

ENERGY AND PHOTON SCIENCES DIRECTORATE NEWSLETTER

APRIL 6, 2021

Volume 2, Issue 2

MEET OUR NEW COLLEAGUES:

Talin Avanesian, CFN
April Baum, NSLS-II
Brandon Bozeat, NSLS-II
Clara Cook, NSLS-II
Donna Cusa, Growth Office
Asim Khaniya, CFN
Mingxing Li, CFN
Zhu Liang, CFN
Jennefer Maldonado, NSLS-II
Vikram Mehar, CO
Christopher Tamargo, NSLS-II
Maria Torres Arango, NSLS-II
Tianqiao Zhao, IS



Jim Misewich

A MESSAGE FROM JIM

This is our second quarterly newsletter of 2021, and it has been over a year since the COVID-19 pandemic caused a shutdown of the Lab with the subsequent development of a resumption of operations plan (ROOP). We are still in Phase 2 of the ROOP but the availability, albeit limited for now, of a vaccine is very encouraging for the path to a pre-COVID world. When the pandemic was first identified, I do not think many of us imagined that we would be where we are now.

A year of working from home, wearing masks, unbearably high death tolls, celebrating the milestones of life-births, deaths, lifecycle events-remotely and limited normal social interaction takes a huge toll on us. We all need to pay attention to our personal stress levels and find coping mechanisms. For me, this coping takes the form of playing the piano for 15 minutes at the end of a working day. The focus needed for playing allows me to transition from working to the other roles in my life. I can be better at all of my roles with the time I take to lower my stress. I urge each of you to find something that helps you cope better. It might be meditation, physical activity, reading a book or whatever works for you. Taking care of oneself is very important for managing the stresses of life under COVID for the long term.

Now, with the coming of springtime, is not the time to become lax in our practices. If anything, now is the time to increase the attention we pay to the details of living safely. We need to be even more vigilant about wearing masks and practicing social distancing.

To conclude, I would like to write a few words about the recent United Way campaign. I am passionate in my commitment to the United Way. In particular, in this time of challenge and economic upheaval that has resulted from the limitations of life in the pandemic, I am very proud to be associated with the BNL community that donated a larger amount to United Way than ever before and where a greater number of people contributed than ever before. This year we had contributions from 100% of the Policy Council as well as throughout the BNL community. Since the programs supported here are based on Long Island, this reflects that we take our partnership with our community very seriously and show it in concrete ways. The number of educational programs with community schools and our PubSci discussions are other signs of our community involvement. We should all be very proud to be part of this. Partnering with our community, with kindness and civility, to share our talents and resources is a core value at BNL.

“Advancing inclusion and belonging for people of all races, national origins, and ethnicities is critical to guaranteeing the safety and security of the American people”

Recent Violence

Once again, senseless violence has captured our attention, this time predominantly against members of the Asian American community. I find this violence deeply disturbing and want to convey my personal support for all of our neighbors and colleagues who suffer violence, discrimination, intolerance, or prejudice because of race, national origin, ethnicity, religion, sexual orientation, or gender identification.

On January 26th of this year, President Biden signed a “Memorandum Condemning and Combating Racism, Xenophobia, and Intolerance Against Asian Americans and Pacific Islanders in the United States”. In it he stated, “Advancing inclusion and belonging for people of all races, national origins, and ethnicities is critical to guaranteeing the safety and security of the American people.” This memorandum continues “during the coronavirus disease 2019 (COVID-19) pandemic, inflammatory and xenophobic rhetoric has put Asian American and Pacific Islander (AAPI) persons, families, communities, and businesses at risk.”

It grieves and angers all good people that, once again, we have to address unacceptable behavior against members of our society BY members of our society. Let us remember to treat all our neighbors and colleagues as we would wish to be treated regardless of race, national origin, ethnicity, religion, sexual orientation, or gender identification. Given recent events, I want to particularly reassure our AAPI colleagues that we appreciate their presence and contributions to our community, and we will continue to work with them to ensure that all members of society are valued and respected.

From the EPSD IDE Council

The EPSD [Peer Counselors](#) are members of the Inclusion, Diversity and Equity (IDE) Council and welcome conversations about any workplace concerns with EPSD employees and guests. Be assured that confidentiality is an utmost priority within the constraints of the law and Lab policy. We have a process for [anonymous messages](#) to the IDE Council and ALD on the IDE website.

BNL employees are required to have one IDE goal on your performance appraisal goalsetting document. To help, we have a web page with [suggested goals](#). Any goal that you find compelling and is related to I&D is acceptable if your supervisor agrees; creativity in the current environment is particularly needed.

The EPS Directorate has spent a lot of time developing an enhanced hiring process for science and technology hires with an aim towards improving the diversity of our staff. The annual assessment of the hiring process for S&T hires was carried out. We had a 71% response rate. Overall, people were aware of the new hiring process. There were some items for improvement for the hiring managers, the recruiter and for improving the assessment form. We have been assessing hiring for three years now. If anyone has any particular concerns and issues, they are welcome to communicate those to the IDE Council members.

In 2021

This is the second EPSD Newsletter of 2021. When we began this year, the IDE Council and Jim asked if you would let us know where your priorities lie for the IDE Council programs and whether you have suggestions going forward. You can email Jim or any member of the Council directly or you can put it in the [anonymous messages](#) suggestion box found on the [IDE web page](#). We are interested both in programs we can pilot (e.g., IDE performance goals, welcoming letters) and programs where we can provide support (e.g., International Woman’s Day Program). Of particular interest are programs that take advantage of the electronic tools that we have used for the past nine to ten months. We have all learned valuable new skills and challenged our creativity; taking advantage of these lessons may be the good that comes out of a very difficult, often heartbreaking time. Please remember that any idea is worth considering. The IDE Council will respond to all ideas either directly if you choose to sign your email or on the “Ask Jim” page to anonymous communications.

Food Services at BNL

We now have food trucks coming on site daily. You can find the information (including online pre-ordering when available) on the [Guest Services Division website, Food Services](#). Menus are listed on the web page and pre-orders are possible for some of the food trucks. The web page also lists places that will deliver food and groceries to BNL.

It’s All About Stress

In line with the almost 13 months of COVID shutdown and scaled reopening, the theme of this newsletter is stress. One article on the impact of stress from *Physics Today* entitled, “Stressed? Depressed? You are not alone” can be found here:

<https://physicstoday.scitation.org/doi/10.1063/PT.3.4696?af=R&>

Keep up with Science at EPSD and BNL

The next big event for the EPSD is the Annual NSLS-II/CFN users meeting. It will be occurring remotely on May 17-20, 2021. There will be user facility updates from John Hill (NSLS-II) and Chuck Black (CFN), as well as an update from Linda Horton, DOE’s Associate Director of Science for Basic Energy Sciences. The speakers for the scientific plenary session, to be held on May 19th, are Latha Venkataraman (Columbia University), Jamie Fraser (University of California-San Francisco), and Brandy Toner (University of Minnesota). The agenda for the main meeting and workshops are available on the [User Meeting](#) website.

As we discussed in the previous newsletter, the Office of Educational Programming has an ongoing monthly series called Science Thursdays at BNL. You can see the times on the BNL calendar. In particular, Tiffany Victor gave one of these talks this past quarter on [Imaging on Beamline HXN](#).

A new section of the newsletter will be to focus on an instrument at BNL. The instrument this quarter is an electron pulser for ultrafast electron microscopy. This device, developed through a collaboration between the

Electron Microscopy Group in the Condensed Matter Physics and Materials Science Division at BNL, Euclid TechLabs LLC, the National Institute of Standards and Technology (NIST), and JEOL, won an R&D 100 Award in 2019. Deviating from other ultrafast techniques with pulsed lasers, this instrument maneuvers ultrashort electron pulses using high-frequency electric signals. With delicate synchronizations, the novel electron microscope is expected to capture ultrafast material processes at high spatial resolutions. More about the instrument can be found at a link from the BNL newsroom:

<https://www.bnl.gov/newsroom/news.php?a=116892>.

Though the instrument is still under development and testing, a preliminary application of the microscope is published recently as shown in the following link: <https://advances.sciencemag.org/content/6/40/eabc3456/tab-article-info>

From the Working Group

The results of the 2019 Engagement survey have been extensive and have led to the development of a multi-year plan to make sustained improvements across the Lab. Claudine Cangiano joined BNL in the role of Organizational Change Management Specialist to guide those improvements. The EPSD working group met with Claudine to discuss our recommendations.

The EPSD has hosted two EPSD Coffee Breaks and Poster sessions using the SpatialChat platform. The initial Coffee Break hosted three posters and the second session hosted four posters. These sessions will continue periodically to explore new collaborations and to help foster the feeling of inclusion during these somewhat isolated times.

The Working Group discussed all of your more than 800 comments in the CultureIQ survey and made a series of recommendations. The recommendations with actions taken are:

Recommendation: Highlight spotlight winners.

Status: Winners highlighted in April and October newsletters. As soon as COVID allows, the award winners will be introduced at a directorate celebration.

Recommendation: Start a newsletter, minimum of quarterly.

Status: This is the fourth newsletter.

Recommendation: Have directorate-wide coffee hours to promote communication between personnel with a focus on the younger hires.

Status: Two have been held so far (see above).

We would like to highlight the following EPSD Spotlight winners who received recognition for achievement in the first half of this fiscal year. Once we can have in-person gatherings, we will add celebrations of these achievements twice each year:

CFN: Priscilla Antunez, Lorraine Davis, Gregory Doerk, Sooyeon Hwang, Kim Kisslinger, Ming Lu, Dmytro Nykypanchuk, and Aaron Stein; **Chemistry-**Sarah Peters; **Growth Office-**Andrea Wund; **Interdisciplinary Science-**David Bock, Lisa Housel, and Lei Wang; **NSLS-II-** Donald

Abel, Ed Granger, Yong Hu, Jiemin Li, Bryan Marino, Nate Maytan, Ryan O'Shea, Ibrahim Saleh, John Sinsheimer, Tianyi Wang, and Jakub Wlodek.

Posters from the IDE Council

We would like to update and personalize our IDE posters with photos of groups at BNL that illustrate diversity. Please send us your group pictures (even composites of headshots or headshots only) so that we can use them in new posters. We have included some posters at the end of the newsletter. You can use these posters in talks or share them with colleagues. The full complement of posters that have been developed by a collaboration between illustration (thank you Jen Abramowitz) and the IDE Council can be found on the IDE webpage [IDE posters](#). They can be used in .pdf for slides. In addition, you are welcome to print them through illustration and use them at BNL. Ideas for new posters or poster series are always welcome.

Help us Welcome our New Colleagues to EPSD:

Once again, we are introducing our newly hired colleagues to you. If you find common interests or places where you can assist, please do. Join with me in welcoming them to the Directorate:

Talin Avanesian, Research Associate, Chemical Science and Machine Learning

Supervisor: Qin Wu

Email: tavanesia@bnl.gov

Start Date: 3/1/2021

Preferred Pronoun: She/Her

Interests: Research interests include computational catalysis and material design and multiscale modeling of reactions at interfaces. Hobbies and interests include movies and books, food, and travel, history, and archeology, yoga, and tennis.

April Baum, Document Coordinator

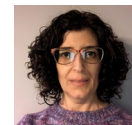
Supervisor: Robert Lee

Email: abaum@bnl.gov

Start Date: 1/25/2021

Preferred Pronoun: She/Her

Interests: April Baum comes to us from Fire Research Corporation where she was a Technical Writer in the Engineering Department for 6.5 years. She is a seasoned writer with over 10 years of expertise with Adobe Creative Suite, especially with InDesign. She worked closely with all engineering staff, sales, and service in order to create operation/installation manuals, instruction sheets and also assisted the IT Manager with updating the company website product pages. At NSLS-II, April is working under Robert Lee and she is working with Denise Yazak in the Document Center. In her spare time, April likes reading or watching documentaries about nutrition, health and wellness, eating all kinds of international cuisines (including Indian, Thai and Japanese food), loves walking by the water, vacationing on the East end and enjoys spending time with her friends and family.



Brandon Bozeat, Mechanical Engineer

Supervisor: Lewis Doom

Email: bbozeat@bnl.gov

Start Date: 3/29/2021

Preferred Pronoun: Him/He

Interests: I'm a Long Island native but attended college at Worcester Polytechnic Institute in Worcester, Massachusetts. Since then I've worked in the aerospace industry. I enjoy spending time outdoors, and my hobbies include hiking, camping, and kayaking. I also enjoy running and hope to run my 3rd marathon this year.

Clara Cook, Scientific Computing Student Assistant

Supervisor: Joshua Lynch

Email: ccook@bnl.gov

Start Date: 2/2/2021

Preferred Pronoun: She/Her

Donna Cusa, Senior Administrative Assistant

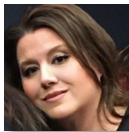
Supervisor: Michael Cowell

Email: dcusa@bnl.gov

Start Date: 1/19/2021

Preferred Pronoun: She/Her

Interests: Hobbies are gardening, reading and animal rescue.



Asim Khaniya, Research Associate-Maturation of Technology for Trapping Xenon and Krypton

Supervisor: Anibal Boscoboinik

Email: akhaniya@bnl.gov

Start Date: 1/25/2021

Mingxing Li, Scientist-Ultrafast Optical and Optoelectronic Material Characterization

Supervisor: Oleg Gang

Email: mli@bnl.gov

Start Date: 1/11/2021

Preferred Pronoun: He/Him



Zhu Liang, Research Associate, Materials Science and Data Analytics

Supervisor: Xiaohui Qu

Email: zliang@bnl.gov

Start Date: 3/15/2021

Jennifer Maldonado, Scientific Computing Student Assistant

Supervisor: Joshua Lynch

Email: jmaldonad@bnl.gov

Start Date: 2/2/2021

Preferred Pronoun: She/Her

Interests: Computational mathematics and machine learning. Interested in applying knowledge of math and computer science to scientific problems at the NSLS-II.



Vikram Mehar, Postdoctoral Research Associate, Chemistry

Supervisor: Jose Rodriguez

Email: meharvikram@gmail.com

Start Date: 3/1/2021

Preferred Pronoun: Him/He

Interests: Metal oxidation; metal/metal oxide interfaces; dilute alloys; swimming (butterfly is my favorite stroke); tennis; working out; badminton; archery; geography. Would love to play bagpipe in a Scottish Kilt.



Christopher Tamargo, Electronics Technician

Supervisor: Danny Padrazo

Email: ctamargo@bnl.gov

Start Date: 3/29/2021

Preferred Pronoun: Him/He

Interests: Playing music; I am a bass player and very active on a bicycle. I love repairing amplifiers in my free time and collect musical instruments.



Maria Torres Arango, Complex Scattering Scientist

Supervisor: Ron Pindak

Email: mtorresar@bnl.gov

Start Date: 1/25/2021

Preferred Pronoun: She/Her

Tianqiao Zhao, Postdoctoral Research Associate, Electrical Engineering

Supervisor: Robert Lofaro

Email: tzhao1@bnl.gov

Start Date: 2/22/2021

Preferred Pronoun: He/Him

Interests: Received Ph.D. degree in Electrical and Electronic Engineering from the University of Manchester, UK, in 2019. Prior to joining Brookhaven, appointed as a Research Associate with the Department of Electrical and Electronic Engineering, University of Manchester, UK from September 2018 to August 2019, and Research Fellow with Department of Electrical and Computer Engineering at Southern Methodist University from November 2019 to February 2021. Main research interests include the areas of large-scale energy management systems, microgrids, distributed control and optimization for power systems. Besides research, I am keen on photography, especially landscape photography.



Members of the EPS IDE Council (clockwise from top): Diane Cabelli, Michael Cowell, Kenneth Evans-Lutterodt, Betsy Hanson, Grace Webster, John Tranquada and Jing Tao and Vivian Stojanoff

Contact Us:

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<https://www.bnl.gov/energysci/>

EPS DEI

Energy & Photon Sciences Diversity, Equity & Inclusion Council

An Inclusive Workplace, A Diverse Workforce

YOU ARE OUR GREATEST STRENGTH

COLLABORATIVE teams shine

INNOVATION comes when all voices are heard

INCLUSION happens when all are involved

CREATIVITY springs from diverse perspectives

...

Catalysis: Reactivity and Structure Group



Energy Science & Technology Dept. ESH Group



Wentao Li - Targem
Shehaneh Tabatabaee

BROOKHAVEN NATIONAL LABORATORY

EPS DEI

Energy & Photon Sciences Diversity, Equity & Inclusion Council

Improving DEI Culture

SET A PERFORMANCE GOAL

Something **YOU** are passionate about

— AND —

improves the diversity, equity and inclusion culture of the Energy and Photon Sciences Directorate

Your goal is part of your performance appraisal rating.

YOU choose your goal and obtain your supervisor's agreement.

Possible goals are listed on the EPS DEI website

<https://www.bnl.gov/energysci/inclusion/>

BROOKHAVEN NATIONAL LABORATORY