

JULY 2023 NEWSLETTER

NANOBIONYC SOCIAL

Stay tuned for details on our NanoBioNYC Social for all Fall Fellows and Spring Scholars!

We look forward to having everyone come together as a community, share their experiences, and bond as peers and colleagues with engaging conversations, food, and games!

COMING SOON



WELCOME FALL 2023 NANOBIONYC FELLOWS!

Meet our second cohort of 8 new fellows from the Graduate Center's PhD programs in Chemistry, Biochemistry, and Physics joining our diverse community of researchers!

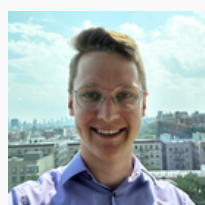


Sarah Jane Baker, Physics, ASRC

My research is at the intersection of nanoscience and photonics. I seek to develop more efficient photovoltaics to make solar energy harvesting practical to implement on larger scales. My goal is to use singlet fission macromolecules to drive multielectron photocatalytic reactions, specifically harvesting individual triplet excitons from a triplet pair prior to dissociation. Outside of my work, I enjoy drawing, baking, and spending time upstate.

Kenny Barriales, Chemistry, ASRC

Kenny's research focuses on the production of melanin mimetic and dispersible graphene nanomaterials using tyrosine containing peptides to solve practical issues such as developing an entirely new liquid form of melanin and a completely soluble form of graphene (not seen in biology) which may be suited for potential cosmetic and biomedical applications.

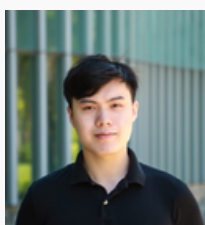


Will Blodgett, Chemistry, *The City College of New York*

Environmental chemistry has interested me since high school and I am very pleased to be working in this field under Prof. John. In my current research, I am working on a collaboration project aimed at using natural synthesis to make and analyze eco-friendly hydrogels which increase water retention capacity of soil in arid areas. In my free time I enjoy exploring the city, long boarding, and solving new Rubik's cubes!

Anna Geissmann, Chemistry, ASRC

Anna is interested in biomolecular condensates, or liquid-liquid phase separation, a new area of protein science. She is currently exploring the chemical and physical properties of condensates involved in neuronal disorders and the effect of post translational modifications on peptide and RNA complex condensates.

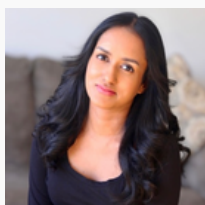
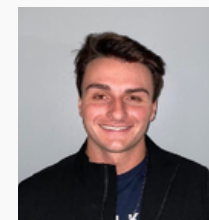


Ryan Kwok, Chemistry, *Hunter College*

As a member of the Marianski lab, Ryan uses methods of density-functional theory to investigate how external force and modification of the electronic properties of substrates modifies the underlying potential-energy surface of glycosylation reaction and other simple organic reactions. When not in lab, Ryan likes to rock climb, snowboard and play video games.

Austin Laviano, Physics, *The City College of New York*

Austin's research lies at the interface of physics, biology, and chemistry. He is studying the molecular organization and the mechanical performance of nanostructured surfaces in the skin of fruits using solid-state nuclear magnetic resonance and atomic force microscopy methods. Austin's long-term goals include using genetic modification to optimize the structural robustness of edible fruits and use these insights to design new polymeric materials with superior protective functions.



Lakshika Malwana, Biochemistry, ASRC

I am interested in studying the interactions between polymer surfactants and protein matrix in order to stabilize them in high temperatures. In my project, I am focusing on enzyme/polymer blends in melt phase for biodegradable plastics.

Fariha Tasnim, Biochemistry, *The City College of New York*

I'm on a thrilling journey into the world of bioinspired lithium-ion batteries, aiming to craft state-of-the-art, environmentally friendly batteries with exceptional performance. When I'm not immersed in this electrifying venture, you'll catch me relishing captivating books, capturing life's beauty through photography, and treasuring quality moments with my family. With big dreams on the horizon, I'm excited about the prospect of launching my very own startup one day. Let's power up for a sustainable and thrilling journey ahead!

