



COLUMBIA

MAILMAN SCHOOL OF PUBLIC HEALTH ENVIRONMENTAL HEALTH SCIENCES



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Special thanks for their work on this issue:
Kendall Kruchten, MPH EHS Student
Brandy Coleman, Academic Assistant, EHS
Nina Kulacki, Director, Academic Programs, EHS

Letter From the Chair

Dear EHS Family:

As the weather warms and spring is upon us, I would like to thank our wonderful EHS community for their fantastic work and tireless efforts in working towards a brighter future for all. Our students, faculty, and staff continue to display admirable tenacity and creativity in all that they do. I encourage all EHS community members to take advantage of the wonderful opportunities offered in the upcoming months.



I am pleased to welcome Dr. Ami Zota to EHS. Dr. Zota will join our department as an Associate Professor of Environmental Health Sciences starting June 2022. Her incredible history of professional accomplishments include founding and directing Agents of Change in Environmental Justice and a partnership with WeACT, a Harlem-based environmental justice group affiliated with EHS and the Columbia University community.

I would also like to bring our exciting new initiatives to the community's attention. The Climate and Health Responder Course for Health Professionals is a course directed by Dr. Cecilia Sorensen and is intended for both Health Professionals and students. Another initiative of note is the Career MODE program- a valuable resource for early-stage investigators interested in developing in-demand techniques. I encourage all interested in supplemental training to utilize this semester as an opportunity to hone existing techniques and expand their skill sets.

For those interested in the literature our esteemed faculty members produce, I am excited to announce that two of the 2021 Papers of the Year selected by the National Institute of Environmental Health Sciences are led by Mailman investigators. It is an honor to have these papers join the numerous wonderful publications by the EHS community. I am incredibly proud to witness the dedication and commitment to excellence the EHS family provides our community daily. As we turn our gazes to the future, let us continue to advance fearlessly in the pursuit of knowledge.

Andrea Baccarelli, MD, PhD, MPH Leon Hess Professor and Chair

Updates: Faculty

OPINION

Omicron's long COVID is a risk not worth taking

By NORMAN J. KLEIMAN and CHRISTINE L. KURYLA
NEW YORK DAILY NEWS | FEB 01, 2022

Norman Kleiman, PhD Assistant Professor

Dr. Kleiman co-authored an article for the NY Daily News OpEd titled *Omicron's long COVID is a risk not worth taking* published on Feb 1, 2022.

"Upwards of 10-30% of COVID-19 cases result in long COVID. With more than 73 million reported cases in the U.S. to date, back-of-the-envelope calculations suggest that as many as 20 million Americans already developed long COVID. Shocking as these numbers are, models indicate that the true number is much higher because of widespread at-home testing and large numbers of asymptomatic individuals."

Read more here!

He also spoke to Wall Steet Journal to weigh in on Russia's attacks on Ukraine's powerplants and how radiation affects the human body and mind.

Watch on Youtube here!

Dr. Kleiman and Christine Kuryla were selected to participate in Math Meets Bio, a Columbia Technology Ventures/AlleyCorp Enterprises joint venture to provide funding, resources, and mentoring "at the intersection of life and data sciences". The project is titled "Identification of biomarkers for use by medical personnel in a diagnostic tool to better predict risk for severe COVID-19 illness". The award includes three-months of "bootcamp" training and entrepreneurial and technical mentorship from top technical and business advisors, designed to help the project move from laboratory to market.

Updates: Faculty



Deliang Tang, DrPH Associate Professor

We want to congratulate Dr. Tang on his recent retirement! He has had an inspiring and successful career in his dedication to important environmental health research. He is a cherished member of the EHS family, and we wish him a wonderful retirement. Dr. Tang is the ultimate "renaissance man" in the sense that honestly, he can do anything. In addition to being an incredibly skilled laboratory and environmental health scientist, he has a huge appreciation for history, art, music, and culture.

"Tang joined my group as a post-doc, having earned an MD in China and a further degree in nutrition after arriving in the US. He quickly showed his brilliance and ability to solve just about any problem. I had the pleasure of advising him on his post-doctoral project on biomarkers in lung cancer and working with him later when he led groundbreaking studies in China. That work showed the harm to children from prenatal exposure to coal-burning pollution and is credited with important policy changes into lower air pollution levels in China. Tang also established and directed the Columbia Center for Children's Environmental Health Molecular Epidemiology Lab for almost 30 years. He is an innovator, a kind and valued colleague and friend."

- Dr. Ricky Perera

Updates: New Faculty



Ami Zota, ScD

We are excited to announce that Dr. Ami Zota is set to join the Columbia Mailman faculty in June 2022. She earned her MPH and ScD in Environmental Health at Harvard T.H. and is currently an Associate Professor at the George Washington University Milken Institute School of Public Health.

Mailman's Public Health News recently published an article to spotlight Dr. Zota's research exposing the hidden risks of endocrine-disrupting chemicals found in beauty products heavily used by women of color. Dr. Zota's research connects the use of these products to known racist attitudes towards personal appearances. This discovery has led her to create Agents of Change in Environmental Justice, a leadership training program for early-career environmental health scientists from systematically marginalized backgrounds. Since it launched in 2019, four Columbia Mailman trainees have participated as fellows in the nine-month program.

For the past two years, Dr. Zota has partnered with WeACT, a Harlem-based environmental justice group long affiliated with Columbia, on community-driven research and helped educate their members about harmful environmental chemicals in the beauty industry. She was also one of the instructors in a Columbia Mailman/Harvard boot camp on environmental justice last summer.

"Columbia is a perfect fit," says Dr. Zota. "My vision is to advance environmental justice and health equity through science, training the next generation, communication, and advocacy. I'm able to build on all of the seat Mailman.

So much is possible."

Read more here!

Updates: New Staff



Anastassia Amato-La Hoz joined our EHS family this spring as the new EHS Assistant to the Chair. She graduated from Stony Brook University and majored in Coastal Environmental Studies. A few fun facts about Anastassia are that she loves Garfield, horror movies, and coffee. She also adores pets, despite being allergic to most!

"Anastassia brings an extraordinary passion for responsible and environmentally conscious business practices." - Dr. Baccarelli



Erica Tyler recently joined Columbia University as the EHS Communications and Marketing Coordinator. Prior to joining the team, Erica worked in the marketing department at Wor-Wic Community College in Maryland. During her tenure at Wor-Wic, a number of her marketing projects received national awards from Higher Ed Marketing and the National Council for Marketing and Public Relations. Erica earned an MS in Management with a concentration in marketing from Wilmington University.

"Erica brings great experience to help us elevate the Columbia EHS name and showcase why our work matters to the public, prospective students, and various stakeholders." - Dr. Baccarelli

Updates: Students



Jaemie Bennett, MPH 1st Year Student Climate and Health Certificate

Jaemie is interning with FEMA Region 2 within the Floodplain Management & Insurance Branch. She found the internship at the Mailman Fall Career Fair, and the application process included two quick rounds of interviews. So far, she's been attending meetings and learning more about how our government promotes and enacts climate change resilience, as well as the problems and solutions to the National Flood Insurance Program. She is also assisting with an effort to implement strategies that will ensure FEMA assistance programs can equitably be accessed by all communities in need. Jaemie looks forward to learning more about emergency management and climate adaptation frameworks.



Updates: Students



Josh (Joshua) Klett, MPH 2nd Year Student Toxicology Certificate

Josh is a 2022 Presidential Management Fellow (PMF). PMF is a two-year program with the goal of developing the next slate of federal government leaders. Josh will have one year to secure a position with an agency of his choice and he hopes to bridge his background of global health implementation with the skills learned in EHS to contribute to federal public health programs and ultimately strengthen his leadership skills.



Filippo Ravalli, MPH 1st Year Student Epidemiology of Chronic Disease Certificate

Filippo has been engaged in research with Dr. Ana Navas-Acien for the past two years, examining the effects of metals on health in two recently completed projects. One study was a systematic review examining the effect of EDTA chelation therapy on patients with cardiovascular disease and was recently accepted to the Journal of the American Heart Association (JAHA) for publication. The second study was conducted with Dr. Annie Nigra and estimated metal concentrations in community water systems across the US. This led to the development of an interactive dashboard summarizing their results. The paper was recently accepted to The Lancet Planetary Health for publication.

Updates: Alumni



Caroline Hoffman, MPH '21 Climate and Health Certificate

Caroline co-authored a paper on RIDOH's Climate Change and Health program that was published in the November issue of the Rhode Island Medical Journal. Also, in addition to social media and marketing campaigns, she worked on the guidance for local code enforcement on preventing childhood lead poisoning in this joint effort with the Rhode Island Attorney General's Office.

"In July 2021, I started at the Rhode Island Department of Health as Senior Public Health Promotion Specialist, covering the Division of Environmental Health -- combining my background in corporate communications and everything I spent the last 2 years learning in EHS into, essentially, a dream job. Since then, I've worked on such a wide variety of projects that every class I took has come up at one point or another, despite changing my certificate before my second year.

In between graduating and starting this position, I secured two freelance projects thanks to the skills and knowledge I gained during my MPH. For the Connecticut Office of Rural Health, I helped guide a needs assessment. For the RI Department of Environmental Management, I created a series of maps and an ArcGIS StoryMap about the benefits of tree canopy and current inequities in Rhode Island that expanded on my final project for Advanced GIS and Spatial Analysis.

All this is really to say, thank you for all of your encouragement and help while I was finding my path forward."

Updates: Alumni



Erika Eitland, MPH '15

Dr. Erika Eitland, EHS Alumnus and previous SEA Eboard member, along with Monica Kumar, created and hosts a new podcast: Inhabit! It focuses on the intersection of the built environment and public health. They turn design inside out and show that together we have the power to create healthy, equitable environments for everyone. They call on special guests to find ways to take action across research, design, and policy.

Perkins&Will

inhabit

design is a public health intervention

Updates: Alumni

Chris Pettinato, MPH '96 Lecturer, EHS

Chris started his Columbia Environmental Health & Safety Department career in 1997 and is the longest-tenured team member. He was recently promoted to Assistant Vice President of that department.



Chris Pitoscia, MPH '10 Environmental Healthy Policy Certificate

Chris is a 17-year veteran of Columbia Environmental Health & Safety Department at Mailman and he was recently promoted to Director.



Kathy (Kathryn) Somers, MPH '14 Toxicology Certificate

Kathy has been with the Columbia Environmental Health & Safety Department at Mailman for nearly 8-years and she was recently promoted to Associate Director.



Spotlight: Faculty



Marianthi Kioumourtzoglou, ScD Assistant Professor

Dr. Marianthi Kioumourtzoglou was granted tenure at Columbia University and is now an Associate Professor of Environmental Health Sciences. We are all excited about this incredibly well-deserved promotion. Marianthi is advancing cutting-edge environmental health sciences through her team's focus on applied statistical issues related to environmental epidemiology, air pollution exposures, and identifying vulnerable populations in a changing climate. She also provides teaching and service contributions to EHS. She does so through teaching her innovative class on Advanced Analytic Methods in Environmental Health Sciences and through her role as Faculty Director of EHS PhD program.

Spotlight: Students



Sasha Berns, DrPH Student

"My name is Sasha Berns, and I am a part-time DrPH student in the EHS Department. I also work full-time in the Environmental Health and Safety Department at New York-Presbyterian Hospital, and have recently become an Adjunct Professor at the Biden School of Public Policy and Administration at the University of Delaware. This spring, I am teaching Introduction to Environmental Health Sciences to MPH and MPA graduate students. Over the past several months I have worked to create and develop the course, drawing on my experiences at Mailman and my several TA-ships while completing my MPH at Mailman. Creating the course from nothing has been incredibly challenging, but also fun. I have the freedom to teach what I think is important for an introductory EHS course, and it is empowering to decide what to include. I make significant efforts to keep the class sessions full of activities to encourage student engagement and participation. The three hours of teaching each week brings me so much joy, and I cannot wait to teach more in the future."

Spotlight: Alumni



Sashti Balasundaram, MPH '08 Molecular Epidemiology Certificate

WeRadiate LLC, a company Sashti co-founded, Named Among the Top Winners at 2021 Grow-NY, an Unprecedented Global Food and Agriculture Business Competition

SYRACUSE, N.Y. – Empire State Development and Cornell University's Center for Regional Economic Advancement have named WeRadiate LLC the \$250,000 winner of Grow-NY, a food innovation and agriculture technology business competition focused on enhancing the emerging agriculture innovation cluster in Central New York, the Finger Lakes, and the Southern Tier. WeRadiate was one of seven finalists to take home prize money during the Grow-NY Food and Ag Summit's award ceremony held at the Oncenter in Syracuse this past November.

"We are thrilled to be a winner of the 2021 Grow-NY Competition. Improving soil health through data and technology is important to us and we are grateful that our company vision was recognized by the judges. We look forward to investing in people and in creating a local supply chain in upstate New York."

- Sashti Balasundaram, CEO WeRadiate.

Grants and Awards



Robbie Parks, PhD
Post Doc, NIH NIEHS k99/R00 Fellow

Robbie was awarded a K99/R00 Pathway to Independence 5-year grant from the NIH/NIEHS, which started on Feb 1, 2021. He continues his research to find new ways to understand the health impacts of climate, particularly as it relates to hurricanes and tropical cyclones.



Sen Pei, PhD Assistant Professor

Dr. Pei was recently awarded the CDC&CSTE (Cooperative Agreement) for his research titled "Modeling and forecast of COVID-19 at state and county scales". The aim of the project is to generate real-time projections of COVID-19 at the US county scales and to incorporate climate-forcing and seasonality to produce long-term projections at the US state scale.



Koshiq Hossain

Koshiq will receive a Bachelor of Arts in Human Biology, with a minor in Chemistry, from Hunter College. He plans to continue conducting environmental health research in the Baccarelli lab and is in the process of publishing his first paper focusing on age acceleration and cognitive impairment in the elderly. Koshiq plans to take a gap year before medical school. During that time, he will work in the clinical setting and study for the MCAT.

"I really enjoyed my time in PrIMER. I had the opportunity to work under Dr. Andrea Baccarelli. His lab helped me meet wonderful people that are very passionate in what they do. Prior to the program I did not really understand the scope of Environmental Health Sciences. However, after the program I realized that I am really passionate about the field and how the research can potentially save many people's lives."



Lauren Lopez

Lauren will receive her Bachelor's degree in Human Biology, with a minor in Neuroscience, from Hunter College. She will matriculate into Columbia's Mailman School of Public Health MPH EHS program in Fall, 2022.

"My time in the PrIMER program was rewarding and collaborative. I am thankful to my mentors, Dr. Baccarelli and Dr. Vrinda Kaila for their guidance during the program. They both continue to be wonderful mentors and very present sources of support as I continue on with my education. Being immersed in a research program with such a welcoming faculty (including Nina Kulacki) and Dr. Ana Navas-Acien made this experience so meaningful. I am looking forward to what the future has in store for me at Columbia!"



Jasmine Shaikh

Jasmine will receive a Bachelor of Science in Public Health, with a minor in Chemistry, from the Urban School of Public Health at Hunter College-CUNY. She plans to apply to medical school soon.

"PrIMER was a very rewarding experience for me. I acquired many skills by attending the workshops that were offered to us, workshops that I would not be able to afford under normal circumstances. I worked in Dr. Diane Re's lab as part of Primer and learned valuable information about environmental public health research."



Monique Slowly

Monique will receive a Bachelor of Arts in Biology from Columbia College at Columbia University. She is enrolled in the 4+1 program at the Mailman School of Public Health in the EHS Department and will matriculate into the MPH program in Fall, 2022.

"The PrIMER program has been incredibly rewarding, as it has allowed me to grow professionally and as a researcher. Through PrIMER, I have assessed blood DNA methylation as a biomarker for liver cancer risk in American Indian/Alaska Native populations. I want to give special thanks to Dr. Hui-Chen Wu, Dr. Regina Santella, Dr. Ana Navas-Acien, and Nina Kulacki for their knowledge and guidance. I am very grateful for the opportunities, experiences, and connections I have had through PrIMER."

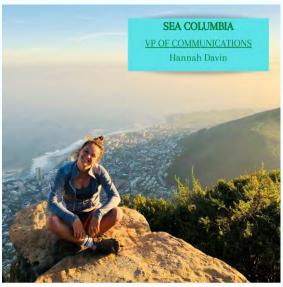
Letter from SEA

Meet the new SEA executive board!









Check out our social media pages for the latest news and updates:

Facebook: Columbia University Students for Environmental Action

Instagram: @seacolumbia

Engage: Students for Environmental Action

Letter from SEA



Dear EHS Family,

First and foremost, SEA is excited to introduce our new executive board!

Jaemie Bennett – President

Jaemie is a first-year MPH EHS student in the Climate & Health Certificate. She hopes to help move society towards a stable and positive relationship with the environment, and her favorite hikes are anywhere with lots of trees and water.

Jackson Zeiler - Vice President Community Outreach

Jackson is a first-year MPH EHS student in the Environmental Health Policy Certificate. He loves learning about how the health of forests, rivers, and mountains affect all of us.

Emelia Suljić – Vice President Finance

Emelia is a first-year MPH EHS student in the Molecular Epidemiology Certificate. She is passionate about the intersection of environmental, animal, and human health, and she loves traveling the world with a concerning lack of funds.

Hannah Davin – *Vice President Communications*

Hannah is a first-year MPH EHS student in the Climate & Health Certificate. She is interested in the influence of climate change on epidemiology and equity, and she is an avid runner and surfer.

We would also like to thank everyone who joined us at our General Body Meeting. We had so much fun, and we hope you did too! And of course, a special thank you to Nina for all she does as our fearless leader.

We are planning our traditional panel event, SEA of Thoughts, where we will discuss environmental health with amazing faculty and experts. This is scheduled for April 13th. Please check out Engage for more information!

In April, SEA plans to reinstate our composting effort on the 11th floor of ARB. This includes collecting data and reporting on the sustainability of CUMC buildings. We'll also host some fun, environmentally minded events. We hope you can join us!

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Love,

Your SEA E-Board

Summer Workshops



EHS's SHARP Training Program successfully piloted offering 3 popular trainings during winter months (NIH Grant Writing, PI Crash Course, and Epigenetics) to keep up with the increasing demand for our programs. The program will continue to grow this summer with 20 trainings being offered virtually June – August, including several returning favorites, and two exciting new topics: SQL and Climate Change and Health, led by our very own Cecilia Sorensen.

We'd also like to welcome the newest members of the SHARP team: Fernando Luque will lead some trainings that overlap with the new Career MODE Program, and Erica Tyler will support the program with some marketing initiatives. We're excited to have you both join the team, Fernando and Erica!

Check out the upcoming EHS-led trainings:

• Climate Change and Health Boot Camp: Building Skills and Knowledge for Effective Engagement

Dr. Cecilia Sorensen

• Environmental Justice Boot Camp: Theory and Methods to Study Environmental Health Disparities

Dr. Joan Casey

- Environmental Mixtures Workshop: Applications in Environmental Health Studies
 Dr. Marianthi-Anna Kioumourtzoglou
- Epigenetics Boot Camp: Planning and Analyzing DNA Methylation Studies Drs. Andrea Baccarelli and Allison Kupsco
- Exposome Boot Camp: Measuring Exposures on an Omic Scale
 Dr. Gary Miller
- GIS Workshop: Visualizing and Analyzing Health Data

Drs. Jeremy Porter and Joel Capellan

- PI Crash Course: Skills for Future or New Lab Leaders
 Dr. Diane Re with co-instructors Drs. Andrea Baccarelli, Ana Navas-Acien, and
 Matt Perzanowski
- Radiation Safety Officer (RSO) Training

Dr. Norman Kleiman

You can see the full list of summer offerings here. If you are interested, please subscribe for updates to be the first to hear any SHARP related news. Please share any ideas for new training topics with Abby Welbourn (aj2730) or Meaghan Doherty (md4003).



Publications

Please check out some of the amazing work being published by our community! These publications are listed in chronological order, by initial publication. Faculty, students, and staff names are **bolded**:

Calabro, R. & **Hoffman, C**. (2021 Nov). The Rhode Island Climate Change and Health Program: Building Knowledge and Community Resilience. *Rhode Island Medical Journal*.

Kuo CC, Balakrishnan P, Gribble MO, Best LG, Goessler W, Umans JG, Navas-Acien A. (2021). The association of arsenic exposure and arsenic metabolism with all-cause, cardiovascular and cancer mortality in the Strong Heart Study. *Environ International 159*(107029). doi: 10.1016/j.envint.2021.107029.

Zhang L, He MZ, Gibson EA, Perera F, Lovasi GS, Clougherty JE, Carrión D, Burke K, Fry D, Kioumourtzoglou MA. (2021). Evaluating the Impact of the Clean Heat Program on Air Pollution Levels in New York City. *Environmental Health Perspectives*. 129(12),127701. doi: 10.1289/EHP9976.

Lieberman-Cribbin W, Galanti M, Shaman J. Socioeconomic Disparities in Severe Acute Respiratory Syndrome Coronavirus 2 Serological Testing and Positivity in New York City. *Open Forum Infectious Disease* 8(12):ofab534. doi: 10.1093/ofid/ofab534.

Re DB, Yan B, Calderón-Garcidueñas L, Andrew AS, Tischbein M, Stommel EW. (2022). A perspective on persistent toxicants in veterans and amyotrophic lateral sclerosis: identifying exposures determining higher ALS risk. *Journal of Neurology*. 10.1007/s00415-021-10928-5. Advance online publication. doi: 10.1007/s00415-021-10928-5

Shen Y, Laue HE, Shrubsole MJ, **Wu H**, **Bloomquist TR**, Larouche A, Zhao K, Gao F, Boivin A, Prada D, Hunting DJ, Gillet V, Takser L, **Baccarelli AA**. (2022). Associations of Childhood and Perinatal Blood Metals with Children's Gut Microbiomes in a Canadian Gestation Cohort. *Environmental Health Perspectives* 130(1), 17007. DOI: 10.1289/EHP9674

Riddell CA, Goin DE, Morello-Frosch R, Apte JS, Glymour MM, Torres JM, **Casey JA** (2022). Hyper-localized measures of air pollution and risk of preterm birth in Oakland and San Jose, California. *International Journal of Epidemiology 50*(6), 1875-1885. DOI: 10.1093/ije/dyab097

Wu HC, Shen J, Siegel A, Santella RM. (2022). Environmental exposure and clinical correlates of hepatocellular carcinoma in New York City: a case only study. *Cancer Causes Control* 33(1):153-159. DOI: 10.1007/s10552-021-01494-2



Publications

Kuo CC, Balakrishnan P, Gribble MO, Best LG, Goessler W, Umans JG, Navas-Acien A. (2022). The association of arsenic exposure and arsenic metabolism with all-cause, cardiovascular and cancer mortality in the Strong Heart Study. *Environment International 159*, 107029. DOI: 10.1016/j.envint.2021.107029

Kannoth S, Kandula S, **Shaman J**. The association between early country-level COVID-19 testing capacity and later COVID-19 mortality outcomes. *Influenza Other Respiratory Viruses 16*(1), 56-62. DOI: 10.1111/irv.12906

Durham T, Guo J, Cowell W, Riley KW, Wang S, Tang D, Perera F, Herbstman JB. (2022). Prenatal PM2.5 Exposure in Relation to Maternal and Newborn Telomere Length at Delivery. Toxics 10(1), 13. DOI: 10.3390/toxics10010013

Kupsco A, Lee JJ, Prada D, Valvi D, **Hu L**, Petersen MS, Coull BA, Weihe P, Grandjean P, **Baccarelli AA**. (2022). Marine pollutant exposures and human milk extracellular vesicle-microRNAs in a mother-infant cohort from the Faroe Islands. *Environment international*, 158, 106986. DOI: 10.1016/j.envint.2021.106986

Spratlen MJ, Perera FP, Sjodin A, Wang Y, Herbstman JB, Trasande L. (2022). Understanding the Role of Persistent Organic Pollutants and Stress in the Association between Proximity to the World Trade Center Disaster and Birth Outcomes. *International Journal of Environmental Research and Public Health*, 19(4), 2008. DOI: 10.3390/ijerph19042008

Yang W, Shaman J. (2022). Viral replication dynamics could critically modulate vaccine effectiveness and should be accounted for when assessing new SARS-CoV-2 variants. *Influenza and other respiratory viruses*, *16*(2), 366–367. DOI: 10.1111/irv.12961

Ravalli, F., Vela Parada, X. F., Ujueta, F., Pinotti, R., Anstrom, K. J., Lamas, G. A., & Navas-Acien, A. (2022). Chelation Therapy in Patients With Cardiovascular Disease: A Systematic Review. *Journal of the American Heart Association 11*. doi: 10.1161/JAHA.121.024648

Saxena R, Gamble M, Wasserman GA, Liu X, Parvez F, Navas-Acien A, Islam T, Factor-Litvak P, Uddin MN, Kioumourtzoglou MA, Gibson EA, Shahriar H, Slavkovich V, Ilievski V, LoIacono N, Balac O, Graziano JH. (2022). Mixed metals exposure and cognitive function in Bangladeshi adolescents. *Ecotoxicology and environmental safety*, 232, 113229. DOI: 10.1016/j.ecoenv.2022.113229

Deierlein AL, **Wu H**, Just AC, **Kupsco AJ**, Braun JM, Oken E, Soria-Contreras DC, Cantoral A, Pizano ML, McRae N, Téllez-Rojo MM, Wright RO, **Baccarelli AA**. (2022). Prenatal phthalates, gestational weight gain, and long-term weight changes among Mexican women. *Environmental research*, 209, 112835. Advance online publication. DOI: 10.1016/j.envres.2022.112835





We enjoy sharing news about our EHS Family with the community and we want to hear from you!

Please send us information about your accomplishments, awards, presentations, publications, pictures, and any noteworthy EHS updates you'd like to share.

Email
Nina at njk2128@columbia.edu
with your submissions.

We look forward to hearing from you. Be well and keep in touch!