



Tri-Institutional PhD Program  
**Chemical Biology**

# **16<sup>TH</sup> ANNUAL TRI-INSTITUTIONAL CHEMICAL BIOLOGY SYMPOSIUM**

**Tuesday, September 1, 2020**  
**9:00 am – 6:30 pm**

**Virtual Event**  
**Broadcast by MSK via Zoom**

Please click the link below to join the webinar:

<https://bit.ly/3gqVUwh>

Passcode: 646251



Memorial Sloan Kettering  
Cancer Center



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1901  
SCIENCE FOR THE BENEFIT OF HUMANITY



**Weill Cornell**  
**Medicine**

## Schedule of Events

*Links will be provided to all registered attendees*

- 9:00-9:15 am**      **Welcome Remarks**  
*Ilana Kotliar, Lucas Repeta, Gabriella Chua*  
*TPCB Symposium Planning Committee*
- 9:15-10:00 am**      **Targeting phosphoglycerate dehydrogenase for treating cancers that metastasize to the brain**  
Prof. Lewis Cantley, Ph.D.  
*Weill Cornell Medicine*
- 10:05-10:25 am**      **Biased constitutive activity in uveal melanoma oncogene *CYSLTR2***  
Mizuho Horioka, TPCB Student  
*Sakmar Lab, The Rockefeller University*
- 10:30-10:40 am**      **Coffee Break (on your own)**
- 10:45-11:05 am**      **Characterization of human linker histone variants**  
Adewola Osunsade, TPCB Student  
*David Lab, Memorial Sloan Kettering Cancer Center*
- 11:10-11:55 am**      **Using genetic code expansion to investigate protein-protein interactions mediated by lysine methylation and acylation**  
Prof. Marcey Waters, Ph.D.  
*University of North Carolina at Chapel Hill*
- 12:00-1:15 pm**      **Lunch break (on your own)**
- 1:15-3:15 pm**      **Poster Session (presentations in multiple virtual meeting rooms)**
- 3:15-4:00 pm**      **Small molecules from the human microbiota**  
Prof. Michael Fischbach, Ph.D.  
*Stanford University*
- 4:05-4:25 pm**      **Functional analysis of S-palmitoylated IFITM3 antiviral activity and regulation**  
Tandriila Das, TPCB Student  
*Hang Lab, The Rockefeller University*
- 4:30-5:15 pm**      **Clinical translation of the MasSpec Pen technology for surgical use**  
Prof. Livia Eberlin, Ph.D.  
*University of Texas at Austin*
- 5:15-5:30 pm**      **Poster Prize Awards & Closing Remarks**  
*Derek Tan, Ph.D., TPCB Director*  
*and TPCB Symposium Planning Committee*
- 5:30-6:30 pm**      **Virtual Reception (BYO)**

## Tri-Institutional PhD Program in Chemical Biology (TPCB)

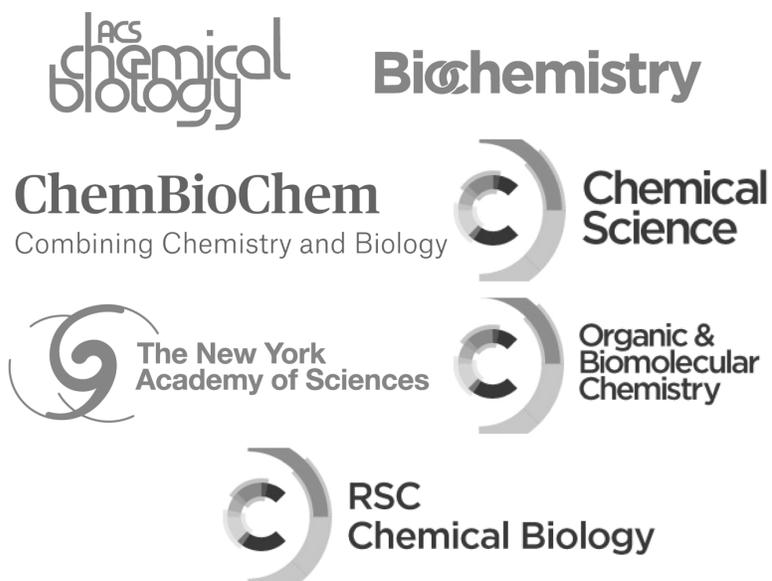
TPCB is a leading PhD graduate program in chemical biology, offered jointly by three premier institutions in New York City, Memorial Sloan Kettering Cancer Center, The Rockefeller University, and Weill Cornell Medical College. We provide an unparalleled combination of world-class faculty, state-of-the-art facilities, and collaborative research opportunities to the next generation of scientific leaders working at the interface of chemistry, biology, and medicine.

**TPCB is strongly committed to diversity and inclusion.** We welcome scientists from underrepresented minority groups and disadvantaged backgrounds, and those with disabilities. We do not tolerate racism, discrimination, or harassment of any kind. All attendees are expected to maintain the highest standards of professional conduct throughout the symposium.

For more information, please visit: <https://chembio.triiprograms.org/>



### PROMOTIONAL PARTNERS:



## Keynote Speakers

### Prof. Lewis Cantley



Prof. Lewis Cantley is a Professor of Cancer Biology in Medicine and the Meyer Director of the Sandra and Edward Meyer Cancer Center at Weill Cornell Medical College. Dr. Cantley received his B.S. in Chemistry from West Virginia Wesleyan College where he graduated with the highest Latin honors. He received his Ph.D. in Biophysical Chemistry from Cornell University, where he studied enzyme kinetics with Gordon Hammes. After a postdoctoral fellowship at Harvard University with Guido Guidotte, Cantley began his independent career as an Assistant Professor, also at Harvard. Dr. Cantley joined the faculty of Weill Cornell in 2012. He is a pioneer in the field of metabolism and has made seminal discoveries contributing to our understanding of cancer, including the discovery and characterization of PI-3-Kinase, its regulation, and its role in signaling pathways in healthy and diseased cells. He received the Breakthrough Prize in Life Sciences in 2013, and the Canada Gairdner International Award in 2015 for his contributions to medical science.

### Prof. Marcey Waters



Prof. Marcey Waters is the Glen H. Elder Jr. Distinguished Professor of Chemistry at UNC Chapel Hill. She completed a bachelor's degree in chemistry at UC San Diego in 1992 after beginning her scientific career in the laboratory of Charles Perrin where she studied the characteristics of aromaticity. After graduating, Dr. Waters moved to the University of Chicago where she earned a Ph.D. in chemistry for her exploration of the mechanism for the Wulff-Dötz benzannulation reaction. She continued her research in organic chemistry as an NIH postdoctoral fellow with Dr. Ronald Breslow at Columbia University before joining the faculty of UNC Chapel Hill. Currently, her laboratory studies the fundamental aspects of biomolecular recognition, with a particular focus on the mechanisms of histone post-translational modification recognition. Dr. Waters recently served as the President of the American Peptide society and has been recognized by UNC and the American Chemical Society as a leader in mentorship for women and students from disadvantaged backgrounds.

### Prof. Michael Fischbach



Prof. Michael Fischbach is an Associate Professor in the Department of Bioengineering at Stanford University. Dr. Fischbach received his A.B. in Biochemical Sciences from Harvard College in 2003. He received his Ph.D. in chemistry from Harvard University in 2007, where he studied the role of iron acquisition in bacterial pathogenesis and the biosynthesis of antibiotics in Christopher T. Walsh's laboratory. After two years as an independent fellow at Massachusetts General Hospital, he joined the faculty at the University of California, San Francisco, where he founded his laboratory before moving to Stanford in 2017. Dr. Fischbach's lab uses a combination of genomics and chemistry to identify and characterize small molecules from microbes, with an emphasis on the human microbiome. Dr. Fischbach is a recipient of various awards in the field, including the NIH Director's Pioneer and New Innovator Awards, the HHMI-Simons Faculty Scholars Award, and the Fellowship for Science and Engineering from the David and Lucille Packard Foundation.

### Prof. Livia Eberlin



Prof. Livia Schiavinato Eberlin grew up in Campinas, Brazil and attended the State University of Campinas, where she was introduced to mass spectrometry while working in the ThoMson Mass Spectrometry Laboratory. While she was an undergraduate, she participated in summer research at Purdue University in Indiana. After graduating, she continued her research in mass spectrometry in the laboratory of R. Graham Cooks at Purdue, where she earned a Ph.D. Dr. Eberlin conducted postdoctoral research with Dr. Richard Zare at Stanford University before launching her own laboratory at the University of Texas at Austin in 2012. Her research has led to the invention of the "MasSpec Pen" which utilizes mass spectrometry to help doctors detect cancerous tissue in real-time during surgery, leading to her being awarded a MacArthur "Genius" Fellowship in 2018. Dr. Eberlin has championed the role of women in science, being awarded a L'Oréal for Women in Science Fellowship during her postdoctoral work and advocating for expanding diversity in science as a professor and MacArthur Fellow.