion in that proposal was to establish an AAV / Virus Vector Core . However, when I asked some of our other molecular biologists on campus, I could not find sufficient demand for a dedicated viral vector core (demonstrable by current use) to make a compelling case for such a specific request.

I therefore thought of suggesting to establish a more general molecular biology core, run by a PhD level supervisor who can guide people in advanced molecular & cellular biology technologies. In this preliminary idea, the facility contains molecular biology instrumentation, so that labs who do not have all the facilities can do some of their work (such as preparation of samples or molecular reagents) in the proposed RCMI molecular core.

This is a very preliminary idea, and I am writing to you to ask for your collaborative input on the validity of such a proposal and on what the molecular core should include in terms of personnel, instrumentation, and services. Naturally, to be funded, the request needs to be very realistic and not over the top.

The key to a successful proposal is a VERY large number of labs who would sign up for it. I would therefore suggest that we include both very basic services that a large number of labs can sign up for, and more specific advanced services that will really promote the level of research we can pursue in house. Note that almost anything nowadays can be outsourced to a commercial service in a company or big universities' core facility; the question is what makes scientific and budgetary sense to request to have in house.

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  - a) Viral Vector Prep.

- b) Advanced plasmid building
- c) Cell sorting
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3) The facility manager's role is not to conduct the experiments, but to train and guide people from labs on best practices, and supervise students and postdocs who would come to do their molecular biology prep in the core facility (bringing their own specialized reagents). Maybe the core should provide some basic reagents like gels as part of a fee system?

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6) other widely used services? other ideas?

We also need to make a shopping list of what equipment will the core contain - both existing RCMI items and new ones. Here is a preliminary potential list ( many times this is not my field - so please add):

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- 5) try to interest companies to have a stock freezer/cabinet for common reagents, as done in other universities (e.g., NEB enzymes, Promega/Qiagen kits).
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This will be a huge task to put this together and *we only have few days before our RCMI proposal is being sent out for external pre-review*. So I suggest :

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looking forward for your input, happy holidays

Itzik

**From:** Itzhak (Itzik) Mano  
**Sent time:** 01/19/2022 12:22:51 PM  
amedee.desGeorges@asrc.cuny.edu; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark  
**To:**  
**Cc:** Maria D Lima; Susan Perkins  
**Subject:** Re: Molecular Biology Core for RCMI?

---

Hi, just replying to general questions from a couple of people:

We are asking ANYONE who expects to benefit IN ANY WAY from the core to add a letter.

Therefore, even if your lab is being set up, or you do not have current/recent funding but you want to increase your research and the core might help you, or you will benefit only from very specific aspects, please add your letter of support & biosketch.

thanks

Itzik

On 1/19/2022 12:02 PM, Itzhak (Itzik) Mano wrote:

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\_\_\_\_\_  
Itzhak (Itzik) Mano, Ph.D. Associate Medical Professor  
Department of Molecular, Cellular and Biomedical Sciences Center for Discovery &  
Innovation, Cluster on Neural Development and Repair The CUNY School of Medicine at City  
College & The CUNY Graduate Center The City University of New York CDI building, Office:  
3-382 Lab: 3-235 85 St. Nicholas Terrace, New York, NY 10031 E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu)  
Office Phone: (212) 6507965 Lab Phone: (212) 6505334 [www.manolab.org](http://www.manolab.org)

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**To:** amedee.desGeorges@asrc.cuny.edu; Itzhak (Itzik) Mano; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; John (Jack) Martin; Carol Moore; Kaliris Salas; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Gokhan Yilmaz; Jun Yoshioka; Robert Anderson; Ana Carnaval; Mark Emerson; Fardad Firooznia; Shubha Govind; Karen Hubbard; Anuradha Janakiraman; Jonathan Levitt; Christine Li; David Lohman; Hysell Oviedo; Mark Pezzano; Stefan U Pukatzki; Adrian Rodriguez Contreras; Andrey Rudenko; Shireen Saleque; Tadmiri Venkatesh; Bao Vuong; Osceola Whitney; Zimei Bu; Kevin Gardner; Ranajeet Ghose; David Jeruzalmi; Reza Khayat; Ronald Koder; Kevin Ryan; Ruth Stark

**Cc:** Susan Perkins; Marc Scullin

**Subject:** Re: Molecular Biology Core for RCMI?

Yes. The proposal reviewers want to be assured that this is something that our investigators need and are in support of. I do appreciate all your help in this everyone!!

Maria

---

**From:** "Itzhak (Itzik) Mano" <imano@med.cuny.edu>

**Date:** Wednesday, January 19, 2022 at 12:22 PM

**To:** Patricia Cortes <pcortes@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Sanna Goyert <sgoyert@med.cuny.edu>, Khosrow Kashfi <kashfi@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Gonzalo Torres <GTorres@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>, Robert Anderson <randerson@ccny.cuny.edu>, Ana Carnaval <acarnaval@ccny.cuny.edu>, Mark Emerson <memerson@ccny.cuny.edu>, Fardad Firooznia <ffirooznia@ccny.cuny.edu>, Shubha Govind <sgovind@ccny.cuny.edu>, Karen Hubbard <khubbard@ccny.cuny.edu>, Anuradha Janakiraman <anuj@ccny.cuny.edu>, Jonathan Levitt <jlevitt@ccny.cuny.edu>, Christine Li <cli@ccny.cuny.edu>, David Lohman <dlohman@ccny.cuny.edu>, Hysell Oviedo <hoviedo@ccny.cuny.edu>, Mark Pezzano <mpezzano@ccny.cuny.edu>, Stefan U Pukatzki <spukatzki@ccny.cuny.edu>, Adrian Rodriguez Contreras <arodriguezcontreras@ccny.cuny.edu>, Andrey Rudenko <arudenko1@ccny.cuny.edu>, Shireen Saleque <ssaleque@ccny.cuny.edu>, Tadmiri Venkatesh <tvenkatesh@ccny.cuny.edu>, Bao Vuong <bvuong@ccny.cuny.edu>, Osceola Whitney <owhitney@ccny.cuny.edu>, Zimei Bu <zbu@ccny.cuny.edu>, "amedee.desGeorges@asrc.cuny.edu" <amedee.desGeorges@asrc.cuny.edu>, Kevin Gardner <kgardner@ccny.cuny.edu>, Ranajeet Ghose <rghose@ccny.cuny.edu>, David Jeruzalmi <dj@ccny.cuny.edu>, Reza Khayat <rkhayat@ccny.cuny.edu>, Ronald Koder <rkoder@ccny.cuny.edu>, Kevin Ryan <kryan@ccny.cuny.edu>, Ruth Stark <rstark@ccny.cuny.edu>

**Cc:** Maria D Lima <mlima@med.cuny.edu>, Susan Perkins <sperkins@ccny.cuny.edu>

**Subject:** Re: Molecular Biology Core for RCMI?

Hi, just replying to general questions from a couple of people:

We are asking ANYONE who expects to benefit IN ANY WAY from the core to add a letter.

Therefore, even if your lab is being set up, or you do not have current/recent funding but you want to increase your research and the core might help you, or you will benefit only from very specific aspects, please add your letter of support & biosketch.

thanks

Itzik

On 1/19/2022 12:02 PM, Itzhak (Itzik) Mano wrote:

Hi everyone,

A reminder - (if you haven't sent it already-) we really need your letters of support today. I paste below a standard text that you can just copy-paste on your letterhead and attach any reasonable biosketch (does not have to be the most updated).

Please note - the core will also host & maintain many of our molecular biology instruments and provide basic support, so even if you do not expect your specific technology to be enhanced by the training component, you will still benefit from this core (instruments, SnapGene, Prism, collaboration, etc).

RCMI also wants to know if you were a previous awardee of a RCMI or MSKCC-CCNY funding, so please indicate this in your replay to me (e.g., "I had a MSKCC pilot grant funding in 2018-2019").

many thanks

Itzik

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Carmen Green, MD  
Maria Lima, PhD  
CUNY School of Medicine  
City College of New York  
160 Convent Ave  
New York, NY 10031

Re: Support for the Molecular Biology Innovative Technologies Core of the RCMI proposal

Dear Drs. Green and Lima,

It is my pleasure to support the Molecular Biology Innovative Technologies Core of the NYC Center for Minority Health, Equity and Social Justice (NYC-MHESJ). My research will undoubtedly take advantage of this facility, as well as the students I train.

In support of this initiative, I am sending my Biographical Sketch as well as this support letter.

It is a pleasure to support the NYC-MHESJ. I feel strongly that this proposal will bring the needed research in Health Disparities to the City College of New York, as well as a fruitful conversation in New York City.

Sincerely yours,

Name, affiliation.

THE LETTER NEEDS TO BE SIGNED AND BE ON INSTITUTIONAL LETTERHEAD

---

Itzhak (Itzik) Mano, Ph.D.  
Associate Medical Professor  
Department of Molecular, Cellular and Biomedical Sciences  
Center for Discovery & Innovation, Cluster on Neural Development and Repair  
The CUNY School of Medicine at City College & The CUNY Graduate Center  
The City University of New York  
CDI building, Office: 3-382 Lab: 3-235  
85 St. Nicholas Terrace, New York, NY 10031  
E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu)  
Office Phone: (212) 6507965 Lab Phone: (212) 6505334  
[www.manolab.org](http://www.manolab.org)

On 12/22/2021 11:59 AM, Itzhak (Itzik) Mano wrote:

Hi everyone,

I am writing to you to ask for your input on a suggestion to establish a molecular biology core as part of our upcoming RCMI submission. I apologize for the short notice, I was only assigned this task a few days ago. Also, I do not have a good list of people who might be interested, so please spread this further to people who are not on the current list of recipients and who might be interested to join (I believe that all departments, but only CCNY- appointed people, count for this proposal; I do not know enough about people in other departments, e.g., Biochem).

There is an upcoming submission of a CCNY- wide RCMI proposal, and I have been asked by Maria Lima to coordinate some of the core facility part of the package. Requested core facilities have to promote the research proposed in the 3 specific proposal submitted, but can also fit with other groups.

Only one of the submitted proposals in the current package is based in biomedical research (the others

are psych and engineering). The initial suggestion in that proposal was to establish an AAV / Virus Vector Core . However, when I asked some of our other molecular biologists on campus, I could not find sufficient demand for a dedicated viral vector core (demonstrable by current use) to make a compelling case for such a specific request.

I therefore thought of suggesting to establish a more general molecular biology core, run by a PhD level supervisor who can guide people in advanced molecular & cellular biology technologies. In this preliminary idea, the facility contains molecular biology instrumentation, so that labs who do not have all the facilities can do some of their work (such as preparation of samples or molecular reagents) in the proposed RCMI molecular core.

This is a very preliminary idea, and I am writing to you to ask for your collaborative input on the validity of such a proposal and on what the molecular core should include in terms of personnel, instrumentation, and services. Naturally, to be funded, the request needs to be very realistic and not over the top.

The key to a successful proposal is a VERY large number of labs who would sign up for it. I would therefore suggest that we include both very basic services that a large number of labs can sign up for, and more specific advanced services that will really promote the level of research we can pursue in house. Note that almost anything nowadays can be outsourced to a commercial service in a company or big universities' core facility; the question is what makes scientific and budgetary sense to request to have in house.

Here is a very preliminary suggestion, just to serve as a starting point for our discussion:

1) The core facility will be housed in Marshak by renovating and adding to existing space. (I would love for this to be in CDI, but is it realistic?)

2) The core will be run by a PhD level molecular biologist with great expertise in:

- a) Viral Vector Prep.
- b) Advanced plasmid building
- c) Cell sorting
- d) RNA and cDNA Library prep

3) The facility manager's role is not to conduct the experiments, but to train and guide people from labs on best practices, and supervise students and postdocs who would come to do their molecular biology prep in the core facility (bringing their own specialized reagents). Maybe the core should provide some basic reagents like gels as part of a fee system?

4) We could consider proposing to add a lab tech who would do actual preps for fee.

5) To have a wide user base, the core will make and provide (for fee) basic reagents that can be prepared by undergrad employed at the core (FWS?) and supervised by the core manager. These can include common molecular biology buffers, LB-Amp plates, growth media, highly used items for specific labs (e.g., worm plates, vials for flies, etc).

6) other widely used services? other ideas?

We also need to make a shopping list of what equipment will the core contain - both existing RCMI items and new ones. Here is a preliminary potential list ( many times this is not my field - so please add):

- 1) Two tissue culture stations (hoods, CO2 incubators, etc)
- 2) Viral vector prep items: growth tanks for liquid cultures? ultra-centrifuge?
- 3) Basic molecular biology setups (microfuges, pipettors, hot plates, gel boxes, power supply, vortex, PCR machines, pH meter, balance, 4c, -20c, -80c, bacterial culture incubator, water bath, plate pouring dispenser, etc).

4) Advanced instrumentation: qPCR, RNA Quality Control, nanodrop, spectrophotometer (please add)

5) try to interest companies to have a stock freezer/cabinet for common reagents, as done in other universities (e.g., NEB enzymes, Promega/Qiagen kits).

6) currently available instruments, such as cell sorter.

other ideas?

This will be a huge task to put this together and *we only have few days before our RCMI proposal is being sent out for external pre-review*. So I suggest :

1) please write to the group (reply all) or to me with your feedback : is this a good and feasible idea? do you think we can have enough buy-in of enough labs to justify this?

2) what structure and services do you thin will work the best?

3) what would you propose as a plan for a gradual buildup of such a core facility (we can not conjure it out of thin air from one day to the next - what should we start with, what should be steps 2 & 3 ?).

4) if the initial response from you is positive, lets have a zoom meeting (next week?) to discuss this and make a plan. We can further polish the proposal on this core while the package is in pre-review (prior to the actual RCMI submission)

looking forward for your input, happy holidays

Itzik

**From:** Hoau-yan Wang  
**Sent time:** 01/20/2022 10:00:53 AM  
**To:** Lindsay Burns <lburns@cassavasciences.com>  
**Subject:** Fw: Concerns with publication in Alzheimer's Research & Therapy (MS ID AZRT-D-17-00036/ DOI 10.1186/s13195-017-0280-8)  
**Attachments:** Fig 1A -bottom row a7nAChR & b-Actin whole blots.TIF Fig 1A -top row a7nAChR & b-Actin whole blots.TIF Fig 1A-middle row a7nAChR & b-Actin whole blots.TIF Fig 1C -a7nAChR & b-Actin whole blots.TIF Fig 5A -pS202 Tau whole blots.TIF Fig 5A -pT181 Tau whole blots.TIF Fig 5A -pT231 Tau whole blots.TIF Fig 5A -total Tau whole blots.TIF Fig 6A - ApoE2E3-ApoE3E3 - a7nAChR & b-Actin whole blots.TIF Fig 6A - ApoE3E4-ApoE4E4 -a7nAChR & b-Actin whole blots.TIF

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**From:** Hoau-yan Wang  
**Sent:** Friday, November 5, 2021 2:40 PM  
**To:** Rebecca Pearce; caryn.thibierge@servier.com; [REDACTED]@hotmail.com; [REDACTED]@gmail.com; [REDACTED]@verizon.net; [REDACTED].edu; philippe.morain@servier.com; isabelle.guignot@servier.com; eva.bouguen@servier.com; Karine.deschet@servier.com; Maria.Pueyo@servier.com; elisabeth.mocaer@servier.com; ousset.p@chu-toulouse.fr; vella.b@chu-toulouse.fr; vera.kiyasova@servier.com  
**Cc:** Galasko, Douglas; Scheltens, P.; Beidel, Jennifer L.  
**Subject:** Re: Concerns with publication in Alzheimer's Research & Therapy (MS ID AZRT-D-17-00036/ DOI 10.1186/s13195-017-0280-8)

Dear Ms. Pearce,

Enclosed are the requested whole blot images used in Figures 1A, 1C, 5A, and 6A arranged according to the format presented in the published article. It should be noted that the data included in this article were collected over 9 years (2008-2016) with most of it collected before 2012. All plasma and blood cell samples were processed blind to the subjects' identities and conditions. Analysis of the raw data was performed by Servier's statistical team, not by me or my team. We received permission to publish the results in late 2016.

As you can see from attached TIFF files, the images in the published article derived from the respective 300 dpi whole blot images without any manipulation. The images retrieved from the online article by the PubPeer are probably even lower resolution. The alleged inconsistencies and breaks could simply be artefacts of making extreme adjustments of contrast and brightness to the low-resolution images in the published article. Many factors could alter and break continuity among background pixels of low-resolution images, including streaks of a film produced by the film processor, wrinkles and folds of the plastic wrap that cover the membrane to prevent drying from influencing the background of the figure, air bubbles, trace amounts of chemiluminescent reagents and/or patches intrinsic to the nitrocellulose membranes. Such changes in background may be exaggerated during processing of the images for publication. Regardless of the reasons for the alleged inconsistencies and breaks in our published figures, the attached whole blot images for these figures verify that the original images were not manipulated or misrepresented in any way in the published article. Indeed, no such concern was mentioned in the three rounds of peer review of the manuscript or by readers after publication.

Thank you.

Best regards,

Hoau-Yan Wang

---

**From:** Hoau-yan Wang  
**Sent:** Wednesday, October 27, 2021 9:16 AM  
**To:** Rebecca Pearce; caryn.thibierge@servier.com; [REDACTED]@hotmail.com; [REDACTED]@gmail.com; [REDACTED]@verizon.net; [REDACTED]; philippe.morain@servier.com; isabelle.guignot@servier.com; eva.bouguen@servier.com; Karine.deschet@servier.com; Maria.Pueyo@servier.com; elisabeth.mocaer@servier.com; ousset.p@chu-toulouse.fr; vella.b@chu-toulouse.fr; vera.kiyasova@servier.com  
**Cc:** Galasko, Douglas; Scheltens, P.  
**Subject:** Re: Concerns with publication in Alzheimer's Research & Therapy (MS ID AZRT-D-17-00036/ DOI 10.1186/s13195-017-0280-8)

Dear Dr. Pearce,

Thank you for your email. We will look into these concerns and respond accordingly before the timeline.

Thanks again.

Best regards,

Hoau-Yan Wang

---

**From:** Rebecca Pearce <rebecca.pearce@biomedcentral.com>

**Sent:** Tuesday, October 26, 2021 12:22 PM

**To:** Hoau-yan Wang; caryn.thibierge@servier.com; [REDACTED]@hotmail.com; [REDACTED]@gmail.com; [REDACTED]@verizon.net; [REDACTED]; philippe.morain@servier.com; isabelle.guignot@servier.com; eva.bouguen@servier.com; Karine.deschet@servier.com; Maria.Pueyo@servier.com; elisabeth.mocaer@servier.com; ousset.p@chu-toulouse.fr; vella.b@chu-toulouse.fr; vera.kiyasova@servier.com

**Cc:** Galasko, Douglas; Scheltens, P.

**Subject:** [EXTERNAL] Concerns with publication in Alzheimer's Research & Therapy (MS ID AZRT-D-17-00036/ DOI 10.1186/s13195-017-0280-8)

Dear Authors,

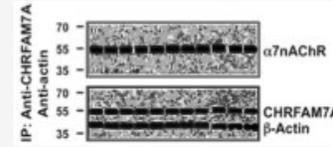
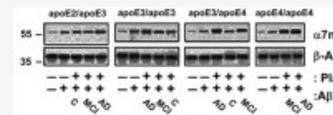
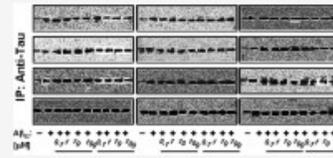
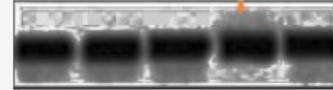
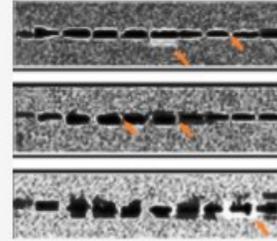
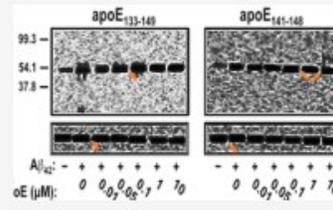
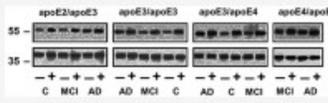
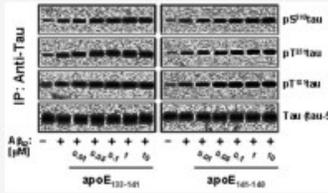
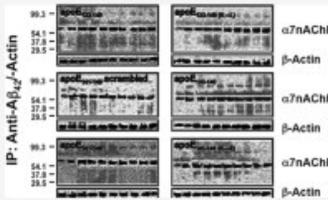
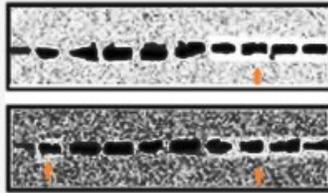
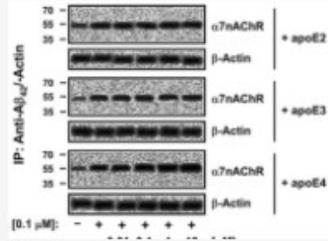
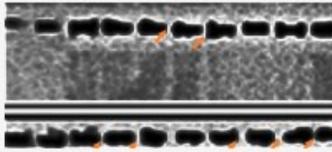
I am contacting you regarding concerns that have been raised regarding an article published in 2017 in *Alzheimer's Research & Therapy* (<https://alzres.biomedcentral.com/articles/10.1186/s13195-017-0280-8>).

We were made aware of breaks and inconsistencies in Figures 1, 5, and 6 in the publication (see the image below with the breaks/inconsistencies pointed out in orange). You can also see the comments on PubPeer:

<https://pubpeer.com/publications/B8A32AD7E71A128B6897D4315AC065>

Can you please supply us with the original (unedited/raw) images and an explanation for the breaks/inconsistencies within the Figures 1a, 1c, 5a, and 6a? We ask that you respond by **Friday, November 5<sup>th</sup>**.

Please be aware that while we await your response, we will be publishing an Editor's Note calling attention to our concerns with the figures.



Kind regards,  
Rebecca

---  
**Rebecca Pearce**  
Publisher

**Springer Nature**  
One New York Plaza, Suite 4600, NY, NY 10004-1562  
T + 1 (212) 451-8733  
[rebecca.pearce@springernature.com](mailto:rebecca.pearce@springernature.com)  
[www.springernature.com](http://www.springernature.com)

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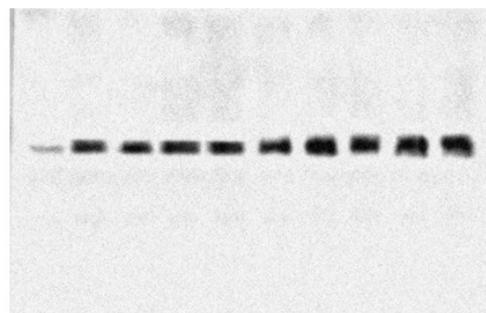
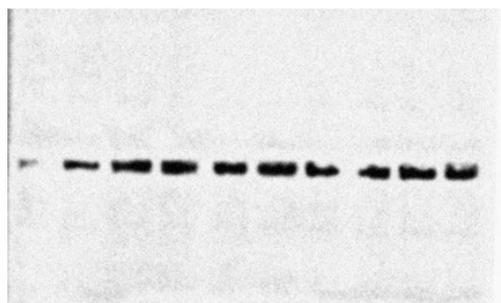
*\*Different time zones, different schedules. Please note I do not expect a reply from you on your evenings or weekends.*

**Fig 1A**

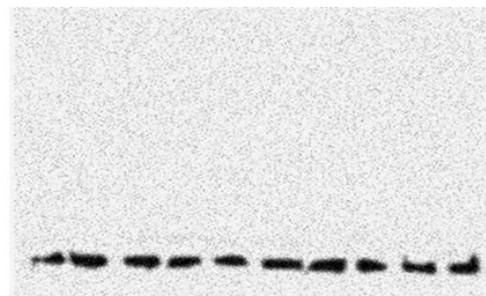
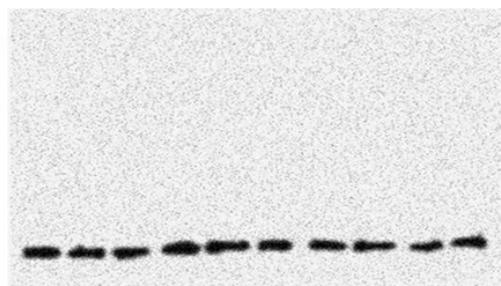
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**ApoE133-149(K→E)**

**α7nAChR**



**β-Actin**

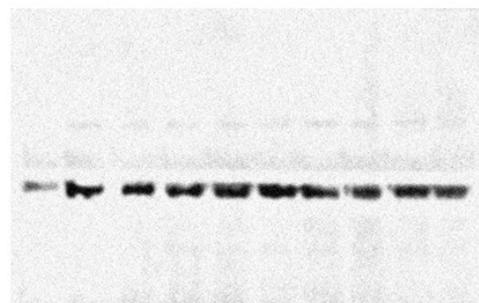
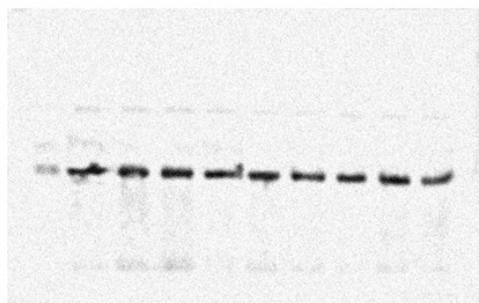


**Fig 1A**

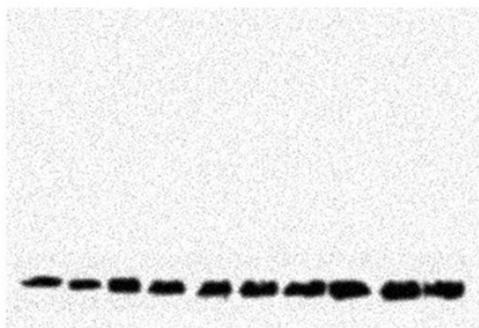
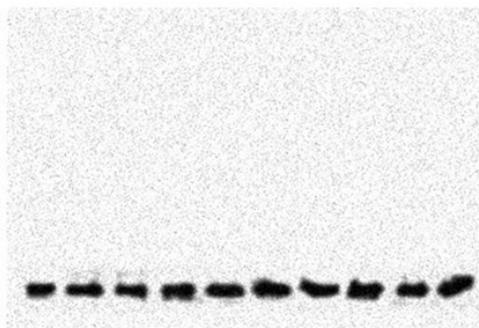
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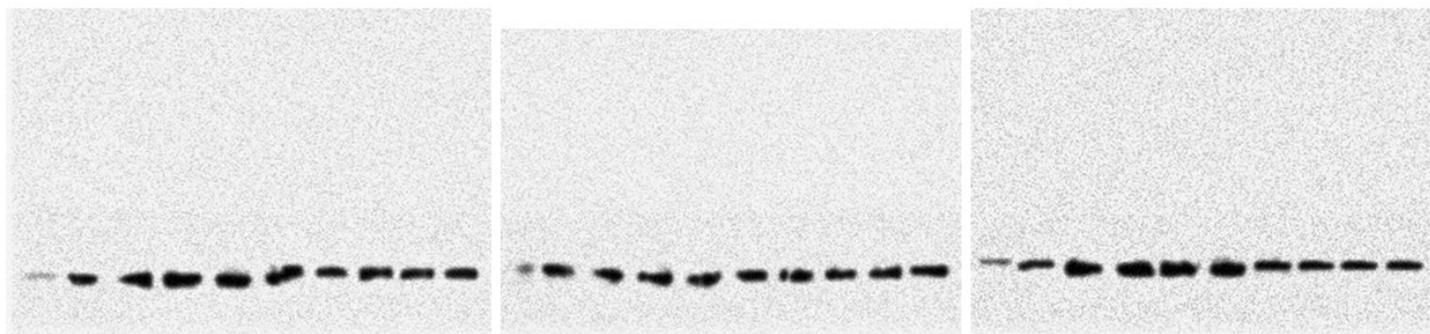
**$\alpha$ 7nAChR**



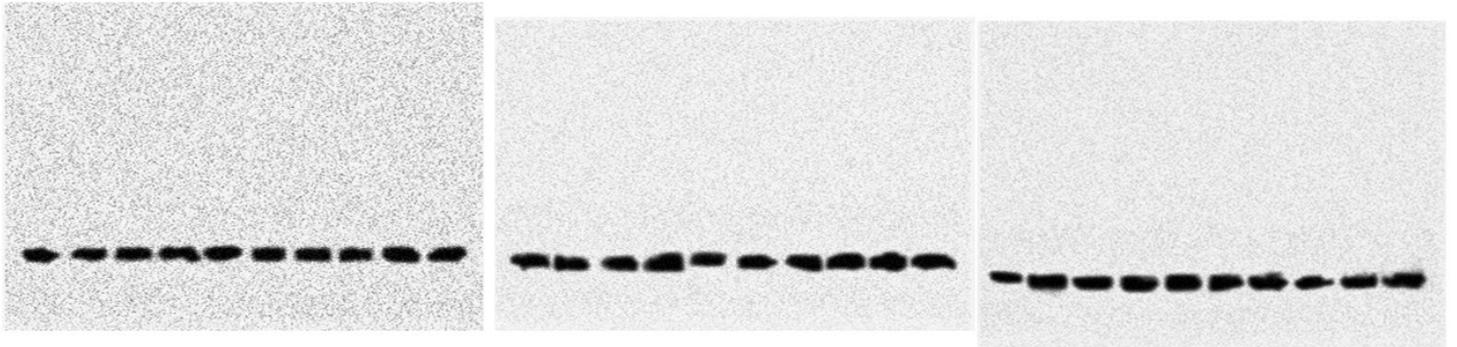
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**Fig 5A**      **pT231 Tau**



**Fig 5A**      **Tau (Tau-5)**

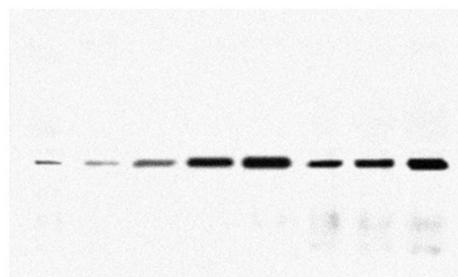
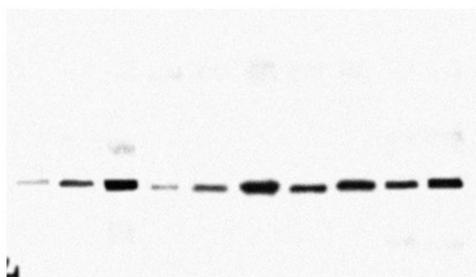


**Fig 6A**

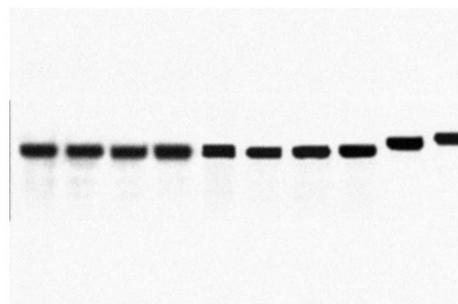
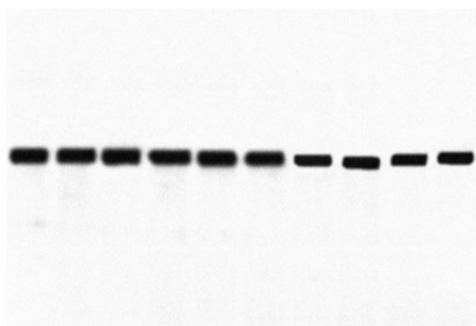
**ApoE3/ApoE4**

**ApoE4/ApoE4**

**$\alpha$ 7nAChR**



**$\beta$ -Actin**

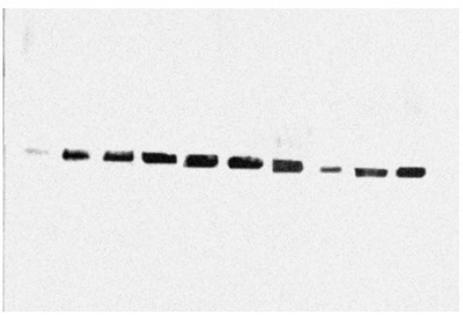
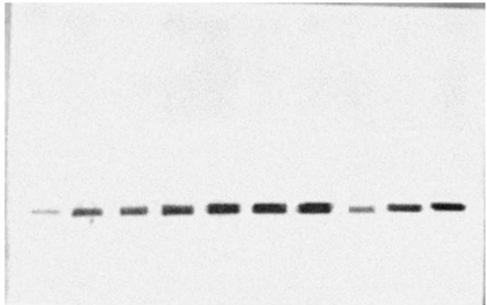


**Fig 1C**

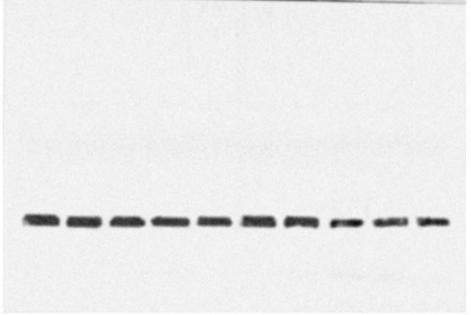
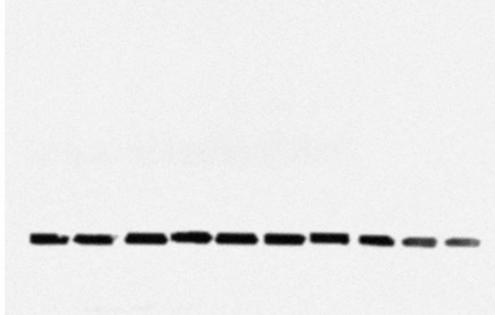
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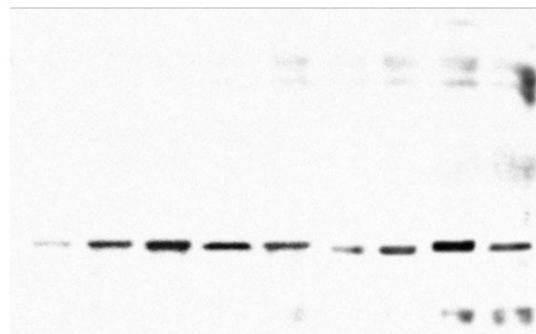
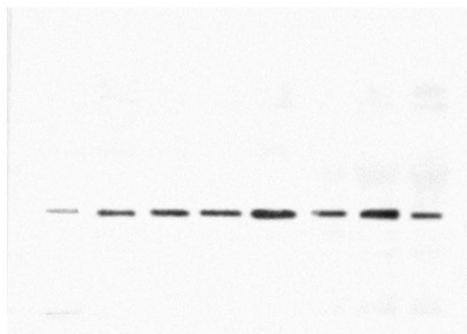


**Fig 6A**

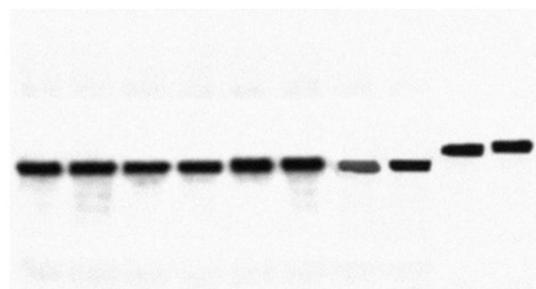
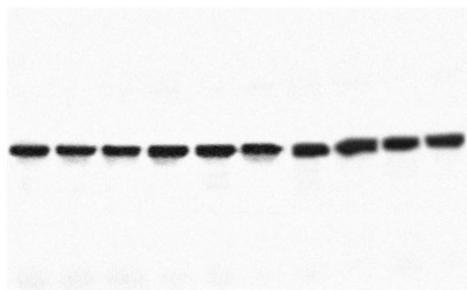
**ApoE2/ApoE3**

**ApoE3/ApoE3**

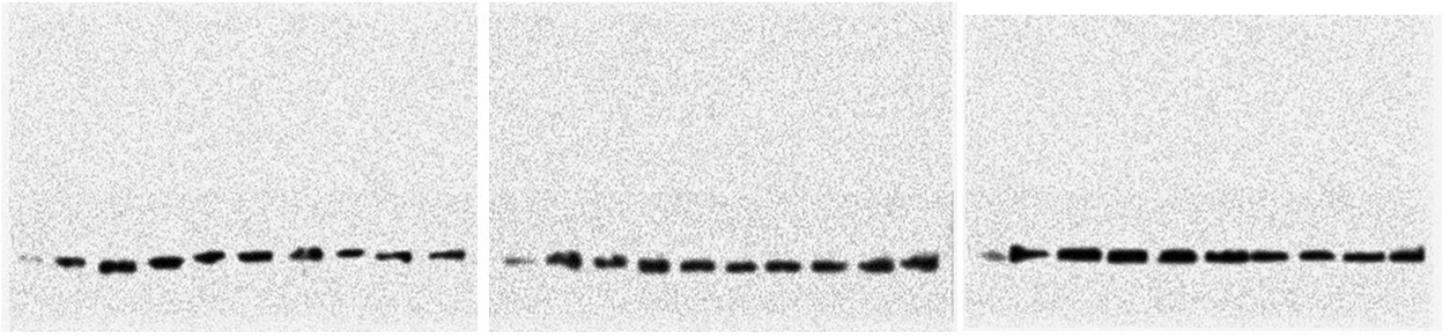
**$\alpha$ 7nAChR**



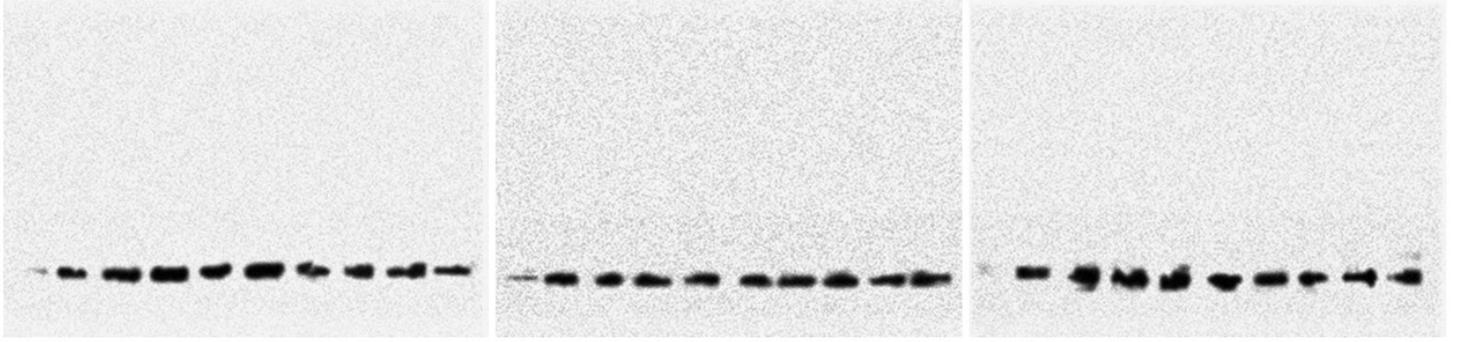
**$\beta$ -Actin**



**Fig 5A**      **pS202 Tau**



**Fig 5A**      **pT181 Tau**

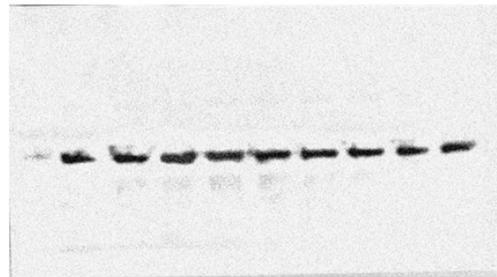
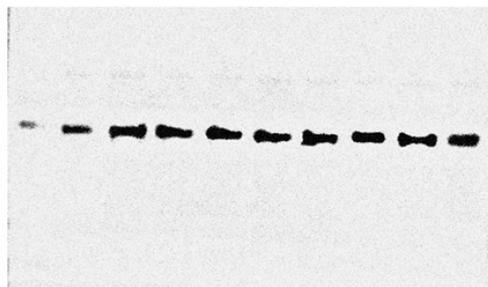


**Fig 1A**

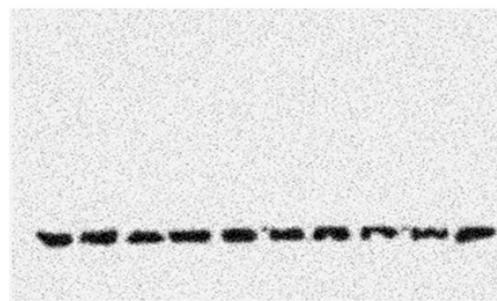
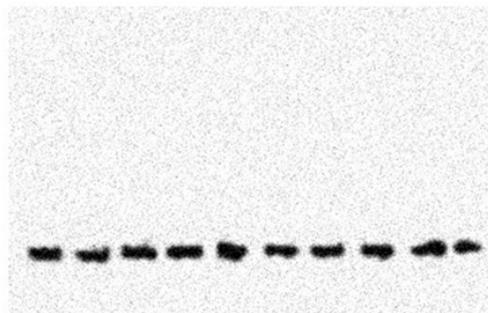
**ApoE141-148**

**ApoE141-148(K→E)**

**α7nAChR**



**β-Actin**





**CSOM/SBE**  
**BIOMED FACULTY AND STAFF**  
**INTERVIEW EVALUATION FORM 2021-2022**

APPLICANT:

DATE:

**INSTRUCTIONS:** Please score the applicant for each of the five categories on the basis of this scale:

- 5 = **Outstanding** - one of the very top students you have ever seen
- 4 = **Excellent** - a superior candidate, excellent addition to the program
- 3 = **Very Good** - student would be acceptable for the program
- 2 = **Average** – average student for the program
- 1 = **Fair** - marginal student for the program
- 0 = **Unacceptable** – unacceptable for the program

Each category contains criteria that all interviewers should use in determining the applicant’s score for that category. Please consider your scores very carefully.

**TOTAL SCORE:**

**Interviewer Signature** \_\_\_\_\_

I certify that I have no conflict of interest with the candidate I have interviewed.

I. **LIFE EXPERIENCE & CONNECTION TO THE WORLD**

Consider the following:

Participates in activities or experiences that contribute to personal development

Shows concern for the health and well-being of others

Demonstrates responsible behavior

Displays industry and initiative

Demonstrates interest in medicine, especially primary care medicine

Possible questions:

- Can you tell me about how you think you have contributed to your community?
- What volunteer or hospital experience have you had? (If necessary.....tell me about it?)
- What has been your favorite extra-curricular activity, and why?
- Tell me about a time when you saw somebody doing something that worried you or that you thought wasn't right for some reason. How did you feel? What, if anything, did you do?
- Can you tell me about a time you have helped someone?
- This past year has been difficult in many ways – how has it affected you?

Score:

Comments:

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## II. APPROACH TO LEARNING

Consider the following:

Inquisitive and involved in intellectual pursuits

Activities demonstrate commitment to achieving goals

Use of free-time indicates an ability to structure time in a disciplined and consistent manner

Able to seek and use help when necessary

Copes with difficulties

Possible questions:

- What do you like most about school?
- What has been your toughest subject? How did you manage it?
- What is your favorite way to spend a free day?
- What do you think about medical advice being on the Web?
- When you run into trouble in one of your classes, how do you handle it?
- Do you prefer to work (school work) by yourself or with others?
- What has your experience in school been since the start of the COVID-19 pandemic?

Score:

Comments:

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**III. COMMITMENT TO THE GOALS OF THE PROGRAM**

Consider the following:

- Understands the goals of the program and appears committed to them
- Willingness to work actively toward the goals of the program
- Displays a high degree of interest in working with people
- Demonstrates openness and flexibility to issues of diversity
- Community and non-academic experiences have expanded insights into the health and social concerns of medically under-served communities
- Sensitive to social, economic, and cultural influences on health and illness

Possible questions:

- What made you decide to apply to our program?
- What will you do if you don't get into the Sophie Davis/CUNY School of Medicine?
- Can you tell me about an enlightening event or interaction that you had while doing volunteer work or extracurricular activities?
- Have you considered the advantages/disadvantages of living in this neighborhood?
- Have you ever felt yourself to be an "outsider"? If so, how did this feel and what, if anything, did you do about it?

Score:

Comments:

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#### IV. PERSONAL ATTRIBUTES

Consider the following:

Self-awareness

Maturity

Motivation

Potential for leadership

Potential for empathy and compassion

Tolerates ambiguity

Resilience

Possible questions:

- What are 3 things you want me to know about you?
- What would you say are your strengths and weaknesses?
- What about yourself would you change, if you could?
- What would your favorite classmate who has worked with you on a project say are the challenges and benefits of working with you?
- What would your favorite teacher say is your greatest strength? Do you think it's an accurate portrayal of you?
- What would the teacher you like the least say is your greatest weakness? Is that an accurate portrayal of you?

Score:

Comments:

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V. **COMMUNICATION SKILLS**

Consider the following (in the context of a virtual interview):

Speaks clearly and concisely

Speaks with ease

Answers fully with relevant information

Relates well, establishes rapport

Expresses feelings without being overbearing

Listens carefully

Maintains appropriate eye contact

Score:

Comments:

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**2021-2022 - CSOM/SBE**  
**FACULTY AND STAFF INTERVIEW SUMMARY SHEET**

Applicant:  
Date of Interview:

**Faculty and Staff – Helpful Comments**

Please summarize or comment on overall appropriateness of applicant for admission, particularly highlighting attributes and/or concerns.

Interviewer:  
Print name

Signature \_\_\_\_\_

Date:

## Admissions Conflict of Interest Policy

In exercising their responsibilities in the admissions processes, all members of the admissions committee and interviewers' committee, which includes faculty, staff and students, will be held to these standards of conduct outlined in CUNY's Conflict of Interest policy:

2.4. "No Covered Individual shall use or attempt to use his or her position at the University to secure unwarranted privileges or exemptions for himself or herself or others."

2.6. "A Covered Individual shall not by his or her conduct give reasonable basis for the impression that any person can improperly influence him or her or unduly enjoy his or her favor in the performance of his or her duties or responsibilities at the University, or that he or she is affected by the kinship, rank, position, or influence of any party or person in the performance of those duties or responsibilities."

2.9. "No Covered Individual shall accept gifts of more than nominal value where the circumstances would permit the inference that (a) the gift was intended to influence the Covered Individual in the performance of his or her duties or responsibilities at the University, or (b) the gift constituted a tip, reward, or sign of appreciation for any act by the Covered Individual in connection with those duties or responsibilities."

Faculty, staff and students must sign a form for each interview conducted that attests that there is no conflict of interest with regard to the student being interviewed. A conflict of interest would require the interviewer to recuse him/herself from an admissions interview. Similarly, if a member of the Admissions Committee has a conflict of interest regarding an applicant who is being discussed, they must recuse themselves from the discussion and not participate in the vote.





THE CITY UNIVERSITY OF NEW YORK  
MULTIPLE POSITION REPORT FOR FULL-TIME FACULTY

This form must be completed by all full-time faculty, including full-time substitutes, in the Fall and Spring semesters.

- Please read the Statement of Policy on Multiple Positions, prior to completing this form and consult with the College Labor Designee, if you have any questions regarding the Policy.
- This form must be completed, and the necessary approvals secured, before the faculty member assumes a multiple position assignment and must be updated, whenever changes in commitments occur during the semester.

*If more space is needed, please attach additional sheets using the same format.*

Date		Semester		Year	
Name		College			
Title/Tenure Status		Department			

**Certification by Faculty Member (Complete Part A or Part B)**

**Part A:** I am aware of the Multiple Position regulations governing activities in addition to my regular full-time employment at

College

*I certify that I have no compensated or uncompensated employment, consultative or other work, grant-funded or otherwise, in addition to my regular full-time employment at the above college. I understand that the failure to complete this form fully and accurately could subject me to various penalties, up to and including termination of employment, following any applicable disciplinary proceedings.*

Signature \_\_\_\_\_

Date \_\_\_\_\_

**If Part A is completed: No further action is required of the college**

**Part B:** I am aware of the Multiple Position regulations governing activities in addition to my regular full-time employment at

College

**I certify that (check all applicable statements):**

In addition to my regular full-time assignment at the College, I have supplementary employment, consultative or other work for extra compensation (including grant-funded activities), **within CUNY** for which complete information follows. (If you check this statement, complete Section B. 1.)

In addition to my regular full-time assignment at the College, I have supplementary compensated or uncompensated employment, consultative or other work for extra compensation (including grant-funded activities), **outside of CUNY** for which complete information follows. (If you check this statement, complete Section B. 2.)

My activities are within the limits set by the Multiple Position regulations.

My activities are above the limits set by the Multiple Position regulations and a waiver to permit activities **within CUNY** has been approved by the Office of Human Resources Management. (**Note: Waivers are not applicable for Section B.2.**)

*I certify that I have fully and accurately disclosed information in Section B. 1 and B. 2, which includes all compensated and uncompensated employment, consultative or other work, grant-funded or otherwise, within and outside CUNY, in addition to my full-time employment at the College.*

*I understand that the failure to complete this form fully and accurately could subject me to various penalties, up to and including termination of employment, following any applicable disciplinary proceedings.*

Signature \_\_\_\_\_

Date \_\_\_\_\_

**B. 1. CUNY - Current Semester** (Only report **compensated** activities that are **not** part of your regular full-time position).

*\* Source of compensation may include tax-levy funds, or non-tax levy funds such as funds from Related Entities, Continuing Education Revenue, Grant Funds, including funds administered by Research Foundation, or any other funding source.*

*Add additional pages, if necessary.*

**TEACHING (Include activities in the Winter Session with Fall semester activities)**

College	<input type="text"/>	Department	<input type="text"/>
Course #	<input type="text"/>	Course Title	<input type="text"/>
Hours/Weekly	<input type="text"/>		
From Date	<input type="text"/>	To Date	<input type="text"/>
Hours/Semester	<input type="text"/>		

College	<input type="text"/>	Department	<input type="text"/>
Course #	<input type="text"/>	Course Title	<input type="text"/>
Hours/Weekly	<input type="text"/>		
From Date	<input type="text"/>	To Date	<input type="text"/>
Hours/Semester	<input type="text"/>		

**NON-TEACHING (Include activities in the Winter Session with Fall semester activities)**

*(Continuing Education Teaching Assignments, Grant-related assignments, any other administrative assignment)*

College	<input type="text"/>	Department	<input type="text"/>
Description of Assignment	<input type="text"/>		Hours/Weekly
Hours/Weekly	<input type="text"/>		
From Date	<input type="text"/>	To Date	<input type="text"/>
Hours/Semester	<input type="text"/>		

College	<input type="text"/>	Department	<input type="text"/>
Description of Assignment	<input type="text"/>		Hours/Weekly
Hours/Weekly	<input type="text"/>		
From Date	<input type="text"/>	To Date	<input type="text"/>
Hours/Semester	<input type="text"/>		

College	<input type="text"/>	Department	<input type="text"/>
Description of Assignment	<input type="text"/>		Hours/Weekly
Hours/Weekly	<input type="text"/>		
From Date	<input type="text"/>	To Date	<input type="text"/>
Hours/Semester	<input type="text"/>		

**B. 2. Compensated and Uncompensated Employment, Consultative or Other Work Outside of CUNY - Current Semester**

*Add additional pages, if necessary.*

Employer/Institution/Organization	<input type="text"/>		
Address	<input type="text"/>	City	<input type="text"/>
State	<input type="text"/>	Zip Code	<input type="text"/>
Tel.:	<input type="text"/>		

Nature of Work

From Date	<input type="text"/>	To Date	<input type="text"/>	No. of hours/week	<input type="text"/>	<input type="checkbox"/> Uncompensated	<input type="checkbox"/> Compensated
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**Section B 1: Approvals should follow campus practice**

**Department Chairperson Approval**

- I certify that the hours reported in Section B. 1 are within the limits set by the University's Multiple Position Policy. I recommend approval.
- I certify that the hours reported in Section B. 1 are above the limits set by the University's Multiple Position Policy. I recommend approval, subject to approval by the President / Designee and OHRM. **(An overload waiver request must be submitted to OHRM)**
- I do not recommend approval of the hours reported in Section B. 1.

Name  Signature \_\_\_\_\_ Date \_\_\_\_\_

**If consistent with campus practice:**

- Date of P & B Meeting   The Department Personnel and Budget Committee recommends approval of the activities listed in Section B. 1
- The Department Personnel and Budget Committee does **not** recommend approval of the activities listed in Section B.1

**Section B 2: Department P & B Approval**

- Date of P & B Meeting   The Department Personnel and Budget Committee recommends approval of the activities listed in Section B. 2
- The Department Personnel and Budget Committee does **not** recommend approval of the activities listed in Section B.2

**Department P & B Committee Approval**

- I certify that the activities and hours reported in Section B. 2 are within the limits set by the University's Multiple Position Policy. I recommend approval. (Limited to an average of one day a week, or its equivalent over the course of the academic year).
- I do not recommend approval of the activities and hours reported in Section B. 2.

P&B Chair  Signature \_\_\_\_\_ Date \_\_\_\_\_

The Multiple Position Policy allows a maximum of 8 classroom contact hours over the Fall and Spring semester. An additional 6 classroom contact hours are allowed during the academic year in courses that are offered a) during the winter session; b) exclusively on Saturdays and Sundays, or c) as part of on-line degree programs. *(14 classroom contact hours)*

Non-teaching assignments are limited to 150 hours per semester or 300 hours for the entire academic year at the appropriate non-teaching adjunct rate, not to exceed the maximum hourly rate.

Combined teaching and non-teaching overload assignments are calculated pursuant to the formula provided:  
*Example: A faculty with 12 classroom contact hours would be eligible for 50 non-teaching assignment hours.  $(14*15) - (12*15) / .6 = 50$*

**President/Designee Action:**

<p><b>Section B. 1: Within CUNY</b></p> <p><input type="checkbox"/> Approved</p> <p>Total teaching hours <input type="text"/></p> <p>Total non-teaching hours <input type="text"/></p>	<p><b>Section B. 2: Outside CUNY</b></p> <p><input type="checkbox"/> Approved</p>
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**Other Action /Comments**

Signature of President or Designee \_\_\_\_\_ Date \_\_\_\_\_



# ACADEMIC MEDICINE

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**Author:** Green Kaye-Alese MA; Wolinsky Rebecca; Parnell Sabreea J.; del Campo Daniela; Nathan Ajay S. MS; Garg Priya S. MD; Kaplan Samantha E. MD, MPH; Dasgupta Shoumita PhD

**Title:** Deconstructing Racism, Hierarchy, and Power in Medical Education: Guiding Principles on Inclusive Curriculum Design

**DOI:** 10.1097/ACM.0000000000004531

## **Academic Medicine**

**DOI: 10.1097/ACM.0000000000004531**

### **Deconstructing Racism, Hierarchy, and Power in Medical Education: Guiding Principles on Inclusive Curriculum Design**

Kaye-Alese Green, MA, Rebecca Wolinsky, Sabreea J. Parnell, Daniela del Campo, Ajay S.

Nathan, MS, Priya S. Garg, MD, Samantha E. Kaplan, MD, MPH, and Shoumita Dasgupta, PhD

**K-A. Green** is an MD/JD candidate, Boston University School of Medicine and Boston University School of Law, Boston, Massachusetts.

**R. Wolinsky** is a third-year medical student, Boston University School of Medicine, Boston, Massachusetts.

**S.J. Parnell** is a fourth-year medical student, Boston University School of Medicine, Boston, Massachusetts.

**D. del Campo** is an MD/JD candidate, Boston University School of Medicine and Boston University School of Law, Boston, Massachusetts.

**A.S. Nathan** is a fourth-year medical student, Boston University School of Medicine, Boston, Massachusetts.

**P.S. Garg** is assistant professor of pediatrics and associate dean of medical education, Boston University School of Medicine, Boston, Massachusetts.

**S.E. Kaplan** is assistant professor of obstetrics & gynecology and assistant dean of diversity & inclusion, Boston University School of Medicine, Boston, Massachusetts.

**S. Dasgupta** is professor of medicine and assistant dean of admissions, Boston University School of Medicine, Boston, Massachusetts; ORCID: <https://orcid.org/0000-0002-1473-7244>.

Correspondence should be addressed to Kaye-Alese Green, Medical Education Office, Boston University School of Medicine, 72 East Concord St., A3, Boston, MA 02118; telephone: (904) 635-9402; email: kagreen@bu.edu; Twitter: @KayeAlese.

Supplemental digital content for this article is available at

<http://links.lww.com/ACADMED/B212>.

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## **Abstract**

In the context of current U.S. racial justice movements, analysis of racism in medicine within medical education is a critical task for all institutions. To educate the next generation of physicians about racism in medicine and out of concern that the curriculum required critical assessment and change, a group of students and faculty at Boston University School of Medicine (BUSM) initiated a longitudinal curricular analysis through a vertical integration group, commissioned by the Medical Education Committee, from May 2019 to June 2020. The curriculum analysis and the major outcomes and guiding principles that emerged from it are described as a path forward, toward a more inclusive curriculum. The major elements of this analysis included a comprehensive internal curricular assessment and an external assessment of peer institutions that led to the development of key curricular recommendations and overarching equity and specific racially focused equity competencies. The curricular recommendations fall into the following domains: (1) challenging the persistence of biological/genetic notions of race, (2) embedding structural practices in medical education to dismantle racism in medicine, and (3) promoting institutional climate change. Initial steps to implement these recommendations are described. The authors believe that the historic and present reality of racism in America and in medicine has impacted medical education specifically, and more broadly, the practice of medicine, trainee experience, and patient outcomes. The key findings of the BUSM analysis are transferable to other medical education institutions, and the described review process can support peer institutions as they engage in the imperative work of institutional reflection and addressing the salient ideas and practices that uphold racism in medicine.

Racism has been embedded in the institution of medicine and medical education for centuries. The origin is linked to Samuel Morton, Josiah Nott, and Paul Broca's theory of racial inferiority, which permeates throughout the teachings of modern medical practice.<sup>1</sup> Today, racism in medicine manifests in many ways including, through the use of race as a risk factor for pathology, even though the literature clearly defines race as a socially derived concept that is founded on unequal distribution of power.<sup>2-4</sup> This misuse of the social construct of race creates an improper connection between race, genetics, and sociological racial disparities, which perpetuates the misconception that there are biologically derived racial differences.<sup>5,6</sup> This misconception is connected to the stunting of physicians' clinical reasoning and the disproportionate level of health care disparities experienced by communities of color.<sup>6</sup> These phenomena converge in the experiences of trainees and physicians of color who, despite being members of the institution of medicine, are still subject to the social injustices of racism. These experiences may involve the explicit and hidden curriculum about race in undergraduate and graduate medical education, a lack of representation, overt racism from colleagues and patients, and the implicit and explicit biases expressed by supervisors, colleagues, and patients.<sup>7</sup>

Given the diverse clinical and educational environment of Boston University School of Medicine (BUSM) and the role that all medical schools play in preparing students to care for, work with, and advocate to ensure health equity for all patients, we believe the work of removing racist ideologies and practices from medical curricula is of critical importance for all medical educators.<sup>8</sup> In this article, we describe the ways in which the curriculum at BUSM has unintentionally reified the disproven notion of biological races and describe the curricular analysis undertaken to dismantle these harmful concepts with the goal of promoting health equity through a more inclusive curriculum. The key findings of our analysis are transferable to other

medical education institutions, and the described review process can support peer institutions as they engage in the imperative work of institutional reflection and addressing the salient ideas and practices that uphold racism in medicine.

### **Vertical Integration Group Commission and Design**

To educate the next generation of physicians about racism in medicine and out of concern that the curriculum required critical assessment and change, we, a group of students and faculty at BUSM, initiated a longitudinal curriculum analysis. This analysis was performed through the creation of a vertical integration group (VIG), commissioned by the BUSM Medical Education Committee (MEC), from May 2019 to June 2020. The VIG was established at the intersection of student activism and institutional objectives. In spring 2019, 8 first-year BUSM medical students gathered to discuss the multiple instances of racism, microaggressions, noticeable confluences of race with biology, and concerns that racially grounded teaching of medical science was propagating systemic racism. Concurrently, the BUSM Medical Education Office (MEO) was in the midst of a comprehensive curricular reform focused on health equity. These students alongside 3 faculty mentors, in partnership with the associate dean for medical education, proposed the development of a VIG focused on racism in medicine to the MEC. On May 9, 2019, the Racism in Medicine VIG was launched and began a year-long curriculum review process, which culminated with the presentation of a 139-page comprehensive report that: (1) assessed BUSM's 4-year curriculum as it relates to racism, (2) provided an external review of successful antiracism programs in select undergraduate medical education programs, and (3) provided high-level curricular recommendations, implementation strategies, and proposed racism in medicine and health equity competencies.<sup>9</sup>

## Curriculum Analysis

The VIG was charged with the primary outcome of producing a comprehensive report.<sup>9</sup> This report provides a detailed narrative of the internal assessment of the BUSM curriculum, external assessment of curricula at peer undergraduate medical institutions, and detailed appendices. Each of these sections is discussed in detail below.

The internal assessment examined the 4-year didactic curriculum and synthesized findings into preclerkship and clerkship sections. The assessment was conducted by a systematic review of every didactic lecture (slides), syllabus section (faculty guide, faculty notes, and course organization documents), and practice exam questions for instances of mention, discussion, or omission of race in the curriculum. An expanded team of invested students from all years of medical school reviewed these materials, entering their observations into information-gathering tools (Supplemental Digital Appendixes 1–3 at <http://links.lww.com/ACADMED/B212>). We also highlighted and explained instances when race was used appropriately by invested lecturers within our learning community. These findings were reviewed by the 3 faculty mentors and compiled in 2 appendices in the VIG report,<sup>9</sup> which respectively displayed the results for the preclerkship and clerkship courses. The findings were documented in this format to provide actionable items for faculty to address immediately.<sup>9</sup>

The external assessment focused on 12 Liaison Committee on Medical Education–accredited medical schools’ curricula that were reviewed through examination of public-facing documentation (i.e., curricular overviews, antiracism program descriptions, and antiracism program development timelines) of their curricula as well as informational interviews of stakeholders at these institutions. The informational interviews focused on synthesizing best practices used and key lessons learned at each peer institution.

The appendices were developed to provide specific recommendations to preclerkship and clerkship faculty around best practices for using race and ethnicity in didactic material. The appendices detail every instance that a term related to race and ethnicity was used, the context it was used in, and the appropriateness of the term. We accompanied incorrect use of terms (i.e., in a manner that propagated the conflation of race, biology, and genetics, listed race as a risk factor, perpetuated a racial stereotype, etc.) with literature-based explanations of why the usage was incorrect and how to resolve the issue. Lastly, the appendices inform faculty of their use of images in their didactic materials and provide recommendations for diversifying images.

The report was edited and reviewed by clinical and foundational science faculty members before it was disseminated, and the findings of the VIG were presented and approved by the MEC on June 12, 2020. Tiered dissemination of the report was initiated subsequently to students, faculty, the greater Boston University community, and the broader national community of U.S. medical schools. We prioritized the dissemination of the report to a wide audience, targeting the student body first, given the 2020 U.S. national reckoning with racism and need for more transparent action around racism in medicine.

After dissemination, the MEO employed a tiered implementation strategy in conjunction with the VIG to address the findings. The core aspects of this implementation strategy were immediate didactic modification, faculty development, the development of an equity curriculum, and the creation of a Diversity and Inclusion Fellowship. The fellowship, which has continued, was funded for the academic year 2020–2021 by the BUSM Diversity & Inclusion Office, Boston University Institute for Healthy System Innovation & Policy, and the Vertex Foundation to support the MEO in the implementation of this work among other strategic BUSM initiatives. The 2020–2021 fellow specifically assisted with the development of the equity curriculum,

supported faculty in addressing issues in their own curricula, and identified and acted on next steps that go beyond the scope of the curriculum-focused report, by working on projects such as the Glossary for Culture Transformation<sup>10</sup> to further foster a climate of inclusion.

### **Outcomes and Guiding Principles**

The full report, “Is Race a Risk Factor? Creating Leadership and Education to Address Racism: An Analytical Review of Best Practices for BUSM Implementation,” encapsulates the findings and key deliverables of the VIG.<sup>9</sup> The deliverables were centered around factors that we determined were foundational for successful antiracist curricular and cultural change endeavors (List 1). While these factors were developed for the BUSM community, many can be implemented at a wide range of institutions.

The key curricular recommendations and overarching equity and specific racially focused equity competencies (see below) are derived from the internal and external curricular assessments described above. The curricular recommendations fall into the following domains: (1) challenging the persistence of biological/genetic notions of race, (2) embedding structural practices in medical education to dismantle racism in medicine, and (3) promoting institutional climate change (Figure 1).<sup>9</sup>

### **Challenging the persistence of biological/genetic notions of race**

The use of race as a differential marker for screening protocols (e.g., glomerular filtration rate [GFR], spirometry) and the etiology and management of disease perpetuate the false equivalency of biological risk groups with racial groups rather than endorsing the social construction of race.<sup>2,5,7,11–13</sup> In this context, the precision of language through the accurate framing of human variation and the impact of social determinants of health is imperative to avoid amplifying these dangerous misconceptions. The perpetuation of race-based medicine and disproven theories of

genetic difference leads to worse health outcomes for patients of color.<sup>6,14</sup> We recommend addressing this cycle of racism in medicine head on to interrupt the propagation of these health disparities.

Permeating many undergraduate medical education curricula is the explicit listing of race as a risk factor for various health conditions. As noted by Jennifer Tsai, “rather than a risk factor that predicts disease or disability because of genetic susceptibility, race is better conceptualized as a risk marker—of vulnerability, bias, or systemic disadvantage.”<sup>2</sup> When race is identified as a risk factor, it mistakenly implies that race is genetic and/or biological and that there is an inherent feature of a race that can lead to a particular pathology. This misconception, among medical trainees and educators, can contribute to biased care practices, restricted clinical reasoning, and reduced accuracy of medical pedagogy, which may be an important explanation for the root causes of the lower quality of care experienced by racial and ethnic minorities.<sup>6</sup> Importantly, the disproportionate burden of disease seen in people of color cannot be explained by factors such as health care access, insurance status, and income.<sup>15</sup> Rather, structural issues impacted by racism, including access to safe housing, availability of clean water and air, disparities in the criminal justice system, and systemic bias throughout the health care system, are more proximal causes of the increased burden of disease on people of color.<sup>15</sup> For example, the diagnosis of non-White individuals with cystic fibrosis or other conditions that are typically associated with European ancestries is often delayed, leading to worse health care outcomes for patients of color with cystic fibrosis.<sup>16</sup>

An impactful way to challenge the notion of the biological derivation of race is to explicitly name racism instead of race as a risk factor.<sup>17</sup> This can be applied when examining the disparities experienced by communities of color with respect to COVID-19. Communities of color are both

more exposed to the SARS-CoV-2 virus and are more susceptible to negative outcomes due to the greater burden of chronic conditions.<sup>18</sup> If the medical curriculum does not name racism explicitly, the false concept of racial health disparities being a result of biological differences will perpetuate the disparities themselves, eliminate the opportunity for effective intervention, and increase the risk of death for people of color.<sup>17</sup> To effectively prevent this domino effect, we recommend establishing that race is a social construct in the first year of medical school and explicitly defining and differentiating race, racism, biology, and genetics throughout the 4-year curriculum.

### **Embedding structural practices in medical education to dismantle racism in medicine**

Due to the pervasive nature of the misconception that racial groups are biological groups, an intentional approach must be taken to disentangle these concepts and to describe populations, race, ethnicity, and ancestry more accurately, as well as to highlight the factors contributing to health disparities. We identified several strategies to establish an antiracist curriculum in undergraduate medical education, including (1) critical examination of the use of race in clinical vignettes and exam questions, (2) diversification of clipart and medical images, (3) critique of the strength of evidence in race-based medical practices, (4) inclusion of principle historical cases, (5) definition of specific racially focused equity competencies, and (6) piloting of curricular innovations via student-led initiatives.

**Critically examine the use of race in clinical vignettes and exam questions.** With respect to employing race in a teaching case, without critical assessment and clear reasoning, educators risk reinforcing race-based pattern recognition of diseases, which may lead to bias in clinical reasoning and delivery of care.<sup>19</sup> Creating a false equivalence between racial groups and risk categories can lead to underdiagnosis and the inadvertent reinforcing of stereotypical

connections between a racial group and a specific condition. This can also result in misdiagnosis in a patient from a different racial group affected by that same condition.

**Diversify clipart and medical images.** Throughout undergraduate medical education, including in the BUSM curriculum, many lecturers and textbooks display images and clipart of individuals with light skin only.<sup>20,21</sup> Continuing to show images primarily of light-skinned patients and health care professionals reinforces power dynamics in which White skin is seen as the default in both groups and creates a knowledge gap in the ability to recognize symptoms in individuals with melanin-rich skin tones. This can result in missed diagnoses and can contribute to patient health disparities when physicians are only trained to recognize conditions on fair skin tones.<sup>22</sup> Additionally, it is harmful when lecturers assert that it is easier to learn dermatological conditions as they present on White skin first, as it perpetuates the idea that darker skin is difficult, problematic, or undesirable. There is a critical need to diversify pathology images, as well as stock images, to prepare students to be able to diagnose with greater accuracy and to challenge associations and assumptions about both patients and providers.<sup>23</sup>

**Critique the strength of evidence in race-based medical practices.** As described above, the practice of using race as a risk factor is pervasive throughout undergraduate medical education and undergirds widely accepted medical practices and foundational pieces of medical research. Faculty must maintain and model a critical and continual assessment of existing research so that the institution of medicine can begin to dismantle the salient and pervasive systematic racism embedded in it. For example, the current American College of Cardiology/American Heart Association treatment guidelines for hypertension, heart failure, and other cardiac conditions are based on race and explicitly propose theories of inherent genetic difference.<sup>13,24</sup> These guidelines exemplify that the U.S. medical system was founded on, and often remains complicit in,

endorsing institutionalized racism. Rather than aligning the medical curriculum with these clinical recommendations simply because they have been promoted by the American College of Cardiology/American Heart Association or other professional societies, it is the responsibility of all educators to engage in antiracist pedagogy and transparently break down the origins of such recommendations to help students understand the existing flaws in the foundational science and its interpretation.

**Include principle historical cases.** In addition to faculty development, intentionally teaching about the embedded aspects of structural racism in medicine is essential for all curricula.

Throughout history, the perceived differences between races allowed for different standards of care, as well as for the unchecked experimentation and mistreatment of people of color by medical institutions, which has left Black Americans rightfully distrustful of the entire institution of medicine.<sup>25</sup> We recommend, at a minimum, teaching the following critical historical cases that demonstrate the harms of structural racism:

- *Study of untreated syphilis:* It is imperative that students understand that the natural history and deadly consequence of this disease was learned at the expense of the Black community in Tuskegee, Alabama.<sup>26</sup> When this study is not acknowledged directly, racism is perpetuated by providing implicit permission for devaluing Black bodies and Black lives under the insidious guise of acquiring medical knowledge. Importantly, we intentionally refer to this as the study of untreated syphilis, rather than emphasize the location of the study (Tuskegee) in the study name, to avoid further harming the community impacted by this study.
- *HeLa cells:* This cell line, the first to be propagated outside of the human body, was established under unethical conditions. The cells were obtained without proper consent

from the deceased Black donor, Henrietta Lacks, or her family. Although the cell line went on to be instrumental in numerous medical breakthroughs, the ends do not justify the means.<sup>27</sup> The ethical implications of these actions, the impact of structural racism in the care of Black people, and the current strategies to involve the Lacks family in decisions on the use of their ancestor's cells are critical to include in discussions on how these cells have revolutionized biomedical research.<sup>28</sup>

- *The spirometer and GFR:* The history of spirometry and GFR are 2 examples of how testing protocol and clinical diagnosis have been distorted by systemic racism. The race correction in the GFR algorithm is derived from the slavery era concept that Black people are more muscular and thus have higher levels of blood creatine. For the spirometer, the race correction was embedded based on 19th-century theories of the physical distinction between races—namely, the belief that Black people had lower lung function.<sup>13,29–31</sup> The omission of the origins of these race corrected formulas erroneously provides a subtext supporting a false biological connection between organ function or disease and race.<sup>13,29–31</sup>
- *Gynecological discoveries through unethical experimentation:* It is essential to teach about the unethical and unanesthetized gynecological experiments on vulnerable enslaved Black people by James Marion Sims. These experiments have led to the creation of many foundational surgical techniques in the field of obstetrics and gynecology, but by glossing over the origins of these techniques, medical education becomes complicit in the methods used to develop them.<sup>32</sup>

**Define specific racially focused equity competencies.** The key curricular recommendations described herein were supplemented by the development of overarching equity and specific racially focused equity competencies. These 2 sets of competencies were developed in partnership with the BUSM MEO and are modeled on Perdomo and colleagues' "Health equity rounds: An interdisciplinary case conference to address implicit bias and structural racism for faculty and trainees."<sup>33</sup> The competencies are designed to ensure an intentional and longitudinal reinforcement of equity (Box 1) and racism-specific (Box 2) concepts across the 4-year curriculum.<sup>9,29</sup> Key components of the racism in medicine specific equity competencies are for students to: recognize the historical context of racism in medicine, establish a deep understanding of racism and race terminology, recognize racism's role in pathology, develop skills to analyze the limitations and inherent racism in scientific research, and employ strategies to address structural racism in medicine at the individual and institutional level.<sup>9,33</sup>

**Pilot curricular innovations via student-led initiatives.** Creating Leadership and Education to Address Racism (CLEAR), was developed as a student-led 6-week extracurricular enrichment series on racism in medicine. This program piloted recommendations from the VIG through seminar classes with experts who led discussions on a range of critical topics. For example, the fall 2019 CLEAR pilot curriculum featured sessions on the history of racism in medicine, antiracism 101, racism and genetics, critical race theory, racism on the wards, and clinical case review. CLEAR has been officially implemented as a BUSM student-led extracurricular enrichment series, but ultimately, we view this enrichment curriculum as a testing ground for educational activities that can be brought into the required medical curriculum.

## **Promoting institutional climate change**

Importantly, the pedagogical strategies mentioned thus far are critical in providing the framework to build an antiracist medical education program, but without a radical transformation of the climate of academic medicine, these changes will not result in effective and durable change.<sup>34</sup> A key component of institutional climate change is developing a strong student-faculty partnership that opens lines of communication between experts in the field, students, faculty, and patients for collective education. By establishing a culture of trust and honesty, medical schools can begin to build a curriculum with an ethos of antiracism that permeates all aspects of medical education.

We recommend that foundational longitudinal faculty development be implemented to create sustainable culture change. Since faculty of color remain an underrepresented group in academic medicine, the majority of faculty cannot rely on lived experience, thus the historical and structural contexts of racism in medicine must be taught and personal bias must be explored.<sup>35</sup> Faculty development, including antibias and microaggression bystander intervention training, has been implemented at BUSM during the 2020–2021 academic year. This training was held during protected time for course directors and doctoring faculty. Importantly, it is paramount that those teaching about race and racism are equipped with the language and a nuanced understanding of how hierarchies and bias contribute to structural inequities. This understanding will help ensure a safe atmosphere for all participants, especially for students with historically excluded identities, to prevent retraumatization.<sup>36</sup> There must also be an emphasis on expanded, advanced faculty training opportunities (e.g., history of racism in medicine workshops, and inclusive pedagogical design trainings) and identification of faculty advocates who can

contribute their perspective and expertise and provide a continuous presence of support to peers engaging in this work at an earlier point in the continuum.

Lastly, culture is changed by a continual partnership between faculty, staff, and students collectively examining the impact of racism on their lives and on their communities and engaging in opportunities to practice being an ally and upstander.

### **Limitations of This Work**

First, the MEC's charge to the VIG stipulated the scope of the work. Therefore, the analyses were limited solely to the undergraduate medical education curriculum with a decidedly scientific lens. In recognition that most medical institutions are not experts in racial justice, we recommend that all medical education institutions partner with local and national organizations with experts in racial justice and health equity to bolster faculty development, student engagement, and cultural change. We also acknowledge that the topic of racism in medicine has implications that extend to the areas of admissions; the culture and climate of an institution; interpersonal behavior and attitudes; grading, honorary recognition, and promotions practices; and policy and legislation. Second, although every effort was taken to conduct the analyses in a manner and provide recommendations that would be generalizable across all populations, the scope of this perspective is largely Afrocentric, and thus the themes represented in it are similarly limited in scope. Third, it is important to recognize that work of this nature can be subject to individual bias. Efforts were taken to minimize these effects through a robust data-gathering framework and multilevel review process for the generation of recommendations. Finally, significant efforts were undertaken to ensure the diversity in the team conducting this work. The team included a multiracial and multicultural alliance from all levels of training, from

first-year medical students to the associate dean of medical education, and included consultations from faculty in areas spanning basic science and clinical practice.

### **Future Directions**

This work has been a labor of love, desperation, and hope. We believe that BUSM and all undergraduate medical education institutions can create leadership and make an active commitment to dismantle the historical vestiges of racism within the institution of medicine and simultaneously endeavor to eliminate health care disparities. The historic and present reality of racism in America and in medicine has impacted medical education specifically, and more broadly, the practice of medicine, trainee experience, and patient outcomes, and has propelled us forward in this work in the hopes of creating a better future for patients, trainees, and the next generation of physicians. However, change must be global, and must not be limited to a single component of the educational experience. It is of the utmost importance to not only analyze and rectify the formal curriculum but also to intentionally investigate the institutional environment and the structural societal barriers that impact the health and well-being of people of color.<sup>37</sup> This work requires senior leadership support, cohesive and comprehensive vision for change, faculty buy in, community partnership, and a global openness to change across all levels. Lastly, there must be a conscious effort to enact change without adding an additional form of oppression through the “diversity tax” on vulnerable student and faculty groups.<sup>38</sup> We recommend that leadership provide protected time and compensation for faculty and students who choose to engage in this transformative work. By prioritizing and embracing this work, each academic medical institution has the opportunity to transform the practice of medicine and impact millions of patient outcomes through a commitment to equity and inclusion.

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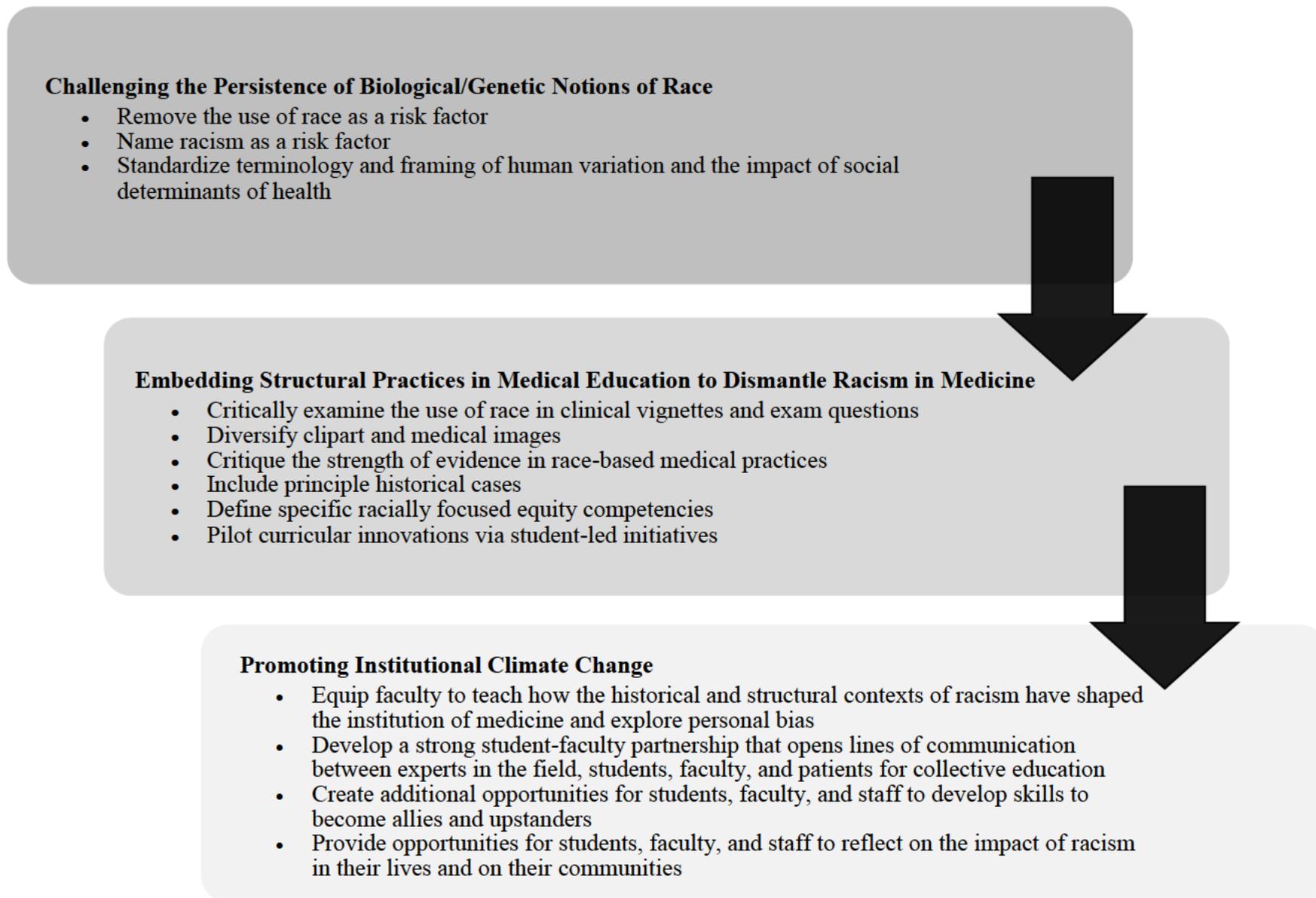
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## **Figure Legend**

### **Figure 1**

Key recommendations for an antiracist medical curriculum and initial steps to implement these recommendations. The first domain (challenging the persistence of biological/genetic notions of race) establishes the foundational nature of disentangling race, biology, and genetics. The second domain (embedding structural practices in medical education to dismantle racism in medicine) builds on that foundation to recommend a series of structural changes to aid in dismantling racist pedagogical practices. The third domain (promoting institutional climate change) focuses on recommendations that can help transform the culture at an institution.

Figure 1



## Box 1

### Proposed Central Equity Competencies Developed at and for Boston University School of Medicine (BUSM)<sup>a</sup>

#### Central Equity Competencies<sup>9</sup>

##### The BUSM graduate...

Recognizes instances and systems of inequity, comprehends the historical context and current drivers of inequity, reflects on their personal biases and privilege, analyzes medical literature through the lens of structural inequity, exhibits the medical knowledge to understand the physiologic response to inequity, recognizes the implications of inequity on health outcomes, and possesses the knowledge and practical skills to be an advocate for a more equitable environment in any health care setting.

##### **Recognizes instances and systems of inequity and comprehends the historical context and current drivers**

- Demonstrates an understanding of the historical and current sociopolitical factors affecting health equity for marginalized patient populations
- Demonstrates an understanding of the trust/mistrust of the health care system and the current structural factors that propagate inequity for marginalized populations

##### **Reflects on their personal biases and privilege**

- Demonstrates an awareness of personal bias and privilege and how it impacts patient care, health outcomes, and interprofessional relationships

##### **Analyzes medical literature through the lens of structural inequity**

- Exhibits the ability to critically examine the medical literature's use of sociopolitical categorizations (i.e., race, refugee, etc.) and disease states

##### **Exhibits the medical knowledge to understand the physiologic response to inequity**

- Exhibits the medical knowledge of how inequity influences the development of pathology at the physiologic, neurocognitive, and epigenetic level

##### **Recognizes the implications of inequality on health outcomes**

- Recognizes medical and sociopolitical inequities and how they impact patient care and health outcomes
- Recognizes how stigmatizing language negatively impacts patient care and professional relationships
- Recognizes and comprehends how medical and sociopolitical inequities impact their colleagues personally and professionally

##### **Possesses the knowledge and practical skill to be an advocate for a more equitable environment in any health care setting**

- Demonstrates the ability to employ evidence-based strategies to advocate for creating equitable health care for marginalized populations

<sup>a</sup>These competencies outline the expectations for all graduates of BUSM concerning equity across all groups that have been historically marginalized.

## **Box 2**

### **Proposed Racism in Medicine Specific Equity Competencies Developed at and for Boston University School of Medicine (BUSM)<sup>a</sup>**

#### **Racism in Medicine Specific Equity Competencies<sup>9,29</sup>**

##### **The BUSM graduate...**

- Recognizes the historical context and current manifestations of structural racism and its impact on the health care system.
- Employs evidence-based tools to recognize and mitigate the effects of personally held implicit racial biases.
- Identifies and analyzes the effects of implicit racial bias and structural racism in clinical scenarios and health outcomes.
- Exhibits the scientific acumen to understand the difference between genetic variation, ancestry, and sociologically derived (race and racism) risk factors.
- Exhibits the knowledge of how racial social inequity influences physiological pathology.
- Analyzes medical literature with the historical understanding of racial inequity, identifies gaps in the medical literature, and is able to delineate where race is used or not used appropriately.
- Employs evidence-based strategies to address structural racism at the individual and institutional level to reduce the negative impact of implicit racial bias on patient care and interprofessional relationships.

<sup>a</sup>These competencies outline the expectations for all graduates of BUSM concerning equity across historically marginalized racial and ethnic groups.

## **List 1**

### **Foundational Factors for Successful Antiracist Curricular and Cultural Change Endeavors<sup>a</sup>**

1. Name and frame the impact of racism as a structural inequity
2. Challenge the biological framework of race in the preclerkship and clerkship curricula
3. Increase faculty development to empower faculty as changemakers
4. Amplify tangible central endorsement to create collaborative buy in
5. Establish a 4-year medical curriculum based on overarching equity and specific racially focused equity competencies
6. Develop a systematic process for dynamic curricular review and didactic support
7. Build a unified antiracist vision and shared language for all departments
8. Create community, inter-, and intra-institutional partnerships with topic experts
9. Establish a context-specific understanding of how structural racism has impacted the institution's community and patient population
10. Continue to foster student activism and engagement

<sup>a</sup>These 10 factors are proposed to establish a strong underpinning for antiracist curricular and cultural changes within an undergraduate medical education institution.











**From:** Rosemarie Wesson  
**Sent time:** 01/29/2022 01:42:51 PM  
**To:** Hoau-yan Wang  
**Cc:** Luisa Hassan  
**Subject:** Re: FY21 Individual Drop

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Dear Hoau-yan,

Below is the information for your individual drop based on your FY21 research expenditures. As a reminder, FY21 covers the period from July 1, 2020 through June 30, 2021. Your total drop for FY21 is **\$2,798.20**. Please review. If you agree, please send an email to Luisa Hassan (cc'd above) indicating the account number into which you want the funds deposited. Please note. We would like to have all DROPS completed before 3/31/22.

The DROP is determined based upon the formula

$$\text{Individual DROP} = \text{Total IDC} * 0.35 * 0.05$$

Your individual IDC recovered for FY21 includes:

Row Labels	TOTAL IDC	IDC LESS RF FEES	DROP
<b>Hoau-Yan Wang</b>	<b>\$ 159,897.32</b>	<b>\$ 133,204.91</b>	<b>\$ 2,798.20</b>
<b>72587-00 01</b>	<b>\$ 24,662.49</b>	<b>\$ 20,475.16</b>	<b>\$ 431.59</b>
<b>72639-00 02</b>	<b>\$ 2,307.89</b>	<b>\$ 1,907.66</b>	<b>\$ 40.39</b>
<b>76434-00 03</b>	<b>\$ 23,500.50</b>	<b>\$ 19,512.38</b>	<b>\$ 411.26</b>
<b>76589-00 05</b>	<b>\$ 437.77</b>	<b>\$ 371.45</b>	<b>\$ 7.66</b>
<b>72587-00 02</b>	<b>\$ 13,330.46</b>	<b>\$ 11,222.37</b>	<b>\$ 233.28</b>
<b>72598-00 03</b>	<b>\$ 22,853.02</b>	<b>\$ 19,201.68</b>	<b>\$ 399.93</b>
<b>72639-00 03</b>	<b>\$ 49,661.24</b>	<b>\$ 41,062.87</b>	<b>\$ 869.07</b>
<b>72762-00 01</b>	<b>\$ 23,143.95</b>	<b>\$ 19,451.34</b>	<b>\$ 405.02</b>

Rose  
Rosemarie D. Wesson, Ph.D., P.E.  
Interim Associate Provost for Research  
Professor Chemical Engineering  
The City College of New York  
160 Convent Avenue  
New York, NY 10031

Phone: 212-650-6902  
Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

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**From:** Rosemarie Wesson <rwesson@ccny.cuny.edu>  
**Date:** Sunday, June 20, 2021 at 1:42 PM  
**To:** Hoau-yan Wang <hywang@med.cuny.edu>  
**Cc:** Luisa Hassan <luisa@ccny.cuny.edu>  
**Subject:** FY20 Individual Drop

Hoau,

Below is the information for your individual drop based on your FY20 expenditures. As a reminder, FY20 covers the period from July 1, 2019 through June 30, 2020. Your total drop for FY20 is \$2,465.31. Please review and confirm the FY20 expenditures by June 25, 2021. If you agree, **please send an email to Luisa Hassan (cc'd above) indicating the 9<sup>th</sup> Ledger account number into which you want the funds deposited.** Please note. We would like to have all DROPS completed before 6/30/21.

The Drop is determined based upon the formula

$$\text{Individual DROP} = \text{Total IDC} * 0.35 * 0.05$$

Your individual IDC received for FY20 includes:

Row Labels	TOTAL IDC	IDC LESS FEES	DROP
<b>Hoau-Yan Wang</b>	<b>\$ 140,874.92</b>	<b>\$ 116,756.87</b>	<b>\$ 2,465.31</b>
72587-00 01	\$ 7,982.15	\$ 6,613.26	\$ 139.69
72598-00 02	\$ 67,430.99	\$ 56,066.10	\$ 1,180.04
72639-00 01	\$ 2,052.99	\$ 1,130.21	\$ 35.93
72639-00 02	\$ 37,143.27	\$ 30,781.75	\$ 650.01
76434-00 02	\$ 506.95	\$ 430.12	\$ 8.87
76434-00 03	\$ 22,401.97	\$ 18,920.51	\$ 392.03
76589-00 05	\$ 3,356.60	\$ 2,848.11	\$ 58.74
92312-08 02	\$ -	\$ (33.19)	\$ -

Rose

Rosemarie D. Wesson, Ph.D., P.E.  
 Interim Associate Provost for Research  
 Professor of Chemical Engineering  
 The Grove School of Engineering  
 The City College of New York

Steinman Hall, Suite 152  
 160 Convent Avenue  
 New York, NY 10031

Phone: 212-650-6902  
 Fax: 212-650-5768  
 Email: [rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)

**From:** Marc Scullin

**Sent time:** 02/07/2022 07:15:13 AM

Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lianne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth

**Subject:** NIH Funding Opportunities - Week ending February 04, 2022

Good morning CSOM Faculty. Please see below for a list of new NIH funding opportunities for the week ending February 04, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 02/04/2022, [Click HERE](#)

## Funding Opportunities

- [Innovative Pilot Mental Health Services Research Not Involving Clinical Trials \(R34 Clinical Trial Not Allowed\)](#)  
(PAR-22-082)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [NHGRI Short Courses for Genomics-Related Research Education \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-22-095)  
National Human Genome Research Institute  
Application Receipt Date(s): January 25, 2025
- [Clinical Trial Readiness for Rare Diseases, Disorders, and Syndromes \(R03 Clinical Trial Not Allowed\)](#)  
(PAR-22-100)  
National Center for Advancing Translational Sciences  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): Multiple dates, see announcement.
- [Clinical Trial Readiness for Rare Diseases, Disorders, and Syndromes \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-22-101)  
National Center for Advancing Translational Sciences  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): Multiple dates, see announcement.
- [NIA Renewal and Revision Cooperative Agreements in AD/ADRD Research \(U24 Clinical Trial Not Allowed\)](#)  
(PAR-22-110)  
National Institute on Aging  
Application Receipt Date(s): Not Applicable
- [Early-Stage Preclinical Validation of Therapeutic Leads for Diseases of Interest to the NIDDK \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-111)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): Multiple dates, see announcement.
- [Urgent Award: COVID-19 Mental Health Research \(R01 Clinical Trial Required\)](#)  
(PAR-22-112)  
National Institute of Mental Health  
Application Receipt Date(s): December 23, 2022
- [Urgent Award: COVID-19 Mental Health Research \(R01 Clinical Trial Optional\)](#)  
(PAR-22-113)  
National Institute of Mental Health  
Application Receipt Date(s): December 23, 2022
- [Analgesic, Anesthetic and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks and Pediatric Anesthesia Safety Initiative \(ACTION/PASI\) \(U01 Clinical Trial Not Allowed\)](#)  
(RFA-FD-22-023)  
Food and Drug Administration  
Application Receipt Date(s): April 11, 2022, by 11:59 PM Eastern Time.
- [Integrative Research in Gynecologic Health \(R01 Clinical Trial Optional\)](#)  
(RFA-HD-23-006)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Office of Research on Women's Health  
Application Receipt Date(s): April 18, 2022
- [HEAL Initiative: Discovery and Functional Evaluation of Human Pain-associated Genes and Cells \(U19 Clinical Trial Not Allowed\)](#)

(RFA-NS-22-018)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): March 09, 2023

- [HEAL Initiative: Human Pain-associated Genes and Cells Data Coordination and Integration Center \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-021)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): October 11, 2022

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Annabel Santana

**Sent time:** 02/07/2022 10:43:37 AM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas;

**To:** Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; ; ; ; ;

**Subject:** REMINDER: Quarterly Faculty meeting - Thursday, 2/10/2022 @ 4:30pm

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Dear faculty,

This is a reminder that quarterly CUNY School of Medicine Faculty meeting will be held this **Thursday, February 10, 2022 at 4:30pm via Zoom**; the Zoom meeting link appears at the end of the email below. An agenda for Thursday's meeting will follow shortly.

We hope to see you Thursday.

Annabel

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**From:** Annabel Santana

**Sent:** Monday, January 3, 2022 5:27 PM

**Subject:** Quarterly CSOM Faculty meetings - effective 2/10/2022

Dear CSOM faculty,

Happy New Year!

Per my December 8<sup>th</sup> email (highlighted below), effective this semester the CSOM Faculty Council meetings will resume on a quarterly basis. Accordingly, we will **NOT** hold a meeting this month; faculty meetings will resume **Thursday, February 10, 2022** and every three months thereafter.

A revised calendar invite will follow.

Annabel

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**From:** Annabel Santana

**Sent:** Wednesday, December 8, 2021 9:39 AM

**Subject:** CSOM Faculty meeting - Thurs, 12/09/21 @ 4:30 pm

Dear Faculty,

This is a reminder that the monthly CSOM Faculty meeting will be held as scheduled, tomorrow - **Thursday, December 9, 2021 at 4:30 pm** via Zoom; Zoom details are provided below. This will be a relatively short meeting, and agenda will include faculty senate and PSC reports/updates, information regarding faculty scholarship in Med Ed, and comments from the Dean.

**PLEASE NOTE:** Effective next semester, the CSOM Faculty Council Meetings will resume on a quarterly basis (as per our governance plan), rather than monthly. Accordingly, the Spring 2022 meetings will be held in **February and early May 2022** (dates to be confirmed). Additional meetings may be called as-needed, to address any urgent/time-sensitive matters that may arise requiring more immediate faculty discussion or action.

Annabel

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CSOM Faculty Council meeting

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBzdDh0TmVxNXpld09>

Meeting ID: 837 7735 3931  
Passcode: 828532

One tap mobile  
+16465588656,,83777353931# US (New York)

Dial by your location  
+1 646 558 8656 US (New York)

*Annabel Santana-Colón, Assistant Dean for Academic & Faculty Affairs*  
*CUNY School of Medicine*  
*The City College of New York*  
*160 Convent Avenue, Suite H-107*  
*New York, New York 10031*  
*Tel: 212-650-5297*  
*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Marc Scullin

**Sent time:** 02/08/2022 08:28:58 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth

**Subject:** NIH Notice of Special Interest: Administrative Supplements to Support Undergraduate Summer Research Experiences

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Greetings CUNY School of Medicine faculty. The National Institute of General Medical Sciences (NIGMS) has announced the availability of funds for Administrative Supplements to NIGMS-funded R01, R35, and R37 awards. These funds are intended for support of undergraduate students who are considering pursuing biomedical research careers by providing authentic research experiences in cutting-edge scientific environments during the summer. Full details on this opportunity can be found at the link below.

[NOT-GM-22-009: Notice of Special Interest \(NOSI\): Administrative Supplements to Support Undergraduate Summer Research Experiences \(nih.gov\)](#)

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Raquel Morales

**Sent time:** 02/09/2022 10:56:01 AM

**To:** Eitan Friedman - CSOM (██████████@optonline.net) <eitan2@optonline.net>; Hoau-Yan Wang (██████████@gmail.com) <██████████@gmail.com>; Kaliris gmail (██████████@gmail.com) <██████████@gmail.com>; Dr.Broderick (██████████@gmail.com) <██████████@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Khosrow Kashfi <██████████@verizon.net>; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiczorek; Sanna Goyert; Jun Yoshioka

**Subject:** Departmental faculty meeting

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Dear Faculty,

Dr. Torres is requesting a Departmental faculty meeting next week Friday, February 18 at 4:00pm and would like to know your availability.

Best Regards,

*Raquel Morales*

Assistant to Chair  
Department of Molecular, Cellular & Biomedical Sciences  
CUNY School of Medicine  
160 Convent Ave, Harris Hall suite 202  
New York, NY 10031

**From:** Marc Scullin  
**Sent time:** 02/14/2022 08:24:42 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lianne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth  
**To:**  
**Subject:** NIH Funding Opportunities - Week ending 02/11/2022

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Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH funding opportunities for the week ending February 11, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 02/11/2022, [Click HERE](#)

## Funding Opportunities

- [NIDCR Mentored Career Development Award to Promote Diversity \(K01 Independent Clinical Trial Not Allowed\)](#)  
(PAR-22-050)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Multiple dates, see announcement.
- [NIDCR Mentored Career Development Award to Promote Diversity \(K01 Clinical Trial Required\)](#)  
(PAR-22-051)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Multiple dates, see announcement.
- [NIDCR Mentored Career Development Award to Promote Diversity \(K01 Independent Basic Experimental Studies with Humans Required\)](#)  
(PAR-22-052)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Multiple dates, see announcement.
- [Global Brain and Nervous System Disorders Research Across the Lifespan \(R01 Clinical Trials Optional\)](#)  
(PAR-22-097)  
John E. Fogarty International Center  
National Eye Institute  
Application Receipt Date(s): December 09, 2024
- [Global Brain and Nervous System Disorders Research Across the Lifespan \(R21 Clinical Trial Optional\)](#)  
(PAR-22-098)  
John E. Fogarty International Center  
National Eye Institute  
Application Receipt Date(s): December 09, 2024
- [Biomarker Signatures of TB Infection in Young Children With and Without HIV \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-22-015)  
National Institute of Allergy and Infectious Diseases  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): June 08, 2022
- [Data, Evaluation and Coordinating Center for: A Multilevel Approach to Connecting Underrepresented Populations to Clinical Trials \(CUSP2CT\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-CA-22-014)  
National Cancer Institute  
Application Receipt Date(s): March 28, 2022
- [Investigating Transposable Elements and Mobile DNA as Targets of Integration for Establishing HIV Reservoirs in the Brain \(R61/R33 - Clinical Trial Optional\)](#)  
(RFA-DA-23-003)  
National Institute on Drug Abuse  
Application Receipt Date(s): Not Applicable
- [NIDCD National Human Ear Resource Network \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-DC-23-002)  
National Institute on Deafness and Other Communication Disorders  
Application Receipt Date(s): April 06, 2022
- [NIDCR Dental Specialty and PhD Program \(K12 Clinical Trial Not Allowed\)](#)  
(RFA-DE-23-001)  
National Institute of Dental and Craniofacial Research

Application Receipt Date(s): February 09, 2018 , by 5:00 PM

- [Integrating Mental Health Care into Health Care Systems in Low- and Middle-Income Countries \(R01 Clinical Trial Optional\)](#)  
(RFA-MH-22-130)  
National Institute of Mental Health  
National Cancer Institute  
Application Receipt Date(s): August 04, 2022
- [BRAIN Initiative: Targeted BRAIN Circuits Projects- TargetedBCP \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-026)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): October 02, 2024
- [BRAIN Initiative: Targeted BRAIN Circuits Planning Projects TargetedBCPP \(R34 Clinical Trials Not Allowed\)](#)  
(RFA-NS-22-027)  
National Institute of Neurological Disorders and Stroke  
Office of Behavioral and Social Sciences Research  
Application Receipt Date(s): October 02, 2024
- [Limited Competition: NIH Neuroscience Doctoral Readiness Program \(DR. Program\) \(R25 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-035)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): April 19, 2022
- [HEAL Initiative: Discovery of Biomarkers and Biomarker Signatures to Facilitate Clinical Trials for Pain Therapeutics \(UG3/UH3 Clinical Trial Optional\)](#)  
(RFA-NS-22-050)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): February 23, 2023

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Raquel Morales  
**Sent time:** 02/16/2022 12:05:00 PM  
**To:** Kaliris gmail [REDACTED]@gmail.com [REDACTED]@gmail.com>; Gonzalo Torres; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Jun Yoshioka; Junghoon Kim; Khosrow Kashfi; Kiran Matthews; Maria Felice M Ghilardi; Linda Spatz; Lisa Coico; Patricia Broderick; Paul Gottlieb; Sanna Goyert; John (Jack) Martin; Gokhan Yilmaz; Rosemary Wiczorek; Jose Cobo; Patricia Cortes; Geri Kreitzer; Maria D Lima  
**Cc:** Raquel Morales  
**Subject:** Departmental Faculty meeting Friday, Feb. 18

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Dear Faculty,

The Departmental faculty meeting will be held this Friday, February 18th at 4:00pm via zoom. Hope you all can attend. Below is the zoom link:

Topic: MCBS Faculty Meeting  
Time: This is a recurring meeting Meet anytime

Join Zoom Meeting  
<https://ccny.zoom.us/j/3783139420>

Meeting ID: 378 313 9420  
One tap mobile  
+16465588656,,3783139420# US (New York)  
+13017158592,,3783139420# US (Washington DC)

Dial by your location  
+1 646 558 8656 US (New York)  
+1 301 715 8592 US (Washington DC)  
+1 312 626 6799 US (Chicago)  
+1 669 900 6833 US (San Jose)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)

Meeting ID: 378 313 9420

Find your local number: <https://ccny.zoom.us/u/kezsSsxn6C>

Best regards,  
Raquel Morales

**From:** Marc Scullin

**Sent time:** 02/18/2022 01:13:35 PM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lianne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth

**Subject:** Save The Date - 11/01/22 @ 12:00 PM - Office of Research Seminar Series - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College

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Greetings CUNY School of Medicine Faculty. The Office of Research will resume our IN PERSON seminar series on Tuesday, March 01, 2022 @ 12:00 PM, Harris Hall 110 when we welcome Dr. Elizabeth Cohn Associate Provost for Research at Hunter College. Dr. Cohn will be giving a talk on the NIH All of Us Research Program, which is an effort aimed at building one of the most diverse health databases in history.

Please save the date and time on your calendars. Light snacks and refreshments will be provided. More details to follow next week.

We hope to see you there.

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 02/22/2022 08:22:57 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth

**Subject:** NIH Funding Opportunities - Week Ending 02/18/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH funding opportunities for the week ending February 18, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 02/18/2022, [Click HERE](#)

## Funding Opportunities

- [Microbial-based Cancer Imaging and Therapy - Bugs as Drugs \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-085)  
National Cancer Institute  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Multiple dates, see announcement.
- [Microbial-based Cancer Imaging and Therapy - Bugs as Drugs \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-22-086)  
National Cancer Institute  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Multiple dates, see announcement.
- [Limited Competition: NEI - DOD Vision Research Collaborative \(R01 Clinical Trial Optional\)](#)  
(PAR-22-117)  
National Eye Institute  
Application Receipt Date(s): March 31, 2022
- [Health Equity and the Cost of Novel Treatments for Alzheimers Disease and Related Dementias \(R61/R33 Clinical Trial Not Allowed\)](#)  
(RFA-AG-23-005)  
National Institute on Aging  
Application Receipt Date(s): July 01, 2022
- [In utero Treatments of Congenital Dental and Craniofacial Disorders Using Precision Medicine Approaches \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-DE-23-004)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): June 14, 2022
- [In utero Treatments of Congenital Dental and Craniofacial Disorders Using Precision Medicine Approaches \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-DE-23-005)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): June 14, 2022
- [Retail Food Safety Regulatory Association Collaboration \(U18\) \[Clinical Trial Not Allowed\]](#)  
(RFA-FD-22-008)  
Food and Drug Administration  
Application Receipt Date(s): April 22, 2022 by 11:59 PM Eastern Time. Late applications will not be accepted for this FOA.
- [Myalgic Encephalomyelitis/Chronic Fatigue Syndrome \(ME/CFS\) Collaborative Research Centers \(CRCs\) \(U54, Basic Experimental Studies Involving Humans Allowed\)](#)  
(RFA-NS-22-019)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): May 24, 2022
- [Data Management and Coordinating Center \(DMCC\) for the Myalgic Encephalomyelitis/Chronic Fatigue Syndrome \(ME/CFS\)](#)

[Collaborative Research Centers \(CRC\) \(U24 Basic Experimental Studies with Humans Required\)](#)

(RFA-NS-22-020)

National Institute of Neurological Disorders and Stroke

Application Receipt Date(s): May 24, 2022

- [Emergency Awards: RADx-UP - Social, Ethical, and Behavioral Implications \(SEBI\) Research on Disparities in COVID-19 Testing among Underserved and Vulnerable Populations \(U01 Clinical Trial Optional\)](#)  
(RFA-OD-22-005)  
Office of the Director, NIH  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): May 02, 2022
- [Emergency Award: RADx-UP Community-Engaged Research on Rapid SARS-CoV-2 Testing among Underserved and Vulnerable Populations \(U01 Clinical Trial Optional\)](#)  
(RFA-OD-22-006)  
Office of the Director, NIH  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): May 02, 2022
- [Limited Competition: Transformative Research to Address Health Disparities and Advance Health Equity at Minority Serving Institutions \(U01 Clinical Trial Optional\)](#)  
(RFA-RM-22-001)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): May 23, 2022
- [NIH Faculty Institutional Recruitment for Sustainable Transformation \(FIRST\) Program: FIRST Cohort \(U54 Clinical Trial Optional\)](#)  
(RFA-RM-22-008)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): July 12, 2022

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Itzhak (Itzik) Mano  
**Sent time:** 02/22/2022 04:23:32 PM  
**To:** Jonathan Levitt; John (Jack) Martin; Hoau-yan Wang; Mark Emerson; Andreas Kottmann; Andrey Rudenko; Osceola Whitney; Christine Li; Adrian Rodriguez Contreras; Bao Vuong; Hysell Oviedo; Anuradha Janakiraman; Jorge Morales  
**Cc:** Maria D Lima; Ranajeet Ghose; Daniel Fimiarz; Susan Perkins; Rosemarie Wesson  
**Subject:** Re: Please note: Signup system for the Keyence BZX microscope through CCNY core.

---

Hi everyone

I just wanted to let you know that (after a long wait) IT has just finished connecting the Keyence microscope's computer to the internet.

all the best

Itzik

On 9/23/2021 8:25 AM, Itzhak (Itzik) Mano wrote:

Hi everyone,

Please note the email from Daniel who is setting up the signup & charge system for our new Keyence BZX scope @CDI.

Daniel recommends writing up user rules (I can not at this moment - tons of teaching right now) and establishing a user committee.

A question for Jorge and the group:

How do people feel about training new people? Do we need it to go through Jorge, or locally within each group (given that operation is relatively straight forward)? If locally, I would also add a recommendation that each lab appoints a Keyence Scope liaison/chief, who will be responsible to train new people from that lab, and communicate with liaisons/chiefs from other labs about keeping things in order. We can post that list of liaisons in the room.

I'll keep you posted on further development.

I believe we can start using it!!!

best wishes for a lot of papers with amazing images!

Itzik

----- Forwarded Message -----

**Subject:**BZX microscope core.

**Date:**Thu, 23 Sep 2021 07:33:18 -0400

**From:**Daniel Fimiarz <[dfimiarz@ccny.cuny.edu](mailto:dfimiarz@ccny.cuny.edu)>

**To:**Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>

**CC:**Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>, Susan Perkins <[sperkins@ccny.cuny.edu](mailto:sperkins@ccny.cuny.edu)>, Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>, Rosemarie Wesson <[rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)>, John (Jack) Martin <[jmartin@med.cuny.edu](mailto:jmartin@med.cuny.edu)>

Users can now register to schedule time on the microscope.

[http://corelabs.sci.cuny.edu/?RID=KEYENCE\\_BZX](http://corelabs.sci.cuny.edu/?RID=KEYENCE_BZX)

Jorge and I have manager access.

A few comments about billing and management.

All of our billing and accounting procedures are based on <https://grants.nih.gov/grants/guide/notice-files/not-od-13-053.html>

>> Core facilities should set user fees based on actual costs and actual usage.

I am still working on the rate (hopefully finished today). We also need a usage log (template attached) since the calendar itself may not be good enough to show the actual usage.

It may be a good idea to compose a document with usage rules. I put some together for our confocals <http://forum.sci.cuny.cuny.edu/cores/microscopy-imaging/confocal-microscopy/lsm800/documents/usage-rules> so this could be a good basis for writing one for the new scope.

The system is a great turn-key solution to imaging but it is not a good teaching system in my opinion. A lot can go wrong when users are careless. I would love to have some monitoring in place as well but space constraints could be a problem.

Will there be a user committee?

Finally, it may also be a good idea to think about future restructuring of our imaging cores to address the scattering of resources across campus. I can see a central imaging core an attractive option that could help CCNY with budgeting, recruitment, and oversight.

Best,

Daniel Fimiarz  
CCNY Core Facilities  
(212) 650 8596  
(646) 238 2087

---

From Itzik: sometime my email can only forward simple text, so here is another simple-text copy of the above:

----- Forwarded Message -----

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Date: Thu, 23 Sep 2021 07:33:18 -0400

From: Daniel Fimiarz <[dfimiarz@ccny.cuny.edu](mailto:dfimiarz@ccny.cuny.edu)>

To: Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>

CC: Jorge Morales <[jmorales@ccny.cuny.edu](mailto:jmorales@ccny.cuny.edu)>, Susan Perkins <[sperkins@ccny.cuny.edu](mailto:sperkins@ccny.cuny.edu)>, Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>, Rosemarie Wesson <[rwesson@ccny.cuny.edu](mailto:rwesson@ccny.cuny.edu)>, John (Jack) Martin <[jmartin@med.cuny.edu](mailto:jmartin@med.cuny.edu)>

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Daniel Fimiarz  
CCNY Core Facilities  
(212) 650 8596  
(646) 238 2087

**From:** Marc Scullin

**Sent time:** 02/24/2022 02:19:13 PM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lianne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth

**Subject:** Reminder - 11/01/22 @ 12:00 PM - Office of Research Seminar Series - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College

---

Greetings CUNY School of Medicine Faculty. The Office of Research will resume our IN PERSON seminar series on Tuesday, March 01, 2022 @ 12:00 PM, Harris Hall 110 when we welcome Dr. Elizabeth Cohn Associate Provost for Research at Hunter College. Dr. Cohn will be giving a talk on the NIH All of Us Research Program, which is an effort aimed at building one of the most diverse health databases in history.

Please save the date and time on your calendars. Light snacks and refreshments will be provided.

We hope to see you there.

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Maria D Lima

**Sent time:** 02/24/2022 02:54:36 PM

Marc Scullin; Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Dani Mcbeth

**Subject:** Re: Reminder - 11/01/22 @ 12:00 PM - Office of Research Seminar Series - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College

Hi Marc,

Please reach Daphne and copy Minoj to make sure you have the zoom. Somehow in the email you sent Daphne, the date was November 1, not March 1 for this seminar.

Best,

Maria

---

**From:** Marc Scullin <msscullin@med.cuny.edu>

**Date:** Thursday, February 24, 2022 at 2:19 PM

**To:** Tashuna Albritton <TAlbritton@med.cuny.edu>, "Jude-Marie A. Smalec" <JSmalec@med.cuny.edu>, Anabelle Andon <AAndon@med.cuny.edu>, Samantha Barrick <SBarrick@med.cuny.edu>, Keosha Bond <kbond@med.cuny.edu>, Patricia Broderick <broderick@med.cuny.edu>, Jose Cobo <jcobo@med.cuny.edu>, Lisa Coico <LSCoico@med.cuny.edu>, Patricia Cortes <pcortes@med.cuny.edu>, Darwin Deen <ddeen@med.cuny.edu>, Eitan Friedman <friedman@med.cuny.edu>, Victoria Frye <vfrye@med.cuny.edu>, Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Sanna Goyert <sgoyert@med.cuny.edu>, Lisanne Hauck <LHauck@med.cuny.edu>, Marisol Hernandez <MHernandez@med.cuny.edu>, Siobhan G Hollander <SHollander@med.cuny.edu>, Khosrow Kashfi <kashfi@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, Lily Lam <llam@med.cuny.edu>, Wenhua Lu <wlu1@med.cuny.edu>, Erica Lubetkin <lubetkin@med.cuny.edu>, "Itzhak (Itzik) Mano" <imano@med.cuny.edu>, Noel Manyindo <nmanyindo@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Kiran Matthews <kmatthews@med.cuny.edu>, Katherine Mendis <kmendis@med.cuny.edu>, Jodie Meyer <meyerjr@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Joao Nunes <nunes@med.cuny.edu>, Danielle D Pritchett <DPritchett@med.cuny.edu>, Daniel M Richter <drichter@med.cuny.edu>, Raymond Robinson <rrobinson1@med.cuny.edu>, Sandy Saintonge <SSaintonge@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, Naomi Smidt-Afek <nsmidtafek@med.cuny.edu>, Nancy Sohler <nsohler@med.cuny.edu>, Amr Soliman <asoliman@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Gonzalo Torres <GTorres@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, Rosemary Wiczorek <RWiczorek@med.cuny.edu>, Preston Williams <pwilliams@ccny.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>, Birgland Joseph <BJoseph@med.cuny.edu>, Gloria J Mabry <gmabry@med.cuny.edu>, Mark Maraj <mmaraj1@med.cuny.edu>, Olga Waters <owaters@med.cuny.edu>, Emine Ercikan Abali <EAbali@med.cuny.edu>, Lisa Auerbach <lauerbach@med.cuny.edu>, Jaclyn N Churchill <JChurchill@med.cuny.edu>, Erica Friedman <ericafriedman@med.cuny.edu>, Carmen R Green <carmeng@med.cuny.edu>, Lynn Hernandez <LHernandez@med.cuny.edu>, Rosa Lee <RLee@med.cuny.edu>, Maria D Lima <mlima@med.cuny.edu>, Dani Mcbeth <dmcbeth@med.cuny.edu>

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Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Maria D Lima

**Sent time:** 02/24/2022 02:55:22 PM

Marc Scullin; Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lianne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Dani Mcbeth

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To everyone,

Please disregard. This email was to Marc Scullin only.

Maria

---

**From:** Maria D Lima <mlima@med.cuny.edu>

**Date:** Thursday, February 24, 2022 at 2:54 PM

**To:** Marc Scullin <msscullin@med.cuny.edu>, Tashuna Albritton <TAlbritton@med.cuny.edu>, "Jude-Marie A. Smalec" <JSmalec@med.cuny.edu>, Anabelle Andon <AAndon@med.cuny.edu>, Samantha Barrick <SBarrick@med.cuny.edu>, Keosha Bond <kbond@med.cuny.edu>, Patricia Broderick <broderick@med.cuny.edu>, Jose Cobo <jcobo@med.cuny.edu>, Lisa Coico <LSCoico@med.cuny.edu>, Patricia Cortes <pcortes@med.cuny.edu>, Darwin Deen <ddeen@med.cuny.edu>, Eitan Friedman <friedman@med.cuny.edu>, Victoria Frye <vfrye@med.cuny.edu>, Maria Felice M Ghilardi <MGhilardi@med.cuny.edu>, Paul Gottlieb <pgottl@med.cuny.edu>, Sanna Goyert <sgoyert@med.cuny.edu>, Lianne Hauck <LHauck@med.cuny.edu>, Marisol Hernandez <MHernandez@med.cuny.edu>, Siobhan G Hollander <SHollander@med.cuny.edu>, Khosrow Kashfi <kashfi@med.cuny.edu>, Junghoon Kim <jkim@med.cuny.edu>, Andreas Kottmann <AKottmann@med.cuny.edu>, Geri Kreitzer <gkreitzer@med.cuny.edu>, Lily Lam <llam@med.cuny.edu>, Wenhua Lu <wlu1@med.cuny.edu>, Erica Lubetkin <lubetkin@med.cuny.edu>, "Itzhak (Itzik) Mano" <imano@med.cuny.edu>, Noel Manyindo <nmanyindo@med.cuny.edu>, "John (Jack) Martin" <jmartin@med.cuny.edu>, Kiran Matthews <kmatthews@med.cuny.edu>, Katherine Mendis <kmendis@med.cuny.edu>, Jodie Meyer <meyerjr@med.cuny.edu>, Carol Moore <moore@med.cuny.edu>, Joao Nunes <nunes@med.cuny.edu>, Danielle D Pritchett <DPritchett@med.cuny.edu>, Daniel M Richter <drichter@med.cuny.edu>, Raymond Robinson <rrobinson1@med.cuny.edu>, Sandy Saintonge <SSaintonge@med.cuny.edu>, Kaliris Salas <ksalasram@med.cuny.edu>, Naomi Smidt-Afek <nsmidtafek@med.cuny.edu>, Nancy Sohler <nsohler@med.cuny.edu>, Amr Soliman <asoliman@med.cuny.edu>, Linda Spatz <lspatz@med.cuny.edu>, Gonzalo Torres <GTorres@med.cuny.edu>, Ashiwel Undieh <aundieh@med.cuny.edu>, Hoau-yan Wang <hywang@med.cuny.edu>, Rosemary Wiczorek <RWiczorek@med.cuny.edu>, Preston Williams <pwilliams@ccny.cuny.edu>, Gokhan Yilmaz <gyilmaz@med.cuny.edu>, Jun Yoshioka <jyoshioka@med.cuny.edu>, Birgland Joseph <BJoseph@med.cuny.edu>, Gloria J Mabry <gmabry@med.cuny.edu>, Mark Maraj <mmaraj1@med.cuny.edu>, Olga Waters <owaters@med.cuny.edu>, Emine Ercikan Abali <EAbali@med.cuny.edu>, Lisa Auerbach <lauerbach@med.cuny.edu>, Jaclyn N Churchill <JChurchill@med.cuny.edu>, Erica Friedman <ericafriedman@med.cuny.edu>, Carmen R Green <carmeng@med.cuny.edu>, Lynn Hernandez <LHernandez@med.cuny.edu>, Rosa Lee <RLee@med.cuny.edu>, Dani Mcbeth <dmcbeth@med.cuny.edu>

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Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin  
**Sent time:** 02/28/2022 09:04:20 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth  
**To:**  
**Subject:** Reminder - 03/01/22 @ 12:00 PM Harris 110 - Office of Research Seminar Series - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College  
**Attachments:** 2022MAR01\_Elizabeth Cohn Seminar.pdf

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For any faculty who cannot attend in person, please use the Zoom link and password below:

<https://cuny.zoom.us/j/82425578491?pwd=bUJ0UFlhR0kpvYWpCV1hYNkk2T2J2Zz09>

**Meeting ID: 824 2557 8491**

**Passcode: Kv50e4**



**CUNY School of Medicine** The City College of New York

**CUNY School of Medicine Faculty Seminar**  
*NIH All of Us Research Program*

  
Elizabeth Cohn, PhD  
Rudin Professor of Nursing and Associate Provost for Research, CUNY Hunter College

Join the CUNY School of Medicine Office of Research in hosting an in-person seminar by Dr. Elizabeth Cohn, Rudin Professor of Nursing and Associate Provost for Research, at CUNY Hunter College.

The Seminar will cover the NIH *All of Us Research Program*, which is an effort aimed at building one of the most diverse health databases in history.

Even if you are an experienced researcher, you can always discover something you did not know! We hope to see you there!

Light snacks and Refreshments will be served.

Harris Hall Room 110  
Tuesday, March 01, 2022  
12:00 PM – 1:30 PM  
To join by Zoom, click the link below  
<https://cuny.zoom.us/j/82425578491?pwd=bUJ0UFlhR0kpvYWpCV1hYNkk2T2J2Zz09>  
Passcode: Kv50e4  
ALL ARE WELCOME!

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

CUNY School of Medicine

The City College  
of New York

## CUNY School of Medicine Faculty Seminar

*NIH All of Us Research Program*



Elizabeth Cohn, PhD

Rudin Professor of Nursing and  
Associate Provost for Research,  
CUNY Hunter College

Join the CUNY School of Medicine Office of Research in hosting an in-person seminar by Dr. Elizabeth Cohn, Rudin Professor of Nursing and Associate Provost for Research, at CUNY Hunter College.

The Seminar will cover the NIH *All of Us Research Program*, which is an effort aimed at building one of the most diverse health databases in history.

Even if you are an experienced researcher, you can always discover something you did not know! We hope to see you there!

**Light snacks and Refreshments will be served.**

Harris Hall Room 110

Tuesday, March 01, 2022

12:00 PM – 1:30 PM

To join by Zoom, click the  
link below

[https://cuny.zoom.us/j/82425578491?  
pwd=bUJ0UFhRQkpvYWpCV1hYNkk2T2  
JZZz09](https://cuny.zoom.us/j/82425578491?pwd=bUJ0UFhRQkpvYWpCV1hYNkk2T2JZZz09)

**Passcode: Kv50e4**

ALL ARE WELCOME!



**From:** Marc Scullin  
**Sent time:** 03/01/2022 08:28:29 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiecezorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth  
**To:**  
**Subject:** In Person Seminar TODAY - 03/01/22 @ 12:00 PM Harris 110 - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College  
**Attachments:** 2022MAR01\_Elizabeth Cohn Seminar.pdf

Greetings CUNY School of Medicine Faculty. The Office of Research will resume our **IN PERSON** seminar series on Tuesday, March 01, 2022 @ 12:00 PM, Harris Hall 110 when we welcome Dr. Elizabeth Cohn Associate Provost for Research at Hunter College. Dr. Cohn will be giving a talk on the NIH All of Us Research Program, which is an effort aimed at building one of the most diverse health databases in history. Light snacks and refreshments will be provided.

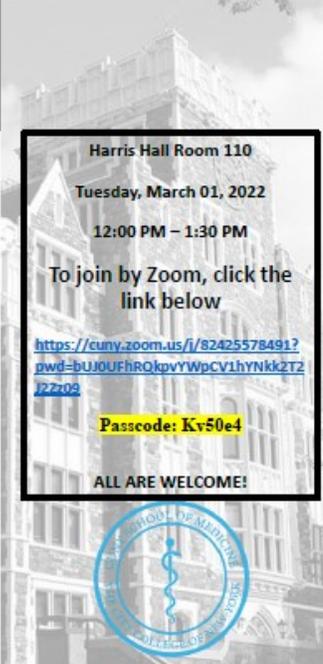
For any faculty who cannot attend in person, please use the Zoom link and password below:

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**Meeting ID: 824 2557 8491**

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pwd=bUJ0UFhRQkpvYWpCV1hYNkk2T2  
JZZz09](https://cuny.zoom.us/j/82425578491?pwd=bUJ0UFhRQkpvYWpCV1hYNkk2T2JZZz09)

**Passcode: Kv50e4**

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**From:** Marc Scullin  
**Sent time:** 03/01/2022 08:55:44 AM  
**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; ;  
**Subject:** RE: In Person Seminar TODAY - 03/01/22 @ 12:00 PM Harris 110 - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College

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Good morning faculty. In advance of today's seminar, please see Dr. Cohn's bio below. We will see you @ 12:00 PM today.

## Dr. Elizabeth Cohn

Associate Provost for Research, Rudin Professor of Nursing

Driven by a passion for health equity, Elizabeth Cohn, RN, PhD, has spent over 20 years focused on how research on the social determinants and root causes of health can better serve communities.

### Profile

Elizabeth Cohn, RN, PhD, is the Rudin Professor for Nursing and the associate provost for research at Hunter College. She was previously the inaugural executive director of the Center for Health Innovation at Adelphi University and an assistant professor of nursing at Columbia University.

Dr. Cohn was selected as an Obama White House Champion of Change for Precision Medicine and Health Equity and currently serves as the chair of the National Institutes for Health, Nurse Scientist Translational Research Interest Group. She has funding from the NIH, the Robert Wood Johnson Foundation and New York State to address issues of health equity in communities.

Her passion and inspiration is health equity and the way that research focused on the social determinants and root causes of health can serve our communities better. She has spent over 20 years working with churches in Harlem to improve the health of the community, including launching the NIH All of Us Research Program from Abyssinian Baptist Church. Her past work with Abyssinian was recognized by Surgeon General Regina Benjamin.

Dr. Cohn is a graduate of Nassau Community College (RN), SUNY Stony Brook (master's and nurse practitioner), Columbia University (PhD) and the National Institute of Health, National Institute for Minority Health and Health Disparities and Genetics training programs.

Her work has been featured on NPR All Things Considered, in the *New York Times*, *The New England Journal of Medicine*, *The Atlantic*, *Men's Health*, *Esquire* and *Ebony*. She is the author of a best-selling EKG textbook, *Flip and See ECG*.

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**Sent:** Tuesday, March 1, 2022 8:28 AM  
**To:** Tashuna Albritton <TAlbritton@med.cuny.edu>; Jude-Marie A. Smalec <JSmalec@med.cuny.edu>; Anabelle Andon <AAndon@med.cuny.edu>; Samantha Barrick <SBarrick@med.cuny.edu>; Keosha Bond <kbond@med.cuny.edu>; Patricia Broderick <broderick@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; 'lisa.coico@ccny.cuny.edu'

<lisa.coico@ccny.cuny.edu>; Patricia Cortes <pcortes@med.cuny.edu>; 'ddeen@ccny.cuny.edu' <ddeen@ccny.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Victoria Frye <vfrye@med.cuny.edu>; 'liceg@med.cuny.edu' <liceg@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Sanna Goyert <sgoyert@med.cuny.edu>; Lisanne Hauck <LHauck@med.cuny.edu>; Marisol Hernandez <MHernandez@med.cuny.edu>; Siobhan G Hollander <SHollander@med.cuny.edu>; Khosrow Kashfi <kashfi@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Lily Lam <llam@med.cuny.edu>; Wenhua Lu <wlu1@med.cuny.edu>; Erica Lubetkin <lubetkin@med.cuny.edu>; Itzhak (Itzik) Mano <imano@med.cuny.edu>; Noel Manyindo <nmanyindo@med.cuny.edu>; 'jmartin@ccny.cuny.edu' <jmartin@ccny.cuny.edu>; Kiran Matthews <kmatthews@med.cuny.edu>; Katherine Mendis <kmendis@med.cuny.edu>; Jodie Meyer <meyerjr@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; Danielle D Pritchett <DPritchett@med.cuny.edu>; Daniel M Richter <drichter@med.cuny.edu>; Raymond Robinson <rrobinson1@med.cuny.edu>; Sandy Saintonge <SSaintonge@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; 'nsmidtafek@ccny.cuny.edu' <nsmidtafek@ccny.cuny.edu>; Nancy Sohler <nsohler@med.cuny.edu>; Amr Soliman <asoliman@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Gonzalo Torres <GTorres@med.cuny.edu>; 'aundieh@ccny.cuny.edu' <aundieh@ccny.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Rosemary Wieczorek <RWieczorek@med.cuny.edu>; Preston Williams <pwilliams@ccny.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>; Birgland Joseph <BJoseph@med.cuny.edu>; Gloria J Mabry <gmabry@med.cuny.edu>; Mark Maraj <mmaraj1@med.cuny.edu>; Olga Waters <owaters@med.cuny.edu>; Emine Ercikan Abali <EAbali@med.cuny.edu>; Lisa Auerbach <lauerbach@med.cuny.edu>; Jaclyn N Churchill <JChurchill@med.cuny.edu>; Erica Friedman <ericafriedman@med.cuny.edu>; 'carmenrgreen@med.cuny.edu' <carmenrgreen@med.cuny.edu>; 'LHernandez@med.cuny.edu' <LHernandez@med.cuny.edu>; Rosa Lee <RLee@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Dani Mcbeth <dmcbeth@med.cuny.edu>

**Subject:** In Person Seminar TODAY - 03/01/22 @ 12:00 PM Harris 110 - NIH All of Us Research Program - Dr. Elizabeth Cohn - Assoc. Provost for Research - Hunter College

**Importance:** High

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**Meeting ID: 824 2557 8491**

**Passcode: Kv50e4**

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Research Programs Specialist  
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(212) 650 7702  
[CSOM Office of Research Home Page](#)



**From:** Itzhak (Itzik) Mano  
**Sent time:** 03/03/2022 01:12:41 PM  
**To:** Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Kiran Matthews; Linda Spatz; Lisa Coico; Maria Felice M Ghilardi; Maria D Lima; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Rosemary Wiecezorek; Sanna Goyert; Jun Yoshioka  
**Subject:** Fwd: [EXTERNAL] FW: Virtual Open House Invitation\_CUNY MCD subprogram of the PhD Program in Biology Tuesday March 15 from 1 pm to 3 pm EST

---

Hi,

The PhD subprogram in Mol Cell & Dev biology will be holding an open house to recruit students on the accepted and waiting lists. Please let me / Jill Bargonetti if you are interested to attend or need any further information. see details below.

Best

Itzik

----- Forwarded Message -----

**Subject:**[EXTERNAL] FW: Virtual Open House Invitation\_CUNY MCD subprogram of the PhD Program in Biology Tuesday March 15 from 1 pm to 3 pm EST

**Date:**Thu, 3 Mar 2022 17:36:17 +0000

**From:**Jill Bargonetti <[Bargonetti@GENECTR.HUNTER.CUNY.EDU](mailto:Bargonetti@GENECTR.HUNTER.CUNY.EDU)>

**To:**Luis E.N. Quadri <[LQuadri@brooklyn.cuny.edu](mailto:LQuadri@brooklyn.cuny.edu)>, Jill Bargonetti <[Bargonetti@GENECTR.HUNTER.CUNY.EDU](mailto:Bargonetti@GENECTR.HUNTER.CUNY.EDU)>, Hualin Zhong <[zhong@GENECTR.HUNTER.CUNY.EDU](mailto:zhong@GENECTR.HUNTER.CUNY.EDU)>, John Dennehy <[john.dennehy@qc.cuny.edu](mailto:john.dennehy@qc.cuny.edu)>, Bao Vuong <[bvuong@ccny.cuny.edu](mailto:bvuong@ccny.cuny.edu)>, Chris Li <[cli@sci.ccny.cuny.edu](mailto:cli@sci.ccny.cuny.edu)>, Itzhak Mano <[imano@ccny.cuny.edu](mailto:imano@ccny.cuny.edu)>, Casaccia, Patrizia <[pcasaccia@qc.cuny.edu](mailto:pcasaccia@qc.cuny.edu)>

**CC:**Amy E. Ikui <[AIkui@brooklyn.cuny.edu](mailto:AIkui@brooklyn.cuny.edu)>, Pablo Peixoto <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>, Anjana Saxena <[ASaxena@brooklyn.cuny.edu](mailto:ASaxena@brooklyn.cuny.edu)>, Pat Rockwell <[Rockwell@GENECTR.HUNTER.CUNY.EDU](mailto:Rockwell@GENECTR.HUNTER.CUNY.EDU)>, [jean.gaffney@baruch.cuny.edu](mailto:jean.gaffney@baruch.cuny.edu) <[jean.gaffney@baruch.cuny.edu](mailto:jean.gaffney@baruch.cuny.edu)>, Shafer, Ori <[oshafer@qc.cuny.edu](mailto:oshafer@qc.cuny.edu)>, Saleque, Shireen <[ssaleque@ccny.cuny.edu](mailto:ssaleque@ccny.cuny.edu)>, [edward.kennelly@lehman.cuny.edu](mailto:edward.kennelly@lehman.cuny.edu) <[edward.kennelly@lehman.cuny.edu](mailto:edward.kennelly@lehman.cuny.edu)>, Manne, Lisa <[Lisa.Manne@csi.cuny.edu](mailto:Lisa.Manne@csi.cuny.edu)>, [lbradbury@york.cuny.edu](mailto:lbradbury@york.cuny.edu) <[lbradbury@york.cuny.edu](mailto:lbradbury@york.cuny.edu)>, Kottmann, Andreas <[AKottmann@med.cuny.edu](mailto:AKottmann@med.cuny.edu)>, Hickerson, Michael <[mhickerson@ccny.cuny.edu](mailto:mhickerson@ccny.cuny.edu)>, Sankaran, Renuka <[RENUKA.SANKARAN@lehman.cuny.edu](mailto:RENUKA.SANKARAN@lehman.cuny.edu)>, Ekaterina Likhtik <[ELikhtik@GENECTR.HUNTER.CUNY.EDU](mailto:ELikhtik@GENECTR.HUNTER.CUNY.EDU)>, [\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com) <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>, [\[REDACTED\]@gradcenter.cuny.edu](mailto:[REDACTED]@gradcenter.cuny.edu) <[\[REDACTED\]@gradcenter.cuny.edu](mailto:[REDACTED]@gradcenter.cuny.edu)>, [\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com) <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>, [\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com) <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>, [lparadiso@nybg.org](mailto:lparadiso@nybg.org) <[lparadiso@nybg.org](mailto:lparadiso@nybg.org)>, Savage-Dunn, Cathy <[\[REDACTED\]@gc.cuny.edu](mailto:[REDACTED]@gc.cuny.edu)>

Greetings,

Prospective student have been invited to attend a virtual Open House for the City University of New York, Molecular, Cellular, and Development (MCD) subprogram of the PhD Program in Biology on Tuesday March 15<sup>th</sup> from 1pm until 3pm EST.

The event will take place on zoom:

<https://us02web.zoom.us/j/2247907973>

Please ask a select few faculty and students at your campus if they are interested in joining us. The second hour, from 2-3pm, is the most important time for answering questions in break out rooms. One student and faculty representative from each campus will be enough to help answer student questions, but more will be welcomed.

I would like to get a tally of how many people will attend. As such, please give me the names or have them reply directly to me.

Thanks,



**From:** Marc Scullin

**Sent time:** 03/07/2022 08:38:14 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth

**Subject:** NIH Funding Opportunities - Week Ending March 04, 2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH funding opportunities for the week ending March 04, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 03/04/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=03-04-2022>

## Funding Opportunities

- [Research on Community Level Interventions for Firearm and Related Violence, Injury and Mortality Prevention \(CLIF-VP\) \(UG3/UH3 Clinical Trial Optional\)](#)  
(PAR-22-115)  
Office of Behavioral and Social Sciences Research  
Application Receipt Date(s): April 22, 2022
- [Limited Competition: Small Grant Program for NIAMS K01, K08, K23, and K25 Recipients \(R03\) \(Clinical Trials Not Allowed\)](#)  
(PAR-22-119)  
National Institute of Arthritis and Musculoskeletal and Skin Diseases  
Application Receipt Date(s): February 19, 2025
- [Coordinating Center to Support Research on Community Level Interventions for Firearm and Related Violence, Injury and Mortality Prevention \(CLIF-VP\) \(U24 Clinical Trial Not Allowed\)](#)  
(PAR-22-120)  
Office of Behavioral and Social Sciences Research  
Application Receipt Date(s): April 22, 2022
- [Limited Competition: Clinical and Translational Science Awards \(CTSA\) Consortium-Wide Centers: Resources for Rapid Demonstration and Dissemination \(U24 Clinical Trials Optional\)](#)  
(PAR-22-122)  
National Center for Advancing Translational Sciences  
Application Receipt Date(s): June 21, 2023
- [NEI Clinical Research Study Planning Grant Program \(R34 Clinical Trial Not Allowed\)](#)  
(PAR-22-128)  
National Eye Institute  
Application Receipt Date(s): May 07, 2025
- [Noncoding RNAs in Alzheimers Disease and Related Dementias \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AG-23-010)  
National Institute on Aging  
Application Receipt Date(s): July 15, 2022
- [Noncoding RNAs in Alzheimers Disease and Related Dementias \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-AG-23-011)  
National Institute on Aging  
Application Receipt Date(s): July 15, 2022
- [Improved Drug Susceptibility Testing \(DST\) for Tuberculosis \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-22-016)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): July 08, 2022
- [Advancing HIV/AIDS Research at the Intersection of Oral and Mental Health \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-DE-23-002)

National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Not Applicable

- [Advancing HIV/AIDS Research at the Intersection of Oral and Mental Health \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-DE-23-003)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): Not Applicable
- [The Role of Dentistry in the Prevention of Opioid Drug Misuse and Abuse \(UG3/UH3 Clinical Trial Optional\)](#)  
(RFA-DE-23-010)  
National Institute of Dental and Craniofacial Research  
Application Receipt Date(s): May 10, 2022
- [Limited Competition for the Continuation of the Data Coordinating Center for the Diabetic Foot Consortium \(U24 Clinical Trial Optional\)](#)  
(RFA-DK-21-505)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): May 23, 2022
- [Biosimilar User Fee Act \(BsUFA\) Research Grant \(U01\) Clinical Trials Optional](#)  
(RFA-FD-22-026)  
Food and Drug Administration  
Application Receipt Date(s): May 09, 2022
- [BRAIN Initiative: Exploratory Team-Research BRAIN Circuit Programs - eTeamBCP \(U01 Clinical Trials Optional\)](#)  
(RFA-NS-22-028)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): June 14, 2024

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

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**From:** Marc Scullin  
**Sent time:** 03/07/2022 08:51:02 AM  
**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiecezorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth  
**Subject:** 2022 Rudin & MacLeish Research Fellowships announcement  
**Attachments:** The MacLeish Research Fellowship application 2022.docx THE RUDIN RESEARCH FELLOWSHIP application 2022.doc

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Greetings CUNY School of Medicine faculty. The Rudin and Macleish fellowships are now available for 2022. Please see below for details on each fellowship and pass this information along to any eligible students.

### **2022 Rudin Research Fellowships**

- Open to U2-M1 students
- Completed application page is due by **March 21, 2022**
- A copy of student CV in the student research format which can be found as a template by scrolling down on the research opportunities page ( <https://www.ccnycuny.edu/csom/medical-student-research-opportunities> ). We will only accept CVs using this format.
- A description of the proposed research project arrived at in consultation with a faculty research mentor.

### **2022 Marlene MacLeish Research Fellowships**

These fellowships are available only to U1 students. We plan to award 4 fellowships in the cycle. The application is attached and will be due by March 21, 2022.

Please note the application requirements.

- Only Open to U1 students. 4 fellowships are planned in the award cycle
- Completed application page is due by **March 21, 2022**
- A copy of student CV in the student research format which can be found as a template by scrolling down on the research opportunities page ( <https://www.ccnycuny.edu/csom/medical-student-research-opportunities> ). We will only accept CVs using this format.
- A description of the proposed research project arrived at in consultation with a faculty research mentor.

Students are also encouraged to seek advice from the Office of Research – Dean Lima and Dr. Coico – as needed.

Following the deadline, the Office of Research will convene a selection committee to review applications and select recipients of the fellowship.

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

## The Marlene MacLeish Research Fellowship

Dr. Marlene MacLeish served as the Sophie Davis Dean for Student Affairs from 1985-91 and was a positive influence on and strong advocate for students in her charge. In gratitude for her support, this fellowship program was created by alumni to encourage early undergraduate students to develop an interest in and facility for research early in their education. The fellowship will provide a small number of U1 students with financial support to conduct research with members of the CUNY School of Medicine / Sophie Davis Program faculty, other faculty within City College, or a graduate of the program beginning in the summer following their first year.

Selected students will receive a stipend of \$3,000 to undertake at least 200 hours of research. Funds will be paid out based on submitted timesheets. Research activity can be community-based, clinical, or laboratory-based but must be mentored by a faculty member or a program graduate. While it is common for a substantial portion of the fellowship to be carried out during the summer, research hours can also be completed during the academic year.

A research poster and participation in the annual Sophie Davis Research Day, as well as a written report, will be required at the conclusion of your research project.

### *APPLICATION INFORMATION*

#### Eligibility for a MacLeish Fellowship:

First-year undergraduate students currently enrolled in the Sophie Davis Biomedical Education Program who maintain a minimum GPA of 3.0 may apply for a MacLeish Research Fellowship. Students are not required to have previous research experience to qualify.

#### Application Process:

Include the following in your application:

- Completion of the attached application form
- A current CV using this format [CV Research Medical Students](#)
- A description of your proposed research project limited to two pages. This will mean that you must have contacted a faculty or alumni member and decided on a research project based on their interests. The following statement should appear at the end of the research description and be signed by your research mentor, "I agree to mentor (your name) for the research project described above." (signature of the mentor)

Application as a **single pdf** must be emailed to [scholarships@med.cuny.edu](mailto:scholarships@med.cuny.edu) (file name: lastname.firstname\_MacLeishFellowship2022) by March 21, 2022.

**2022 APPLICATION FOR THE  
MacLeish Research Fellowship**

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Cell #: \_\_\_\_\_ Citymail e-mail: \_\_\_\_\_

First semester GPA: \_\_\_\_\_

\*\*\*\*\*

What interests you most about this project?

Please describe any previous or current research experience (if applicable):

Please describe any additional skills you feel are relevant to this application:

# THE RUDIN RESEARCH FELLOWSHIP

The Rudin family's commitment to philanthropy includes an amazing list of support for many different kinds of programs, particularly in the New York City area. Many of these programs relate directly to healthcare and healthcare education. As a result of the generosity of the Louis and Rachel Rudin Foundation, we established the Rudin Research Fellowships, which provide biomedical students with financial support to conduct research with members of the CUNY School of Medicine / Sophie Davis Program faculty or other faculty within The City College.

Each year, selected students receive fellowships of \$3000. Monies are paid out based on submitted time sheets of up to 200 hours. Research activity may be clinical in nature, community-based or laboratory-based, but must be mentored by a faculty member of the college or affiliated faculty at clinical sites. While it is common that a substantial portion of the fellowship is carried out in the summer months, research hours can also be completed during the academic year.

## *APPLICATION INFORMATION*

### Eligibility:

Students currently enrolled in the CUNY School of Medicine / Sophie Davis Biomedical Education Program who maintain a GPA of 3.0 or higher for undergraduate students or are making Satisfactory Academic Progress for medical students (M1 students only) may apply for a Rudin Research Fellowship.

### Application Process:

Include the following in your application:

- Completion of the attached application form
- A current CV using this format [CV Research Medical Students](#)
- A description of your proposed research project limited to two pages. This will mean that you must have contacted a faculty member and decided on a research project based on their interests. The following statement should appear at the end of the research description and be signed by your research mentor, "I agree to mentor (your name) for the research project described above." (signature of the mentor)

Application forms as a **single pdf**

(file name: lastname.firstname\_RudinFellowship2022)

must be emailed to— [scholarships@med.cuny.edu](mailto:scholarships@med.cuny.edu) - by March 21, 2022.

**2022 APPLICATION FOR THE  
RUDIN RESEARCH FELLOWSHIP**

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Cell Phone #: \_\_\_\_\_ e-mail: \_\_\_\_\_

Current year in the program: \_\_\_\_ U2 \_\_\_\_ U3 \_\_\_\_ M1

Current GPA (undergraduate students): \_\_\_\_\_



Describe any previous or current research experience:

Describe any additional skills you feel relevant to this application:

**From:** Marc Scullin

**Sent time:** 03/09/2022 10:34:38 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Mark Paige

**Subject:** An Introduction to RFCUNY Human Resources - Thursday, 3/10/22, 2-3 PM

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Good morning CUNY School of Medicine faculty. Please see below for an upcoming webinar about Research Foundation Human Resources policy & procedures. If your RF has effort for employees, this webinar will be very informative for you. Details below.

You are invited to join us in the next research seminar. In this seminar, personnel from RFCUNY will provide an Introduction to the RFCUNY Human Resources Department, and will focus on understanding the roles and responsibilities of the HR teams along with understanding the HR procedures and policies.

**What:** **An Introduction to RFCUNY Human Resources**  
**When:** Thursday, March 10, 2022  
**Time:** 2:00 PM– 3:00PM  
**Presenter** *Mr. Sean McPartland and RFCUNY HR Department*

**Zoom link:** <https://ccny.zoom.us/j/85936197171>

Meeting ID: 859 3619 7171

One tap mobile

+1 646 558 8656 US (New York)

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 03/14/2022 11:21:35 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell

**Subject:** NIH Funding Opportunities - Week ending 03/11/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH funding opportunities for the week ending March 11, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities

below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 03/11/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=03-11-2022>

## Funding Opportunities

- [Chronic, Non-Communicable Diseases and Disorders Across the Lifespan: Fogarty International Research Training Award \(NCD-LIFESPAN\) \(D43 Clinical Trial Optional\)](#)  
(PAR-22-104)  
John E. Fogarty International Center  
National Center for Complementary and Integrative Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Centers of Excellence in Genomic Science \(RM1 Clinical Trial Optional\)](#)  
(PAR-22-107)  
National Human Genome Research Institute  
National Institute of Mental Health  
Application Receipt Date(s): June 21, 2024
- [International Bioethics Research Training Program \(D43 Clinical Trial Optional\)](#)  
(PAR-22-116)  
John E. Fogarty International Center  
National Human Genome Research Institute  
Application Receipt Date(s): June 06, 2024
- [International Research Ethics Education and Curriculum Development Award \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-22-118)  
John E. Fogarty International Center  
National Human Genome Research Institute  
Application Receipt Date(s): June 06, 2024
- [Bioengineering Partnerships with Industry \(U01 Clinical Trial Optional\)](#)  
(PAR-22-123)  
National Institute of Biomedical Imaging and Bioengineering  
Application Receipt Date(s): January 07, 2025
- [NIA Program Project Applications \(P01 Clinical Trial Optional\)](#)  
(PAR-22-130)  
National Institute on Aging  
Application Receipt Date(s): September 07, 2025
- [NEI Regenerative Medicine Clinical Trial Planning Grant \(R34 - Clinical Trials Not Allowed\)](#)  
(PAR-22-135)  
National Eye Institute  
Application Receipt Date(s): May 07, 2025
- [Emergency Awards: Biocontainment Facility Improvements and Building System Upgrades to Support Pandemic Preparedness \(G20 Clinical Trial Not Allowed\)](#)  
(RFA-AI-22-019)

National Institute of Allergy and Infectious Diseases

Application Receipt Date(s): April 19, 2022 All applications are due by 5:00 PM local time of applicant organization.

- [Development of HIV Broadly Neutralizing Antibody Susceptibility Assays \(R61/R33 Clinical Trial Not Allowed\)](#)  
(RFA-AI-22-022)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): August 03, 2022
- [Cancer Control Research in Persistent Poverty Areas \(U54 Clinical Trial Optional\)](#)  
(RFA-CA-22-015)  
National Cancer Institute  
Application Receipt Date(s): July 06, 2022
- [CAPSTONE Centers for Multidisciplinary Research in Child Abuse and Neglect \(P50\) \(Clinical Trial Optional\)](#)  
(RFA-HD-23-007)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): July 27, 2022
- [Addressing Mental Health Disparities Research Gaps: Aggregating and Mining Existing Data Sets for Secondary Analyses \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-MH-22-200)  
National Institute of Mental Health  
Application Receipt Date(s): October 18, 2022
- [Center for Coordination of Analysis, Science, Enhancement, and Logistics \(CASEL\) in Tobacco Regulatory Science \(U54 Clinical Trial Not Allowed\)](#)  
(RFA-OD-22-003)  
Office of Disease Prevention  
National Institute on Drug Abuse  
Application Receipt Date(s): July 14, 2022
- [Tobacco Centers of Regulatory Science \(TCORS\) for Research Relevant to the Family Smoking Prevention and Tobacco Control Act \(U54 Clinical Trial Optional\)](#)  
(RFA-OD-22-004)  
Office of Disease Prevention  
Application Receipt Date(s): July 14, 2022

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Lindsay Burns <lburns@cassavasciences.com>  
**Sent time:** 03/15/2022 04:19:23 PM  
**To:** Hoau-Yan Wang <[REDACTED]@gmail.com>; PLOS Pub Ethics <pub-ethics@plos.org>  
**Cc:** maya.frankfurt@hofstra.edu; Hoau-yan Wang  
**Subject:** [EXTERNAL] Re: URGENT Please Respond - PLOS ONE: Editorial decision on the publication ethics concerns raised with your article  
<https://doi.org/10.1371/journal.pone.0001554>

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Dear Dr. Zalm,

For the reasons outlined in Dr. Wang's letter and the letters of an independent Western blot expert reviewer, I strongly disagree with retracting this 2008 PLOS paper. We consider a retraction to be outside the scope of COPE guidelines, which require evidence of data manipulation. There is none. We request a correction to provide a corrected Figure 7A, correcting the inadvertently duplicated image.

Respectfully,  
Lindsay Burns

**Lindsay H. Burns, PhD**

SVP, Neuroscience  
Cassava Sciences, Inc.  
O: 512-501-2484 C: 512-574-4238  
[www.cassavasciences.com](http://www.cassavasciences.com)



---

**From:** Hoau-Yan Wang <[REDACTED]@gmail.com>  
**Sent:** Tuesday, March 15, 2022 3:08 PM  
**To:** PLOS Pub Ethics <pub-ethics@plos.org>  
**Cc:** Lindsay Burns <lburns@cassavasciences.com>; mfrank@sci.ccny.cuny.edu <mfrank@sci.ccny.cuny.edu>; maya.frankfurt@hofstra.edu <maya.frankfurt@hofstra.edu>; hywang@sci.ccny.cuny.edu <hywang@sci.ccny.cuny.edu>  
**Subject:** Re: URGENT Please Respond - PLOS ONE: Editorial decision on the publication ethics concerns raised with your article  
<https://doi.org/10.1371/journal.pone.0001554>

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Dr. Zalm,

**I (H-Y W) strongly disagree with retraction and I (H-Y W) stand by the article's findings.**

2008 PLOS ONE article, "High-Affinity Naloxone Binding to Filamin A Prevents Mu Opioid Receptor-Gs Coupling Underlying Opioid Tolerance and Dependence" (<https://doi.org/10.1371/journal.pone.0001554>).

Please find the enclosed a Response to retraction Dr. Zalm memorandum that states clearly the reasons that the retraction is not warranted as well as a letter by an independent reviewer who indicates there is no manipulation of the data.

Thank you.

Respectfully

Hoau-Yan Wang

*Hoau-Yan Wang, Ph.D.*  
*Medical Professor*  
*CUNY SOM*

On Tue, Mar 1, 2022 at 11:30 AM PLOS Pub Ethics <[pub-ethics@plos.org](mailto:pub-ethics@plos.org)> wrote:

Dear Dr. Wang and colleagues,

I am writing from the PLOS Publication Ethics team in regard to your 2008 PLOS ONE article, "High-Affinity Naloxone Binding

to Filamin A Prevents Mu Opioid Receptor–Gs Coupling Underlying Opioid Tolerance and Dependence" (<https://doi.org/10.1371/journal.pone.0001554>). Thank you for engaging with us in the discussion of concerns raised about this article.

We have now completed our editorial assessment of this case and decided to retract the above article. This decision was reached in discussion with the PLOS Publication ethics team and senior members of the journal's Editorial team. Together, we carefully considered the concerns raised, comments and data you provided, and the implications of the concerns for the reliability of results reported in the article. PLOS ONE abides by guidance of the Committee on Publication Ethics (COPE) in following up on concerns raised to the journal and addressing issues in the published literature. In this case we consider that retraction is warranted due to concerns about results presented in Figures 1 and 7, as well as concerns about the underlying data provided for this article and four other articles mentioned in the retraction notice copied below.

We plan to notify your institution of this issue and editorial decision, per the journal's standard procedure.

The specific issues that underlie this decision are explained in the retraction notice, which is included below my signature and will be posted on your article at the time of retraction. If you have any comments on the issues raised in the notice, or if you see any inaccuracies in the notice, **please reply with your comments no later than 08 March 2022**.

As discussed in COPE's Retraction Guidelines, the purpose of the public retraction notice is to correct the literature and relay the reasons for the editorial decision. Per PLOS' standards we also include standardized statements in retraction notices to indicate authors' positions with regard to the editorial decision. To inform these statements, we ask that each of you **reply individually by 08 March 2022** with your responses to both of the following questions:

1. Please add your initials next to the phrase that indicates your position with regard to the retraction decision:
  - agree with retraction
  - disagree with retraction
2. Add your initials next to the relevant phrase(s) if either of the following applies in your case and you would like a corresponding statement added to the public retraction notice:
  - stand by the article's findings
  - apologize for the issues with the published article

Please note that we will not consider requests for custom text in author position statements. We do not consider retraction notices to be an appropriate forum for discussion of items that go beyond the information readers should be provided around the circumstances and basis for the retraction. If you wish to comment publicly on information relayed in the retraction notice you may do so by posting a public Comment on the article or retraction webpage. Please note that any Comment posted on a PLOS webpage must abide by the Good Practice guidelines outlined at <https://journals.plos.org/plosone/s/comments>, and must include a Competing Interests statement which in this case should include your authorship of the retracted article.

After the specified reply deadline the notice text will be finalized and we will not consider further responses or queries regarding the retraction. If we do not receive your **reply by 08 March 2022**, or if you do not provide a reply to question 1 by this deadline, we will include a statement in the notice to indicate that you 'did not reply directly or could not be reached'.

If you have questions about this information you may reach me directly by replying to this email. Please reference Case 7282710 in any messages related to this matter.

I realize this will likely be a disappointing outcome and I am sorry I do not have more positive news to relay on this occasion.

Best regards,  
Maria

Maria Zalm, Ph.D  
Senior Editor Publication Ethics | she, her

PLOS | [pub-ethics@plos.org](mailto:pub-ethics@plos.org)  
Empowering researchers to transform science  
Carlyle House, Carlyle Road, Cambridge CB4 3DN | United Kingdom

California (U.S.) corporation #C2354500, based in San Francisco

# Retraction: High-Affinity Naloxone Binding to Filamin A Prevents Mu Opioid Receptor–Gs Coupling Underlying Opioid Tolerance and Dependence

The *PLOS ONE* Editors

Following the publication of this article [1], concerns were raised regarding results presented in Figures 1 and 7. Specifically,

- There appear to be horizontal and vertical irregularities suggestive of splice lines in the following panels:
  - Between lanes between lanes 4-5 of the Figure 1A left and right FLNA panels, right MOR panel, and left and right G $\alpha$  panels.
  - Between the 92.3kDa and the 50.4kDa marker of the Figure 1A left MOR panel.
  - Between lanes 2-3 of the Figure 7A Morphine + NLX +FLNA<sub>2550-2560</sub> panel.
  - Around multiple bands presented in the Figure 7A MOR and G $\alpha$  panels
- In Figure 1C, neither the published panels nor the underlying data provided in follow-up discussions include a positive control sample. The absence of a positive control calls into question the reliability of the results presented in Figure 1C.
- The Figure 7A NLX and FLNA<sub>2550-2560</sub> panels appear similar.

The corresponding author noted that the Figure 7A NLX and FLNA<sub>2550-2560</sub> panels were inadvertently duplicated and provided a replacement panel for the FLNA<sub>2550-2560</sub> panel. However, the corresponding author disagreed with the Figures 1A concerns, stating that the observations are likely the result of image compression artefacts.

The corresponding author provided image data to support the contested western blot results in this [1] and other PLOS ONE articles [2-5]. Per PLOS' assessment of the data files, the pixel patterns in background areas of blot images provided for multiple panels in [1-5] appear more similar than would be expected for data obtained in independent experiments. Furthermore, the supporting data files did not contain molecular weight markers or positive controls as needed to verify the reliability of the results. In response to these concerns, the corresponding author stated that the repetitive features in the background noise of the image data are likely the result of scanner artifacts and noted that the protein sizes on the blot were verified against pre-stained molecular weight markers. The explanation given for the background image similarities does not resolve the journal's concerns in light of PLOS' assessment of the data files.

The data and comments provided did not resolve the concerns about the integrity and reliability of data presented in this article. In light of these issues, the *PLOS ONE* Editors retract this article.

[Author initials] agreed with the retraction. [author initials] either did not respond directly or could not be reached. [author initials] did not agree with the retraction.

## References

1. Wang H-Y, Frankfurt M, Burns LH (2008) High-Affinity Naloxone Binding to Filamin A Prevents Mu Opioid Receptor–Gs Coupling Underlying Opioid Tolerance and Dependence. *PLoS ONE* 3(2): e1554. <https://doi.org/10.1371/journal.pone.0001554>
2. Wang H-Y, Burns LH (2009) Naloxone's Pentapeptide Binding Site on Filamin A Blocks Mu Opioid Receptor–Gs Coupling and CREB Activation of Acute Morphine. *PLoS ONE* 4(1): e4282. <https://doi.org/10.1371/journal.pone.0004282>
3. Bakshi K, Kosciuk M, Nagele RG, Friedman E, Wang H-Y (2011) Prenatal Cocaine Exposure Increases Synaptic Localization of a Neuronal RasGEF, GRASP-1 via Hyperphosphorylation of AMPAR Anchoring Protein, GRIP. *PLoS ONE* 6(9): e25019. <https://doi.org/10.1371/journal.pone.0025019>
4. Bakshi K, Parihar R, Goswami SK, Walsh M, Friedman E, Wang H-Y (2014) Prenatal Cocaine Exposure Uncouples mGluR1 from Homer1 and Gq Proteins. *PLoS ONE* 9(3): e91671. <https://doi.org/10.1371/journal.pone.0091671>
5. Stucky A, Bakshi KP, Friedman E, Wang H-Y (2016) Prenatal Cocaine Exposure Upregulates BDNF-TrkB Signaling. *PLoS ONE* 11(8): e0160585. <https://doi.org/10.1371/journal.pone.0160585>

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Case Number: 07282710

ref: 00DU0Ifis\_5004P1dRVNC:ref

**From:** Marc Scullin  
**Sent time:** 03/18/2022 09:46:24 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Sain tonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Della O'Donnell; Stefan U Pukatzki  
**To:**  
**Subject:** CUNY School of Medicine Faculty Seminar - Tuesday, April 12 @ 12 PM in Harris 110 - Dr. Stefan Pukatzki "The cholera bacterium human pathogen and bacterial predator"  
**Attachments:** 2022APR12\_Stefan\_Pukatzki\_CSOM Seminar.pdf

Greetings CUNY School of Medicine Faculty. The Office of Research will host an IN PERSON seminar on Tuesday, April 12, 2022 @ 12:00 PM, Harris Hall 110 when we welcome Dr. Stefan U. Pukatzki, the Sharon D. Cosloy Professor of Biology at The City College of New York.

Dr. Pukatzki will be giving a talk titled *The cholera bacterium: human pathogen and bacterial predator* on Light snacks and refreshments will be provided.

For any faculty who cannot attend in person, please use the Zoom link below.

<https://ccny.zoom.us/j/91051592042?pwd=WU5EUWJWJT1d4aEtCeSs1VWpybmtQQT09>

CUNY School of Medicine

The City College  
of New York

## CUNY School of Medicine Faculty Seminar

*The cholera bacterium: human pathogen and bacterial predator*



Stefan U. Pukatzki, PhD

Sharon D. Cosloy Professor of  
Biology

The City College of New York

Join the CUNY School of Medicine Office of Research in hosting an in-person seminar by Dr. Stefan Pukatzki, Sharon D. Cosloy Professor of Biology at The City College of New York.

The Seminar will discuss how bacteria use sophisticated strategies, which involve virulence factors that interact with commensal barriers in the host to cause infections and how responses over evolutionary time impacts the identification of novel drug targets for alternative therapies.

Even if you are an experienced researcher, you can always discover something you did not know! We hope to see you there!

Light snacks and Refreshments will be served.

Harris Hall Room 110

Tuesday, April 12, 2022

12:00 PM – 1:30 PM

To join by Zoom, click the link below

<https://ccny.zoom.us/j/91051592042?pwd=WU5EUWJWJT1d4aEtCeSs1VWpybmtQQT09>

ALL ARE WELCOME!



Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

CUNY School of Medicine

The City College  
of New York

## CUNY School of Medicine Faculty Seminar

*The cholera bacterium: human pathogen and bacterial predator*



Stefan U. Pukatzki, PhD

Sharon D. Cosloy Professor of  
Biology

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ALL ARE WELCOME!



**From:** Marc Scullin

**Sent time:** 03/21/2022 08:52:51 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell

**Subject:** NIH Funding Opportunities - Week ending 03/18/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH funding opportunities for the week ending March 18, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 03/18/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=03-18-2022>

## **Funding Opportunities**

- [NIDA Research Center of Excellence Grant Program \(P50 Clinical Trial Optional\)](#)  
(PAR-22-133)  
National Institute on Drug Abuse  
Application Receipt Date(s): Multiple dates, see announcement.
- [NIAID Research Education Program \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-22-134)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): Multiple dates, see announcement.
- [Accelerating the Pace of Child Health Research Using Existing Data from the Adolescent Brain Cognitive Development \(ABCD\) Study \(R01-Clinical Trial Not Allowed\)](#)  
(PAR-22-137)  
National Institute of Mental Health  
Application Receipt Date(s): May 07, 2025
- [Accelerating the Pace of Child Health Research Using Existing Data from the Adolescent Brain Cognitive Development \(ABCD\) Study \(R21-Clinical Trial Not Allowed\)](#)  
(PAR-22-138)  
National Institute of Mental Health  
Application Receipt Date(s): May 07, 2025
- [Systematic Testing of Radionuclides in Preclinical Experiments \(STRIPE\) \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-139)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Systematic Testing of Radionuclides in Preclinical Experiments \(STRIPE\) \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-22-140)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [NEI Research Grant for Vision-Related Secondary Data Analysis \(R21 Clinical Trial Not Allowed\)](#)  
(PAR-22-141)  
National Eye Institute  
Application Receipt Date(s): May 07, 2025
- [Single Cell Opioid Responses in the Context of HIV \(SCORCH\) Program Expansion: CNS Data Generation for Chronic Opioid, Methamphetamine, Cocaine and/or Cannabinoid Exposures \(U01 - Clinical Trial Not Allowed\)](#)  
(RFA-DA-23-004)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 11, 2022
- [Enhancing Social Connectedness and Ameliorating Loneliness to Prevent and Treat SUD and Support Recovery \(R21 - Clinical Trial Not Allowed\)](#)

(RFA-DA-23-009)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 15, 2022

- [Enhancing Social Connectedness and Ameliorating Loneliness to Prevent and Treat SUD and Support Recovery \(R34 - Clinical Trial Optional\)](#)  
(RFA-DA-23-010)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 15, 2022
- [KUH Predoctoral to Postdoctoral Fellow Transition Award \(F99/K00 - Independent Clinical Trial Not Allowed\)](#)  
(RFA-DK-21-033)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): April 01, 2025
- [NIDDK Partnerships with Professional Societies to Enhance Scientific Workforce Diversity and Promote Scientific Leadership \(R25 - Clinical Trial Not Allowed\)](#)  
(RFA-DK-22-004)  
National Institute of Diabetes and Digestive and Kidney Diseases  
Application Receipt Date(s): June 21, 2022
- [National Centers for Translational Research in Reproduction and Infertility \(NCTRI\) \(P50\) \(Clinical Trial Optional\)](#)  
(RFA-HD-23-011)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): July 28, 2022
- [Limited Competition: Stimulating Access to Research in Residency Transition Scholar \(StARRTS\) \(K38 Clinical Trial Not Allowed\)](#)  
(RFA-HL-23-007)  
National Heart, Lung, and Blood Institute  
Application Receipt Date(s): October 12, 2022
- [Short-Term Research Education Experiences to Attract Talented Students to Biomedical Informatics/Data Science Careers and Enhance Diversity \(R25 Clinical Trial Not Allowed\)](#)  
(RFA-LM-22-001)  
National Library of Medicine  
Application Receipt Date(s): May 31, 2022

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin  
**Sent time:** 03/24/2022 08:42:35 AM

Tashuna Albritton; Jude-Marie A Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mebeth; Kathleen Delia O'Donnell; Stefan U Pukatzki

**Subject:** CUNY School of Medicine Faculty Seminar - Tuesday, April 12 @ 12 PM in Harris 110 - Dr Stefan Pukatzki "The cholera bacterium: human pathogen and bacterial predator"

**Attachments:** 2022APR12\_Stefan\_Pukatzki\_CSOM Seminar pdf

Greetings CUNY School of Medicine Faculty. The Office of Research will host an IN PERSON seminar on Tuesday, April 12, 2022 @ 12:00 PM, Harris Hall 110 when we welcome Dr. Stefan U. Pukatzki, the Sharon D. Cosloy Professor of Biology at The City College of New York.

Dr. Pukatzki will be giving a talk titled *The cholera bacterium: human pathogen and bacterial predator* on Light snacks and refreshments will be provided.

For any faculty who cannot attend in person, please use the Zoom link below.

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# CUNY School of Medicine

# The City College of New York

## CUNY School of Medicine Faculty Seminar

*The cholera bacterium: human pathogen and bacterial predator*



Stefan U. Pukatzki, PhD  
Sharon D. Cosloy Professor of  
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Tuesday, April 12, 2022  
12:00 PM – 1:30 PM

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Tuesday, April 12, 2022

12:00 PM – 1:30 PM

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link below

<https://ccny.zoom.us/j/91051592042?pwd=WU5EUWJWJT1d4aEtCeSs1VWpybmtQQT09>

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**From:** Andreas Kottmann  
**Sent time:** 03/25/2022 04:31:30 AM  
**To:** Patricia Cortes; Patricia Broderick; Hoau-yan Wang; Eitan Friedman; Itzhak (Itzik) Mano; Khosrow Kashfi; John (Jack) Martin; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Jun Yoshioka; Junghoon Kim; Gonzalo Torres; Geri Kreitzer; Ashiwel Undieh  
**Cc:** Maria D Lima  
**Subject:** FW: UFS Elections - 2022 ballot  
**Attachments:** UFS letter 2022.pdf ATT00001.htm UFS Ballot 2022-23.docx ATT00002.htm

---

Dear doctoral faculty,  
Please see attached letter about, and ballot for, GC senate election.  
Thanks, Andreas

---

**From:** Mercado, Wanda <wmercado@GC.CUNY.EDU>  
**Sent:** Donnerstag, 24. März 2022 17:49  
**To:** NSCFAC-L@GC.LISTSERV.CUNY.EDU  
**Subject:** [EXTERNAL] [NSCFAC-L] Fwd: UFS Elections - 2022 ballot

Begin forwarded message:

**From:** "Myatt, Patti" <[pmyatt@gc.cuny.edu](mailto:pmyatt@gc.cuny.edu)>  
**Subject:** UFS Elections - 2022 ballot  
**Date:** March 24, 2022 at 4:12:01 PM EDT  
**To:** "Myatt, Patti" <[pmyatt@gc.cuny.edu](mailto:pmyatt@gc.cuny.edu)>

Dear EOs and APOs,

Could you kindly forward the attached memo from President Garrell announcing the UFS election and the election ballot to your faculty?

Thank you.

<https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Interdisciplinary-Concentrations/CUNY-Neuroscience-Collaborative-%28CNC%29>

March 24, 2022

Memorandum

To: Members of the Doctoral Faculty

From: President Robin L. Garrell 

Subject: Election of Senators to the University Faculty Senate for 2022-2023

Please use the attached ballot to submit your preferences for the election of University Faculty Senators whose terms begin May 2022.

The Graduate Center is entitled to a University Faculty Senate delegation of five members (3-year terms) and two alternate members (1-year terms).

In this election, two full-time members and two alternates need to be chosen as Graduate Center representatives. In addition to the nominees appearing on the ballot, you may also include write-in candidates. Please vote for up to four candidates.

Please do not put your name on the ballot, to ensure confidentiality. Your name will be checked off on the list of doctoral faculty from your email address. It would be preferable that you send the ballot via your gc.cuny.edu address.

Please email the attached ballot by April 8, 2022 to Patti Myatt at [pmyatt@gc.cuny.edu](mailto:pmyatt@gc.cuny.edu) .

Thank you.



<https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Interdisciplinary-Concentrations/CUNY-Neuroscience-Collaborative-%28CNC%29>

<https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Interdisciplinary-Concentrations/CUNY-Neuroscience-Collaborative-%28CNC%29>

**From:** Marc Scullin

**Sent time:** 03/28/2022 10:11:00 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell

**Subject:** NIH Funding Opportunities - Week ending 03/25/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH funding opportunities for the week ending March 25, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 03/25/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=03-25-2022>

## **Funding Opportunities**

- [Prospective Observational Comparative Effectiveness Research in Clinical Neurosciences \(UG3/UH3 Clinical Trial Not Allowed\)](#)  
(PAR-22-076)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): Multiple dates, see announcement.
- [Technology Development Research for Establishing Feasibility and Proof of Concept \(R21 - Clinical Trial Not Allowed\)](#)  
(PAR-22-126)  
National Institute of General Medical Sciences  
National Cancer Institute  
National Institute on Aging  
Application Receipt Date(s): Multiple dates, see announcement.
- [Focused Technology Research and Development \(R01 Clinical Trial Not Allowed\)](#)  
(PAR-22-127)  
National Institute of General Medical Sciences  
Application Receipt Date(s): Multiple dates, see announcement.
- [Patient Derived Xenograft \(PDX\) Development and Trial Centers \(PDTCs\) Network \(U54 Clinical Trial Not Allowed\)](#)  
(RFA-CA-22-012)  
National Cancer Institute  
Application Receipt Date(s): November 01, 2022
- [PDX Data Commons and Coordinating Center \(PDCCC\) for the PDX Development and Trial Centers Research Network \(PDXNet\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-CA-22-013)  
National Cancer Institute  
Application Receipt Date(s): November 01, 2022
- [Small Business Transition Grant For Early Career Scientists \(R42 Clinical Trial Not Allowed\)](#)  
(RFA-CA-22-017)  
National Cancer Institute  
Application Receipt Date(s): Not Applicable
- [Development of Innovative Informatics Methods and Algorithms for Cancer Research and Management \(R21 Clinical Trial Optional\)](#)  
(RFA-CA-22-021)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Early-Stage Development of Informatics Technologies for Cancer Research and Management \(U01 Clinical Trial Optional\)](#)  
(RFA-CA-22-022)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.

- [Advanced Development of Informatics Technologies for Cancer Research and Management \(U24 Clinical Trial Optional\)](#)  
(RFA-CA-22-023)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Sustained Support for Informatics Technologies for Cancer Research and Management \(U24 Clinical Trial Optional\)](#)  
(RFA-CA-22-024)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Avenir Award Program for Chemistry and Pharmacology of Substance Use Disorders \(DP1- Clinical Trial Not Allowed\)](#)  
(RFA-DA-23-014)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 11, 2022
- [Understanding and Addressing Misinformation among Populations that Experience Health Disparities \(R01 - Clinical Trials Optional\)](#)  
(RFA-MD-22-008)  
National Institute on Minority Health and Health Disparities  
Application Receipt Date(s): November 13, 2022
- [Understanding Suicide Risk and Protective Factors among Black Youth \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-MH-22-140)  
National Institute of Mental Health  
Application Receipt Date(s): June 20, 2023
- [Understanding Suicide Risk and Protective Factors among Black Youth \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-MH-22-141)  
National Institute of Mental Health  
Application Receipt Date(s): June 20, 2023
- [BRAIN Initiative: Integration and Analysis of BRAIN Initiative Data \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-MH-22-220)  
National Institute of Mental Health  
Application Receipt Date(s): June 07, 2024

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 03/29/2022 08:51:51 AM

Tashuna Albritton; Jude-Marie A Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mebeth; Kathleen Delia O'Donnell; Stefan U Pukatzki

**Subject:** CUNY School of Medicine Faculty Seminar - Tuesday, April 12 @ 12 PM in Harris 110 - Dr Stefan Pukatzki "The cholera bacterium: human pathogen and bacterial predator"

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Dr. Pukatzki will be giving a talk titled *The cholera bacterium: human pathogen and bacterial predator*. Light snacks and refreshments will be provided.

For any faculty who cannot attend in person, please use the Zoom link below.

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Harris Hall Room 110

Tuesday, April 12, 2022

12:00 PM – 1:30 PM

To join by Zoom, click the link below

<https://ccny.zoom.us/j/91051592042?pwd=WU5EUUJWJT1d4aEtCeSs1VWpybmtQQT09>

ALL ARE WELCOME!



Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 04/04/2022 10:10:04 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell

**Subject:** NIH & DOD Funding Opportunities for Week Ending 04/01/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH & DOD funding opportunities for the week ending April 01, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 04/01/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=03-25-2022>

For a full Synopsis for Open Program Funding Opportunities for the DOD Congressionally Directed Medical Research Programs click on the link below

<https://cdmrp.army.mil/funding/refutable>

## **NIH Funding Opportunities**

- [Implementation Research to Reduce Noncommunicable Disease \(NCD\) Burden in Low- and Middle-Income Countries \(LMICs\) and Tribal Nations During Critical Life Stages and Key Transition Periods \(R01 Clinical Trial Optional\)](#)  
(PAR-22-132)  
John E. Fogarty International Center  
National Cancer Institute  
Application Receipt Date(s): August 10, 2022
- [Leveraging Health Information Technology \(Health IT\) to Address and Reduce Health Care Disparities \(R01 Clinical Trial Optional\)](#)  
(PAR-22-145)  
National Institute on Minority Health and Health Disparities  
Application Receipt Date(s): May 07, 2025
- [Enhancing HIV Reservoir Susceptibility to Elimination \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-22-025)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): August 03, 2022
- [Developing Regulated Therapeutic and Diagnostic Solutions for Patients Affected by Opioid and/or Stimulants use Disorders \(OUD/StUD\) \(R43/R44 - Clinical Trial Optional\)](#)  
(RFA-DA-23-021)  
National Institute on Drug Abuse  
Application Receipt Date(s): Multiple dates, see announcement.
- [Innovation Award: Minority Health and Health Equity \(U01\) Clinical Trials Optional](#)  
(RFA-FD-22-005)  
Food and Drug Administration  
Application Receipt Date(s): June 06, 2022
- [OMHHE Educational Funding Opportunity: Expanding education on skin lightening products \(U01\) Clinical Trials Optional](#)  
(RFA-FD-22-020)  
Food and Drug Administration  
Application Receipt Date(s): June 06, 2022
- [Consumer Assessment of Healthcare Providers and Systems \(CAHPS\) VI \(U18\)](#)  
(RFA-HS-22-007)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): June 06, 2022
- [Research Program Award \(R35 Clinical Trial Optional\)](#)  
(RFA-NS-22-038)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): Multiple dates, see announcement.

## **United States Department of Defense Funding Opportunities**

<u>Opportunity Number</u>	<u>Opportunity Title</u>	<u>Posted Date</u>
<a href="#">23-DHA-MHSR</a>	Military Health System Research	04/04/2022
<a href="#">N00014-22-S-F006</a>	FY22 FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) for the Office of Naval Research (ONR) Science, Technology, Engineering, and Mathematics (STEM) Program	04/01/2022
<a href="#">W81XWH-22-TSCRP-CTRA</a>	DOD, Tuberos Sclerosis Complex Research Program, Clinical Translational Research Award	03/31/2022
<a href="#">W81XWH-22-PRCRP-CDA</a>	DoD Peer Reviewed, Career Development Award	03/31/2022
<a href="#">W81XWH-22-TSCRP-IDA</a>	DOD, Tuberos Sclerosis Complex Research Program, Idea Development Award	03/31/2022
<a href="#">W81XWH-22-TSCRP-EHDA</a>	DOD, Tuberos Sclerosis Complex Research Program, Exploration – Hypothesis Development Award	03/31/2022
<a href="#">W81XWH-22-PRCRP-TTSA</a>	DoD Peer Reviewed, Translational Team Science Award	03/31/2022
<a href="#">W81XWH-22-PRCRP-CSCCDA</a>	DoD Peer Reviewed, Convergent Science Cancer Consortium Development Award	03/31/2022
<a href="#">W81XWH-22-PRCRP-BHSA</a>	DoD Peer Reviewed, Behavioral Health Science Award	03/31/2022
<a href="#">W81XWH-22-PRCRP-IPA</a>	DoD Peer Reviewed, Impact Award	03/31/2022
<a href="#">W81XWH-22-PRCRP-IA</a>	DoD Peer Reviewed, Idea Award	03/31/2022
<a href="#">W81XWH-22-ARP-CTA</a>	DOD, Autism Research Program, Clinical Trial Award	03/29/2022
<a href="#">W81XWH-22-ARP-CDA</a>	DOD, Autism Research Program, Career Development Award	03/29/2022
<a href="#">W81XWH-22-ARP-IDA</a>	DOD, Autism Research Program, Idea Development Award	03/29/2022
<a href="#">W81XWH-22-OCRP-CTA</a>	DOD Ovarian Cancer Clinical Trial Award	03/29/2022

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin  
**Sent time:** 04/06/2022 09 13 16 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Stobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Sain tonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwei Undieih; Hoau-yan Wang; Rosemary Wiecezorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Aball; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell  
**To:**  
**Subject:** CUNY School of Medicine Faculty Seminar - Tuesday, April 12 @ 12 PM in Harris 110 - Dr. Stefan Pukatzki "The cholera bacterium human pathogen and bacterial predator"

Greetings CUNY School of Medicine Faculty. The Office of Research will host an IN PERSON seminar on Tuesday, April 12, 2022 @ 12:00 PM, Harris Hall 110 when we welcome Dr. Stefan U. Pukatzki, the Sharon D. Cosloy Professor of Biology at The City College of New York. Dr. Pukatzki will be giving a talk titled *The cholera bacterium: human pathogen and bacterial predator*.

Light snacks and refreshments will be provided. Dr. Pukatzki will also be available for further discussion with faculty and graduates after the seminar.

For any faculty who cannot attend in person, please use the Zoom link below.

<https://ccny.zoom.us/j/91051592042?pwd=WU5EUUVJVT1d4aEtCeSs1VWpybmtQQT09>

CUNY School of Medicine

The City College  
of New York

## CUNY School of Medicine Faculty Seminar

*The cholera bacterium: human pathogen and bacterial predator*



Stefan U. Pukatzki, PhD

Sharon D. Cosloy Professor of  
Biology  
The City College of New York

Join the CUNY School of Medicine Office of Research in hosting an in-person seminar by Dr. Stefan Pukatzki, Sharon D. Cosloy Professor of Biology at The City College of New York.

The Seminar will discuss how bacteria use sophisticated strategies, which involve virulence factors that interact with commensal barriers in the host to cause infections and how responses over evolutionary time impacts the identification of novel drug targets for alternative therapies.

Even if you are an experienced researcher, you can always discover something you did not know! We hope to see you there!

Light snacks and Refreshments will be served.

Harris Hall Room 110  
Tuesday, April 12, 2022  
12:00 PM – 1:30 PM  
To join by Zoom, click the link below  
<https://ccny.zoom.us/j/91051592042?pwd=WU5EUUVJVT1d4aEtCeSs1VWpybmtQQT09>  
ALL ARE WELCOME!



Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 04/11/2022 10:51:39 AM

Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; ;

**Subject:** NIH & DOD Funding Opportunities for Week Ending 04/08/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH & DOD funding opportunities for the week ending April 08, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals.

If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 04/08/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=04-08-2022>

For a full Synopsis for Open Program Funding Opportunities for the DOD Congressionally Directed Medical Research Programs click on the link below

<https://cdmrp.army.mil/funding/reftable>

## **NIH Funding Opportunities**

- [National Institute of General Medical Sciences \(NIGMS\) Bridges to the Baccalaureate Research Training Program \(T34\)](#)  
(PAR-22-125)  
National Institute of General Medical Sciences  
Application Receipt Date(s): September 25, 2024
- [Research Projects in Physical Sciences-Oncology \(U01 Clinical Trial Optional\)](#)  
(PAR-22-147)  
National Cancer Institute  
Application Receipt Date(s): Multiple dates, see announcement.
- [Laboratories to Optimize Digital Health \(R01 Clinical Trial Required\)](#)  
(PAR-22-154)  
National Institute of Mental Health  
Application Receipt Date(s): May 07, 2025
- [Alcohol Health Services Research \(R01 Clinical Trial Optional\)](#)  
(PAR-22-156)  
National Institute on Alcohol Abuse and Alcoholism  
Office of Research on Women's Health  
Application Receipt Date(s): May 07, 2023
- [Alcohol Health Services Research \(R34 Clinical Trial Optional\)](#)  
(PAR-22-157)  
National Institute on Alcohol Abuse and Alcoholism  
Application Receipt Date(s): May 07, 2023
- [Alcohol Treatment and Recovery Research \(R01 Clinical Trial Required\)](#)  
(PAR-22-158)  
National Institute on Alcohol Abuse and Alcoholism  
Application Receipt Date(s): May 07, 2023
- [Alcohol Treatment and Recovery Research \(R34 Clinical Trial Required\)](#)  
(PAR-22-159)  
National Institute on Alcohol Abuse and Alcoholism  
Application Receipt Date(s): May 07, 2023
- [Cancer Epidemiology Cohorts: Building the Next Generation of Research Cohorts \(U01 Clinical Trial Not Allowed\)](#)  
(PAR-22-161)  
National Cancer Institute  
Application Receipt Date(s): February 28, 2025
- [Development and Optimization of Next-Generation Immunological Assays to Support Influenza Clinical Studies and Trials](#)

[\(UH2/UH3 Clinical Trial Not Allowed\)](#)

(RFA-AI-22-020)

National Institute of Allergy and Infectious Diseases

Application Receipt Date(s): July 01, 2022

- [Partnerships for the Development of Novel Therapeutics to Combat Select Antibiotic Resistant Bacteria and Fungi \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AI-22-028)  
National Institute of Allergy and Infectious Diseases  
Application Receipt Date(s): July 29, 2022
- [Pediatric Immunotherapy Network \(PIN\) \(U01 Clinical Trial Optional\)](#)  
(RFA-CA-22-016)  
National Cancer Institute  
Application Receipt Date(s): September 27, 2022
- [Cancer Prevention, Detection, Diagnosis, and Treatment Technologies for Global Health \(U01 Clinical Trial Optional\)](#)  
(RFA-CA-22-020)  
National Cancer Institute  
Office of Research on Women's Health  
Application Receipt Date(s): June 17, 2022
- [SBIR Phase IIB Bridge Awards to Accelerate the Development of Cancer-Relevant Technologies Toward Commercialization \(R44 Clinical Trial Optional\)](#)  
(RFA-CA-22-025)  
National Cancer Institute  
Application Receipt Date(s): August 6, 2021
- [Increasing Immediate Engagement and Retention in HIV Treatment with Substance Users \(R01- Clinical Trials Required\)](#)  
(RFA-DA-23-002)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 11, 2022
- [NIDCD Research Opportunities for New Investigators to Promote Workforce Diversity \(R01 Clinical Trial Optional\)](#)  
(RFA-DC-23-001)  
National Institute on Deafness and Other Communication Disorders  
Application Receipt Date(s): August 04, 2023
- [A Community Research Resource: Characterization of the Resident Ocular Microbiome. \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-EY-22-001)  
National Eye Institute  
Application Receipt Date(s): July 06, 2022
- [Reducing Racial and Ethnic Healthcare Disparities in Chronic Conditions by Dissemination and Implementation of Patient Centered Outcomes Research \(PCOR\) Evidence \(R18\)](#)  
(RFA-HS-22-001)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): June 17, 2022
- [Diagnostic Centers of Excellence: Partnerships to Improve Diagnostic Safety and Quality \(R18\)](#)  
(RFA-HS-22-008)  
Agency for Healthcare Research and Quality  
Application Receipt Date(s): June 09, 2022
- [Limited Competition: Research Centers in Minority Institutions \(RCMI\) Clinical Research Network for Health Equity \(UG3/UH3 - Clinical Trial Optional\)](#)  
(RFA-MD-22-006)  
National Institute on Minority Health and Health Disparities  
Application Receipt Date(s): May 31, 2022
- [Investigation of Co-occurring conditions across the Lifespan to Understand Down syndrome \(INCLUDE\) Clinical Trial Readiness \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-OD-22-007)  
Office of the Director, NIH  
National Cancer Institute  
Application Receipt Date(s): July 01, 2024
- [Small Research Grants for Analysis, Curation, and/or Sharing of Down syndrome-related Research Data for the INCLUDE Project](#)

[\(R03 Clinical Trial Not Allowed\)](#)

(RFA-OD-22-008)

Office of the Director, NIH

National Cancer Institute

Application Receipt Date(s): Multiple dates, see announcement.

- [Transformative Research Award for the INCLUDE \(Investigation of Co-occurring Conditions across the Lifespan to Understand Down syndrome\) Project \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-OD-22-009)  
Office of the Director, NIH  
National Cancer Institute  
Application Receipt Date(s): July 01, 2024
- [Clinical Trials Development for Co-Occurring Conditions in Individuals with Down syndrome: Phased Awards for INCLUDE \(R61/R33 Clinical Trial Required\)](#)  
(RFA-OD-22-010)  
Office of the Director, NIH  
Application Receipt Date(s): July 01, 2024
- [Emergency Award: Rapid Acceleration of Diagnostics Tribal Data Repository \(RADx TDR\) \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-OD-22-011)  
Office of the Director, NIH  
National Library of Medicine  
Application Receipt Date(s): May 31, 2022
- [NIH Directors New Innovator Award Program \(DP2 Clinical Trial Optional\)](#)  
(RFA-RM-22-019)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): August 19, 2022

## United States Department of Defense Funding Opportunities

<u>Opportunity Number</u>	<u>Opportunity Title</u>	<u>Close Date</u>
<a href="#">W81XWH-22-KCRP-CA</a>	DoD Kidney Cancer, Concept Award	7/14/2022
<a href="#">W81XWH-22-KCRP-PCFA</a>	DoD Kidney Cancer, Postdoctoral and Clinical Fellowship Award	7/14/2022
<a href="#">W81XWH-22-KCRP-IDA</a>	DoD Kidney Cancer, Idea Development Award	10/6/2022
<a href="#">W81XWH-22-KCRP-TRPA</a>	DoD Kidney Cancer, Translational Research Partnership Award	10/6/2022
<a href="#">W81XWH-22-PRORP-ARA</a>	DoD Peer Reviewed Orthopaedic, Applied Research Award	9/13/2022
<a href="#">W81XWH-22-PRORP-CTRA</a>	DoD Peer Reviewed Orthopaedic, Clinical Translational Research Award	9/13/2022
<a href="#">W81XWH-22-PRORP-CTA</a>	DoD Peer Reviewed Orthopaedic, Clinical Trial Award	9/13/2022
<a href="#">W81XWH-22-S-JWMRP</a>	DoD Joint Warfighter Medical, Military Medical Research and Development Award	7/28/2022
<a href="#">W9126G-22-2-SOI-1948</a>	Sedimentation and Paleo-flood Investigations Coastal and Estuarine Systems	5/8/2022

Marc Scullin, MA

Research Programs Specialist

CUNY School of Medicine

Harris Hall 10E

(212) 650 7702

[CSOM Office of Research Home Page](#)

**From:** Marc Scullin  
**Sent time:** 04/11/2022 11 14 17 AM  
Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwe Undieh; Hoau-yan Wang; Rosemary Wiecezorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ereikan Abali; Lisa Auerbach; Jaelyn N Churchill; Erica Friedman; Carmen R Green; ; ; ; ;  
**To:**  
**Subject:** CUNY School of Medicine Faculty Seminar - Tuesday, April 12 @ 12 PM in Harris 110 - Dr. Stefan Pukatzki "The cholera bacterium human pathogen and bacterial predator"  
**Attachments:** 2022APR12\_Stefan\_Pukatzki\_CSOM Seminar.pdf

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CUNY School of Medicine

The City College  
of New York

## CUNY School of Medicine Faculty Seminar

*The cholera bacterium: human pathogen and bacterial predator*



Stefan U. Pukatzki, PhD  
Sharon D. Cosloy Professor of  
Biology  
The City College of New York

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Harris Hall Room 110

Tuesday, April 12, 2022

12:00 PM – 1:30 PM

To join by Zoom, click the link below

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ALL ARE WELCOME!



Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
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link below

<https://ccny.zoom.us/j/91051592042?pwd=WU5EUWJWJT1d4aEtCeSs1VWpybmtQQT09>

ALL ARE WELCOME!





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For Office Use (Date Received):	MM/DD/YYYY	E-mail spreadsheet to: <a href="mailto:capandgownorders@herffjones.com">capandgownorders@herffjones.com</a>
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ClassKeeper	<input type="text"/>	<input type="text"/>
ClassRental	<input type="text"/>	<input type="text"/>

Sales Representative Name:	<input type="text"/>
Sales Representative Number:	<input type="text"/>
Sales Representative Phone:	<input type="text"/>

Customer Contact Name:	<input type="text"/>
Contact Address Line1:	<input type="text"/>
Contact Address Line2:	<input type="text"/>
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Contact City:	<input type="text"/>
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Contact Zip Code:	<input type="text"/>
Contact Telephone:	<input type="text"/>
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Bill To Customer Number:	<input type="text"/> (11 digits)
Bill To Address Information:	
Name:	<input type="text"/>
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**NOTE: Additional Information**  
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Cap & Gown Customer Service, 901 Bob King Drive, Arcola IL 61910-1905

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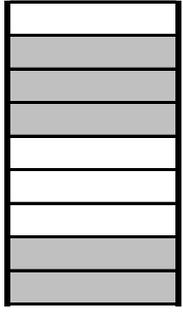














**From:** Cynthia Civil

**Sent time:** 04/22/2022 12:04:22 PM

**To:** Annabel Santana; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victor I Schwartz; Victoria Frye; ; ; ; ; ;

**Subject:** CHANGE IN DEADLINE DATE FOR REGALIA RENTAL SUBMISSION - NEW DATE FOR DEADLINE IS MONDAY, APRIL 25

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Good afternoon faculty members,

I have changed the deadline date for rentals from May 4 to **April 25**. Thus far, I have only received 4 responses from faculty. Thank you and have a wonderful day!

Cynthia

Dear Faculty,

I hope everyone had a great holiday weekend if you celebrate it. The school will be paying the rental fee for regalia for all faculty participating in the MD Graduation this year. The ceremony will be held on Thursday May 26<sup>th</sup> at 11AM. I have attached a spreadsheet for you to fill in your information and send back to me as soon as possible. **The new deadline for submission of this form is Monday, April 25.** Please make sure you meet this deadline. A memo detailing information about graduation will be sent shortly when everything is finalized.

With warm regards,

Cynthia Civil  
Office of Student Affairs

**From:** Patricia Broderick

**Sent time:** 04/22/2022 08:57:00 PM

Cynthia Civil; Annabel Santana; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victor I Schwartz; Victoria Frye; Wenhua Lu; Birgland Joseph; Emily Greene; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters

**Subject:** Re: CHANGE IN DEADLINE DATE FOR REGALIA RENTAL SUBMISSION - NEW DATE FOR DEADLINE IS MONDAY, APRIL 25

---

Hi Cynthia,

I have my gown for graduation.

Thank you for your good work,

My best,  
Patricia

---

**From:** Cynthia Civil

**Sent:** Friday, April 22, 2022 12:04 PM

**To:** Annabel Santana; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victor I Schwartz; Victoria Frye; Wenhua Lu; Birgland Joseph; Emily Greene; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters

**Subject:** CHANGE IN DEADLINE DATE FOR REGALIA RENTAL SUBMISSION - NEW DATE FOR DEADLINE IS MONDAY, APRIL 25

Good afternoon faculty members,

I have changed the deadline date for rentals from May 4 to **April 25**. Thus far, I have only received 4 responses from faculty. Thank you and have a wonderful day!

Cynthia

Dear Faculty,

I hope everyone had a great holiday weekend if you celebrate it. The school will be paying the rental fee for regalia for all faculty participating in the MD Graduation this year. The ceremony will be held on Thursday May 26<sup>th</sup> at 11AM. I have attached a spreadsheet for you to fill in your information and send back to me as soon as possible. **The new deadline for submission of this form is Monday, April 25.** Please make sure you meet this deadline. A memo detailing information about graduation will be sent shortly when everything is finalized.

With warm regards,

Cynthia Civil  
Office of Student Affairs



**Motion:**

***For 2022/2023 year, rising M3 students will be permitted to take Step 1 until June 10, 2022. If they pass, they will be permitted to enter M3 Block 2 in August.***

**Second Entry Draft Plan**

From time to time students who have successfully completed the CUNY School of Medicine curriculum will not be prepared to take Step 1 by the school-set deadline. Preparation is demonstrated by a passing score on at least one self-assessment (e.g., CBSSA, U World 1 or 2, etc.)

The increase in the number of clerkship sites allows the School of Medicine to offer a second entry to current M2 students who might be able to pass Step 1 with additional time.

As per current handbook the step1 policies on step 1 failure remain in effect:

**Requirements**

- Students must sit for the exam by the school set deadline for second entrance (in AY 2022, June 10).
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**Recommendations**

- Students will be given access to the Kaplan Integrated-self study plan paid for by the CUNY School of Medicine
- Students should meet with their Step 1 coach weekly. If they prefer a different coach from the one they were assigned for the dedicated period, they should request a new coach from the coaching director (currently Dr. Barbara Juliano).
- The LRC should offer test-taking and time management workshops.
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**Note:**

- Students will not be eligible for the clerkship lottery. Instead they will be placed in open spots.
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- Students will finish the M3 in August of the following year and may be able to pass Step 2 and apply to residency on time or may decide to take an academic year between M3 and M4 and graduate a year later.

**From:** Manojkumar Padarat

**Sent time:** 04/26/2022 03:58:36 PM

**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wiczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victor I Schwartz; Victoria Frye; Wenhua Lu; Birgland Joseph; Emily Greene; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters; Annabel Santana;

**Subject:** Urgent Faculty Meeting-

**Attachments:** M3 Second Entry - Proposal for Full Faculty.pdf

---

Join Zoom Meeting: <https://ccny.zoom.us/j/83777353931>

Meeting ID: 837 7735 3931

Passcode: 828532

**Motion:**

***For 2022/2023 year, rising M3 students will be permitted to take Step 1 until June 10, 2022. If they pass, they will be permitted to enter M3 Block 2 in August.***

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Meeting ID: 817 9715 3512

Passcode: 059715



New York, NY 10031

Phone: 212-650-5275 Fax: 212-650-6696

Email: [carmeng@med.cuny.edu](mailto:carmeng@med.cuny.edu)

[www.cuny.cuny.edu/csom](http://www.cuny.cuny.edu/csom)

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**From:** Gonzalo Torres  
**Sent time:** 05/02/2022 10:58:12 AM  
**To:** Maria Felice Ghilardi [REDACTED]@gmail.com [REDACTED]@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wieczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** MCBS updates  
**Attachments:** Mallikaratchy\_Updated CV.pdf

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Dear All,

I hope you are doing well. I have seen many of you over the past few weeks, but now I would like to see most if not all of you on campus. Let's meet tomorrow **Tuesday May 3<sup>rd</sup> at noon** for an informal faculty meeting in H205Q.

A couple of important announcements:

1. Congratulations to Ashiwel, who just received an R16 award from NIH. The title of the grant is: Nonpeptide Neurotrophic Mechanisms in Spinal Cord Repair. Good job Ashiwel!
2. The search committee for the tenure track faculty position has identified 3 candidates, who will be visiting the school on May 5, May 12, and probably May 23. Our first candidate is Prabodhika Mallikaratchy (see attached CV). She will be giving a research talk May 5 at 12:00pm in H110. The title of her talk is: "Hacking cellular receptor biology to build programmable molecular devices". I will be asking some of you to meet with Prabodhika during her visit. We will send a flyer with details of the talk shortly and I will discuss the candidates tomorrow.

Best,  
Gonzalo

## Prabodhika R. Mallikaratchy

---

Associate Professor of Chemistry  
Lehman College for The City University of New York  
Science Hall 4404  
250 Bedford Park Blvd. West,  
Bronx, NY 10468  
Phone: 347-577-4082  
Fax: 718-960-8750  
Email: [Prabodhika.Mallikaratchy@lehman.CUNY.Edu](mailto:Prabodhika.Mallikaratchy@lehman.CUNY.Edu)  
Website: [www.mallikaratchylab.org](http://www.mallikaratchylab.org)  
ORCID ID: <https://orcid.org/0000-0002-6437-4613>

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### EDUCATION AND TRAINING

- 2008-2012      Post-doctoral Research Fellow  
Memorial Sloan Kettering Cancer Center, New York, NY.  
Advisor: David Scheinberg, M.D.-Ph.D.
- 2003-2008      University of Florida, Gainesville, FL  
Degree Awarded: Ph.D. Chemistry: Biochemistry division  
Thesis Title: "*In Vitro Selection and Development of Aptamers  
for Biomarker Discovery and Targeted Therapy*"  
Advisor: Weihong Tan, Ph.D.
- 2001-2003      University of Louisiana, Monroe, LA  
Degree Awarded: M.S. Chemistry: Organic Chemistry Emphasis  
Thesis Title: "*Synthesis of organo-tellurium compounds*"  
Advisor: Thomas Junk, Ph.D.
- 1996-2000      Institute of Chemistry, Sri Lanka  
Degree Awarded: G.I.Chem. (BS equivalent)  
Thesis Title: "*Dye sensitization of cadmium sulfide electrodes  
for solar cell fabrication*"  
Advisor: O.A. Illepreuma, Ph.D.

### EXPERIENCE

- 2019-Present      Associate Professor of Chemistry, Lehman College, Department  
of Chemistry, Bronx, NY

- 2019-Present Associate Professor of Chemistry, Ph.D. Programs in Chemistry, Biochemistry and Biology, The Graduate Center, The City University of New York, New York, NY
- 2017-2019 Assistant Professor of Chemistry, Ph.D. Programs in Biology, The Graduate Center, City University of New York, New York, NY
- 2013-2019 Assistant Professor of Chemistry, Ph.D. Programs in Chemistry, Biochemistry, The Graduate Center, The City University of New York, New York, NY
- 2012-2019 Assistant Professor of Chemistry, Lehman College, Department of Chemistry, Bronx, NY
- 2008-2012 Research Fellow with David Scheinberg, Memorial Sloan Kettering Cancer Center, Molecular Pharmacology Program, New York, NY
- 2003-2008 Graduate Student with Weihong Tan, University of Florida, Department of Chemistry, Gainesville, FL
- 2001-2003 Graduate Student with Thomas Junk, University of Louisiana, Department of Chemistry, Monroe, LA

## AWARDS/HONORS

- 2021 Maximizing Investigators' Research Award (MIRA)
- 2017 Junior Faculty Research Award in Science and Engineering
- 2010-2012 Lymphoma Research Foundation Research Fellow award
- 2009-2010 Lauri Strauss Leukemia Research Fellow award
- 2008 Crow Stasch Award for excellence in publications
- 2007-2008 Ruegamer Fellowship for best biochemistry student
- 2007 Procter & Gamble Award for excellence in graduate research
- 2000 Medal/Merit Pass honors pass; Institute of Chemistry, Sri Lanka
- 2000 Shireen Jayasuriya gold medal (1<sup>st</sup> place in class), Institute of Chemistry, Sri Lanka
- 2000 Royal Society of Chemistry (Sri Lanka section) award for the best performance in Part II (Theory), Institute of Chemistry, Sri Lanka
- 2000 W R O Fernando Prize for Physical chemistry, Institute of Chemistry, Sri Lanka
- 1997 Merit Scholarship, Institute of Chemistry, Sri Lanka

**GRANT FUNDING*****POSTDOCTORAL FELLOWSHIPS***

- |   |           |           |
|---|-----------|-----------|
| 1. Lauri Strauss Leukemia Foundation fellow | 2009-2010 | \$45,000  |
| Role: <i>PI</i>                             |           |           |
| 2. Lymphoma Research Foundation             | 2010-2012 | \$110,000 |
| Role: <i>PI</i>                             |           |           |

***INTERNAL FUNDING AT LEHMAN COLLEGE***

- |  |           |          |
|--|-----------|----------|
| 3. Lehman College-Start-up for reagents      | 2012-2014 | \$55,000 |
| Start-up: Graduate Research Technology Funds | 2013      | \$55,623 |

***EXTERNAL FUNDING***

- |  |   |                 |
|--|---|-----------------|
| 4. NIGMS: GM105578   | <i>Title: Antibody Guided Cell-SELEX</i>  |                 |
| Role: <i>PI</i>  | 2013-2017   | \$437,400       |
| 5. Lauri Strauss Leukemia Foundation                                       |   |                 |
| Tile: <i>Design and development of DNA aptamer based immunotherapeutic</i> |   |                 |
| Role: <i>PI</i>  | 2016-2017   | \$12,500        |
| 6. NSF CBET 40F68-02 01  | <i>Title: Coupling liquid crystal phase transitions with aptamer selectivity for biomolecular sensing</i> |                 |
| Role: <i>Co-PI</i>   | 2016-2020   | \$20,199.52     |
| 7. Sloan Foundation  |   |                 |
| Junior Faculty Research Award in Science and Engineering                   |   |                 |
| Role: <i>PI</i>  | 2017-2018   | \$10,000        |
| 8. NIGMS: GM122648   | <i>Title: Ligand Guided Selection of Aptamers against Human Leukemia and Lymphoma</i>                     |                 |
| Role: <i>PI</i>  | 2017-2023   | \$1,467,327.05  |
| 9. NIGMS: R35GM139336  | <i>Title: Discovery and development of artificial nucleic acid ligands to probe cellular interactions</i> |                 |
| Role: <i>PI</i>  | 2021-2026   | \$ 1,761,920.00 |

**GRANTS and FELLOWSHIPS WON BY LAB MEMBERS**

1. American Chemical Society: William H. Nichols Fellowship 2016  
*Name of the student: George E. Maio*
2. *St. George's Society of New York: St George's Society Merit Award* 2016  
*Name of the student: Sana Batool*
3. American Chemical Society: Honorable Mention 2017  
*Name of the student: Sana Batool*
4. CUNY Dissertation Fellowship 2017  
Name of the student: Hasan Zumrut
5. American Chemical Society: Biotechnology division Award 2017  
Name of the student: Hasan Zumrut
6. Paul and Daisy Soros Fellowship for New Americans 2019  
Name of the student: Sana Batool
7. Jonas Salk Scholarship 2019  
Name of the student: Sana Batool
8. Tri-Institutional (Memorial Sloan Kettering, Rockefeller, and Weil-Cornell) Chemical Biology Symposium best poster award 2020  
Name of the student: Nicole Williams
9. Tri-Institutional (Memorial Sloan Kettering, Rockefeller, and Weil-Cornell) Chemical Biology Symposium best poster award 2020  
Name of the Postdoc: Lina Freage

**PUBLICATIONS**

**Bold** Designates corresponding author, *undergraduate authors are underlined*, # designates CUNY graduate author, \* designates high school student.

Lehman College:

1. "A selection platform to identify multiple aptamers against multiple cell-surface markers using ligand-guided selection" Williams, N. B.#; Batool, S.; Zumrut H.E.#; Patel, R.#; Sosa, German; Jamal, M.; **Mallikaratchy, P.R.** Under review: 2022
2. "A bispecific aptamer sensor towards T-cell leukemia detection in the tumor microenvironment" Boykoff, N.#; Freage, L.; Lenn, J.\*; **Mallikaratchy, P.R.:** *ACS Omega*: 6:48: 32563-32570: 2021

3. "The utility of multivalent artificial nucleic acid ligands to develop nanoscale DNA devices against surface receptors" Freage, L.; Boykoff, N.#; and **Mallikaratchy, P.R.** (Invited review) *ACSOmega*: 6(19):12382-12391: 2021
4. "A Homodimeric Aptamer Variant Generated from Ligand-Guided Selection Activates the T Cell Receptor Cluster of Differentiation 3 Complex", Freage L.; Jamal, D.; Williams, N.# and **Mallikaratchy, P.R.**; *Mol. Therapy Nucleic Acids*: 22: 167-178: 2020
5. "Discovery of artificial nucleic acid ligands against cell surface targets", Zumrut, H.#; **Mallikaratchy, P.R.**; (Invited spotlight) *ACS Applied Biomaterials*: 3(5): 2545-2552: 2020
6. "Ligand Guided Selection (LIGS) with Artificially Expanded Genetic Information Systems against TCR-CD3 $\epsilon$ ", Zumrut, H.#; Yang, Z.; Williams, N.#; Arizala, J. D. R.#; Batool, S.; Benner, S.; **Mallikaratchy, P. R.**; *Biochemistry*: 59(4): 552-562: 2020
7. "The key role of G-quadruplex structures in anti-IgM aptamers-target specific recognition", Moccia F.; Platella C.; Musumeci D.; Batool S.; Zumrut H.#; Bradshaw J.#; **Mallikaratchy P. R.**; **Montesarchio D.**, *Biochem. Biophys. Acta. General topics*: 133:839-849; 2019
8. "Integrating Ligand-receptor Interactions and In Vitro Evolution for Streamlined Discovery of Artificial Nucleic Acid Ligands" Zumrut, H.#; Batool, S.; Argyropoulos, K.; Williams, N.#; Azad R.#; **Mallikaratchy, P.R.**; *Mol. Therapy Nucleic Acids*: 6: 17:150-163: 2019
9. "Synthesis of stable azide and alkyne functionalized phosphoramidite nucleosides" Lingala, S.; Nordstrøm L.U.; **Mallikaratchy, P.R.**; *Tetrahedron Lett*: 17: 60(3): 211-213: 2019
10. "Dimerization of an aptamer generated from Ligand-guided Selection (LIGS) yields highly specific scaffold with improved affinity" Batool, S.; Argyropoulos, K.; Azad, R.#; Okeoma, P.; Zumrut, H.#; Dekhang, R.; **Mallikaratchy, P. R.**; *Biochem. Biophys. Acta. General topics*: 1863(1): 232-240: 2019
11. "Engineered Aptamers to Probe Molecular Interactions on the Cell Surface" Batool, S.; Bhandari, S.; George, S.; Okeoma, P.; Van, N.; Zümürüt, H. E.#; **Mallikaratchy, P.R.**; (Invited review) *Biomedicines*: 5(3): E54: 2017
12. "Structural optimization of an aptamer generated from Ligand guided Selection (LIGS) resulted in high affinity variant toward mIgM expressed on Burkitt's lymphoma cell lines" Zümürüt, H. E.#; Batool, S.; Van, N.; George, S.; Bhandari, S.

Maio, G. E.; **Mallikaratchy, P.R.**; *Biochem. Biophys. Acta. General topics*: 1861(7): 1825: 2017

13. “Modification of 2’-OMe RNA analogues enhances the stability of an aptamer evolved against Myeloid Leukemia cells” Maio, G. E.; Enweronye, O.; Zümürüt, H. E.#; Batool, S.; Van, N.; **Mallikaratchy, P.R.**; *ChemistrySelect*: 2(7): 2335-2340: 2017
14. “Evolution of complex target SELEX to identify aptamers against mammalian cell surface antigens” **Mallikaratchy, P.R.**; (Invited review); *Special Topical Collection: New Frontiers in Nucleic Acid Chemistry Molecules*:22(2): E215: 2017.
15. Ligand-guided selection of aptamers against T-cell Receptor-cluster of differentiation 3 (TCR-CD3) expressed on Jurkat.E6 cells” Zümürüt, H. E.#; Ara, N.; Maio, G. E.; Van, N.; Batool, S.; **Mallikaratchy, P.R.**; *Anal. Biochem.* 512: 1: 2016
16. “Ligand-Guided Selection of Target-Specific Aptamers: A Screening Technology for Identifying Specific Aptamers Against Cell-Surface Proteins” Zümürüt, H. E.#; Ara, N.; Fraile, M.; Maio, G. E.; **Mallikaratchy, P.R.**; *Nucleic Acid Ther*: 26(3): 190: 2016
17. “A self-assembling short oligonucleotide duplex suitable for pretargeting” **Mallikaratchy, P.R.**; Gardner, J.; Nordstrøm, L. U. R.; Veomett, N. J.; McDevitt, M. R.; Heaney, M. L.; and Scheinberg, D. A.; *Nucleic Acid Ther.* 23(4): 289: 2013

## BOOK CHAPTERS

18. Discovery of Biomarkers Using Aptamers Evolved in Cell-SELEX Method **Mallikaratchy, P.R.**; Zümürüt, H. E.#; Ara, N.; (Invited book chapter)”; Aptamers selected by cell-SELEX for Theranostics; Principles, Eds. W. Tan and X. Fan; SpringerLink: p.265-299: 2015

## PATENTS

19. US Patent: 10253314: **Prabodhika Mallikaratchy**;“LIGAND-GUIDED-SELECTION METHOD FOR SCREENING ANTIGEN SPECIFIC LIGANDS”; Date granted: April 09, 2019.

## Publications Pre-Lehman:

20. “A multivalent DNA aptamer specific for the B cell receptor on human lymphoma and leukemia” **Mallikaratchy, P. R.**; Ruggiero, A.; Gardner, J. R.; Kuryavyi, V.; Maguire, W. F.; Heaney, M. L.; McDevitt, M. R.; Patel, D. J.; Scheinberg, D. A. *Nucleic Acids Res*; 39(6): 2458: 2011

21. "Aptamer-target binding triggered molecular mediation of singlet oxygen generation" Tang, Z.; Zhu, Z.; **Mallikaratchy, P. R.**; Yang, R.; Sefah, K.; Tan, W.; *Chem. Asian J*: 5(4): 783: 2010
22. "Using aptamers evolved from cell-SELEX to engineer a drug delivery platform" **Mallikaratchy, P. R.**; Liu, H.; Huang, Y. -F.; Wang, H.; Lopez-Colon, D.; Tan, W.; *Chem. Commun*: 7(21): 3056: 2009
23. "Aptamers evolved from whole cell selection as a selective anti-tumor photodynamic agent" **Mallikaratchy, P. R.**; Tang, Z.; Tan, W.; *ChemMedChem: Chemistry Enabling Drug Discovery*: 3(3): 425: 2008
24. "Aptamer switch probe based on intramolecular displacement" Tang, Z.; **Mallikaratchy, P. R.**; Yang, R.; Kim, Y.; Zhu, Z.; Wang, H.; Tan, W.; *J. Am. Chem. Soc.*: 130(34): 11268: 2008
25. "Cell-specific aptamer probes directing cancer biomarker discovery in cancer cells" Shangguan, D.; Meng, L.; **Mallikaratchy, P. R.**; Li, Y.; Tan, W.; *J. Proteomic Res.*: 7(5): 2133: 2008
26. "Aptamer directly evolved from live cells recognize membrane bound immunoglobulin heavy mu chain on Burkitt's lymphoma cells" **Mallikaratchy, P. R.**; Tang, Z.; Kwame, S.; Meng, L.; Shangguan, D.; Tan, W.; *Mol. Cell. Proteomics*: 6(12): 2230: 2007
27. "DNA aptamers for molecular imaging and profiling of cancer" **Mallikaratchy P. R.**; Chen, H.; Tang, Z.; Meng, L.; Shangguan, D.; Parekh, P.; Kim, Y.; Sefah, K.; Tan, W.; *American Pharm. Rev.*: 10 (6): 134: 2007
28. "Selection of aptamers for molecular recognition and characterization of cancer cells" Tang, Z.; Shangguan, D.; Wang, K.; Kwame, S.; **Mallikaratchy, P. R.**; Li, Y.; Tan, W.; *Anal. Chem.*: 79(13): 4900: 2007
29. "Optimizations and modifications of aptamers selected from live cancer cells" Shangguan, D.; Tang, Z.; **Mallikaratchy P.R.**; Xiao, Z.; Tan W.; *ChemBioChem* 8(6): 603: 2007
30. "Aptamers evolved from live cells as effective molecular probes for cancer study" Shangguan D.; Li Y.; Tang Z.; Cao Z.; Chen H.; **Mallikaratchy P. R.**; Kwame S.; Yang C.J.; and Tan; W. *Proc. Natl. Acad. Sci USA*: 103:11838: 2006.
31. "Selection of DNA ligands for protein kinase c- $\delta$  " **Mallikaratchy, P.R.**; Stahelin, R.v.; Cao, Z.; Cho, W.; Tan, W.; *Chem. Communications*: 30: 3229-3231: 2006
32. "Facile Access to novel organotellurium heterocycles by nitration of Bis- (3, 5-Dimethylphenyl) Ditelluride" **Mallikaratchy P. R.**; Fronczek F. R.; Brotherton H. O.; Junk T. J.; *Het. Chem.*: 42(2): 243: 2005

33. “ $\mu$ -Diazenediyl-diphenyl- $\kappa^2C_2N_2:\kappa^2C_2,N_1$ )-bis[(3,5-dimethylphenyl)-tellurium(II)]” **Mallikaratchy P. R.**; Norman R. E.; Fronczek F. R.; Junk T.; *Acta Crystallographica*: E61(7): m1370: 2005
34. “Tribromo(3,5-dimethyl-2-nitrophenyl- $\kappa^2C_1,O$ )tellurium(IV), bromo(3,5-dimethyl-2-nitrophenyl- $\kappa^2C_1,O$ )-tellurium(II) and bromo(3,5-dimethyl-2-nitrosophenyl- $\kappa^2C_1,O$ ) tellurium(II)” **Mallikaratchy P. R.**; Norman R. E.; Fronczek F. R.; Junk T: *Acta Crystallographica*: C59(10): 0571: 2003

## BOOK CHAPTERS

35. “Fluorescent Aptamer Probes” Chen, H.; Kim, Y.; O’Donoghue, M.; **Mallikaratchy, P. R.**; Martin, J.; Tang, Z.; Shangguan, D.; and Tan, W.; *Functional Nucleic Acid Sensors Based on Different Transduction Principles*; Eds. Yi Lu and Yingfu Li; SpringerLink: 111-130: 2007
36. “Cancer cell proteomics using molecular aptamers” Tan, W.; Cao, Z.; Shangguan, D.; Li, Y.; Tang, Z.; **Mallikaratchy, P R.**; Chen, H.; *Drug Discovery Handbook*; Ed. Shayne Cox Gad; Wiley-Inter science: 73-86: 2005

## PATENTS

37. U.S. Patent US Patent: 13/510,221, **Mallikaratchy, Prabodhika**, and Scheinberg David, COMPOSITIONS AND METHODS FOR TREATING CANCER AND OTHER DISEASES, Published September 06, 2012. Granted

## MENTORING

### STUDENTS AND POSTDOCS

#### Postdocs

Dr. Maria Fraile	2013-2014
Dr. Mst. Naznin Ara	2014-2015
Dr. Rigzin Dekhang	2017-2018
Dr. Suresh Lingala	2017-2018
Dr. Lina Freage	2019-2021

## Graduate Students

## (Doctoral Advisor)

Hasan E. Zümrit	2014-2020
Nicole Williams	2018-Present
Rutika Patel	2019-2022
Natalie Boykoff	2019-2022
Egbe Vydaline	2020-Present
Mahil Kothalawala	2021-Present

## (MS Co-Advisor)

Sanjana Karpe	2017- 2018
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## Rotation Advisor

Hasan E. Zümrit	Spring 2014
Angela Manandhar	Spring 2014
Shami Chakrabarti	Fall 2014
Shami Chakrabarti	Spring 2015
Jose Cobo	Fall 2014
Avdar San	Spring 2016
Mina Poursharifi	Spring 2017
Nourelhoda Elamrani	Fall 2017
Nicole Williams	Fall 2017
Joekeem Arizala	Spring 2018
Roksana Azard	Spring 2018
Maithreyi Ramakrishnan	Spring 2019
Rutika Patel	Fall 2019
Natalie Boykoff	Fall 2019
Egbe Vydaline	Fall 2020
Tatiana Derli	Spring 2021
Paola Colon De Leon	Fall 2021
Mahil Kothalawala	Fall 2021

## Undergraduate Students

## (Research Advisor)

MayPoh Lai	2012- 2013
Shikera Daley	Spring 2014
Naralys Batista	2014
Aanchal Tyagi	2014
Kaniz Rizwana	2014
Osita J. Enweronye	2014

**Current Position**

Grad Student
Unknown
MD (Columbia Medical School)
MD (NYIT Medical College)
Unknown
Unknown

George E. Maio	2015- 2017	Grad Student (Cornell University)
Nabeela Van	2016- 2017	Research Tech (Perrigo Pharma)
Sanam Bhandhari	2016- 2017	PA Student, (SUNY, Buffalo)
Shanell George	2016-2017	Nursing student
Sana Batool	2016-2019	MD Student, (Harvard)
Precious Okeoma	2016-2019	Pre-Med
Chinelle Hutchinson	2017-2019	Pre-Med
John Bradshaw	2017-2019	Research Scientist (Pfizer)
Glory Odeh	2018-2019	Pre-Med
Ilse Siguachi	2018-2019	Unknown
Deana Jamal	2018-2020	Pre-Med
Mohammad Jamal	2019-Present	Pre-Med
German Sosa	2019-Present	Pre-Med
David Kolade	2020-Present	Pre-Med
Emily Wen Jing Shuai	2020-2021	Pre-Med
Swara Patel	2021-Present	Pre-Med

Louis Stokes Alliance for Minority Participation (LSAMP) Scholars:  
Victoria Olaseun 2012- 2013

Bronx Stem Summer Research Scholars Program  
Afito D Djokoto Summer 2015

### High School Students:

(Research Advisor)

Zeynep Sonmez	2019-2020	Riverdale Kingsbridge Academy
Jared Lenn	2018-2020	Bronx Science
Afia Semin	Spring 2016	Bronx Center for Science & Math
Daniel Stremt	Spring 2015	American Studies
Maame Gyamfi	Summer 2015	Astor Collegiate Academy
Catherine Hilario	Summer 2015	Bronx Center for Science and math
Afia Semin	Summer 2015	Bronx Center for Science and Mathematics
Ines Cedillo	Summer 2015	Collegiate Institute for Math and Science
Istiak Ahmed	Summer 2014	Bronx Center for Science and math
Syed Hussain	Summer 2014	Bronx Center for Science and math
Ashley Lau	2013-2014	Bronx Science
Saadjo Sow	Fall 2012	Bronx Center for Science & Math

## CLASSROOM TEACHING

Classroom Instruction

**2013-2018**

CHE244/245 Introductory Biochemistry Lecture and Lab

CHE 245: Designed nine new labs, piloted and implemented.

CHE244: Sapling homework and iclicker was integrated into the lecture to enhance learning and student engagement.

**2012-2014**

CHE 249 Quantitative chemical analysis, lecture and lab

**2017**

CHE 449 Instrumental Analysis

**2017-2020**

BICM 71010 Advanced Biochemistry

BICM 72010 Basic Seminar in Biochemistry

**2012-Present**

Formal mentorship/experiential learning

CHE 391/491 Undergraduate chemical research

Biol 71101 (Graduate) Molecular Cellular and Developmental Biology

BICM 71110, 71120 (Graduate) Biochemistry

**2020-Present**

CHE446 Advanced Biochemistry 2

**SERVICE**

**CUNY SERVICE**

Member, Executive Board, MS nanotechnology program	(2020-Present)
Member, MS nanotechnology admission committee	(2020-Present)
Member, Research Task Force appointed by Provost	(2019-Present)
Member, Faculty Research Advisory Board	(2019-Present)
Pre-health Evaluation Committee	(2017-2020)
Curriculum Committee Member, PhD program in Biochemistry	(2017-Present)
Doctoral student recruiting sessions representative	(2012-13, 2014)
Student Advisor	(2016-Present)
Search Committee, Assistant Professor	(2016)
Search Committee, Assistant Professor	(2015)
Search Committee, Chair of Chemistry	(2015)
Curriculum Committee, PhD Program in Biochemistry	(2017-2020)
Admissions Committee PhD Program in Chemistry	(2015)
Dissertation Fellowship Committee, CUNY Graduate Center	(2016)
Doctoral Advisory Committee	Brian Olson (Biochemistry)
Doctoral Advisory Committee	Harini Senthil (Plant Sciences)
Doctoral Advisory Committee	Jose Cobo (Biochemistry)
Doctoral Advisory Committee	Uthama Edupuganti (Biochemistry)
Doctoral Advisory Committee	Vanya Petrova (Plant Sciences)
Doctoral Advisory Committee	Rosemary Membreno (Chemistry)

Doctoral Advisory Committee	Samantha Delaney (Chemistry)
External Doctoral advisory committee	Nachiket Kamatkar (Levy group, The department of biochemistry Albert Einstein School of medicine)
External Doctoral advisory committee	Anna Koudrina (DeRosa group, The department of chemistry, Carleton University, Canada)

## SERVICE TO THE PROFESSION/COMMUNITY

### 1. NIH- study sections

Ad-hoc reviewer Synthetic and Biological Chemistry A Study Section (2021)  
Reviewer Members of the HHS-NIH-CDC-SBIR (2021)  
Reviewer Special Emphasis Panel ZGM1 RCB-4 (CB) (2021)  
Reviewer Members of the HHS-NIH-CDC-SBIR (2022)  
Reviewer Special Emphasis Panel SURE-First ZGM1 RCB-4 (SF) (2022)

### 2. Symposiums Organized and Moderated

2018; PittCon, Orlando FL  
*Title: Advances in Nucleic Acid Aptamers as Molecular Tools in Nanotechnology and Theranostics Development*

2017, PittCon, Chicago, IL  
*Title: Symposium entitled "Advances in Nucleic Acid Ligand Screening Methods Against Extra-Cellular Targets"*

### 3. Symposiums Moderated/Presided

Aptamer in Bordeaux 2019  
Moderator/Chair session 6:

Cell 255<sup>th</sup> American Chemical Society meeting, Biochemical Technology division, 2018  
Moderator/Chair Biomedical & Emerging Technologies Symposium New Strategies for the Delivery of Therapeutics: From Proteins & Genes to

7<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference, 2016  
Chair of the Session: Therapeutic Delivery of Nucleic Acid-Based Drugs Part II

### 4. Poster Judge

Aptamer in Bordeaux meeting Bordeaux, France, 2017

255<sup>th</sup> American Chemical Society meeting, Biochemical Technology division  
New Orleans, LA, 2018

5. Advisory Board  
Advisory Board 7<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference, 2016
6. Panelist  
STEM Woman, women in science: "Women inspiring innovation: Breaking boundaries in STEM fields" Lehman College, New York, NY, 2013
7. Reviewer (2013-Present)  
Journal of American Chemical Society  
ACS Nano  
ACS-Analytical Chemistry  
ACS-Combinatorial science  
ACS-Applied Biomaterials  
Journal of Nucleic Acids  
Journal of Pharmaceutical and Biomedical Analysis  
Nucleic Acids Therapeutics  
PLOS One  
Journal of Bioelectrochemistry  
Biochemica Biphysica Acta General Subjects  
Critical Reviews in Oncology/hematology  
The International Journal of Molecular Sciences  
Nature Scientific Reports  
Theranostics (Springer)  
Journal Bioorganic Chemistry  
Macromolecules  
Molecular Therapy Nucleic Acids  
Nano Letters  
Analytical Chemistry

Invited Ad-hoc Grant Reviewer (2019), Natural Sciences and Engineering Research Council of Canada

Academic Editor: PLOS one

## PRESENTATIONS

## INVITED TALKS

1. P.R. Mallikaratchy; "Discovery and development of artificial nucleic acid ligands to probe cellular interactions"; Department of Biochemistry, Albert Einstein School of Medicine; **November 10<sup>th</sup> 2020**

2. P.R. Mallikaratchy; “Discovery and development of artificial nucleic acid ligands to probe cellular interactions”; CUNY-Staten Island; **September 09<sup>th</sup> 2020**
3. P.R. Mallikaratchy; “Discovery and development of artificial nucleic acid ligands to probe cellular interactions”; ASRC-Convergence to transform: Hacking biology to advance medicine Webinar; **June 26<sup>th</sup>, 2020.**
4. P.R. Mallikaratchy; “*Integrating ligand receptor interactions and in vitro evolution for streamlined discovery of artificial nucleic acid ligands against T-cell receptor-CD3 complex in human T-cells*”; Carleton University, Canada; **October 04<sup>th</sup> 2019**
5. P.R. Mallikaratchy; “*Integrating ligand receptor interactions and in vitro evolution for streamlined discovery of artificial nucleic acid ligands against T-Cell receptor-CD3 Complex in human T-cells*” Aptamers in Bordeaux, Bordeaux, France; **June 29<sup>th</sup> 2019**
6. H. Zumrut; S. Batool; K. V. Argyropoulos; P. Okeoma. P.R. Mallikaratchy; “*Ligand Guided Selection (LIGS): A SELEX Variant to Develop Aptamers against Cell-surface Markers*” 8th International Symposium on Bioanalysis, Biomedical Engineering and Nanotechnology (8th ISBBN 2018); Changsha, China; **May 27<sup>th</sup> 2018**
7. P.R. Mallikaratchy; “*Ligand-Guided Selection (LIGS): A SELEX Variant to Identify Specific Aptamers Against Cell-Surface Markers*” Advances in Nucleic Acid Aptamers as Molecular Tools in Nanotechnology and Theranostics Development; PittCon; Orlando, FL; **March 1<sup>st</sup> 2018**
8. P.R. Mallikaratchy “*Ligand-Guided Selection (LIGS): A SELEX Variant to Identify Specific Aptamers Against Cell-Surface Markers*” The Department of Biology, Queens College, New York, NY; **February 7<sup>th</sup> 2018**
9. H.E. Zümürüt; N. Ara; M. Fraile; G. E. Maio; S. Batool; N. Van; S.Bhandari; S. George; P.R. Mallikaratchy “*Ligand-Guided Selection (LIGS): SELEX Variant to Identify Specific Aptamers Against Cell-surface Markers*” Aptamers in Bordeaux; Symposium: In vitro Selection Methodology; Bordeaux, France; **September 22<sup>nd</sup> 2017**
10. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Department of Biomedical Engineering; City College for The City University of New York, New York, NY; **May 17<sup>th</sup> 2017**
11. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Department of Chemistry; City College, City University of New York New York, NY; **February 27<sup>th</sup> 2017**

12. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Public Health Research Institute; College of Medicine, Rutgers University, Newark, NJ; **January 31<sup>st</sup> 2017**
13. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Department of Chemistry, Brooklyn College, City University of New York, New York, NY; **November 18<sup>th</sup> 2016**
14. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Department of Chemistry, Queens College, City University of New York, New York, NY; **October 17<sup>th</sup> 2016**
15. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers*” 7<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference; Boston, MA; **September 15<sup>th</sup> 2016**
16. P.R. Mallikaratchy “*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*” 6<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference; Philadelphia, PA; **September 9<sup>th</sup> 2015**
17. P.R. Mallikaratchy “*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*” Biochemistry-Biophysics-Bio-design division; Advanced Science Research Center, City College, New York, NY; **April 15<sup>th</sup> 2015**
18. P.R. Mallikaratchy “*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*” Department of Chemical Engineering, City College, New York, NY; **March 16<sup>th</sup> 2015**
19. P.R. Mallikaratchy “*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*” Department of Biology, Brooklyn College, New York, NY; **November 6<sup>th</sup> 2014**
20. P.R. Mallikaratchy “*Development DNA aptamer based therapeutic for human lymphoma and leukemia*”; Department of Biology, College of Staten Island, New York, NY; **September 19<sup>th</sup> 2013**

## CONTRIBUTED ORAL PRESENTATIONS

18. P.R. Mallikaratchy; “Integrating ligand receptor interactions and in vitro evolution for streamlined discovery of artificial nucleic acid ligands against T-cell receptor-CD3 complex in human T-cells”, The 257<sup>th</sup> American Chemical Society National Meeting; San Diego, CA; **August 26<sup>th</sup>, 2019**
19. P.R. Mallikaratchy; “Aptamers Against Cell-Surface Markers” Gordon Research Conference on DNA nanotechnology, Ventura, CA; **January, 2019**

20. P.R. Mallikaratchy; “Ligand-guided selection (LIGS): A SELEX variant to identify specific aptamers against cell-surface markers” The 256<sup>th</sup> American Chemical Society National Meeting, Boston, MA; **August 21<sup>st</sup>, 2018**
21. P.R. Mallikaratchy; “Ligand-guided selection (LIGS): A screening technology to identify specific aptamers against cell-surface markers” The 252<sup>nd</sup> American Chemical Society National Meeting and Exposition, Philadelphia, PA; **August 21<sup>st</sup> 2016**

**CONTRIBUTED LOCAL/NATIONAL PROFESSIONAL MEETING PRESENTATION BY LAB MEMBERS:**

**\* Designates presenter(s)**

*Total of 30 posters/oral presentations by undergraduate/graduate/postdoc members in the lab*

22. L. Freage\*, D. Jamal, P.R. Mallikaratchy “*Homodimeric variant of an aptamer generated from LIGS activates TCR-CD3 $\epsilon$  complex*” 260<sup>th</sup> American Chemical Society Meeting; **August 17<sup>th</sup>-20<sup>th</sup> 2020**: (On-demand poster)
23. N. Williams\*, S. Batool, H. E. Zumrut, M. Jamal, G. Sosa, P. R. Mallikaratchy “*Multi-target ligand-guided selection (LIGS) to generate aptamers against B-cell biomarkers*” 260<sup>th</sup> American Chemical Society Meeting; **August 17<sup>th</sup>-20<sup>th</sup> 2020**: (On-demand poster)
24. J. Bradshaw\*, H.E. Zümrit, and P.R. Mallikaratchy “*Optimization of salt and pH to generate highly specific aptamers against Burkitt’s lymphoma*” 66<sup>th</sup> New York City American Chemical Society Undergraduate Research Symposium; York College; New York, NY; **May 5<sup>th</sup> 2018**: (Oral)
25. S. Batool\*, K. Argyropoulos, R. Dekhang, and P.R. Mallikaratchy “*Design of dimeric aptamer against B-cell receptor*” 66<sup>th</sup> New York City American Chemical Society Undergraduate Research Symposium; York College, New York, NY; **May 5<sup>th</sup> 2018** (Oral)
26. S. Batool\*, K. Argyropoulos, R.Dekhang, and P.R. Mallikaratchy “*Design of a dimeric aptamer against B-cell receptor*” Lehman College Undergraduate Symposium; Lehman College, New York NY; **April 23<sup>rd</sup> 2018** (Poster)
27. S. Batool\*, H. E. Zümrit, S. Bhandari, N. Van, S. George, and P.R. Mallikaratchy “*Design of a dimeric aptamer against B-cell receptor*” The 255<sup>th</sup> American Chemical Society; New Orleans, L A; **March 20<sup>th</sup> 2018** (Poster)
28. P.R. Mallikaratchy\*, H. E. Zümrit, R. Dekhang, S. Batool “*Ligand-Guided Selection (LIGS): A Screening Technology to Identify Specific Aptamers Against*

*Cell-surface Markers*” Oligonucleotide Therapeutic Society Meeting; Bordeaux, France; **September 24<sup>th</sup> 2017** (Poster)

29. S. George\*, S. Batool, N. Van, S. Bhandari, H. E. Zümürüt, and P.R. Mallikaratchy “*Systematic investigation of effect of temperature on an aptamer folding*” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University; New York, NY; **May 6<sup>th</sup> 2017** (Oral)
30. S Bhandari\*, H E. Zümürüt, S Batool, N Van, S George, and P.R. Mallikaratchy “Design of a dimeric aptamer against B-cell receptor” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University, Bronx, NY; **May 6<sup>th</sup> 2017** (Oral)
31. S. Batool\*, H. E. Zümürüt N. Van, S. George, S. Bhandari, and P.R. Mallikaratchy “*Investigation of specificity of an aptamer selected again a B-cell marker*” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University, Bronx, NY; **May 6<sup>th</sup> 2017** (Oral)
32. N. Van\*, S. Batool, H. E. Zümürüt, S. George, S. Bhandari and P.R. Mallikaratchy “Investigation of effect monovalent salts of aptamer folding” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University, Bronx; **May 06<sup>th</sup> 2017** (Oral)
33. G. E. Maio\*, O. Enweronye, H. E. Zümürüt, S. Batool, N. Van, and P.R. Mallikaratchy “*Systematic optimization and modification of a DNA aptamer with 2'-O-methyl RNA analogues*” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University; Bronx, NY; **May 6<sup>th</sup> 2017** (Oral)
34. N. Van\*, S. George\*, S. Batool, H. Zümürüt, S. Bhandari, and P.R. Mallikaratchy “Investigation of effect of monovalent salts on aptamer folding”: 9<sup>th</sup> Annual Student Scholarship Showcase; Lehman College, Bronx, NY; **April 21<sup>st</sup> 2017** (Poster)
35. S Batool\*, SBhandari\*, Ps Okeoma\*, H E. Zümürüt, N Van, S George, and P.R. Mallikaratchy “*Investigation of specificity of an aptamer selected again a B-cell marker*” 9<sup>th</sup> Annual Student Scholarship Showcase; Lehman College, Bronx, NY; April 21st 2017 (Poster).
36. H. E. Zümürüt\*, S. Batool, N. Van, and P.R. Mallikaratchy “Optimization of structure of an aptamer discovered utilizing Ligand Guided Selection (LIGS) yields high affinity aptamer” The 253<sup>rd</sup> American Chemical Society National Meeting and Exposition; San Francisco, CA; **April 04<sup>th</sup>, 2017** (Poster)
37. G. E. Maio\*, H. E. Zümürüt, S. Batool, N. Van, and P.R. Mallikaratchy “*Designing bi-specific aptamers for increased stability in human serum*” The 252<sup>nd</sup> American Chemical Society National Meeting and Exposition; Philadelphia, PA; **August 21<sup>st</sup> 2016** (Poster)

38. G. E. Maio\*, O. J. Enweronye, H. Zümürüt, P.R. Mallikaratchy “*Designing bispecific aptamers for increased stability in human serum*” The 64<sup>th</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; Lehman College, Bronx, NY; May 7<sup>th</sup> 2016 (Oral)
39. G. E. Maio\*, O. J. Enweronye, H. Zümürüt, and P.R. Mallikaratchy “*Designing bispecific aptamers for increased stability in human serum*” The 8<sup>th</sup> Annual Research and Scholarship Day; Lehman College, Bronx, NY; April 15<sup>th</sup> 2016 (Poster)
40. Afia Semin\* and P.R. Mallikaratchy “*Investigation of length of a DNA aptamer on the binding capacity*” The 4<sup>th</sup> Annual Bronx SciFest; Lehman College; New York NY; April 15<sup>th</sup> 2016 (Poster)
41. H.E. Zümürüt\*, S. Chakrabarti, Mst. N. Ara, G. E. Maio, and P.R. Mallikaratchy “*Generation of T-cell Specific Aptamers Using a Novel Cell-SELEX Method: Antibody Guided Cell-SELEX Technology*” The 67<sup>th</sup> PittCon Conference & Expo; Atlanta, GA; March 10<sup>th</sup> 2016 (Poster)
42. S. Chakrabarti, H. E Zümürüt\*, G. E. Maio, Mst N. Ara, and P.R. Mallikaratchy “*Selection of Aptamers Targeting B-Cell Receptor (BCR) Using Antibody Guided Cell- SELEX Technology– A Novel Approach*” The 67<sup>th</sup> PittCon Conference & Expo, Atlanta, GA; March 10<sup>th</sup> 2016 (Poster)
43. H.E. Zümürüt\* and P. Mallikaratchy “*Monoclonal Antibody Guided SELEX (mAb-guided-SELEX): a novel technology for selecting epitope specific DNA aptamers against cell-surface markers*” The Biodesign Mega meeting Advanced Research Science Center, City College, City University of New York, New York, NY; November 13<sup>th</sup> 2015 (Oral)
44. H. E. Zümürüt\*, Mst. N. Ara, S. Chakrabarti, G. E. Maio, and P. R. Mallikaratchy “*Selection of aptamers targeting T-cell receptor (TCR) and B-cell receptor (BCR) using a novel cell-SELEX method*” The 7<sup>th</sup> Annual Research and Scholarship Day; Lehman College, Bronx, NY; April 24<sup>th</sup> 2015 (Poster)
45. D.l Stremt\*, H. Zümürüt, O. J. Enweronye, A.l Tyagi, N. Batista, and P.R. Mallikaratchy “*Investigation of the role of divalent metal is stability of aptamer-target binding*” The 3<sup>rd</sup> Annual Bronx SciFest; Lehman College, Bronx, NY; April 24<sup>th</sup> 2015 (Poster)
46. O.J. Enweronye\*, K. Rizwana, N. Batista, A. Tyagi, H. E. Zümürüt, and P.R. Mallikaratchy “*Design and Development of bispecific aptamers*” The 7<sup>th</sup> Annual Research and Scholarship Day; Lehman College, Bronx, NY; April 24<sup>th</sup> 2015 (Poster)
47. N. Batista\*, A. Tyagi, O. J. Enweronye, H. E. Zümürüt, and P.R. Mallikaratchy “*Design and Development of pH sensitive aptameric micelles*” The 7<sup>th</sup> Annual

Research and Scholarship Day; Lehman College, Bronx, NY; **April 24<sup>th</sup> 2015** (Poster)

48. O.J. Enweronye\*, K. Rizwana, N. Batista, A. Tyagi, H. E. Zümrit, and P.R. Mallikaratchy "*Design and Development of bispecific aptamers*" The 63<sup>rd</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; Queensborough Community College, Queens, NY; **May 9<sup>th</sup> 2015** (Oral)
49. N. Batista\*, A. Tyagi, O. J. Enweronye, H. E. Zümrit, and P.R. Mallikaratchy "*Design and Development of pH sensitive aptameric micelles*" The 63<sup>rd</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; Queensborough Community College, New York, NY; **May 9<sup>th</sup> 2015** (Oral)
50. M. P. Lai\*, L. U. R. Nordstrøm, V. Olaseun, P.R. Mallikaratchy "*DNA aptamer-based liposome as a novel drug delivery vehicle*" The 61<sup>st</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; City College, City University of New York, NY; **April 27<sup>th</sup> 2013** (Oral)
51. V. Olaseun\*, M. P. Lai, P.R. Mallikaratchy "Investigation of *receptor internalization and recycling in breast cancer cells using DNA aptamers*" The 5<sup>th</sup> Annual Celebration of Undergraduate Research, Scholarship and Creativity; Lehman College, New York NY; **April 30<sup>th</sup> 2013** (Poster)
52. Saadjo Sow\* and P.R. Mallikaratchy "*Investigation of receptor internalization and recycling in breast cancer cells using DNA aptamers*" The 1<sup>st</sup> Annual Bronx SciFest; Lehman College, Bronx, NY; **February 22<sup>nd</sup> 2013** (Poster)

## References

1. Bruce A. Sullenger, PhD  
Joseph and Dorothy Beard Professor  
Department of Surgery  
Duke University Medical Center  
Durham, NC 27710  
Phone: 919-684-6375  
Fax: 919-684-6492  
Email: [bruce.sullenger@duke.edu](mailto:bruce.sullenger@duke.edu)  
*Relationship: Expert in aptamers and an independent evaluator of my research. I have met Bruce at conferences.*
2. Steven Benner, PhD  
Distinguish Fellow  
The Foundation for applied molecular evolution,  
13709 Progress Blvd., Box 7  
Alachua, FL 32615  
Phone: 386-418-8085  
Fax: 844-418-8085  
Email: [sbenner@ffame.org](mailto:sbenner@ffame.org)  
*Relationship: Collaborator*
3. Michael Famulok, PhD  
Life & Medical Sciences (LIMES)-Institut  
Chemical Biology & Medicinal Chemistry Unit  
Gerhard-Domagk-Straße 1  
53121 Bonn, Germany  
Email: [m.famulok@uni-bonn.de](mailto:m.famulok@uni-bonn.de)  
Phone: +49 (0)2 28 / 73 - 1787  
Fax: 49 (0)2 28 / 73 - 53 88  
[www.famuloklab.de](http://www.famuloklab.de)  
*Relationship: Expert in aptamers and an independent evaluator of my research. I have met Michael at conferences.*
4. David A. Scheinberg, MD-PhD  
Molecular Pharmacology Program;  
Experimental Therapeutics Center;  
Leukemia Service;  
Memorial Sloan Kettering Cancer Center;  
1275 York Avenue, NY, NY, 10065;  
Email: [scheinbd@mskcc.org](mailto:scheinbd@mskcc.org)  
Phone: 646-888-2190 office 646-888-2195  
Fax: 646-422-0296  
*Relationship: Postdoctoral mentor/Collaborator*

**From:** Marc Scullin

**Sent time:** 05/02/2022 11:14:10 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell

**Subject:** NIH & DOD Funding Opportunities - Week ending 04/29/22

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH & DOD funding opportunities for the week ending April 01, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 04/29/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=04-29-2022>

For a full Synopsis for Open Program Funding Opportunities for the DOD Congressionally Directed Medical Research Programs click on the link below

<https://cdmnp.army.mil/funding/default>

## NIH Funding Opportunities

- [Education Program on Translational Devices \(R25 Clinical Trial Not Allowed\)](#)  
(PAR-22-146)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): July 29, 2022
- [Grants for Early Medical/Surgical Specialists Transition to Aging Research \(GEMSSTAR\) \(R03 Clinical Trial Optional\)](#)  
(RFA-AG-23-031)  
National Institute on Aging  
Application Receipt Date(s): October 17, 2022
- [NIAMS Rheumatic Diseases Research Resource-based Centers \(P30 - Clinical Trial Not Allowed\)](#)  
(RFA-AR-23-002)  
National Institute of Arthritis and Musculoskeletal and Skin Diseases  
Application Receipt Date(s): September 13, 2022
- [Pathogenic Mechanisms influencing Blood Brain Barrier function in HIV and Substance Use Disorders \(R01 Clinical Trial Optional\)](#)  
(RFA-DA-23-012)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 11, 2023
- [Coordinating Center for the HIV/AIDS and Substance Use Cohorts Program \(U24 Clinical Trial Not Allowed\)](#)  
(RFA-DA-23-040)  
National Institute on Drug Abuse  
Application Receipt Date(s): August 10, 2022
- [SBIR E-Learning for HAZMAT and Emergency Response \(R43/R44 Clinical Trial Not Allowed\)](#)  
(RFA-ES-22-004)  
National Institute of Environmental Health Sciences  
Application Receipt Date(s): July 29, 2022
- [Understanding the role of Gut Immune dysfunction and Gut Microbiome in pathogenesis of Central Nervous System co-morbidities in people living with HIV \(R21 Clinical Trial Not Allowed\)](#)  
(RFA-MH-22-230)  
National Institute of Mental Health  
Application Receipt Date(s): Not Applicable
- [NIH Directors Early Independence Awards \(DP5 Clinical Trial Optional\)](#)  
(RFA-RM-22-021)  
Office of Strategic Coordination (Common Fund)  
Application Receipt Date(s): September 02, 2022

**United States Department of Defense Funding Opportunities for the Week ending  
04/29/2022**

Opportunity Number	Opportunity Title	Close Date
<a href="#">W81XWH-22-MSRP-CTA</a>	DoD Multiple Sclerosis, Clinical Trial Award	10/03/2022
<a href="#">W81XWH-22-MSRP-EIRA</a>	DoD Multiple Sclerosis, Early Investigator Research Award	10/03/2022
<a href="#">W81XWH-22-MSRP-IIRA</a>	DoD Multiple Sclerosis, Investigator-Initiated Research Award	10/03/2022
<a href="#">W81XWH-22-MSRP-EHDA</a>	DoD Multiple Sclerosis, Exploration-Hypothesis Development Award	10/03/2022
<a href="#">W81EWF-22-SOI-0006</a>	Libby and Bonneville Dams Maximum Precipitation Studies	06/17/2022
<a href="#">W911KB-22-2-0008</a>	SUSTAINABLE RANGE STUDY -Richardson Training Area, Fort Wainwright and Donnelly Training Area, Alaska	05/27/2022
<a href="#">W81XWH-22-PCARP-IDA</a>	DoD Pancreatic Cancer, Idea Development Award	10/06/2022
<a href="#">W81XWH-22-PCARP-TRPA</a>	DoD Pancreatic Cancer, Translational Research Partnership Award	10/06/2022
<a href="#">W81EWF-22-SOI-0015</a>	In Situ Measurements of Physical Forces, Geotechnical and Biological Parameters in Coastal and Estuarine Systems, Galveston District	06/27/2022
<a href="#">N00014-22-S-F007</a>	Fiscal Year (FY) 2023 Young Investigator Program	07/01/2022
<a href="#">W911NF-22-S-0011</a>	Tactical Behaviors for Autonomous Maneuver	
<a href="#">W81XWH-22-PRARP-ADRA</a>	DoD Peer Reviewed Alzheimer's Research Program, Accelerating Diagnostics Research Award	07/25/2022
<a href="#">W81XWH-22-PRARP-IIRA</a>	DoD Peer Reviewed Alzheimer's Research Program, Investigator-Initiated Research Award	07/25/2022
<a href="#">W81XWH-22-PRARP-TRA</a>	DoD Peer Reviewed Alzheimer's Research Program, Translational Research Award	07/25/2022
<a href="#">W81XWH-22-RCRP-RCDA</a>	DoD Rare Cancers, Resource and Community Development Award	09/30/2022
<a href="#">W81XWH-22-RCRP-IDA</a>	DoD Rare Cancers, Idea Development Award	09/30/2022
<a href="#">W81XWH-22-RCRP-CA</a>	DoD Rare Cancers, Concept Award	08/29/2022
<a href="#">HR001122S0034</a>	Biological Technologies	04/20/2023

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Patricia Broderick  
**Sent time:** 05/02/2022 12:50:43 PM  
**To:** Maria Felice Ghilardi [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Gonzalo Torres; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wieczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** Re: MCBS updates

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Hi Gonzalo,

I have a mtg with National Digest at about the same time for the May issue at their request and backing as well. Can I make this by zoom ahead of the other interview requested of me?

Please let me know.

Best,  
Patricia

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**From:** Gonzalo Torres  
**Sent:** Monday, May 2, 2022 10:58 AM  
**To:** Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Maria Felice Ghilardi [REDACTED]@gmail.com); Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wieczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** MCBS updates

Dear All,

I hope you are doing well. I have seen many of you over the past few weeks, but now I would like to see most if not all of you on campus. Let's meet tomorrow **Tuesday May 3<sup>rd</sup> at noon** for an informal faculty meeting in H205Q.

A couple of important announcements:

1. Congratulations to Ashiwel, who just received an R16 award from NIH. The title of the grant is: Nonpeptide Neurotrophic Mechanisms in Spinal Cord Repair. Good job Ashiwel!
2. The search committee for the tenure track faculty position has identified 3 candidates, who will be visiting the school on May 5, May 12, and probably May 23. Our first candidate is Prabodhika Mallikaratchy (see attached CV). She will be giving a research talk May 5 at 12:00pm in H110. The title of her talk is: "Hacking cellular receptor biology to build programmable molecular devices". I will be asking some of you to meet with Prabodhika during her visit. We will send a flyer with details of the talk shortly and I will discuss the candidates tomorrow.

Best,  
Gonzalo

**From:** Gonzalo Torres  
**Sent time:** 05/05/2022 09:21:49 AM  
**To:** Maria Felice Ghilardi ( [REDACTED]@gmail.com) [REDACTED]@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wieczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** Seminar today at 12:00pm - Faculty candidate  
**Attachments:** Mallikaratchy\_Updated CV.pdf MCBS Seminar Thursday May 5, 2022 12-00PM.pdf

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Good morning all,

A friendly reminder that we have a faculty candidate giving a seminar today at 12:00 in H-110. CV and announcement are attached.

See you there,

Gonzalo

# SEMINAR

*"Hacking cellular receptor biology to build  
programmable molecular devices"*

**Prabodhika R. Mallikaratchy, Ph.D.**  
Associate Professor of Chemistry  
Lehman College - CUNY

**Thursday, May 5th, 2022**  
**12:00-1:30pm**  
**Harris Hall Conference Room-110**

**If you are not able to attend in person:**  
**Zoom Link: <https://ccny.zoom.us/j/88633103389>**

## Prabodhika R. Mallikaratchy

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Associate Professor of Chemistry  
Lehman College for The City University of New York  
Science Hall 4404  
250 Bedford Park Blvd. West,  
Bronx, NY 10468  
Phone: 347-577-4082  
Fax: 718-960-8750  
Email: [Prabodhika.Mallikaratchy@lehman.CUNY.Edu](mailto:Prabodhika.Mallikaratchy@lehman.CUNY.Edu)  
Website: [www.mallikaratchylab.org](http://www.mallikaratchylab.org)  
ORCID ID: <https://orcid.org/0000-0002-6437-4613>

---

### EDUCATION AND TRAINING

- 2008-2012      Post-doctoral Research Fellow  
Memorial Sloan Kettering Cancer Center, New York, NY.  
Advisor: David Scheinberg, M.D.-Ph.D.
- 2003-2008      University of Florida, Gainesville, FL  
Degree Awarded: Ph.D. Chemistry: Biochemistry division  
Thesis Title: "*In Vitro Selection and Development of Aptamers  
for Biomarker Discovery and Targeted Therapy*"  
Advisor: Weihong Tan, Ph.D.
- 2001-2003      University of Louisiana, Monroe, LA  
Degree Awarded: M.S. Chemistry: Organic Chemistry Emphasis  
Thesis Title: "*Synthesis of organo-tellurium compounds*"  
Advisor: Thomas Junk, Ph.D.
- 1996-2000      Institute of Chemistry, Sri Lanka  
Degree Awarded: G.I.Chem. (BS equivalent)  
Thesis Title: "*Dye sensitization of cadmium sulfide electrodes  
for solar cell fabrication*"  
Advisor: O.A. Illepreuma, Ph.D.

### EXPERIENCE

- 2019-Present      Associate Professor of Chemistry, Lehman College, Department  
of Chemistry, Bronx, NY

- 2019-Present Associate Professor of Chemistry, Ph.D. Programs in Chemistry, Biochemistry and Biology, The Graduate Center, The City University of New York, New York, NY
- 2017-2019 Assistant Professor of Chemistry, Ph.D. Programs in Biology, The Graduate Center, City University of New York, New York, NY
- 2013-2019 Assistant Professor of Chemistry, Ph.D. Programs in Chemistry, Biochemistry, The Graduate Center, The City University of New York, New York, NY
- 2012-2019 Assistant Professor of Chemistry, Lehman College, Department of Chemistry, Bronx, NY
- 2008-2012 Research Fellow with David Scheinberg, Memorial Sloan Kettering Cancer Center, Molecular Pharmacology Program, New York, NY
- 2003-2008 Graduate Student with Weihong Tan, University of Florida, Department of Chemistry, Gainesville, FL
- 2001-2003 Graduate Student with Thomas Junk, University of Louisiana, Department of Chemistry, Monroe, LA

## AWARDS/HONORS

- 2021 Maximizing Investigators' Research Award (MIRA)
- 2017 Junior Faculty Research Award in Science and Engineering
- 2010-2012 Lymphoma Research Foundation Research Fellow award
- 2009-2010 Lauri Strauss Leukemia Research Fellow award
- 2008 Crow Stasch Award for excellence in publications
- 2007-2008 Ruegamer Fellowship for best biochemistry student
- 2007 Procter & Gamble Award for excellence in graduate research
- 2000 Medal/Merit Pass honors pass; Institute of Chemistry, Sri Lanka
- 2000 Shireen Jayasuriya gold medal (1<sup>st</sup> place in class), Institute of Chemistry, Sri Lanka
- 2000 Royal Society of Chemistry (Sri Lanka section) award for the best performance in Part II (Theory), Institute of Chemistry, Sri Lanka
- 2000 W R O Fernando Prize for Physical chemistry, Institute of Chemistry, Sri Lanka
- 1997 Merit Scholarship, Institute of Chemistry, Sri Lanka

**GRANT FUNDING*****POSTDOCTORAL FELLOWSHIPS***

- |   |           |           |
|---|-----------|-----------|
| 1. Lauri Strauss Leukemia Foundation fellow | 2009-2010 | \$45,000  |
| Role: <i>PI</i>                             |           |           |
| 2. Lymphoma Research Foundation             | 2010-2012 | \$110,000 |
| Role: <i>PI</i>                             |           |           |

***INTERNAL FUNDING AT LEHMAN COLLEGE***

- |  |           |          |
|--|-----------|----------|
| 3. Lehman College-Start-up for reagents      | 2012-2014 | \$55,000 |
| Start-up: Graduate Research Technology Funds | 2013      | \$55,623 |

***EXTERNAL FUNDING***

- |  |   |                 |
|--|---|-----------------|
| 4. NIGMS: GM105578   | <i>Title: Antibody Guided Cell-SELEX</i>  |                 |
| Role: <i>PI</i>  | 2013-2017   | \$437,400       |
| 5. Lauri Strauss Leukemia Foundation                                       |   |                 |
| Tile: <i>Design and development of DNA aptamer based immunotherapeutic</i> |   |                 |
| Role: <i>PI</i>  | 2016-2017   | \$12,500        |
| 6. NSF CBET 40F68-02 01  | <i>Title: Coupling liquid crystal phase transitions with aptamer selectivity for biomolecular sensing</i> |                 |
| Role: <i>Co-PI</i>   | 2016-2020   | \$20,199.52     |
| 7. Sloan Foundation  |   |                 |
| Junior Faculty Research Award in Science and Engineering                   |   |                 |
| Role: <i>PI</i>  | 2017-2018   | \$10,000        |
| 8. NIGMS: GM122648   | <i>Title: Ligand Guided Selection of Aptamers against Human Leukemia and Lymphoma</i>                     |                 |
| Role: <i>PI</i>  | 2017-2023   | \$1,467,327.05  |
| 9. NIGMS: R35GM139336  | <i>Title: Discovery and development of artificial nucleic acid ligands to probe cellular interactions</i> |                 |
| Role: <i>PI</i>  | 2021-2026   | \$ 1,761,920.00 |

**GRANTS and FELLOWSHIPS WON BY LAB MEMBERS**

1. American Chemical Society: William H. Nichols Fellowship 2016  
*Name of the student: George E. Maio*
2. *St. George's Society of New York: St George's Society Merit Award* 2016  
*Name of the student: Sana Batool*
3. American Chemical Society: Honorable Mention 2017  
*Name of the student: Sana Batool*
4. CUNY Dissertation Fellowship 2017  
Name of the student: Hasan Zumrut
5. American Chemical Society: Biotechnology division Award 2017  
Name of the student: Hasan Zumrut
6. Paul and Daisy Soros Fellowship for New Americans 2019  
Name of the student: Sana Batool
7. Jonas Salk Scholarship 2019  
Name of the student: Sana Batool
8. Tri-Institutional (Memorial Sloan Kettering, Rockefeller, and Weil-Cornell) Chemical Biology Symposium best poster award 2020  
Name of the student: Nicole Williams
9. Tri-Institutional (Memorial Sloan Kettering, Rockefeller, and Weil-Cornell) Chemical Biology Symposium best poster award 2020  
Name of the Postdoc: Lina Freage

**PUBLICATIONS**

**Bold** Designates corresponding author, *undergraduate authors are underlined*, # designates CUNY graduate author, \* designates high school student.

Lehman College:

1. "A selection platform to identify multiple aptamers against multiple cell-surface markers using ligand-guided selection" Williams, N. B.#; Batool, S.; Zumrut H.E.#; Patel, R.#; Sosa, German; Jamal, M.; **Mallikaratchy, P.R.** Under review: 2022
2. "A bispecific aptamer sensor towards T-cell leukemia detection in the tumor microenvironment" Boykoff, N.#; Freage, L.; Lenn, J.\*; **Mallikaratchy, P.R.:** *ACS Omega*: 6:48: 32563-32570: 2021

3. "The utility of multivalent artificial nucleic acid ligands to develop nanoscale DNA devices against surface receptors" Freage, L.; Boykoff, N.#; and **Mallikaratchy, P.R.** (Invited review) *ACS Omega*: 6(19):12382-12391: 2021
4. "A Homodimeric Aptamer Variant Generated from Ligand-Guided Selection Activates the T Cell Receptor Cluster of Differentiation 3 Complex", Freage L.; Jamal, D.; Williams, N.# and **Mallikaratchy, P.R.**; *Mol. Therapy Nucleic Acids*: 22: 167-178: 2020
5. "Discovery of artificial nucleic acid ligands against cell surface targets", Zumrut, H.#; **Mallikaratchy, P.R.**; (Invited spotlight) *ACS Applied Biomaterials*: 3(5): 2545-2552: 2020
6. "Ligand Guided Selection (LIGS) with Artificially Expanded Genetic Information Systems against TCR-CD3 $\epsilon$ ", Zumrut, H.#; Yang, Z.; Williams, N.#; Arizala, J. D. R.#; Batool, S.; Benner, S.; **Mallikaratchy, P. R.**; *Biochemistry*: 59(4): 552-562: 2020
7. "The key role of G-quadruplex structures in anti-IgM aptamers-target specific recognition", Moccia F.; Platella C.; Musumeci D.; Batool S.; Zumrut H.#; Bradshaw J.#; **Mallikaratchy P. R.**; **Montesarchio D.**, *Biochem. Biophys. Acta. General topics*: 133:839-849; 2019
8. "Integrating Ligand-receptor Interactions and In Vitro Evolution for Streamlined Discovery of Artificial Nucleic Acid Ligands" Zumrut, H.#; Batool, S.; Argyropoulos, K.; Williams, N.#; Azad R.#; **Mallikaratchy, P.R.**; *Mol. Therapy Nucleic Acids*: 6: 17:150-163: 2019
9. "Synthesis of stable azide and alkyne functionalized phosphoramidite nucleosides" Lingala, S.; Nordstrøm L.U.; **Mallikaratchy, P.R.**; *Tetrahedron Lett*: 17: 60(3): 211-213: 2019
10. "Dimerization of an aptamer generated from Ligand-guided Selection (LIGS) yields highly specific scaffold with improved affinity" Batool, S.; Argyropoulos, K.; Azad, R.#; Okeoma, P.; Zumrut, H.#; Dekhang, R.; **Mallikaratchy, P. R.**; *Biochem. Biophys. Acta. General topics*: 1863(1): 232-240: 2019
11. "Engineered Aptamers to Probe Molecular Interactions on the Cell Surface" Batool, S.; Bhandari, S.; George, S.; Okeoma, P.; Van, N.; Zümürüt, H. E.#; **Mallikaratchy, P.R.**; (Invited review) *Biomedicines*: 5(3): E54: 2017
12. "Structural optimization of an aptamer generated from Ligand guided Selection (LIGS) resulted in high affinity variant toward mIgM expressed on Burkitt's lymphoma cell lines" Zümürüt, H. E.#; Batool, S.; Van, N.; George, S.; Bhandari, S.

Maio, G. E.; **Mallikaratchy, P.R.**; *Biochem. Biophys. Acta. General topics*: 1861(7): 1825: 2017

13. “Modification of 2’-OMe RNA analogues enhances the stability of an aptamer evolved against Myeloid Leukemia cells” Maio, G. E.; Enweronye, O.; Zümürüt, H. E.#; Batool, S.; Van, N.; **Mallikaratchy, P.R.**; *ChemistrySelect*: 2(7): 2335-2340: 2017
14. “Evolution of complex target SELEX to identify aptamers against mammalian cell surface antigens” **Mallikaratchy, P.R.**; (Invited review); *Special Topical Collection: New Frontiers in Nucleic Acid Chemistry Molecules*:22(2): E215: 2017.
15. Ligand-guided selection of aptamers against T-cell Receptor-cluster of differentiation 3 (TCR-CD3) expressed on Jurkat.E6 cells” Zümürüt, H. E.#; Ara, N.; Maio, G. E.; Van, N.; Batool, S.; **Mallikaratchy, P.R.**; *Anal. Biochem.* 512: 1: 2016
16. “Ligand-Guided Selection of Target-Specific Aptamers: A Screening Technology for Identifying Specific Aptamers Against Cell-Surface Proteins” Zümürüt, H. E.#; Ara, N.; Fraile, M.; Maio, G. E.; **Mallikaratchy, P.R.**; *Nucleic Acid Ther*: 26(3): 190: 2016
17. “A self-assembling short oligonucleotide duplex suitable for pretargeting” **Mallikaratchy, P.R.**; Gardner, J.; Nordstrøm, L. U. R.; Veomett, N. J.; McDevitt, M. R.; Heaney, M. L.; and Scheinberg, D. A.; *Nucleic Acid Ther.* 23(4): 289: 2013

## BOOK CHAPTERS

18. Discovery of Biomarkers Using Aptamers Evolved in Cell-SELEX Method **Mallikaratchy, P.R.**; Zümürüt, H. E.#; Ara, N.; (Invited book chapter)”; Aptamers selected by cell-SELEX for Theranostics; Principles, Eds. W. Tan and X. Fan; SpringerLink: p.265-299: 2015

## PATENTS

19. US Patent: 10253314: **Prabodhika Mallikaratchy**;“LIGAND-GUIDED-SELECTION METHOD FOR SCREENING ANTIGEN SPECIFIC LIGANDS”; Date granted: April 09, 2019.

## Publications Pre-Lehman:

20. “A multivalent DNA aptamer specific for the B cell receptor on human lymphoma and leukemia” **Mallikaratchy, P. R.**; Ruggiero, A.; Gardner, J. R.; Kuryavyi, V.; Maguire, W. F.; Heaney, M. L.; McDevitt, M. R.; Patel, D. J.; Scheinberg, D. A. *Nucleic Acids Res*; 39(6): 2458: 2011

21. "Aptamer-target binding triggered molecular mediation of singlet oxygen generation" Tang, Z.; Zhu, Z.; **Mallikaratchy, P. R.**; Yang, R.; Sefah, K.; Tan, W.; *Chem. Asian J*: 5(4): 783: 2010
22. "Using aptamers evolved from cell-SELEX to engineer a drug delivery platform" **Mallikaratchy, P. R.**; Liu, H.; Huang, Y. -F.; Wang, H.; Lopez-Colon, D.; Tan, W.; *Chem. Commun*: 7(21): 3056: 2009
23. "Aptamers evolved from whole cell selection as a selective anti-tumor photodynamic agent" **Mallikaratchy, P. R.**; Tang, Z.; Tan, W.; *ChemMedChem: Chemistry Enabling Drug Discovery*: 3(3): 425: 2008
24. "Aptamer switch probe based on intramolecular displacement" Tang, Z.; **Mallikaratchy, P. R.**; Yang, R.; Kim, Y.; Zhu, Z.; Wang, H.; Tan, W.; *J. Am. Chem. Soc.*: 130(34): 11268: 2008
25. "Cell-specific aptamer probes directing cancer biomarker discovery in cancer cells" Shangguan, D.; Meng, L.; **Mallikaratchy, P. R.**; Li, Y.; Tan, W.; *J. Proteomic Res.*: 7(5): 2133: 2008
26. "Aptamer directly evolved from live cells recognize membrane bound immunoglobulin heavy mu chain on Burkitt's lymphoma cells" **Mallikaratchy, P. R.**; Tang, Z.; Kwame, S.; Meng, L.; Shangguan, D.; Tan, W.; *Mol. Cell. Proteomics*: 6(12): 2230: 2007
27. "DNA aptamers for molecular imaging and profiling of cancer" **Mallikaratchy P. R.**; Chen, H.; Tang, Z.; Meng, L.; Shangguan, D.; Parekh, P.; Kim, Y.; Sefah, K.; Tan, W.; *American Pharm. Rev.*: 10 (6): 134: 2007
28. "Selection of aptamers for molecular recognition and characterization of cancer cells" Tang, Z.; Shangguan, D.; Wang, K.; Kwame, S.; **Mallikaratchy, P. R.**; Li, Y.; Tan, W.; *Anal. Chem.*: 79(13): 4900: 2007
29. "Optimizations and modifications of aptamers selected from live cancer cells" Shangguan, D.; Tang, Z.; **Mallikaratchy P.R.**; Xiao, Z.; Tan W.; *ChemBioChem* 8(6): 603: 2007
30. "Aptamers evolved from live cells as effective molecular probes for cancer study" Shangguan D.; Li Y.; Tang Z.; Cao Z.; Chen H.; **Mallikaratchy P. R.**; Kwame S.; Yang C.J.; and Tan; W. *Proc. Natl. Acad. Sci USA*: 103:11838: 2006.
31. "Selection of DNA ligands for protein kinase c- $\delta$  " **Mallikaratchy, P.R.**; Stahelin, R.v.; Cao, Z.; Cho, W.; Tan, W.; *Chem. Communications*: 30: 3229-3231: 2006
32. "Facile Access to novel organotellurium heterocycles by nitration of Bis- (3, 5-Dimethylphenyl) Ditelluride" **Mallikaratchy P. R.**; Fronczek F. R.; Brotherton H. O.; Junk T. J.; *Het. Chem.*: 42(2): 243: 2005

33. “ $\mu$ -Diazenediyl-diphenyl- $\kappa^2C_2N_2:\kappa^2C_2,N_1$ )-bis[(3,5-dimethylphenyl)-tellurium(II)]” **Mallikaratchy P. R.**; Norman R. E.; Fronczek F. R.; Junk T.; *Acta Crystallographica*: E61(7): m1370: 2005
34. “Tribromo(3,5-dimethyl-2-nitrophenyl- $\kappa^2C_1,O$ )tellurium(IV), bromo(3,5-dimethyl-2-nitrophenyl- $\kappa^2C_1,O$ )-tellurium(II) and bromo(3,5-dimethyl-2-nitrosophenyl- $\kappa^2C_1,O$ ) tellurium(II)” **Mallikaratchy P. R.**; Norman R. E.; Fronczek F. R.; Junk T: *Acta Crystallographica*: C59(10): 0571: 2003

## BOOK CHAPTERS

35. “Fluorescent Aptamer Probes” Chen, H.; Kim, Y.; O’Donoghue, M.; **Mallikaratchy, P. R.**; Martin, J.; Tang, Z.; Shangguan, D.; and Tan, W.; *Functional Nucleic Acid Sensors Based on Different Transduction Principles*; Eds. Yi Lu and Yingfu Li; SpringerLink: 111-130: 2007
36. “Cancer cell proteomics using molecular aptamers” Tan, W.; Cao, Z.; Shangguan, D.; Li, Y.; Tang, Z.; **Mallikaratchy, P R.**; Chen, H.; *Drug Discovery Handbook*; Ed. Shayne Cox Gad; Wiley-Inter science: 73-86: 2005

## PATENTS

37. U.S. Patent US Patent: 13/510,221, **Mallikaratchy, Prabodhika**, and Scheinberg David, COMPOSITIONS AND METHODS FOR TREATING CANCER AND OTHER DISEASES, Published September 06, 2012. Granted

## MENTORING

### STUDENTS AND POSTDOCS

#### Postdocs

Dr. Maria Fraile	2013-2014
Dr. Mst. Naznin Ara	2014-2015
Dr. Rigzin Dekhang	2017-2018
Dr. Suresh Lingala	2017-2018
Dr. Lina Freage	2019-2021

## Graduate Students

## (Doctoral Advisor)

Hasan E. Zümrit	2014-2020
Nicole Williams	2018-Present
Rutika Patel	2019-2022
Natalie Boykoff	2019-2022
Egbe Vydaline	2020-Present
Mahil Kothalawala	2021-Present

## (MS Co-Advisor)

Sanjana Karpe	2017- 2018
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## Rotation Advisor

Hasan E. Zümrit	Spring 2014
Angela Manandhar	Spring 2014
Shami Chakrabarti	Fall 2014
Shami Chakrabarti	Spring 2015
Jose Cobo	Fall 2014
Avdar San	Spring 2016
Mina Poursharifi	Spring 2017
Nourelhoda Elamrani	Fall 2017
Nicole Williams	Fall 2017
Joekeem Arizala	Spring 2018
Roksana Azard	Spring 2018
Maithreyi Ramakrishnan	Spring 2019
Rutika Patel	Fall 2019
Natalie Boykoff	Fall 2019
Egbe Vydaline	Fall 2020
Tatiana Derli	Spring 2021
Paola Colon De Leon	Fall 2021
Mahil Kothalawala	Fall 2021

## Undergraduate Students

## (Research Advisor)

MayPoh Lai	2012- 2013
Shikera Daley	Spring 2014
Naralys Batista	2014
Aanchal Tyagi	2014
Kaniz Rizwana	2014
Osita J. Enweronye	2014

**Current Position**

Grad Student
Unknown
MD (Columbia Medical School)
MD (NYIT Medical College)
Unknown
Unknown

George E. Maio	2015- 2017	Grad Student (Cornell University)
Nabeela Van	2016- 2017	Research Tech (Perrigo Pharma)
Sanam Bhandhari	2016- 2017	PA Student, (SUNY, Buffalo)
Shanell George	2016-2017	Nursing student
Sana Batool	2016-2019	MD Student, (Harvard)
Precious Okeoma	2016-2019	Pre-Med
Chinelle Hutchinson	2017-2019	Pre-Med
John Bradshaw	2017-2019	Research Scientist (Pfizer)
Glory Odeh	2018-2019	Pre-Med
Ilse Siguachi	2018-2019	Unknown
Deana Jamal	2018-2020	Pre-Med
Mohammad Jamal	2019-Present	Pre-Med
German Sosa	2019-Present	Pre-Med
David Kolade	2020-Present	Pre-Med
Emily Wen Jing Shuai	2020-2021	Pre-Med
Swara Patel	2021-Present	Pre-Med

Louis Stokes Alliance for Minority Participation (LSAMP) Scholars:  
Victoria Olaseun 2012- 2013

Bronx Stem Summer Research Scholars Program  
Afito D Djokoto Summer 2015

### High School Students:

(Research Advisor)

Zeynep Sonmez	2019-2020	Riverdale Kingsbridge Academy
Jared Lenn	2018-2020	Bronx Science
Afia Semin	Spring 2016	Bronx Center for Science & Math
Daniel Stremt	Spring 2015	American Studies
Maame Gyamfi	Summer 2015	Astor Collegiate Academy
Catherine Hilario	Summer 2015	Bronx Center for Science and math
Afia Semin	Summer 2015	Bronx Center for Science and Mathematics
Ines Cedillo	Summer 2015	Collegiate Institute for Math and Science
Istiak Ahmed	Summer 2014	Bronx Center for Science and math
Syed Hussain	Summer 2014	Bronx Center for Science and math
Ashley Lau	2013-2014	Bronx Science
Saadjo Sow	Fall 2012	Bronx Center for Science & Math

## CLASSROOM TEACHING

Classroom Instruction

**2013-2018**

CHE244/245 Introductory Biochemistry Lecture and Lab

CHE 245: Designed nine new labs, piloted and implemented.

CHE244: Sapling homework and iclicker was integrated into the lecture to enhance learning and student engagement.

**2012-2014**

CHE 249 Quantitative chemical analysis, lecture and lab

**2017**

CHE 449 Instrumental Analysis

**2017-2020**

BICM 71010 Advanced Biochemistry

BICM 72010 Basic Seminar in Biochemistry

**2012-Present**

Formal mentorship/experiential learning

CHE 391/491 Undergraduate chemical research

Biol 71101 (Graduate) Molecular Cellular and Developmental Biology

BICM 71110, 71120 (Graduate) Biochemistry

**2020-Present**

CHE446 Advanced Biochemistry 2

**SERVICE**

**CUNY SERVICE**

Member, Executive Board, MS nanotechnology program	(2020-Present)
Member, MS nanotechnology admission committee	(2020-Present)
Member, Research Task Force appointed by Provost	(2019-Present)
Member, Faculty Research Advisory Board	(2019-Present)
Pre-health Evaluation Committee	(2017-2020)
Curriculum Committee Member, PhD program in Biochemistry	(2017-Present)
Doctoral student recruiting sessions representative	(2012-13, 2014)
Student Advisor	(2016-Present)
Search Committee, Assistant Professor	(2016)
Search Committee, Assistant Professor	(2015)
Search Committee, Chair of Chemistry	(2015)
Curriculum Committee, PhD Program in Biochemistry	(2017-2020)
Admissions Committee PhD Program in Chemistry	(2015)
Dissertation Fellowship Committee, CUNY Graduate Center	(2016)
Doctoral Advisory Committee	Brian Olson (Biochemistry)
Doctoral Advisory Committee	Harini Senthil (Plant Sciences)
Doctoral Advisory Committee	Jose Cobo (Biochemistry)
Doctoral Advisory Committee	Uthama Edupuganti (Biochemistry)
Doctoral Advisory Committee	Vanya Petrova (Plant Sciences)
Doctoral Advisory Committee	Rosemary Membreno (Chemistry)

Doctoral Advisory Committee	Samantha Delaney (Chemistry)
External Doctoral advisory committee	Nachiket Kamatkar (Levy group, The department of biochemistry Albert Einstein School of medicine)
External Doctoral advisory committee	Anna Koudrina (DeRosa group, The department of chemistry, Carleton University, Canada)

## SERVICE TO THE PROFESSION/COMMUNITY

### 1. NIH- study sections

Ad-hoc reviewer Synthetic and Biological Chemistry A Study Section (2021)  
Reviewer Members of the HHS-NIH-CDC-SBIR (2021)  
Reviewer Special Emphasis Panel ZGM1 RCB-4 (CB) (2021)  
Reviewer Members of the HHS-NIH-CDC-SBIR (2022)  
Reviewer Special Emphasis Panel SURE-First ZGM1 RCB-4 (SF) (2022)

### 2. Symposiums Organized and Moderated

2018; PittCon, Orlando FL

*Title: Advances in Nucleic Acid Aptamers as Molecular Tools in Nanotechnology and Theranostics Development*

2017, PittCon, Chicago, IL

*Title: Symposium entitled "Advances in Nucleic Acid Ligand Screening Methods Against Extra-Cellular Targets"*

### 3. Symposiums Moderated/Presided

Aptamer in Bordeaux 2019  
Moderator/Chair session 6:

Cell 255<sup>th</sup> American Chemical Society meeting, Biochemical Technology division, 2018

Moderator/Chair Biomedical & Emerging Technologies Symposium New Strategies for the Delivery of Therapeutics: From Proteins & Genes to

7<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference, 2016

Chair of the Session: Therapeutic Delivery of Nucleic Acid-Based Drugs Part II

### 4. Poster Judge

Aptamer in Bordeaux meeting Bordeaux, France, 2017

255<sup>th</sup> American Chemical Society meeting, Biochemical Technology division  
New Orleans, LA, 2018

5. Advisory Board  
Advisory Board 7<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference, 2016
6. Panelist  
STEM Woman, women in science: "Women inspiring innovation: Breaking boundaries in STEM fields" Lehman College, New York, NY, 2013
7. Reviewer (2013-Present)  
Journal of American Chemical Society  
ACS Nano  
ACS-Analytical Chemistry  
ACS-Combinatorial science  
ACS-Applied Biomaterials  
Journal of Nucleic Acids  
Journal of Pharmaceutical and Biomedical Analysis  
Nucleic Acids Therapeutics  
PLOS One  
Journal of Bioelectrochemistry  
Biochemica Biphysica Acta General Subjects  
Critical Reviews in Oncology/hematology  
The International Journal of Molecular Sciences  
Nature Scientific Reports  
Theranostics (Springer)  
Journal Bioorganic Chemistry  
Macromolecules  
Molecular Therapy Nucleic Acids  
Nano Letters  
Analytical Chemistry

Invited Ad-hoc Grant Reviewer (2019), Natural Sciences and Engineering Research Council of Canada

Academic Editor: PLOS one

## **PRESENTATIONS**

### **INVITED TALKS**

1. P.R. Mallikaratchy; "Discovery and development of artificial nucleic acid ligands to probe cellular interactions"; Department of Biochemistry, Albert Einstein School of Medicine; **November 10<sup>th</sup> 2020**

2. P.R. Mallikaratchy; “Discovery and development of artificial nucleic acid ligands to probe cellular interactions”; CUNY-Staten Island; **September 09<sup>th</sup> 2020**
3. P.R. Mallikaratchy; “Discovery and development of artificial nucleic acid ligands to probe cellular interactions”; ASRC-Convergence to transform: Hacking biology to advance medicine Webinar; **June 26<sup>th</sup>, 2020.**
4. P.R. Mallikaratchy; “*Integrating ligand receptor interactions and in vitro evolution for streamlined discovery of artificial nucleic acid ligands against T-cell receptor-CD3 complex in human T-cells*”; Carleton University, Canada; **October 04<sup>th</sup> 2019**
5. P.R. Mallikaratchy; “*Integrating ligand receptor interactions and in vitro evolution for streamlined discovery of artificial nucleic acid ligands against T-Cell receptor-CD3 Complex in human T-cells*” Aptamers in Bordeaux, Bordeaux, France; **June 29<sup>th</sup> 2019**
6. H. Zumrut; S. Batool; K. V. Argyropoulos; P. Okeoma. P.R. Mallikaratchy; “*Ligand Guided Selection (LIGS): A SELEX Variant to Develop Aptamers against Cell-surface Markers*” 8th International Symposium on Bioanalysis, Biomedical Engineering and Nanotechnology (8th ISBBN 2018); Changsha, China; **May 27<sup>th</sup> 2018**
7. P.R. Mallikaratchy; “*Ligand-Guided Selection (LIGS): A SELEX Variant to Identify Specific Aptamers Against Cell-Surface Markers*” Advances in Nucleic Acid Aptamers as Molecular Tools in Nanotechnology and Theranostics Development; PittCon; Orlando, FL; **March 1<sup>st</sup> 2018**
8. P.R. Mallikaratchy “*Ligand-Guided Selection (LIGS): A SELEX Variant to Identify Specific Aptamers Against Cell-Surface Markers*” The Department of Biology, Queens College, New York, NY; **February 7<sup>th</sup> 2018**
9. H.E. Zümürüt; N. Ara; M. Fraile; G. E. Maio; S. Batool; N. Van; S.Bhandari; S. George; P.R. Mallikaratchy “*Ligand-Guided Selection (LIGS): SELEX Variant to Identify Specific Aptamers Against Cell-surface Markers*” Aptamers in Bordeaux; Symposium: In vitro Selection Methodology; Bordeaux, France; **September 22<sup>nd</sup> 2017**
10. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Department of Biomedical Engineering; City College for The City University of New York, New York, NY; **May 17<sup>th</sup> 2017**
11. P.R. Mallikaratchy “*Ligand Guided Selection of Target Specific Aptamers (LIGS)*” Department of Chemistry; City College, City University of New York New York, NY; **February 27<sup>th</sup> 2017**

12. P.R. Mallikaratchy "*Ligand Guided Selection of Target Specific Aptamers (LIGS)*" Public Health Research Institute; College of Medicine, Rutgers University, Newark, NJ; **January 31<sup>st</sup> 2017**
13. P.R. Mallikaratchy "*Ligand Guided Selection of Target Specific Aptamers (LIGS)*" Department of Chemistry, Brooklyn College, City University of New York, New York, NY; **November 18<sup>th</sup> 2016**
14. P.R. Mallikaratchy "*Ligand Guided Selection of Target Specific Aptamers (LIGS)*" Department of Chemistry, Queens College, City University of New York, New York, NY; **October 17<sup>th</sup> 2016**
15. P.R. Mallikaratchy "*Ligand Guided Selection of Target Specific Aptamers*" 7<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference; Boston, MA; **September 15<sup>th</sup> 2016**
16. P.R. Mallikaratchy "*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*" 6<sup>th</sup> Non-Coding RNA & RNAi Therapeutics Conference; Philadelphia, PA; **September 9<sup>th</sup> 2015**
17. P.R. Mallikaratchy "*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*" Biochemistry-Biophysics-Bio-design division; Advanced Science Research Center, City College, New York, NY; **April 15<sup>th</sup> 2015**
18. P.R. Mallikaratchy "*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*" Department of Chemical Engineering, City College, New York, NY; **March 16<sup>th</sup> 2015**
19. P.R. Mallikaratchy "*Development of DNA aptamer based therapeutic for human lymphoma and leukemia*" Department of Biology, Brooklyn College, New York, NY; **November 6<sup>th</sup> 2014**
20. P.R. Mallikaratchy "*Development DNA aptamer based therapeutic for human lymphoma and leukemia*"; Department of Biology, College of Staten Island, New York, NY; **September 19<sup>th</sup> 2013**

## CONTRIBUTED ORAL PRESENTATIONS

18. P.R. Mallikaratchy; "Integrating ligand receptor interactions and in vitro evolution for streamlined discovery of artificial nucleic acid ligands against T-cell receptor-CD3 complex in human T-cells", The 257<sup>th</sup> American Chemical Society National Meeting; San Diego, CA; **August 26<sup>th</sup>, 2019**
19. P.R. Mallikaratchy; "Aptamers Against Cell-Surface Markers" Gordon Research Conference on DNA nanotechnology, Ventura, CA; **January, 2019**

20. P.R. Mallikaratchy; “Ligand-guided selection (LIGS): A SELEX variant to identify specific aptamers against cell-surface markers” The 256<sup>th</sup> American Chemical Society National Meeting, Boston, MA; **August 21<sup>st</sup>, 2018**
21. P.R. Mallikaratchy; “Ligand-guided selection (LIGS): A screening technology to identify specific aptamers against cell-surface markers” The 252<sup>nd</sup> American Chemical Society National Meeting and Exposition, Philadelphia, PA; **August 21<sup>st</sup> 2016**

**CONTRIBUTED LOCAL/NATIONAL PROFESSIONAL MEETING PRESENTATION BY LAB MEMBERS:**

**\* Designates presenter(s)**

*Total of 30 posters/oral presentations by undergraduate/graduate/postdoc members in the lab*

22. L. Freage\*, D. Jamal, P.R. Mallikaratchy “*Homodimeric variant of an aptamer generated from LIGS activates TCR-CD3 $\epsilon$  complex*” 260<sup>th</sup> American Chemical Society Meeting; **August 17<sup>th</sup>-20<sup>th</sup> 2020**: (On-demand poster)
23. N. Williams\*, S. Batool, H. E. Zümrüt, M. Jamal, G. Sosa, P. R. Mallikaratchy “*Multi-target ligand-guided selection (LIGS) to generate aptamers against B-cell biomarkers*” 260<sup>th</sup> American Chemical Society Meeting; **August 17<sup>th</sup>-20<sup>th</sup> 2020**: (On-demand poster)
24. J. Bradshaw\*, H.E. Zümrüt, and P.R. Mallikaratchy “*Optimization of salt and pH to generate highly specific aptamers against Burkitt’s lymphoma*” 66<sup>th</sup> New York City American Chemical Society Undergraduate Research Symposium; York College; New York, NY; **May 5<sup>th</sup> 2018**: (Oral)
25. S. Batool\*, K. Argyropoulos, R. Dekhang, and P.R. Mallikaratchy “*Design of dimeric aptamer against B-cell receptor*” 66<sup>th</sup> New York City American Chemical Society Undergraduate Research Symposium; York College, New York, NY; **May 5<sup>th</sup> 2018** (Oral)
26. S. Batool\*, K. Argyropoulos, R. Dekhang, and P.R. Mallikaratchy “*Design of a dimeric aptamer against B-cell receptor*” Lehman College Undergraduate Symposium; Lehman College, New York NY; **April 23<sup>rd</sup> 2018** (Poster)
27. S. Batool\*, H. E. Zümrüt, S. Bhandari, N. Van, S. George, and P.R. Mallikaratchy “*Design of a dimeric aptamer against B-cell receptor*” The 255<sup>th</sup> American Chemical Society; New Orleans, LA; **March 20<sup>th</sup> 2018** (Poster)
28. P.R. Mallikaratchy\*, H. E. Zümrüt, R. Dekhang, S. Batool “*Ligand-Guided Selection (LIGS): A Screening Technology to Identify Specific Aptamers Against*

*Cell-surface Markers*” Oligonucleotide Therapeutic Society Meeting; Bordeaux, France; **September 24<sup>th</sup> 2017** (Poster)

29. S. George\*, S. Batool, N. Van, S. Bhandari, H. E. Zümürüt, and P.R. Mallikaratchy “*Systematic investigation of effect of temperature on an aptamer folding*” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University; New York, NY; **May 6<sup>th</sup> 2017** (Oral)
30. S Bhandari\*, H E. Zümürüt, S Batool, N Van, S George, and P.R. Mallikaratchy “Design of a dimeric aptamer against B-cell receptor” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University, Bronx, NY; **May 6<sup>th</sup> 2017** (Oral)
31. S. Batool\*, H. E. Zümürüt N. Van, S. George, S. Bhandari, and P.R. Mallikaratchy “*Investigation of specificity of an aptamer selected again a B-cell marker*” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University, Bronx, NY; **May 6<sup>th</sup> 2017** (Oral)
32. N. Van\*, S. Batool, H. E. Zümürüt, S. George, S. Bhandari and P.R. Mallikaratchy “Investigation of effect monovalent salts of aptamer folding” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University, Bronx; **May 06<sup>th</sup> 2017** (Oral)
33. G. E. Maio\*, O. Enweronye, H. E. Zümürüt, S. Batool, N. Van, and P.R. Mallikaratchy “*Systematic optimization and modification of a DNA aptamer with 2'-O-methyl RNA analogues*” 65<sup>th</sup> NY ACS undergraduate research symposium; Fordham University; Bronx, NY; **May 6<sup>th</sup> 2017** (Oral)
34. N. Van\*, S. George\*, S. Batool, H. Zümürüt, S. Bhandari, and P.R. Mallikaratchy “Investigation of effect of monovalent salts on aptamer folding”: 9<sup>th</sup> Annual Student Scholarship Showcase; Lehman College, Bronx, NY; **April 21<sup>st</sup> 2017** (Poster)
35. S Batool\*, SBhandari\*, Ps Okeoma\*, H E. Zümürüt, N Van, S George, and P.R. Mallikaratchy “*Investigation of specificity of an aptamer selected again a B-cell marker*” 9<sup>th</sup> Annual Student Scholarship Showcase; Lehman College, Bronx, NY; April 21st 2017 (Poster).
36. H. E. Zümürüt\*, S. Batool, N. Van, and P.R. Mallikaratchy “Optimization of structure of an aptamer discovered utilizing Ligand Guided Selection (LIGS) yields high affinity aptamer” The 253<sup>rd</sup> American Chemical Society National Meeting and Exposition; San Francisco, CA; **April 04<sup>th</sup>, 2017** (Poster)
37. G. E. Maio\*, H. E. Zümürüt, S. Batool, N. Van, and P.R. Mallikaratchy “*Designing bi-specific aptamers for increased stability in human serum*” The 252<sup>nd</sup> American Chemical Society National Meeting and Exposition; Philadelphia, PA; **August 21<sup>st</sup> 2016** (Poster)

38. G. E. Maio\*, O. J. Enweronye, H. Zümürüt, P.R. Mallikaratchy “*Designing bispecific aptamers for increased stability in human serum*” The 64<sup>th</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; Lehman College, Bronx, NY; May 7<sup>th</sup> 2016 (Oral)
39. G. E. Maio\*, O. J. Enweronye, H. Zümürüt, and P.R. Mallikaratchy “*Designing bispecific aptamers for increased stability in human serum*” The 8<sup>th</sup> Annual Research and Scholarship Day; Lehman College, Bronx, NY; April 15<sup>th</sup> 2016 (Poster)
40. Afia Semin\* and P.R. Mallikaratchy “*Investigation of length of a DNA aptamer on the binding capacity*” The 4<sup>th</sup> Annual Bronx SciFest; Lehman College; New York NY; April 15<sup>th</sup> 2016 (Poster)
41. H.E. Zümürüt\*, S. Chakrabarti, Mst. N. Ara, G. E. Maio, and P.R. Mallikaratchy “*Generation of T-cell Specific Aptamers Using a Novel Cell-SELEX Method: Antibody Guided Cell-SELEX Technology*” The 67<sup>th</sup> PittCon Conference & Expo; Atlanta, GA; March 10<sup>th</sup> 2016 (Poster)
42. S. Chakrabarti, H. E Zümürüt\*, G. E. Maio, Mst N. Ara, and P.R. Mallikaratchy “*Selection of Aptamers Targeting B-Cell Receptor (BCR) Using Antibody Guided Cell- SELEX Technology– A Novel Approach*” The 67<sup>th</sup> PittCon Conference & Expo, Atlanta, GA; March 10<sup>th</sup> 2016 (Poster)
43. H.E. Zümürüt\* and P. Mallikaratchy “*Monoclonal Antibody Guided SELEX (mAb-guided-SELEX): a novel technology for selecting epitope specific DNA aptamers against cell-surface markers*” The Biodesign Mega meeting Advanced Research Science Center, City College, City University of New York, New York, NY; November 13<sup>th</sup> 2015 (Oral)
44. H. E. Zümürüt\*, Mst. N. Ara, S. Chakrabarti, G. E. Maio, and P. R. Mallikaratchy “*Selection of aptamers targeting T-cell receptor (TCR) and B-cell receptor (BCR) using a novel cell-SELEX method*” The 7<sup>th</sup> Annual Research and Scholarship Day; Lehman College, Bronx, NY; April 24<sup>th</sup> 2015 (Poster)
45. D.l Stremt\*, H. Zümürüt, O. J. Enweronye, A.l Tyagi, N. Batista, and P.R. Mallikaratchy “*Investigation of the role of divalent metal is stability of aptamer-target binding*” The 3<sup>rd</sup> Annual Bronx SciFest; Lehman College, Bronx, NY; April 24<sup>th</sup> 2015 (Poster)
46. O.J. Enweronye\*, K. Rizwana, N. Batista, A. Tyagi, H. E. Zümürüt, and P.R. Mallikaratchy “*Design and Development of bispecific aptamers*” The 7<sup>th</sup> Annual Research and Scholarship Day; Lehman College, Bronx, NY; April 24<sup>th</sup> 2015 (Poster)
47. N. Batista\*, A. Tyagi, O. J. Enweronye, H. E. Zümürüt, and P.R. Mallikaratchy “*Design and Development of pH sensitive aptameric micelles*” The 7<sup>th</sup> Annual

Research and Scholarship Day; Lehman College, Bronx, NY; **April 24<sup>th</sup> 2015**  
(Poster)

48. O.J. Enweronye\*, K. Rizwana, N. Batista, A. Tyagi, H. E. Zümrit, and P.R. Mallikaratchy "*Design and Development of bispecific aptamers*" The 63<sup>rd</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; Queensborough Community College, Queens, NY; **May 9<sup>th</sup> 2015** (Oral)
49. N. Batista\*, A Tyagi, O. J. Enweronye, H. E. Zümrit, and P.R. Mallikaratchy "*Design and Development of pH sensitive aptameric micelles*" The 63<sup>rd</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; Queensborough Community College, New York, NY; **May 9<sup>th</sup> 2015** (Oral)
50. M. P. Lai\*, L. U. R. Nordstrøm, V. Olaseun, P.R. Mallikaratchy "*DNA aptamer-based liposome as a novel drug delivery vehicle*" The 61<sup>st</sup> Annual Undergraduate Research Symposium, American Chemical Society of New York City; City College, City University of New York, NY; **April 27<sup>th</sup> 2013** (Oral)
51. V. Olaseun\*, M. P. Lai, P.R. Mallikaratchy" *Investigation of receptor internalization and recycling in breast cancer cells using DNA aptamers*" The 5<sup>th</sup> Annual Celebration of Undergraduate Research, Scholarship and Creativity; Lehman College, New York NY; **April 30<sup>th</sup> 2013** (Poster)
52. Saadjo Sow\* and P.R. Mallikaratchy "*Investigation of receptor internalization and recycling in breast cancer cells using DNA aptamers*" The 1<sup>st</sup> Annual Bronx SciFest; Lehman College, Bronx, NY; **February 22<sup>nd</sup> 2013** (Poster)

## References

1. Bruce A. Sullenger, PhD  
Joseph and Dorothy Beard Professor  
Department of Surgery  
Duke University Medical Center  
Durham, NC 27710  
Phone: 919-684-6375  
Fax: 919-684-6492  
Email: [bruce.sullenger@duke.edu](mailto:bruce.sullenger@duke.edu)  
*Relationship: Expert in aptamers and an independent evaluator of my research. I have met Bruce at conferences.*
  
2. Steven Benner, PhD  
Distinguish Fellow  
The Foundation for applied molecular evolution,  
13709 Progress Blvd., Box 7  
Alachua, FL 32615  
Phone: 386-418-8085  
Fax: 844-418-8085  
Email: [sbenner@ffame.org](mailto:sbenner@ffame.org)  
*Relationship: Collaborator*
  
3. Michael Famulok, PhD  
Life & Medical Sciences (LIMES)-Institut  
Chemical Biology & Medicinal Chemistry Unit  
Gerhard-Domagk-Straße 1  
53121 Bonn, Germany  
Email: [m.famulok@uni-bonn.de](mailto:m.famulok@uni-bonn.de)  
Phone: +49 (0)2 28 / 73 - 1787  
Fax: 49 (0)2 28 / 73 - 53 88  
[www.famuloklab.de](http://www.famuloklab.de)  
*Relationship: Expert in aptamers and an independent evaluator of my research. I have met Michael at conferences.*
  
4. David A. Scheinberg, MD-PhD  
Molecular Pharmacology Program;  
Experimental Therapeutics Center;  
Leukemia Service;  
Memorial Sloan Kettering Cancer Center;  
1275 York Avenue, NY, NY, 10065;  
Email: [scheinbd@mskcc.org](mailto:scheinbd@mskcc.org)  
Phone: 646-888-2190 office 646-888-2195  
Fax: 646-422-0296  
*Relationship: Postdoctoral mentor/Collaborator*

**From:** Itzhak (Itzik) Mano  
**Sent time:** 05/06/2022 12:36:21 PM  
**To:** Maria Felice Ghilardi (██████████@gmail.com) <██████████@gmail.com>; Gonzalo Torres; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wiczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** Re: MCBS updates  
**Attachments:** GC Exec Comm 4-5-22\_approved.pdf

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let me know if you have any question about these or other topics.

all the best

Itzik

---

Itzhak (Itzik) Mano, Ph.D. Associate Medical Professor Department of Molecular, Cellular and Biomedical Sciences Center for Discovery & Innovation, Cluster on Neural Development and Repair The CUNY School of Medicine at City College & The CUNY Graduate Center The City University of New York CDI building, Office: 3-382 Lab: 3-235 85 St. Nicholas Terrace, New

On 5/2/2022 10:58 AM, Gonzalo Torres wrote:

Dear All,

I hope you are doing well. I have seen many of you over the past few weeks, but now I would like to see most if not all of you on campus. Let's meet tomorrow **Tuesday May 3<sup>rd</sup> at noon** for an informal faculty meeting in H205Q.

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1. Congratulations to Ashiwel, who just received an R16 award from NIH. The title of the grant is: Nonpeptide Neurotrophic Mechanisms in Spinal Cord Repair. Good job Ashiwel!
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Best,  
Gonzalo

PhD Program in Biology  
Executive Committee Meeting  
Tuesday, April 5, 2022  
Minutes Approved April 18,2022

**Graduate Deputy Chairs**

Prof. Jean Gaffney\*, Baruch College  
Prof. Chester Zarnoch, Baruch College (Serving the remainder of the year)  
Prof. Orie Shafer, ASRC  
Prof. Amy Ikui, Brooklyn College  
Prof. Shireen Saleque, City College  
Prof. Patricia Rockwell, Hunter College  
Prof. Edward Kennelly, Lehman College  
Prof. John Dennehy, Queens  
Prof. Louis Bradbury, York College  
Prof. Andreas Kottmann, CUNY School of Medicine

**Subprogram Advisory Committee Chair**

EEB Prof. Mike Hickerson, City College  
MCD Prof. Jill Bargonetti, Hunter  
NS Prof. Ekaterina Likhtik, Hunter  
PS Prof. Renuka Sankaran, Lehman

**Subprogram Student Representatives**

Rilquer Mascarenhas Da Silva\* – City College  
Matthew Cleere, ASRC  
Lydia Paradiso, NYBG  
Lizette Couto\*, CSOM

**Executive Officer**

Cathy Savage-Dunn

**\*Denotes absence**

In attendance:

**1. Announcements**

- a) In person graduation on June 9 at Barclay Center. Inviting the past three years b/c there was no in-person graduation.
- b) Do we want to have a biology celebration? In-person or virtually? Contact Cathy.
- c) Changes to CUNYFirst in April. Navigation changes.
- d) Students have received email for uploading evidence of booster shot for Fall enrollment.
- e) Spring 23 – There will be additional modalities listed for courses. All instructors need to be clear. Options are: In-person, Fully online (asynch, Synch, mixed), Hybrid (recommend 25-75% in person) – can have asynch, synch, mixed), Hy-Flex (students choose to be in person or online), Hy-Field (for field work).

PhD Program in Biology  
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- f) Student course evaluations this semester. They will send evaluations to instructors, who then give to students, and students can do them in class.
- g) Grad Center offer student teaching and faculty mentoring awards (\$1,000 prize), one awardee per category (sciences). Deadline is May 2. Encourage submissions.
- h) Retreats -EE/PS planning retreat at NYBG – May 25. Working through invoicing from NYBG. Program will pay for it. Faculty register with donation to pay back the Program. Students are covered by program. MCD/CNC is in early stages of planning. Interested in piggybacking on the EEB/PS, the committee chairs will explore.
- i) Joan Reid will be taking travia leave after this semester. Contact Cathy to discuss the celebratory event.

**2. Update on admissions (subprogram chairs)**

- a) EEB – Have 5 offers + one fellowship. One offer is undecided, three have accepted offers, one offer declined. EEB could use more offers due to available faculty funding.
- b) MCD – Have 11 slots. Eight have accepted, one is about to accept, 3 offers out and waiting on response.
- c) PS – Made 7 offers, one rejected, five accepted, one is a Fulbright fellow that they are waiting on their response.
- d) NS – Had 5 slots. One deferred from last year. Eight offers were made. 4 declined, one accepted, made on offer to waitlist and that student accepted. 3/5 slots filled.

**3. Fall courses**

- a) Review course listings and make sure all is correct.

**4. OTPS and Gifts**

- a) Received some OTPS. Will offer licenses to students for GraphPad.
- b) New award - Ellen Katz (\$5,000) to promote Women in Science. Renewed each year. Need to decide on how to use that award. Apply? Nominations?, Focus on particular group (5<sup>th</sup> years, students changing mentors, other difficulties).

**5. Discussion w/ Development & Communications representatives**

- a) Jim Cronin, Tara McDonnell, Bonnie Eisner, Paul Mastrodonato – in attendance to talk about fundraising ideas. They have been focused on alumni. Wanted to get additional ideas.
- b) Planned gifts, or fellowships. Alumni creating fellowships. Want ideas on who/where to pursue these?
- c) Raising private funds (Individuals, Families, Foundations, Corporations). Need to learn more about preidentified funding needs to be on the “lookout” for identifying funders and creating “matches”.
- d) Faculty should share ideas.

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- e) Could faculty pursue corporate funding to support events, etc.. Bring in one of the staff to help plan to raise money for planning an event and create opportunities for sponsorship. Can help clarify sponsorship vs. donation.
- f) How should we communicate with the staff? They have a one-page form that will be shared. Intake form – broken into ideas – 1) needs for current programs and 2) needs for new ideas/initiatives.

**6. Motion on support for 6<sup>th</sup> year students (see below)**

- a) Suggestion to change language of motion. Funding to supplement a teaching award.
- b) Motion applies only to those entering 6<sup>th</sup> year (not 7<sup>th</sup> years).
- c) Tuition covered if the students will be teaching. Non-teaching adjunct also makes eligible for tuition to be covered. 7<sup>th</sup> years are also eligible for this tuition support as well.
- d) This will be added into the mentor agreement.
- e) Motion passed.

Motion: Faculty who have funding should provide financial support to students who are making satisfactory progress and entering their 6<sup>th</sup> year, at the level that was committed in the student's first year. Failure to do so would result in faculty being unable to have new students join their lab. *(To be edited based on today's discussion)*

Rationale for Motion - faculty should not "save" their funding for a new student to the detriment of senior students continuing to contribute to the group's productivity.

**7. Handbook revisions**

- a) Review of already approved changes.
- b) Wanted to consider resources page – Explanations on how to report an issue and get help. Idea of having a science or biology Ombuds person? Idea to have a report a conflict button that would go to a student body. The student body would make a recommendation for helping the student. Graphic flow chart explaining the different type of help (informal, formal, etc.).
- c) Add issue with salary payments as the 'report a conflict' button.
- d) Include research integrity officer contacts from each campus
- e) Maybe the students shouldn't be responsible for steering these student problems to the proper next steps?
- f) Need to overcome the complicated, convoluted reporting process and mechanisms for students to find support.

PhD Program in Biology  
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- g) Cathy proposes the 4 student members of Exec Comm be the students that receive these reports and then advise the reporting student. Student members support this idea.
  - h) Need to determine if students then become “required reporters”?
  - i) Student role - Recommending the appropriate place to report or how to address the issue. Helping students feel like they are not alone in reporting an issue.
  - j) Cathy will find out about how to get more training on this for next year. Generate a more visible support network.
  - k) Suggestion that the EO monitor the reporting button.
  - l) Proposal – Have both “report a pay” and “report a conflict” buttons on webpage – conflict button goes to EO email. Pay button goes to report a pay issue email.
0. MOTION Passed

#### 8. Self Study

- a) Will be writing the self-study in fall. Need to suggest external reviewers. Will have the external comm visit in February after the self-study has been written. Provide suggestions for reviewers or ideas to Cathy.
- b) Liz Alter suggested as a reviewer.

#### 9. Advisory Committee elections

PS – Renuka Sankaran, Eleanore Wurtzel, and Andrew Reinmann were reelected.  
*Students* - Adv. Comm. – Gavin Duckett and Yi Zhao. Exec Comm. – Lydia Paradiso reelected.

EEB – Lisa Manne agreed to serve as chair as Mike Hickerson goes on sabbatical. Joanna Coleman and Ana Carolina O.Q Carnaval elected to be on advisory committee. Lisa Manne and Ana Carolina O.Q Carnaval in 3 year appt. Joanna Coleman will be alternate.  
*Students* – Adv. Comm – Polet Yamaly Barragan, Aaron Goodman – Exec Comm – Kathryn Mercier

MCD – Votes – Itzhak Mano and Mark Emerson, on 3 year, Maral Tajerian and Patrizia Casaccia as alternate  
*Students* – Adv Comm – Katherine Anderson and Leonard Ash, Exec Comm – Sara Fresard

NS – Need to determine organization/structure for faculty

*Students* – Adv Comm – Carolina Maria Fernandes Henriques and Robert Veline, Exec Comm – Jasmine Pathan

Campus Representatives – No need to be on Exec and be elected for campus representatives. Exec Comm. Students will meet with campus representatives.  
Hunter – Sara Fresard

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NYBG – Lydia Paradiso  
City – Katherine Anderson  
CUNY School of Med – Jasmine Pathan  
AMNH – Royce Cummings  
ASRC – James Siclari  
Baruch – Beryl Khan  
Brooklyn - no votes  
CIS –Albert Ptashnik  
Lehman – Ertan Kastrat  
Queens – Katerina Yamamoto

Office will confirm that all are willing to serve. A vote will be happening for the Chair of each committee – look for survey email.

**10. Student Issues**

- a) No student issues

**11. New faculty member applications**

- a) New EEB faculty will be presented in May

**12. New business**

- a) Cathy will be EO for one more year. If folks are interested in position, please let Cathy know. Nominations will be explored by GC. This will happen in early Spring next year
- b) A search for Joan Reid will be performed soon. Joan and Cathy on search committee -can add another if interested.

Meeting date for 2022:  
May 17

Minutes Submitted by Chester Zarnoch

**From:** Ashiwel Undieh  
**Sent time:** 05/06/2022 12:58:35 PM  
**To:** Maria Felice Ghilardi [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Itzhak (Itzik) Mano; Gonzalo Torres; Andreas Kottmann; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wiczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** RE: MCBS updates

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Thanks, Itzik, for the updates. How is graduate student recruitment going in MCD?  
Ashiwel

=====

Ashiwel S. Undieh, PhD  
Professor in Neuroscience / Pharmacology / Pharmaceuticals  
City University of New York (CUNY) School of Medicine  
The City College of New York, 160 Convent Avenue  
Marshak Building Room 918 (Lab); Harris Hall Room 210 (Office)  
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**Cc:** Raquel Morales <rmorales@med.cuny.edu>; Juana Torres <velas@med.cuny.edu>; Roberto Rodriguez <RRodriguez@med.cuny.edu>; Maria Agosto <magosto@med.cuny.edu>  
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Itzhak (Itzik) Mano, Ph.D.  
Associate Medical Professor  
Department of Molecular, Cellular and Biomedical Sciences  
Center for Discovery & Innovation, Cluster on Neural Development and Repair  
The CUNY School of Medicine at City College & The CUNY Graduate Center  
The City University of New York  
CDI building, Office: 3-382 Lab: 3-235  
85 St. Nicholas Terrace, New York, NY 10031  
E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu)  
Office Phone: (212) 6507965 Lab Phone: (212) 6505334  
[www.manolab.org](http://www.manolab.org)

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**Subject:** Re: MCBS updates

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The total number of students recruited to each program depends on the number of commitment letters that the program gets from the different PIs/Chairs/campuses. This year CSoM could not commit to supporting any student, but we are still eligible to recruit students from the incoming pool.

Based on the number of commitments from throughout CUNY, the GC allocated for the MCD program slots to recruit 9 students, the CNC program to recruit 4 (or 6?) students, and the Biochem (part of the Chemistry program) to recruit 21 students.

The MCD program had a great pool of applicants. Usually our top students get offers also from top private universities and they go elsewhere. This year only some of them did, and all 9 MCD recruits are from the top group.

The CNC program had an issue this year and many students have declined their acceptance. Correlation is not causation, but this happened in correlation with the walk-out of the current neuro students from the open-day recruitment event, in protest of the lack of stability in their pay. Bottom line, they are accepting only 2 students.

The Biochem program had difficulty recruiting so many students of sufficient quality.

As a result of under-recruitment in CNC & Biochem, the MCD program will probably be allowed to recruit up to 4 more students, all of whom got good reviews in our interviews. We have additional good candidates on the waiting list whom we have not interviewed yet, but we could, if needed.

best

Itzik

On 5/6/2022 12:58 PM, Ashiwe Undieh wrote:

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Ashiwe

=====  
Ashiwe S. Undieh, PhD  
Professor in Neuroscience / Pharmacology / Pharmaceuticals  
City University of New York (CUNY) School of Medicine  
The City College of New York, 160 Convent Avenue  
Marshak Building Room 918 (Lab); Harris Hall Room 210 (Office)  
New York, NY 10031-9101  
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**From:** Itzhak (Itzik) Mano <[imano@med.cuny.edu](mailto:imano@med.cuny.edu)>  
**Sent:** Friday, May 6, 2022 12:36 PM  
**To:** Gonzalo Torres <[GTorres@med.cuny.edu](mailto:GTorres@med.cuny.edu)>; Andreas Kottmann <[AKottmann@med.cuny.edu](mailto:AKottmann@med.cuny.edu)>; Ashiwe Undieh <[aundieh@med.cuny.edu](mailto:aundieh@med.cuny.edu)>; Carol Moore <[moore@med.cuny.edu](mailto:moore@med.cuny.edu)>; Eitan Friedman <[friedman@med.cuny.edu](mailto:friedman@med.cuny.edu)>; Geri Kreitzer <[gkreitzer@med.cuny.edu](mailto:gkreitzer@med.cuny.edu)>; Gokhan Yilmaz <[gyilmaz@med.cuny.edu](mailto:gyilmaz@med.cuny.edu)>; Hoau-yan Wang <[hywang@med.cuny.edu](mailto:hywang@med.cuny.edu)>; Joao Nunes <[nunes@med.cuny.edu](mailto:nunes@med.cuny.edu)>; John (Jack) Martin <[jjmartin@med.cuny.edu](mailto:jjmartin@med.cuny.edu)>; Jose Cobo <[jcobo@med.cuny.edu](mailto:jcobo@med.cuny.edu)>; Junghoon Kim <[jkim@med.cuny.edu](mailto:jkim@med.cuny.edu)>; Kaliris Salas <[ksalasram@med.cuny.edu](mailto:ksalasram@med.cuny.edu)>; Khosrow Kashfi <[kashfi@med.cuny.edu](mailto:kashfi@med.cuny.edu)>; Linda Spatz <[lspatz@med.cuny.edu](mailto:lspatz@med.cuny.edu)>; Lisa Coico <[LSCoico@med.cuny.edu](mailto:LSCoico@med.cuny.edu)>; Kiran Matthews <[kmatthews@med.cuny.edu](mailto:kmatthews@med.cuny.edu)>; Jun Yoshioka <[jjoshioka@med.cuny.edu](mailto:jjoshioka@med.cuny.edu)>; Maria Felice Ghilardi ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Patricia Broderick <[broderick@med.cuny.edu](mailto:broderick@med.cuny.edu)>; Patricia Cortes <[pcortes@med.cuny.edu](mailto:pcortes@med.cuny.edu)>; Paul Gottlieb <[pgottl@med.cuny.edu](mailto:pgottl@med.cuny.edu)>; Sanna Goyert <[sgoyert@med.cuny.edu](mailto:sgoyert@med.cuny.edu)>; Maria D Lima <[mlima@med.cuny.edu](mailto:mlima@med.cuny.edu)>; Rosemary Wiczorek <[RWiczorek@med.cuny.edu](mailto:RWiczorek@med.cuny.edu)>  
**Cc:** Raquel Morales <[rmorales@med.cuny.edu](mailto:rmorales@med.cuny.edu)>; Juana Torres <[velas@med.cuny.edu](mailto:velas@med.cuny.edu)>; Roberto Rodriguez <[RRodriguez@med.cuny.edu](mailto:RRodriguez@med.cuny.edu)>; Maria Agosto <[magosto@med.cuny.edu](mailto:magosto@med.cuny.edu)>  
**Subject:** Re: MCBS updates

Hi everyone

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We did agree that an important tool to keep high productivity is the grade, given by the PI to the student each semester, and the feedback from the annual meeting with the PhD committee. Although currently all PIs fill up the grade as "Satisfactory Progress" (SP), PIs should now use the "Non Satisfactory" (NS) whenever the student is not investing enough effort. This will give the student a critical feedback (earlier than the final year) on her/his progress and serve as a commonly used accountability tool.

On other notes:

1) The CUNY Neuroscience Collaborative (CNC) program is currently in an unofficial status (running jointly by Bio & Psych), but the proposal for an independent stand-alone program has made it through an important stage of approval within the GC, and it is now moving further up. Expected to begin operation in 2023.

2) Please note that the MCD & CNC programs will hold a retreat @ ASRC, I think June 8 (there will be an announcement). Anyone (PhD students from any program and postdoc) from labs where the PI is affiliated with either the MCD or CNC program can participate. The two said programs will cover the cost (~\$60?) of participation of students in these programs, while the PI will cover other participants from her/his lab (students from other programs, postdocs, PI). Anyone is welcome to present posters, and there will be short talks: PhD students (including 2nd-3rd year) will be given highest priority, and then postdocs.

3) The neuroscience courses required by the CNC will move from being two semesters of 4 credit courses (NS 1 & 2) to 4 courses of 3 credits each, giving more room to new aspects of data acquisition (optogenetics) and signal analysis.

let me know if you have any question about these or other topics.

all the best

Itzik

---

Itzhak (Itzik) Mano, Ph.D.  
Associate Medical Professor  
Department of Molecular, Cellular and Biomedical Sciences  
Center for Discovery & Innovation, Cluster on Neural Development and Repair  
The CUNY School of Medicine at City College & The CUNY Graduate Center  
The City University of New York  
CDI building, Office: 3-382 Lab: 3-235  
85 St. Nicholas Terrace, New York, NY 10031  
E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu)  
Office Phone: (212) 6507965 Lab Phone: (212) 6505334

On 5/2/2022 10:58 AM, Gonzalo Torres wrote:

Dear All,

I hope you are doing well. I have seen many of you over the past few weeks, but now I would like to see most if not all of you on campus. Let's meet tomorrow **Tuesday May 3<sup>rd</sup> at noon** for an informal faculty meeting in H205Q.

A couple of important announcements:

1. Congratulations to Ashiwel, who just received an R16 award from NIH. The title of the grant is: Nonpeptide Neurotrophic Mechanisms in Spinal Cord Repair. Good job Ashiwel!
1. The search committee for the tenure track faculty position has identified 3 candidates, who will be visiting the school on May 5, May 12, and probably May 23. Our first candidate is Prabodhika Mallikaratchy (see attached CV). She will be giving a research talk May 5 at 12:00pm in H110. The title of her talk is: "Hacking cellular receptor biology to build programmable molecular devices". I will be asking some of you to meet with Prabodhika during her visit. We will send a flyer with details of the talk shortly and I will discuss the candidates tomorrow.

Best,  
Gonzalo

**From:** Ashiwel Undieh  
**Sent time:** 05/06/2022 03:52:24 PM  
**To:** Maria Felice Ghilardi ([REDACTED].com) <[REDACTED]@gmail.com>; Itzhak (Itzik) Mano; Gonzalo Torres; Andreas Kottmann; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wiczorek  
**Subject:** RE: MCBS updates

Thanks, Itzik, for the detailed update.

=====  
Ashiwel S. Undieh, PhD  
Professor in Neuroscience / Pharmacology / Pharmaceutics  
City University of New York (CUNY) School of Medicine  
The City College of New York, 160 Convent Avenue  
Marshak Building Room 918 (Lab); Harris Hall Room 210 (Office)  
New York, NY 10031-9101  
Phone: +1-212-650-8283 (Lab); +1-212-650-8234 (Office)  
=====

"A good experiment answers at least one question and raises at least one new question" - ASU

**From:** Itzhak (Itzik) Mano <imano@med.cuny.edu>  
**Sent:** Friday, May 6, 2022 2:43 PM  
**To:** Ashiwel Undieh <aundieh@med.cuny.edu>; Gonzalo Torres <GTorres@med.cuny.edu>; Andreas Kottmann <AKottmann@med.cuny.edu>; Carol Moore <moore@med.cuny.edu>; Eitan Friedman <friedman@med.cuny.edu>; Geri Kreitzer <gkreitzer@med.cuny.edu>; Gokhan Yilmaz <gyilmaz@med.cuny.edu>; Hoau-yan Wang <hywang@med.cuny.edu>; Joao Nunes <nunes@med.cuny.edu>; John (Jack) Martin <jmartin@med.cuny.edu>; Jose Cobo <jcobo@med.cuny.edu>; Junghoon Kim <jkim@med.cuny.edu>; Kaliris Salas <ksalasram@med.cuny.edu>; Khosrow Kashfi <kashfi@med.cuny.edu>; Linda Spatz <lspatz@med.cuny.edu>; Lisa Coico <LSCoico@med.cuny.edu>; Kiran Matthews <kmatthews@med.cuny.edu>; Jun Yoshioka <jyoshioka@med.cuny.edu>; Maria Felice Ghilardi ([REDACTED]@gmail.com) <[REDACTED]@gmail.com>; Patricia Broderick <broderick@med.cuny.edu>; Patricia Cortes <pcortes@med.cuny.edu>; Paul Gottlieb <pgottl@med.cuny.edu>; Sanna Goyert <sgoyert@med.cuny.edu>; Maria D Lima <mlima@med.cuny.edu>; Rosemary Wiczorek <RWiczorek@med.cuny.edu>  
**Subject:** Re: MCBS updates

The total number of students recruited to each program depends on the number of commitment letters that the program gets from the different PIs/Chairs/campuses. This year CSOM could not commit to supporting any student, but we are still eligible to recruit students from the incoming pool.

Based on the number of commitments from throughout CUNY, the GC allocated for the MCD program slots to recruit 9 students, the CNC program to recruit 4 (or 6?) students, and the Biochem (part of the Chemistry program) to recruit 21 students.

The MCD program had a great pool of applicants. Usually our top students get offers also from top private universities and they go elsewhere. This year only some of them did, and all 9 MCD recruits are from the top group.

The CNC program had an issue this year and many students have declined their acceptance. Correlation is not causation, but this happened in correlation with the walk-out of the current neuro students from the open-day recruitment event, in protest of the lack of stability in their pay. Bottom line, they are accepting only 2 students.

The Biochem program had difficulty recruiting so many students of sufficient quality.

As a result of under-recruitment in CNC & Biochem, the MCD program will probably be allowed to recruit up to 4 more students, all of whom got good reviews in our interviews. We have additional good candidates on the waiting list whom we have not interviewed yet, but we could, if needed.

best

Itzik

On 5/6/2022 12:58 PM, Ashiwel Undieh wrote:

Thanks, Itzik, for the updates. How is graduate student recruitment going in MCD?  
Ashiwel

=====  
Ashiwel S. Undieh, PhD  
Professor in Neuroscience / Pharmacology / Pharmaceutics  
City University of New York (CUNY) School of Medicine

The City College of New York, 160 Convent Avenue  
Marshak Building Room 918 (Lab); Harris Hall Room 210 (Office)  
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**Cc:** Raquel Morales <[rmorales@med.cuny.edu](mailto:rmorales@med.cuny.edu)>; Juana Torres <[velas@med.cuny.edu](mailto:velas@med.cuny.edu)>; Roberto Rodriguez <[RRodriguez@med.cuny.edu](mailto:RRodriguez@med.cuny.edu)>; Maria Agosto <[magosto@med.cuny.edu](mailto:magosto@med.cuny.edu)>

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Itzhak (Itzik) Mano, Ph.D.  
Associate Medical Professor  
Department of Molecular, Cellular and Biomedical Sciences  
Center for Discovery & Innovation, Cluster on Neural Development and Repair  
The CUNY School of Medicine at City College & The CUNY Graduate Center  
The City University of New York  
CDI building, Office: 3-382 Lab: 3-235  
85 St. Nicholas Terrace, New York, NY 10031  
E-mail: [imano@med.cuny.edu](mailto:imano@med.cuny.edu)  
Office Phone: (212) 6507965 Lab Phone: (212) 6505334  
[www.manolab.org](http://www.manolab.org)

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Best,  
Gonzalo





NYC Health + Hospitals -- details to follow. (Brief bio:

<https://www.nychealthandhospitals.org/leadership/machelle-allen/> )

The CCNY Commencement speaker will be **Dr. Anthony Fauci**, MD, Director of the National Institute of Allergy and Infectious Diseases (NIAID) and Chief Medical Advisor to President Biden.

<https://www.ccnycuny.edu/news/anthony-fauci-ccny-commencement-speaker-june-3-honors-award-winning-filmmaker-stanley-nelson>

Annabel

*Annabel Santana-Colón, Associate Dean for Special Projects*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*

CUNY School of Medicine

The City College  
of New York

**From:** Jodie Meyer  
**Sent time:** 05/09/2022 09:17:54 PM  
Annabel Santana; Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Maxine Nwigwe; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victor I Schwartz; Victoria Frye; Wenhua Lu; Birgland Joseph; Emily Greene; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters  
**To:**  
**Cc:** Cynthia Civil  
**Subject:** Re: Graduation 2022 -- Please confirm your attendance

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Graduation is always one of the high points...and it should not be missed that (once again) one of our very own, Rose Mary Biju, is the City College valedictorian!!!  
Let's all show up and support her, Jodie

---

**From:** Annabel Santana  
**Sent:** Monday, May 9, 2022 6:07 PM  
**To:** Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Barbara M Juliano; Carmen R Green; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas; Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Maxine Nwigwe; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victor I Schwartz; Victoria Frye; Wenhua Lu; Birgland Joseph; Emily Greene; Gloria J Mabry; Jaclyn N Churchill; Mark Maraj; Olga Waters  
**Cc:** Cynthia Civil  
**Subject:** Graduation 2022 -- Please confirm your attendance

Dear Faculty,

Our school needs to provide the College with the total count of the faculty who will be marching at the CCNY graduation ceremony on Friday, June 3<sup>rd</sup> to ensure that the appropriate number of seats are reserved for our faculty.

Therefore, **if you plan to march in the CCNY and MD graduation ceremonies and haven't yet notified Cynthia Civil, please contact Cynthia (copied on this email) no later than this Wednesday, May 11, 2022.**

Please Note:

Our MD graduation speaker will be **Dr. Machele Allen, MD**, Chief Medical Officer and Senior Vice President of NYC Health + Hospitals -- details to follow. (Brief bio:

<https://www.nychealthandhospitals.org/leadership/machele-allen/> )

The CCNY Commencement speaker will be **Dr. Anthony Fauci**, MD, Director of the National Institute of Allergy and Infectious Diseases (NIAID) and Chief Medical Advisor to President Biden.

<https://www.ccnycunyu.edu/news/anthony-fauci-ccny-commencement-speaker-june-3-honors-award-winning-filmmaker-stanley-nelson>

Annabel

*Annabel Santana-Colón, Associate Dean for Special Projects*

*CUNY School of Medicine*

*The City College of New York*

*160 Convent Avenue, Suite H-107*

*New York, New York 10031*

*Tel: 212-650-5297*

*Email: [santana@med.cuny.edu](mailto:santana@med.cuny.edu)*



**From:** Gonzalo Torres  
**Sent time:** 05/10/2022 08:58:28 AM  
**To:** Maria Felice Ghilardi [REDACTED]@gmail.com [REDACTED]@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wieczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** MCBS Faculty Candidate Research Seminar - Thursday May 12, 12:00pm - H110  
**Attachments:** Curriculum Rene Barro-Soria.pdf Rene Barro Seminar.pdf

---

Dear All,

I hope you all had a nice weekend. Our second faculty candidate for a tenure track position in MCBS will be visiting the school this week. Rene Barro-Soria (see attached CV) will be giving a research talk this **Thursday May 12 at 12:00pm in H110**. The title of his talk is: "Voltage Sensing Mechanism of a Key potassium Channel". Flyer announcement is attached.

See you there,

Gonzalo

The City College  
of New York

CUNY School of Medicine

Department of  
Molecular, Cellular &  
Biomedical Sciences

---

# SEMINAR

*"Voltage sensing mechanism of a key  
potassium channel"*

**Rene Barro-Soria, Ph.D.**

**Assistant Professor**

**Department of Medicine**

**Division of Endocrinology, Diabetes and  
Metabolism**

**Miller School of Medicine,  
University of Miami**

**Thursday, May 12th, 2022**

**12:00-1:30pm**

**Harris Hall Conference Room-110**

**If you are not able to attend in person:**

**Zoom Link: <https://ccny.zoom.us/j/88633103389>**

**CURRICULUM VITAE***Rene Barro-Soria, Ph.D.*1. *Date:* October 10, 2021**I. Personal**

2. *Name:* Rene Barro-Soria, Ph.D.
3. *Home Phone:* 305-244-0300
4. *Office Phone:* 305-243-6270
5. *Address:* 6039 Collins Ave. Apt 1601, Miami FL, 33140
6. *Current Academic Rank:* Assistant Professor
- 6A. *Current Track of Appointment:* Tenure Track
7. *Primary Department:* Department of Medicine. Division of Endocrinology, Diabetes and Metabolism
8. *Secondary or Joint Appointment:* N/A
9. *Citizenship:* American
10. *Visa Type:* N/A

**II. Higher Education***11. Institutional:*

- University of Regensburg, Germany, Ph.D., Physiology, July 2008
- University of Havana, Havana, Cuba, Master of Science, Biochemistry, March 2004
- University of Havana, Havana, Cuba, Bachelor of Science, Biochemistry, July 2000

*12. Non-Institutional:* N/A*13. Certification and Licensure:* N/A**III. Experience***14. Academic:*

- University of Miami, Miller School of Medicine; Graduate Faculty in the Programs for 1) Cellular Physiology and Molecular Biophysics, 2) Neuroscience, and 3) Human Genetics and Genomics. 2018-present

- University of Miami, Miller School of Medicine; Department of Medicine, Division of Endocrinology, Diabetes and Metabolism; Assistant Professor; 2016-present
- University of Miami, Miller School of Medicine; Department of Physiology and Biophysics; Post-doctoral Fellow; 2011-2015
- University Hospital Regensburg, Germany; Department of Experimental Ophthalmology; Post-doctoral Fellow, 2010-2011
- University of Miami, Miller School of Medicine; Department of Physiology and Biophysics; Post-doctoral Fellow; 2009-2010

15. *Hospital Appointments*: N/A

16. *Non- Academic*: University of Miami, Miller School of Medicine; Department of Physiology and Biophysics; Scientist; 2015-2016

17. *Military*: N/A

## IV. Publications

### 18. Books and Monographs Published:

1. Chapter: Gating of ion channels. The Oxford Handbook of Neuronal Ion channels. ISBN: 9780190669164.  
<https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190669164.001.0001/oxfordhb-9780190669164-e-19>

### 19. Juried or Refereed Journal Articles or Exhibitions:

1. **Barro-Soria R**, Caicedo A, Jäggle H, Merkel L, Zhao N, Knop G, Gierke K, Dannullis A, Castrop H, Brandstätter JH, Kirchhoff F, Feigenspan A, Strauß O. Angiotensin-Receptor-Associated Protein Modulates Ca<sup>2+</sup> Signals in Photoreceptor and Mossy Fiber cells. *Scientific Reports*. 2019. Dec 23;9(1):19622. doi: 10.1038/s41598-019-55380-8.
2. **Barro-Soria R**. \* Epilepsy-associated mutations in the voltage sensor of KCNQ3 affect voltage dependence of channel opening. *The Journal of General Physiology*. 2019 Feb 4;151(2):247-257. doi: 10.1085/jgp.201812221. Epub 2018 Dec 21. PMID: 30578330.  
\*corresponding author.  
This paper (PMID: 30578330) has also been highlighted in JGP's "Research News", PMID: 30626616
3. Liin SI, Yazdi S, Ramentol R, **Barro-Soria R**, Larsson HP. Mechanisms Underlying the Dual Effect of Polyunsaturated Fatty Acid Analogs on Kv7.1. *Cell Report*. 2018 Sep 11;24(11):2908-2918. doi: 10.1016/j.celrep.2018.08.031.
4. Lassuthova P, Rebelo AP, Ravenscroft G, Lamont PJ, Davis MR, Manganelli F, Feely SM, Bacon C, Brožková DŠ, Haberlova J, Mazanec R, Tao F, Saghira C, Abreu L, Courel S, Powell E, Buglo E, Bis DM, Baxter MF, Ong RW, Marns L, Lee YC, Bai Y, Isom DG, **Barro-Soria R**, Chung KW, Scherer SS, Larsson HP, Laing NG, Choi BO, Seeman P, Shy ME, Santoro L, Zuchner S. Mutations in ATP1A1 Cause Dominant Charcot-Marie-Tooth Type 2. *American Journal of Human Genetics*. (2018) 102(3):505-514. doi: 10.1016/j.ajhg.2018.01.023. PMID: 29499166.
5. **Barro-Soria R**\*, Rosamary Ramentol., Sara, I. Liin., Perez, M. E., Robert, S. Kass and Larsson, H.P. KCNE1 and KCNE3 modulate KCNQ1 channels by affecting different gating transitions. *Proceedings of the National Academy of Sciences*. (2017) 114(35): E7367-E7376. doi: 10.1073/pnas.1710335114. PMID: 28808020. \*corresponding author.
6. **Barro-Soria R**\*, Liin\* I, S., and Larsson HP\*. Using fluorescence to understand  $\beta$  subunit-NaV channel interactions. *The Journal of General Physiology*. (2017). Jul 18. pii: jgp.201711843. doi: 10.1085/jgp.201711843. PMID: 28720591. \*corresponding author.
7. Peng G., **Barro-Soria R.**, Sampson KJ., Larsson HP., and Kass RS. Gating mechanisms underlying deactivation slowing by two KCNQ1 atrial fibrillation mutations. *Scientific Reports*. (2017). 7:45911. doi: 10.1038/srep45911.
8. **Barro-Soria R.**, Liin I, S., and Larsson HP. Specificity of M-channel activators: binding or effect? *The Journal of Physiology*. (2017). 595(3):605-606. doi: 10.1113/JP273250.
9. Liin I, S., Larsson JE., **Barro-Soria R.**, Bentzen BH., Larsson, HP. Fatty acid analogue N-Arachidonoyl taurine restores function of IKs channels with diverse long QT mutations. *Elife*. 2016 Sep 30;5. pii: e20272. doi: 10.7554/eLife.20272.
10. Qui F., Chamberlin A., Ionescu A., Perez M.E., **Barro-Soria R.**, Gonzalez C., Noskov SY and Larsson HP. Molecular Mechanism of Zn<sup>2+</sup> Inhibition of a Voltage-Gated Proton Channel.

- Proceedings of the National Academy of Sciences. (2016). doi: 10.1073/pnas.1604082113. PMID: 27647906
11. **Barro-Soria, R.**, Perez, M. E., and Larsson, H.P. KCNE3 acts by promoting voltage sensor activation in KCNQ1. Proceedings of the National Academy of Sciences. (2015) Dec 14. doi: 10.1073/pnas.1516238112. PMID: 26668384
  12. Liin, S.I., Silvera Ejneby., **M, Barro-Soria, R.**, Skarsfeldt, M.A., Larsson, J.E., Starck Härlin, F., Parkkari, T., Bentzen, B.H., Schmitt, N., Larsson, H.P., Elinder, F. Polyunsaturated fatty acid analogs act anti-arrhythmically on the cardiac I<sub>Ks</sub> channel. Proceedings of the National Academy of Sciences. Apr 21. pii: 201503488. (2015). PMID: 25901329. PMID: 25901329
  13. Liin, S.I<sup>#</sup>., **Barro-Soria, R<sup>#</sup>.**, Larsson, H.P. The KCNQ1 channel- remarkable flexibility in gating allows for functional versatility. The Journal of Physiology. Feb 4. doi: 10.1113/jphysiol.2014.287607. [Epub ahead of print]. (2015). PMID: 25653179  
[#These authors share the first authorship.](#)
  14. Dando, R., Pereira, E., Kurian, M., **Barro-Soria, R.**, Chaudhari, N., Roper, SD. A permeability barrier surrounds taste buds in lingual epithelia. American Journal of Physiology Cell Physiology. Jan 1;308(1):C21-32. doi: 10.1152/ajpcell.00157. 2014. Epub 2014 Sep10. (2015). PMID: PMC4281669
  15. **Barro-Soria, R.**, Rebolledo, S., Liin, S.I., Perez, M.E., Sampson K.J., Kass, R.S., Larsson H.P. KCNE1 divides the voltage sensor movement in KCNQ1/KCNE1 channels into two steps. Nature Communications, Apr 28;5:3750 doi: 10.1038/ncomms4750. (2014). PMID: PMC4019390
  16. **Barro-Soria, R.**, Stindl, J., Müller, C., Foeckler, R., Todorov, V., Castrop, H., Strauß, O. Angiotensin-2-mediated Ca(2+) signaling in the retinal pigment epithelium: Role of Angiotensin-receptor-associate-protein and TRPV2 channel. PLoS One 7 (11): e49624. doi: 10.1371/journal.pone.0049624. Epub 2012 Nov 20. (2012). PMID: PMC3502274
  17. Osteen, J.D., **Barro-Soria, R.**, Robey, S., Sampson, K J., Kass RS., Larsson, H.P. Allosteric gating mechanism underlies the flexible gating of KCNQ1 potassium channels. Proceedings of the National Academy of Sciences 109 (18): 7103-7108. doi: 10.1073/pnas.1201582109. Epub 2012 Apr 16. (2012). PMID: PMC3344993
  18. Dvoryanchikov, G., Huang, YA., **Barro-Soria, R.**, Chaudhari, N., Roper, S.D. GABA, its receptors, and GABAergic inhibition in mouse taste buds. Journal of Neuroscience. 31(15): 5782-5791. doi: 10.1523/JNEUROSCI.5559-10.2011 (2011). PMID: PMC3320853
  19. **Barro-Soria, R.**, Aldehni, F., Almaça, J., Witzgall, R., Schreiber, R., Kunzelmann, K. ER-localized bestrophin 1 activates Ca(2+)-dependent ion channels TMEM16A and SK4 possibly by acting as a counterion channel. Pflugers Archiv. 459 (3):485-497. doi: 10.1007/s00424-009-0745-0. Epub 2009 Oct 13. (2010). PMID: 19823864
  20. **Barro-Soria, R.**, Spitzner, M., Schreiber, R., Kunzelmann, K. Bestrophin 1 enables Ca<sup>2+</sup>-activated Cl<sup>-</sup> conductance in epithelia. The Journal of Biological Chemistry 284 (43):29405-29412. Epub 2006 Sept 26. (2009). PMID: PMC2785573
  21. AlDehni, F., Spitzner, M., Martins, J.R., **Barro-Soria, R.**, Schreiber, R., Kunzelmann, K. Bestrophin 1 promotes epithelial-to-mesenchymal transition of renal collecting duct cells. Journal of the American Society of Nephrology 20(7):1556-1564. doi: 10.1681/ASN.2008090987. Epub 2009 May 21. (2009). PMID: PMC2709680
  22. Milenkovic, V.M., **Soria, R.B.**, AlDehni, F., Schreiber, R., Kunzelmann, K. Functional assembly and purinergic activation of bestrophins. Pflugers Archiv 458(2): 431-441. doi: 10.1007/s00424-008-0626-y. Epub 2009 Jan 8. (2009). PMID: 19130075

23. Grangeia, A., **Barro-Soria, R.**, Carvalho, F., Damas, A.M., Mauricio, A.C., Kunzelmann, K., Sousa, M., Barros, A. Molecular and Functional characterization of CBAVD-causing mutations located in CFTR nucleotide-binding domains. *Cellular Physiology and Biochem* 22:79-92. doi: 10.1159/000149785. Epub 2008 Jul 25. (2008). PMID: 18769034
24. **Barro-Soria, R.**, Schreiber, R., Kunzelmann, K. Bestrophin 1 and 2 are components of the Ca<sup>2+</sup> activated Cl<sup>-</sup> conductance in mouse airway. *Biochemica et Biophysica Acta-MCR* (10):1993-2000. doi: 10.1016/j.bbamcr.2008.06.016. Epub 2008 Jul 3. (2008). PMID: 18652850
25. Spitzner, M., Martins, J.R., **Soria, R.B.**, Ousingsawat, J., Scheidt, K., Schreiber, R., Kunzelmann, K. Eag1 and Bestrophin1 are up-regulated in fast-growing colonic cancer cells. *The Journal of Biological Chemistry* 283: 7421-7428. doi: 10.1074/jbc.M703758200. Epub 2008 Jan 25. (2008). PMID: 18222922
26. Kunzelmann, K., Milenkovic, V.M., Spitzner, M., **Soria, R.B.**, Schreiber, R. Calcium dependent chloride conductance in epithelia: Is there a contribution by Bestrophin? *Pflügers Archiv* 454:879-889. Epub 2007 Mar 15. Review (2007). PMID: 17361457
27. Linares, AF., Loikkanen, J., Jorge, M.F., **Soria, R.B.**, Novoa, A.V. Antioxidant and neuroprotective activity of the extract from the seaweed *Halimeda incrassata* (Ellis) Lamouroux, against in vitro and in vivo toxicity induced by methyl-mercury. *Vet. and Human Toxicology*. 46(1):1-5. (2004). PMID: 14748406

These 27 articles have been cited 634 times by 665 documents; h-index: 16 (Scopus)

## 20. Other Works, Publications and Abstracts:

Abstracts presentations at scientific conferences (refereed):

1. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 15-19. 2020, San Diego, California, USA.
2. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, March 02-06. 2019, Baltimore, Maryland, USA.
3. Barro-Soria, R. Poster presentation. Gordon Conference, Ion Channels: July 08-13. 2018, South Hadley, Massachusetts, USA.
4. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 17-21. 2018, San Francisco, California, USA.
5. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 27-March 02. 2017, New Orleans, Louisiana, USA.
6. Barro-Soria, R. Poster presentation. Gordon Conference, Ion Channels: July 10-15. 2016, South Hadley, Massachusetts, USA.
7. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 27-March 02. 2016, Los Angeles, California, USA.
8. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 07-01. 2015, Baltimore, Maryland, USA.
9. Barro-Soria, R. Poster presentation. Gordon Conference, Ion Channels: July 06-11. 2014, South Hadley, Massachusetts, USA.
10. Barro-Soria, R. Platform presentation. Gordon Research Seminar, Ion Channels: July 05. 2014, South Hadley, Massachusetts, USA.
11. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 15-19. 2014, San Francisco, California, USA.

12. Barro-Soria, R., et al. Platform presentation. Biophysical Society Meeting: February 02-06. 2013, Philadelphia, Pennsylvania, USA.
13. Barro-Soria, R., et al. Poster presentation. Biophysical Society Meeting, February 25-29. 2012, San Diego, California, USA.
14. Barro-Soria, R., et al. Poster presentation. German Physiological Society: March 26-29. 2011 Regensburg, Germany.
15. Barro-Soria, R., et al. Platform presentation. Association for Chemoreception Sciences: April 21-25. 2010, St. Petersburg, USA.
16. Barro-Soria, R., et al. Poster presentation. Assoc. Research in Vision and Ophthalmology, April 27-May 1, 2008 Fort Lauderdale, USA.
17. Barro-Soria, R., et al. Poster presentation. German Physiological Society: March 02-05, 2008. Cologne, Germany.
18. Barro-Soria, R. Platform presentation. New Frontiers in Basic Science of Cystic Fibrosis: April 25-29. 2007, Tavira, Portugal.
19. Barro-Soria, R., et al. Poster presentation. German Physiological Society: March 25-28, 2007. Hannover, Germany.
20. Barro-Soria, R., et al. Platform presentation. German Physiological Society: March 26-29, 2006. Munich, Germany.

21. *Other Works Accepted for Publication:* N/A

## V. Professional

22. *Funded Research Performed:*

- **1R01NS110847 – 02S1** “Molecular Mechanisms of Epilepsy-Causing Mutations in IKM channels: anti-epileptic effect of Lipophilic compounds”

Principal Investigator: Rene, Barro-Soria, Ph.D.

Agency: National Institutes of Health (NINDS)  
\$75,618.00 (direct cost), \$40,461.00 (indirect costs), \$152,213.00 (total cost all years).

Effort paid: 10%

Period: 05/01/2021 – 12/31/2023
- **1R01NS110847 - 01A1** “Molecular Mechanisms of Epilepsy-Causing Mutations in IKM channels: anti-epileptic effect of Lipophilic compounds”

Principal Investigator: Rene, Barro-Soria, Ph.D.

Agency: National Institutes of Health (NINDS)  
\$1,093,750.00 (direct cost), \$585,155.00 (indirect costs), \$1,678,905.00 (total cost all years).

Effort paid: 50%

Period: 01/01/2020 – 12/31/2024
- **1K01NS096778-01A1** “Molecular Mechanisms of Epilepsy-Causing Mutations in IKM Channels”

Principal Investigator: Rene, Barro-Soria, Ph.D.

Agency: National Institutes of Health (NINDS)

- \$595,013.00 (total cost all years)
- Effort paid: 100%
- Period: 01/15/17-12/31/19, non-cost extended to 06/30/2020
- **UM SJG 2020-10** “Anti-epileptic effect of lipophilic compounds on epilepsy-causing mutations in KCNQ channels”.
- Principal Investigator: Rene, Barro-Soria, Ph.D.
- Agency: Stanley J. Glaser Foundation Research award, Univ. of Miami  
\$40,000.00 (one year)
- Effort paid: 100%
- Period: 06/01/2019 – 05/31/2020, non-cost extended to 11/30/2020
- **414889** Taking Fly Award for Independence Career Path.  
“Molecular mechanisms of epilepsy-causing mutations in the IKM channel: anti-epileptic effect of polyunsaturated fatty acids (PUFAs) variants.”
- Principal Investigator: Rene, Barro-Soria, Ph.D.
- Agency: CURE citizens united for Research in EPILEPSY  
\$100,000.00 (one year)
- Effort paid: 50%
- Period: 06/01/16-05/30/17

### 23. Editorial Responsibilities:

- 2018-Present: Editorial Board member (Reviewing Editor), *Frontiers in Molecular Neuroscience*.
- 2021-Present: Editorial Board member (Reviewing Editor), *Frontiers in Pharmacology*, and in *Pharmacology of Ion Channels and Channelopathies*.
- Ad hoc reviewer: *eLife*, *The Journal of General Physiology*, *Molecular Autism*, *PlosOne*, *Human Mutation*, *International Journal of Molecular Sciences*.

### 24. Professional and Honorary Organizations:

- 2022-2027 **Member of the Drug Discovery for the Nervous System (DDNS) Study Section, Center for Scientific Review (CSR), NIH.**
- 2021-2022 **Member of the Biophysics of Neural Systems Study Section (BPNS), Center for Scientific Review (CSR), NIH.**
- 2020 **Ad hoc reviewer of the BPNS study section, CSR, NIH.**
- 2018 Invited to the pilot workshop on the peer review process co-led by HHMI and the NIH’s Center for Scientific Review (CSR).

#### Memberships

- 2012-Present American Biophysical Society
- 2012-2013 American Heart Association
- 2010-2011 Association for Chemoreception Sciences (AChemS)

- 2007-2008 The Association for Research in Vision and Ophthalmology (ARVO)
- 2004-08; 2011 German Physiological Society

#### 25. Honors and Awards:

- 2014 Gordon Conference Seminars, Travel Award. Invited speaker. Mount Holyoke College in South Hadley MA. USA
- 2014 American Biophysical Society, MAC Travel Award. San Francisco. California.
- 2010 Polak Young Investigator Award. Best abstract for junior scientist. Oral presentation. AChemS. St Petersburg. Florida. USA.  
<http://www.achems.org/i4a/pages/index.cfm?pageID=3903>
- 2008 Pro-Retina Travel Award. Best abstract for junior scientist. International ARVO Meeting. Eyes on Innovation. Fort Lauderdale. Florida. USA
- 2007 Novartis Young Fellow Travel Award. Best abstract undergraduate program. European Cystic Fibrosis Society Conference. Tavira. Portugal
- 2005-2008 German “Friedrich-Ebert” Fellowship, PhD Program.

#### 26. Post-Doctoral Fellowships:

- **American Heart Association fellowship** (13POST17000057) - 07/01/13-06/30/15  
“Molecular Mechanism of Arrhythmia-Causing Mutations in  $I_{Ks}$  Channels.”

#### 27. Other Professional Activities:

##### Invited speaker

- Department of Ophthalmology, Visual, and Anatomical Sciences, Wayne State University School of Medicine, Detroit, MI, USA 2022
- 4th (Virtual) Neural Engineering Symposium, Univ. of Miami, Miami FL, USA 2020
- Human Genetics and Genomics, Univ. of Miami, Miami FL, USA 2019
- Department of Physiology & Biophysics, UIC, Chicago, IL, USA 2018
- Department of Physiology & Biophysics. Denver, CO, USA 2018
- Department of Physiology & Functional Genomics. Gainesville, FL, USA 2017
- Department of Physiology. Glendale, AZ, USA 2017
- Department of Molecular Physiology & Biophysics, Vanderbilt, TN, USA 2016
- Ion Channel Symposium. University of Copenhagen, Copenhagen, Denmark 2015
- Gordon Conference. Mount Holyoke College in South Hadley, MA. USA 2014
- Biophysical Society 57<sup>th</sup> Annual Meeting. Philadelphia, PA. USA 2013
- Association for Chemoreception Sciences (AChemS), St. Petersburg, FL, USA 2010
- Novartis Fellow Travel Award. European Cystic Fibrosis Society, Tavira, Portugal 2007

## VI. Teaching

28. *Teaching Awards Received:* N/A

29. *Teaching Specialization:*

At University of Miami, USA:

- 2019-Present Program in Biomedical Sciences (PIBS) 702; 2 small group sessions; Graduate level.
- 2017-Present Principles of Membrane Physiology and Biophysics I and II PHS 641 and 642; 4 lectures.
- 2015-Present Cardiovascular Physiology; Small group facilitator; MD/MPH students.
- 2014-Present Cardiovascular Physiology; 4 small group sessions; MD students.
- 2013-Present Cell Physiology and Membrane Biophysics; 4 small group sessions; MD students.

At University of Regensburg (Institute of Physiology), Germany:

- 2008 Electrocardiogram, 4 small group sessions, MD students.

At University of Havana (School of Biology), Cuba:

- 2000-2004 Metabolism of Carbohydrates and Lipids, (ii) Nitrogen compounds, (iii) Principles of nutrition and toxicology, Undergraduate in Biochemistry. Full time instructor.

30. *Thesis and Dissertation Advising/Post-doctoral Student Supervision:*

Supervising Doctoral Students:

- Michaela A. Edmond, "Voltage-sensing mechanism of neuronal KCNQ channels" Physiology and Biophysics Graduate Program University of Miami, March, 2019-present (expected graduation 2023).
- Andy Hinojo-Perez, Title: Mechanisms of small molecules on  $I_{KM}$  channel gating, Physiology and Biophysics Graduate Program University of Miami, January. 2020-present (expected graduation 2024).

Supervising Master Student:

- Elyssa Salmeron, University of Miami. Master's in Biomedical Sciences Program (MiBS, 2020).

Supervising Undergraduate Student:

- Ludwig Andersson, "Molecular Mechanisms of Epilepsy-Causing Mutations in the  $I_{KM}$  Channel and the identification of Small Molecules that Restores Physiological Channel Function," MD program, Linkoping University, Sweden.

Supervising Rotation Students:

- Michaela A. Edmond, (2019), Physiology and Biophysics Graduate Program, University of Miami.
- Andy Hinojo-Perez, (2019), Program in Biological Sciences (PIBS), University of Miami.
- Ariana Jose, (2019), Program in Biological Sciences (PIBS), University of Miami.

#### Appointments to Ph.D. Committees:

- Thesis Committee member (2022-present), "Utilizing the Connexin26 V37I Variant to Understand the Carbenoxolone Mechanism of Action, the Cx26 Size-Charge Profile, and Molecules Essential to Cx26 Functionality." Brett Colbert, PhD program in Human Genetics and Genomics, University of Miami. QE passed on February 14<sup>th</sup> 2022.
- Mentor, Thesis Committee (2020-present), "Molecular mechanisms of neuronal KCNQ channels and related channelopathies." Andy Hinojo-Perez, PhD program in Cellular Physiology and Molecular Biophysics, University of Miami. QE on November 1<sup>st</sup> 2021.
- Thesis Committee member (2021-present), "Modulation of neuronal activity by G-protein signaling." Ariana Jose, PhD program in Cellular Physiology and Molecular Biophysics, University of Miami. QE passed on August 17<sup>th</sup> 2021.
- Thesis Committee member (2021-present), "Title: Investigating the role of glial KCNQ K<sup>+</sup> channels in neural development and function in *C. elegans*." Bianca Graziano, PhD program in Cellular Physiology and Molecular Biophysics, University of Miami. QE passed on April 26<sup>th</sup> 2021.
- **Chair** Thesis Committee (2020-present), "Title: Optimization of novel lead compounds for treatment of Long QT Syndrome." Jessica Jowais, PhD program in Cellular Physiology and Molecular Biophysics, University of Miami. QE passed on January 25<sup>th</sup> 2021.
- Thesis Committee member (2019-present), "Title: Interrogating Physiological Mechanisms in the Inner Ear Using Pulsed Infrared Radiation." Federica Raciti, PhD program in 2021 Cellular Physiology and Molecular Biophysics, University of Miami. QE passed on December 14<sup>th</sup> 2020.
- Mentor, Thesis Committee (2018-present), Title: Voltage-sensing mechanism of neuronal KCNQ channels; Michaela A. Edmond. PhD program in Cellular Physiology and Molecular Biophysics, University of Miami. QE passed on June 15<sup>th</sup> 2020.
- Thesis Committee member (2018-2021), Title: Voltage-gating Mechanism of Hyperpolarization-activated Cyclic Nucleotide-gated Ion Channels, Rosamary Ramentol. Cellular Physiology and Molecular Biophysics Program, University of Miami. Completed.

## VII. Service

### 31. *University Committee and Administrative Responsibilities:*

- 2021-present Director of the Journal Club Ion Channels seminar series, Department of Physiology and Biophysics, University of Miami.
- 2018-present Member of Committee for Ion Channel spring seminar series, Department of Physiology and Biophysics, University of Miami.

### 32. *Community Activities:* N/A

**From:** Marc Scullin

**Sent time:** 05/10/2022 09:33:45 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell

**Subject:** NIH & DOD Funding Opportunities - Week ending 05/06/22

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH & DOD funding opportunities for the week ending May 06, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 05/06/2022, click the link below

<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=05-06-2022>

For a full Synopsis for Open Program Funding Opportunities for the DOD Congressionally Directed Medical Research Programs click on the link below

<https://cdmrp.army.mil/funding/refutable>

## **NIH Funding Opportunities for week ending 05/06/2022**

- [National Cooperative Drug/Device Discovery/Development Groups \(NCDDG\) for the Treatment of Mental Disorders or Alcohol Use Disorder \(U01 Clinical Trial Optional\)](#)  
(PAR-22-143)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [National Cooperative Drug/Device Discovery/Development Groups \(NCDDG\) for the Treatment of Mental Disorders or Alcohol Use Disorder \(U19 Clinical Trial Optional\)](#)  
(PAR-22-144)  
National Institute of Mental Health  
Application Receipt Date(s): Multiple dates, see announcement.
- [Policy and Alzheimers Disease \(AD\) and Alzheimers Disease-Related Dementias \(ADRD\) Healthcare Disparities: Access, Utilization, and Quality \(R01 Clinical Trial Not Allowed\)](#)  
(RFA-AG-23-024)  
National Institute on Aging  
Application Receipt Date(s): October 20, 2022
- [NICHD Neonatal Research Network \(NRN\): Data Coordinating Center \(U24 Clinical Trial Optional\)](#)  
(RFA-HD-23-001)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): August 11, 2022
- [NICHD Neonatal Research Network \(NRN\): Clinical Centers \(UG1 Clinical Trial Optional\)](#)  
(RFA-HD-23-002)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): August 11, 2022
- [NICHD Maternal-Fetal Medicine Units \(MFMU\) Network: Clinical Centers \(UG1 Clinical Trial Optional\)](#)  
(RFA-HD-23-016)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): August 11, 2022
- [NICHD Maternal-Fetal Medicine Units \(MFMU\) Network: Data Coordinating Center \(U24 Clinical Trial Optional\)](#)  
(RFA-HD-23-017)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Application Receipt Date(s): August 11, 2022
- [Emergency Awards: HEAL Initiative: Coordinating Center for National Pain Scientists Career Development \(R24 Clinical Trial Not Allowed\)](#)  
(RFA-NS-22-060)  
National Institute of Neurological Disorders and Stroke  
Application Receipt Date(s): July 15, 2022

**United States Department of Defense Funding Opportunities for the Week ending  
05/06/2022**

Opportunity Number	Opportunity Title	Close Date
<a href="#">OLDCC-22-F-0002</a>	Defense Community Infrastructure Pilot Program	07/18/2022
<a href="#">W81XWH-22-S-CRRP</a>	DoD Combat Readiness Medical, Rapid Development and Translational Research Award	09/14/2022
<a href="#">W81XWH-22-BMFRP-IIRA</a>	DOD Bone Marrow Failure Investigator-Initiated Research Award	09/23/2022
<a href="#">W81XWH-22-BMFRP-IDA</a>	DOD Bone Marrow Failure Idea Development Award	09/23/2022
<a href="#">FOA-AFRL-AFOSR-2022-0006</a>	FY22 DEFENSE ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (DEPSCoR) – RESEARCH COLLABORATION (RC)	02/21/2023
<a href="#">FOA-AFRL-AFOSR-2022-0007</a>	FY22 DEFENSE ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (DEPSCoR) – CAPACITY BUILDING (CB)	02/21/2023

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Annabel Santana

**Sent time:** 05/12/2022 11:06:52 AM

Amr Soliman; Anabelle Andon; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Dani Mcbeth; Daniel M Richter; Danielle D Pritchett; Darwin Deen; Eitan Friedman; Emine Ercikan Abali; Erica Friedman; Erica Lubetkin; Geri Kreitzer; Gokhan Yilmaz; Gonzalo Torres; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; Jodie Meyer; John (Jack) Martin; Jose Cobo; Jude-Marie A. Smalec; Jun Yoshioka; Junghoon Kim; Kaliris Salas;

**To:** Katherine Mendis; Keosha Bond; Khosrow Kashfi; Kiran Matthews; Lily Lam; Lisa Auerbach; Lisa Coico; Lisanne Hauck; Linda Spatz; Lynn Hernandez; Maria D Lima; Maria Felice M Ghilardi; Marisol Hernandez; Nancy Sohler; Naomi Smidt-Afek; Nicole Roberts; Noel Manyindo; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Preston Williams; Raymond Robinson; Rosa Lee; Rosemary Wieczorek; Samantha Barrick; Sandy Saintonge; Sanna Goyert; Siobhan G Hollander; Tashuna Albritton; Victoria Frye; Wenhua Lu; Birgland Joseph; ; ; ; ; ;

**Subject:** Canceled: CSOM Faculty meeting

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The CSOM Faculty Council meetings will resume on a **quarterly** basis effective February 10, 2022 and every 3 months thereafter.

Unless otherwise announced, the meetings will be held via Zoom (details below).

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Topic: CSOM Faculty Council meeting

Time: Quarterly, the 2<sup>nd</sup> Thursday of February, May, August/September, November at 4:30 PM.

Join Zoom Meeting

<https://ccny.zoom.us/j/83777353931?pwd=d29Kc2ZlRVpqcXBZdDh0TmVxNXpldz09>

Meeting ID: 837 7735 3931

Passcode: 828532

One tap mobile

+16465588656,,83777353931# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

Find your local number: <https://ccny.zoom.us/u/kdJQGKqIGV>

**From:** Marc Scullin  
**Sent time:** 05/23/2022 09:38:40 AM  
 Tashuna Albritton; Jude-Marie A Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wiczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell; Victor I Schwartz  
**To:**  
**Subject:** NIH & DOD Funding Opportunities for week ending 05/20/2022

Good morning CUNY School of Medicine Faculty. Please see below for a list of new NIH & DOD funding opportunities for the week ending May 20, 2022. The CCNY Grants & Sponsored Programs (GSP) Office requires **10 business days advance notification** through the Protocol Assistance Request System (PARS) for all research proposals. If any of the opportunities below are of interest to you, please contact the office of research as soon as possible so that we can discuss the next steps.

For the full list of NIH Notices for the week ending the week of 05/20/2022, click the link below  
<https://grants.nih.gov/grants/guide/WeeklyIndexMobile.cfm?WeekEnding=05-20-2022>

For a full Synopsis for Open Program Funding Opportunities for the DOD Congressionally Directed Medical Research Programs click the link below  
<https://cdmrp.army.mil/funding/reftable>

### NIH Funding Opportunities for Week Ending 05/20/2022

- [Transgender People: Immunity, Prevention, and Treatment of HIV and STIs \(R21 Clinical Trial Not Allowed\)](#)  
 (PAR-22-186)  
 National Institute of Allergy and Infectious Diseases  
 Application Receipt Date(s): December 07, 2024
- [Stimulants and HIV: Addressing Contemporary and Recurring Epidemics \(R61/R33 - Clinical Trial Required\)](#)  
 (RFA-DA-23-008)  
 National Institute on Drug Abuse  
 Application Receipt Date(s): November 12, 2024
- [Expanding Prevention Strategies for Mental Disorders in Mobile Populations in Humanitarian Crises \(R34 Clinical Trial Optional\)](#)  
 (RFA-MH-22-180)  
 National Institute of Mental Health  
 Application Receipt Date(s): October 25, 2022
- [NINDS Interdisciplinary Team Science Grant \(RM1 Clinical Trial Optional\)](#)  
 (RFA-NS-22-036)  
 National Institute of Neurological Disorders and Stroke  
 Application Receipt Date(s): October 08, 2024
- [Treatments for Lewy Body Dementias and Frontotemporal Dementias--Exploratory Clinical Trial \(U01 Clinical Trial Required\)](#)  
 (RFA-NS-22-056)  
 National Institute of Neurological Disorders and Stroke  
 National Institute on Aging  
 Application Receipt Date(s): November 21, 2022
- [Stroke Preclinical Assessment Network \(SPAN\) to Support Translational Studies For Acute Cerebroprotection- Interventions \(U01 Clinical Trial Not Allowed\)](#)  
 (RFA-NS-22-066)  
 National Institute of Neurological Disorders and Stroke  
 Application Receipt Date(s): July 28, 2022

### United States Department of Defense Funding Opportunities for the Week ending 05/20/2022

Opportunity Number	Opportunity Title	Close Date
<a href="#">W81XWH-22-MBRP-CTRA</a>	DoD Military Burn, Clinical Translational Research Award	10/11/2022
<a href="#">W81XWH-22-MBRP-TTDA</a>	DoD Military Burn, Technology/Therapeutic Development Award	10/11/2022
<a href="#">OLDCC-22-F-0001</a>	Defense Manufacturing Communities Support Program	07/19/2022
<a href="#">HR001122S0038</a>	H6	08/08/2022
<a href="#">W81XWH-22-HRRP-FRA</a>	DoD Hearing Restoration Focused Research Award	11/30/2022
<a href="#">W81XWH-22-LRP-IPA</a>	DoD Lupus, Impact Award	09/01/2022
<a href="#">W81XWH-22-LRP-IA</a>	DoD Lupus, Idea Award	09/01/2022

<a href="#">W911NF-22-S-0010</a>	Fiscal Year (FY) 2023 DoD Research and Education Program for Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI)	08/12/2022
<a href="#">W81XWH-22-LRP-TVA</a>	DoD Lupus, Transformative Vision Award	09/01/2022

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Marc Scullin

**Sent time:** 05/23/2022 09:51:55 AM

**To:** Tashuna Albritton; Jude-Marie A. Smalec; Anabelle Andon; Samantha Barrick; Keosha Bond; Patricia Broderick; Jose Cobo; Lisa Coico; Patricia Cortes; Darwin Deen; Eitan Friedman; Victoria Frye; Maria Felice M Ghilardi; Paul Gottlieb; Sanna Goyert; Lisanne Hauck; Marisol Hernandez; Siobhan G Hollander; Khosrow Kashfi; Junghoon Kim; Andreas Kottmann; Geri Kreitzer; Lily Lam; Wenhua Lu; Erica Lubetkin; Itzhak (Itzik) Mano; Noel Manyindo; John (Jack) Martin; Kiran Matthews; Katherine Mendis; Jodie Meyer; Carol Moore; Joao Nunes; Danielle D Pritchett; Daniel M Richter; Raymond Robinson; Sandy Saintonge; Kaliris Salas; Naomi Smidt-Afek; Nancy Sohler; Amr Soliman; Linda Spatz; Gonzalo Torres; Ashiwel Undieh; Hoau-yan Wang; Rosemary Wieczorek; Preston Williams; Gokhan Yilmaz; Jun Yoshioka; Birgland Joseph; Gloria J Mabry; Mark Maraj; Olga Waters; Emine Ercikan Abali; Lisa Auerbach; Jaclyn N Churchill; Erica Friedman; Carmen R Green; Lynn Hernandez; Rosa Lee; Maria D Lima; Dani Mcbeth; Kathleen Delia O'Donnell; Victor I Schwartz

**Subject:** REMINDER - Survey of Research Support for City College Faculty

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Good morning CUNY School of Medicine faculty. Please remember to complete the CUNY Faculty Advisory Council's Survey of Research Support by CUNY and the Research Foundation of CUNY.

The purpose of the survey is to gain information on the services that you receive from the Research Foundation of CUNY. Individual survey responses will be kept in the strictest of confidence and only aggregated responses will be published in reports.

The survey consists of approximately 30 questions and will require approximately 15-20 minutes to fill out. Analysis of aggregated results will be published by the FAC (anticipated publication date: Fall 2022).

**[This is an important opportunity to have your voice heard regarding the level of research support that you currently receive from CCNY and RFCUNY.](#)**

To complete the survey, please visit this link: [https://gccuny.az1.qualtrics.com/jfe/form/SV\\_7R6iKYhgkAtty8I](https://gccuny.az1.qualtrics.com/jfe/form/SV_7R6iKYhgkAtty8I)

Marc Scullin, MA  
Research Programs Specialist  
CUNY School of Medicine  
Harris Hall 10E  
(212) 650 7702  
[CSOM Office of Research Home Page](#)

**From:** Gonzalo Torres  
**Sent time:** 05/23/2022 01:26:34 PM  
**To:** Maria Felice Ghilardi [REDACTED]@gmail.com <[REDACTED]@gmail.com>; Andreas Kottmann; Ashiwel Undieh; Carol Moore; Eitan Friedman; Geri Kreitzer; Gokhan Yilmaz; Hoau-yan Wang; Itzhak (Itzik) Mano; Joao Nunes; John (Jack) Martin; Jose Cobo; Junghoon Kim; Kaliris Salas; Khosrow Kashfi; Linda Spatz; Lisa Coico; Kiran Matthews; Jun Yoshioka; Patricia Broderick; Patricia Cortes; Paul Gottlieb; Sanna Goyert; Maria D Lima; Rosemary Wiczorek  
**Cc:** Raquel Morales; Juana Torres; Roberto Rodriguez; Maria Agosto  
**Subject:** Re: MCBS Pathology Faculty Candidate Lecture - Wednesday May 25, 12:00pm - zoom  
**Attachments:** Pearl\_Myers\_Resume.docx

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Dear All,

The MCBS Department is completing a search for a Pathology faculty position. We are planning to have the first finalist, Dr. Myers **on May 25<sup>th</sup> at 12:00 PM** to give a sample lecture via zoom.

We are inviting the entire CSOM community to attend Dr. Myers lecture. Her CV is attached.

Thank you.

Gonzalo

Zoom details: <https://ccny.zoom.us/j/84108045017>

**Pearl G. Myers, MD, MS**  
**24 Mayer Drive**  
**Middletown, NY 10940**

Cell Phone: 601-520-4268  
Office Phone: 845-648-1218  
Email: [mye494@aol.com](mailto:mye494@aol.com)

**Education:**

Wofford College,  
Spartanburg, SC  
Biology, BS 8/1984-5/1988

Meharry Medical College,  
Nashville, TN  
School of Graduate Studies  
6/1992-5/1996  
Biomedical Sciences, MS 5/1998

University of Kansas Medical Center  
School of Medicine  
Kansas City, KS  
8/1997-5/2001  
MD, 2001

Department of Pathology  
Orlando Regional Medical Center  
Orlando, Florida  
Pathology residency  
6/2001- 2/ 2005

Department of Pathology  
Tampa General Hospital/Univ of South  
Florida  
Pediatric Pathology Fellow  
3/2005-7/ 2006

**Medical Licensure**

South Carolina Medical License: 30590

NY Medical license 296142-1

**Work Experience:**

Touro College of Osteopathic Medicine  
Middletown Campus  
Assistant Director Masters Program Associate  
Professor  
Course Director Systemic Pathology  
Middletown, NY 10940  
1/ 2015-present

American University of the Caribbean  
Visiting Faculty  
Systemic Pathology  
1 University Drive at Jordan Road  
Cupecoy, St. Maarten, West Indies  
5/15/16-5/30/16

City University of New York  
School of Medicine  
Visiting Faculty  
Systemic Pathology  
160 Covent Ave  
New York, New York  
10/2017-11/2017

Thieme publishing  
Reviewer  
5/2015-present

National Association of Minority Medical Educators' journal  
Reviewer  
11/2016-present

William Carey University  
College of Osteopathic Medicine

Departments of Anatomy and Pathology  
Associate Professor  
Hattiesburg, MS  
1/ 2010-12/ 2014

Hattiesburg Clinic  
Department of Pathology  
Weekend Pathology Assistant  
Hattiesburg, MS  
7/ 2010-4/ 2014

Medical University of the Americas  
School of Medicine  
Department of Pathology  
Department of Anatomy  
Associate Professor  
St. Kitts-Nevis, West Indies, Caribbean 1/  
2007- 12/ 2009.

Hillsborough Community College  
Department of Natural Sciences  
Adjunct Biology Professor  
Tampa, FL  
8/ 2006-12/ 2006

Sanford Brown Institute  
For Allied Health  
Ultrasound Department  
Adjunct Pathology and Anatomy Instructor  
Tampa, FL  
7 2006-11/ 2006

EKG Technician, Department of  
Cardiology, University of Kansas Hospital,  
Kansas City, KS 9/1998-6/2000

Personal Care Assistant, Communityworks,  
Inc., Kansas City, KS 6/1996-6/1997

Burn Care Technician, Department of  
Surgery, Medical University of South  
Carolina Hospital, Charleston, SC 6-8/1991

Research Lab Assistant, Department of  
Microbiology  
School of Graduate Studies,  
Medical University of South Carolina,  
Charleston, SC, 6-8/1990

Microbiology Specimen Technician,  
Department of Laboratory Medicine  
Medical University of South Carolina Hospital  
Charleston, SC, 7/1989-6/1990

**Military Service:**

United States Army Reserves  
Captain  
9/ 2001- 9/ 2005

**Organizational Activities:**

Association of African-American Students,  
Wofford College, 1984-1988,  
Vice President, 1987

Student Government Representative,  
Wofford College, 1987

Graduate School Representative to Student  
Government, Meharry Medical College,  
1995

American Medical Association-Medical  
Student Section University of Kansas  
School of Medicine 1997-2001

Student National Medical Association  
University of Kansas School of Medicine  
1997-2001

College of American Pathologists 2001-present

American Medical Association 2001-present  
American Society for Clinical Pathology  
2002-present

United States and Canadian Association of Pathology  
2005-present

Advisor, Black Student Association  
Medical University of the Americas

Advisor, Student National Medical Association  
William Carey University College of Osteopathic Medicine  
2011-2014

Member, Graduate Research in Pathology Education (GRPE), 2016

**Awards and Honors:**

Who's Who Among American High Schools  
1984

Who's Who Among American Colleges  
1988

Blue Key Academic Honor Society,  
Wofford College 1988

Minority Centers of Research Fellowship Award 1995

Ahuja Family Scholarship, University of  
Kansas, School of Medicine 1997

National Medical Fellowships, Inc.  
Scholarship 1998  
University of Kansas, School of Medicine

**Publications:**

Myers, PG, Rees, GM, Trupin, JS, Russell, JD, Russell, SB, Role of Interleukin-1 Beta induced modulators in Abnormal Growth of Keloid Fibroblasts, ASBMB, San Francisco, CA May 21-25, 1995  
FASEB J. No. 9, 1995

Myers, PG, Mechanism of the Differential Effect of Interleukin-1 Beta and Platelet Derived Growth Factor-AA on the Growth Of Normal and Keloid Fibroblasts, Thesis, Meharry Medical College, Nashville, TN 1998

Mayer, JL, Myers P, Gilbert-Barness E, Nora F, Patterson R, and Pomerance HH, "Clinico-Pathologic Conference: An 11-Year-Old Girl with Lupus Erythematosus, Thromboses, and Purpura Fulminans" Fetal Pediatr Pathol, Nov-Dec;24(6):317- 330,2005.

Passmore LM, Myers P, Gilbert-Barness E, "Pathology Teach and Tell: Solid Variant Alveolar Rhabdomyosarcoma of the Orbit" Fetal Pediatr Pathol, Jan-Feb24(7)2006

Keehn C, Myers P, Paidas C, Gilbert-Barness E, "Pathology Teach and Tell: Plexiform Neurofibroma in Type 1 Neuro-Fibromatosis" Fetal Pediatr Pathol, Mar-Apr,24(8) 2006

Bowers LA, Myers P, Gilbert Barness E, Pomerance HH,"Clinico-pathologic conferences, fetomaternal transfusion" Fetal Pediatr Pathol. Jul-Aug;25(4);1999-210 2006

Myers, PG, Knapp, C, Yens, DP, "Outcomes of the Flipped Classroom in a New York Osteopathic Medical School". Poster presentation. Annual Meeting Graduate Research in Pathology, Jan 2016

Myers, PG, Knapp, C, Yens, DP, "Outcomes of the Flipped Classroom in a New York Osteopathic Medical School". Poster presentation prize finalist. American Colleges of Osteopathic Medicine Annual Meeting, April 2017

## **Current Research**

Barriers to health care for persons with HIV/AIDS on St. Kitts and Nevis

2007-2008

Windward Islands Research Group

Medical University of the Americas

St. Kitts-Nevis

Access to health care and Use of Health Coaches in the diabetes management of Patients in South Mississippi. Group of Six Research Group

William Carey College of Osteopathic Medicine

Hattiesburg MS 2013-2014

Outcomes of the Flipped Classroom in a New York Osteopathic Medical School, Journal Article in Progress

