

Nanoscience Newsletter

WINTER 2020

Dear CUNY Nanoscience Community,

As we approach the end of the year, we wanted to share a recap of all the exciting news and events that transpired this year. Below are a few highlights in our Nanoscience Community!

Do you have an idea or interest in an interdisciplinary research that connects with one of the ASRC five initiatives and want to become an ASRC Faculty Fellow? Read more [here](#).

Plans for Nano Day in Spring 2021 are underway. Stay tuned for updates on our spring event.

INITIATIVE NEWS

- Nanoscience hosted a virtual global [Systems Chemistry Symposium](#) with three days of talks and an interactive Twitter poster session. Read [Nature Chemistry's meeting Report](#) on the event.
- Congratulations to Professor Adam Braunschweig on his full professor appointment!
- Roxy Piotrowska's (Ulijn Group and Chen Group) paper was recently accepted in Nature Materials. Read more [here](#).
- The Braunschweig Group has recently been awarded approximately \$2.5 M in research grants. The grants were awarded from the ARO, AFOSR, and NSF. The money will fund multiple research projects such as studying natural and synthetic mucins, studies of charge transport in designed nanoscale molecular assemblies, synthetic carbohydrate receptors, and the nanosizer – a new tool for the preparation of arbitrary bioactive surfaces. The funds will also support new organizations such as the [Comparative Animal Mucomics Project](#) and the [Center of Mechanical Control of Chemistry](#).
- We had a total of 3 REU and CSURP who worked with the Nanoscience Initiative over the summer.
- Magdelene Lee, a former Nano-NY REU student from Ulijn Lab, is co-authored in a recently accepted manuscript titled "In situ, non-covalent labeling and super-resolution STED imaging of supramolecular peptide nanostructures" to be published by ACS Nano.

NANOSCIENCE MSc Program

CUNY is now offering something new and unique to science by starting New York City's first master's program in nanoscience becoming one of the few in the nation. The M.S. Program in Nanoscience is ideal for students who want to enter the workforce in nanoscience and its related energy, biomedical, electronics, telecommunications, and materials science fields, as well as for students who wish to expand their knowledge and skills in preparation for doctoral programs in chemistry, physics or materials science.

SENSOR CAT

Are you working with industry and interested in financial incentives to work on a project at ASRC? Please contact our new industry liaison office, the [ASRC Sensor Center for Advanced Technology \(CAT\)](#). The center at CUNY is now up and running and dedicated to co-funding research projects with industry partners, opening the door to cost reductions in facility use and collaboration with our research experts.

If you or your organization would like to learn more, the CAT is planning for a CUNY-wide Virtual Roadshow starting this Fall and would be glad to talk in more detail with your department.

Congratulations to our recent graduates!

Click on their names to find them on LinkedIn and stay in touch.

- [Fernando Bravo](#) from Adam Braunschweig Lab (Advanced Science Research Center)
- [Colleen Brent](#) from Lynn Francesconi Lab (Hunter College)
- Ning Chen from Seogjoo Jang Lab (Queens College)
- [Kimberly C. Fung](#) from Brian Zeglis Lab (Hunter College)
- Patricia Gonzalez Periche from David Mootoo Lab (Hunter College)
- [Keke Hu](#) from Michael Mirkin Lab (Queens College)
- [Julien Lim-Jo Lombardi](#) from Stephen O'Brien Lab (City College of New York)
- [Mikhail Miroshnikov](#) from George John Lab (City College of New York)
- [Iliya Nayshevsky](#) from Alan Lyons Lab (College of Staten Island)
- Malick Samateh from George John Lab (City College of New York)
- [Yan Sun](#) from Jianbo Liu (Queens College)



PUBLICATIONS & GRANTS

Across CUNY, the nanoscience community has had a remarkably successful year in obtaining 17 competitive federal grants from a variety of funders including NSF, NIH, and the department of defense. This includes large and small grants with a collective value of \$6 M. This is commendable especially given the low funding numbers in recent years.

While we haven't yet been able to track all publications, we are aware of 31 new papers published in 2020 in peer reviewed journals by our community, with many of these in leading journals, including PNAS, Nature Materials and ACS Nano. We would like to get as a complete as possible picture of outputs from our community, as it will raise awareness and opens doors to large center grants. So please share your successes with us. We can also feature news stories on especially impactful work on the ASRC website and promote your work via social media.

NEW MEMBERS



Kenny Barriaes

Undergraduate Student, Ulijn Group



Anna Geissmann

Undergraduate Student, Ulijn Group



Seungri (Victor) Kim

PhD Student, Chen Group



Dr. Chak Shing Kwan

Post-Doc, Braunschweig Group



Sadiyah Parveen

Undergraduate Student, Ulijn Group



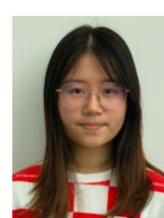
Rodolphe Tchatcha

Undergraduate Student, Ulijn Group



Khushabu Thankur

Post-Doc, Braunschweig Group



Yujie Wei

Undergraduate Student, Chen Group

COMMUNITY NEWS



In her new role as the new Executive Officer, Doctoral Program in Chemistry at the CUNY Graduate Center, Professor Yolanda Small plans to accomplish three main goals: (1) Focus on making improvements to the student experience and retention; (2) Enhance the connection to industry; (3) Optimize recent improvements that Prof. Gibney implemented in recruitment, with specific emphasis on increasing the number of underrepresented minorities and women in chemistry. As EO, Dr. Small hopes to encourage and facilitate more frequent co-mentoring opportunities that enable co-PI relationships on collaborative grants. Overall, Professor Small's message to the CUNY Nano Community: "I hope that my goals as the new EO of Chemistry are shared across CUNY, and especially in nano community, as such synergy will reward us all with measurable success."



Professor Bruce Kim's project "Development of Automatic Detection System for Maritime Containers with Dangerous Cargo," received 600K grant from the Korea Research Institute of Ships and Ocean Engineering. Read more [here](#).



The German Physical Society (DPG) named Professor Dorthe M. Eisele as one of the "175 Inspiring People". Read more [here](#). Dr. Eisele's paper was recently accepted in Nature Chemistry. Read more [here](#).



Professor Mateusz Marianski's project "Hopping sugars: molecular mechanism of protonated glycan structural rearrangement" received a 300K grant from the NIH/NIGMS. Dr. Marianski wants to employ quantum chemistry methods to pinpoint specific structural requirements that facilitate such reorganization in complex carbohydrates.

Please email Jiye Son (json2@gc.cuny.edu) to share news and publications for future newsletters.