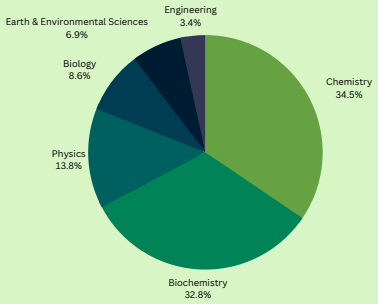
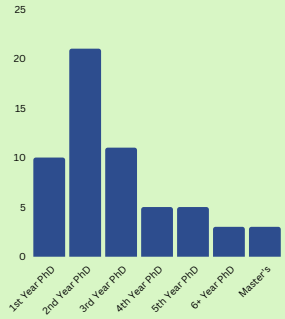
NanoBioNYC
THE GRADUATE CENTER
CITY UNIVERSITY OF NEW YORK

DECEMBER 2022 NEWSLETTER

RECAP ON FALL 2022'S PHD LEADERSHIP WORKSHOP SERIES

We concluded with 3 workshops with over 80 registrants from:





Huge thanks to the Graguate Center's talented staff! We learned the ins and outs of using **Zotero Citation Manager** with Science Librarian Mason Brown, to **Discover Your Career Strengths** and values with CP&PD staff, Jennifer Furlong, Emily Seamone, and Donald Goldstein, and **Present Your Science** to a non-expert audience by breaking down jargon and using an engaging analogy with Science Media Director Shawn Rhea.

You can still take full advantage of all of the resources that were shared.

Watch Recordings

FALL 2022 NANOBIONYC FELLOWS

Meet our first cohort of 6 fellows from the Graduate Center's PhD programs in Chemistry, Biochemistry, and Physics with diverse research backgrounds coming together in one program!

Mike Cornejo, Chemistry, *Hunter College*

Radioimmunoconjugates has helped identify and treat various tumors by using a combination of antibodies, which selectively localize tumors, and radiometals, to delineate the tumor areas via PET imaging. Currently, I am developing new [64Cu]-labeled radioimmunoconjugates for colorectal cancer as well as novel approaches with fluorescent label immunoconjugates.

Angela Grebe, Biochemistry, *City College of New York*

I am interested in understanding how regulation of gene expression during development influences cell fate decisions, particularly in the vertebrate retina. My specific research project focuses on developing new methods to determine which proteins bind to specific DNA sequences interest to drive these developmental differences.

Jack Mechler, Biochemistry, *ASRC*

My research interests lie in the convergence of Cryo-Electron Microscopy and new computational methods of analysis. I am working to integrate AI protein structure programs like AlphaFold into the 3D reconstruction of the membrane protein RyR to help uncover its "social" behaviors and mechanics of function.

Julinda Mujo, Physics, *Hunter College*

Measuring brain flow currently requires an invasive procedure. I am working on a brain imaging project incorporating light plus sound, accomplishing a noninvasive bedside method for monitoring blood flow particularly useful for neuro intensive care. I am honored to be part of the NanoBioNyc program and hope to incorporate nanobiology techniques to my research.

Tania Rajpersaud, Biochemistry, *College of Staten Island*

Research involves using computational programs such as NAMD, GROMACS and AMBER to perform molecular dynamic simulation of peptide systems. The project that I am focused on is based on simulating six different peptide-based polyelectrolyte systems in order to probe factors which affect their ability to cluster and form coacervates. Currently, coacervates are being studied as a new type of adaptable material and as a drug delivery method so an understanding of the factors behind coacervation is important.

Milan Shlain, Chemistry, *Hunter College*

Developing broad-scope biosensors for virus detection and prevention. Printing of functionalized metasurfaces. Drug design and synthesis.

INTERESTED IN BECOMING A NANOBIONYC FELLOW?

Fellows can join a community of student scientists and receive an 'Advanced Certificate in Bio-inspired Nanoscience,' internship placements or other career track experiences, and more.

Applications for Spring 2023 cohort will open in January. Sign up to receive updates on our news and events!