



*Department
Newsletter
Fall 2020*



COLUMBIA

MAILMAN SCHOOL
OF PUBLIC HEALTH

ENVIRONMENTAL
HEALTH SCIENCES



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Special thanks for their work on this issue:

Aradhika Dhawan, MPH EHS Student

Brandy Coleman, Academic Assistant, EHS

Nina Kulacki, Director, Academic Programs, EHS

Rupa Ravi, MPH PopFam Student (Background Images)

Letter From the Chair

Dear EHS family:

It has been truly humbling to witness the resilience and strength our Department has shown in these few short months. While we are fortunate to have a record of academic excellence in research and training, our students and trainees have also stood out as exemplary models of stewardship and service. I am grateful for the important volunteer and research-driven work our students, faculty, and staff are pursuing to meet the challenges faced by the pandemic and racial inequality. This year, the School has also mobilized expertise within Mailman to seed new initiatives that prioritize the creation of social and physical environments that advance and promote the health and well-being of those we serve.




Within our Department two working groups, led by our PhD students and the other a task force led by Drs. Casey and Perzanowski, are leading the charge to examine the issues regarding participation and structural racism in public health. The talent assembled within our Department is poised to support the transformational changes needed to ensure that everyone has the resources to be safe, comfortable, and productive with study and work.

Over the summer, we held 14 SHARP boot camps and workshops, with the help of our PhD students, for more than 500 attendees from around the globe. We also hosted several forums and town halls at the Departmental and School level to discuss ongoing Covid-19 research and plans for a safe return to campus. During that time, we also witnessed several spectacular doctoral defenses from Drs. Annie Nigra, Sarah Kramer, Mike He, Yanelli Núñez, and Roheeni Saxena. Each defense highlighted a broad range of multi-disciplinary expertise with great potential to influence future public health policies. We look forward to following their promising careers in the coming years. Congratulations to our recent EHS doctoral graduates! Also, I would like to thank Nina Kulacki, Greg Freyer, and Brandy Coleman for the incredible support with these defenses and for the transition to remote instruction this year.

Finally, we are all very excited that Columbia University's President Lee C. Bollinger announced the establishment of a new School of Climate. Columbia has long been at the forefront of academic discovery and involvement in issues of climate change and our Department's Climate and Health program had a pioneering role in shaping the narrative in this critical public health program. Like I have said before, "Summer might be long gone, but good seasons never end at EHS and Mailman". We have welcomed new students and a new energy to the Department this year and cannot wait for what is in store for the coming semesters.


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



Updates: Faculty

[Frederica Perera](#), DrPH, PhD, along with a group of researchers from four universities, has released [preliminary findings](#) that highlight the health benefits of policies to reduce carbon pollution from the transportation sector. The scientists presented their independent analysis to state policymakers and stakeholders who are considering how best to design climate mitigation programs and achieve health gains, as part of the [Transportation Climate Initiative](#) (TCI), a regional collaboration of 12 Northeast and Mid-Atlantic states and the District of Columbia. They modeled the potential health and economic benefits under several TCI policy scenarios representing a range of emissions reduction caps and investment strategies. The states expect to [finalize a memorandum of understanding](#) this fall.

[Mr. Michael Musso](#), Lecturer in EHS, participated in the Association for Environmental Health and Sciences (AEHS) Conference the week of October 19 and virtually presented a continuing education workshop on Human Health Risk Assessment. He also sits on the AEHS Science Advisory Board.



Updates: Student

Ahlam Abuawad, PhD candidate, presented posters at the FASEB Summer Research Conference.


Victoria Bortfeld, 2nd year MPH student, wrote an article for the Earth Institute called '[This 'Green' Space Shouldn't Be So White](#)' in August.

Karina M. Carrillo, 2nd year MPH student, had the opportunity to co-moderate a [Columbia event with Cori Bush](#). She also published an article on '[An American Legacy](#)', reflecting on the dark past of Eugenics and following graduation vows to be a political candidate with social, economic and environmental justice perspectives at the forefront of her campaign. She also wrote an article for the Bronx Times titled '[The Grass is greener in some parts of NYC](#)' in August.

Aradhika Dhawan, 2nd year MPH student, has been chosen as one of the Wellness Days Ambassadors for 2020-2021 by the Office of University Life at Columbia. WDAs are student leaders who help promote, plan and staff events, and collaborate with other student leaders to engage in health and well-being dialogue. Wellness Days offer students a series of events and workshops focused on supporting the mental health and well-being.

Wil Lieberman-Cribbin, PhD student, is the co-author of a research article called '[Disparities in COVID-19 Testing and Positivity in New York City](#)'. This work, and Wil, were also cited recently in the [New York Times](#).

Marisa Sobel, PhD student, gave an oral presentation at ISEE in August, just before she started the EHS PhD program. The title of her talk was "*Low-level exposure to multiple metals associated with spirometry-defined lung disease in American Indians: Evidence from the Strong Heart Study*".



Updates: Alumni

Congratulations to all our Summer, 2020 graduates!

Mike He, PhD defended on July 8th, 2020. The title of his dissertation was *"Air Pollution and Adverse Health Effects: Assessing Exposure Windows and Sensitivity to Modeling Choices"*.


Sarah Kramer, PhD defended on June 11th, 2020. The title of her dissertation *"Forecasting Influenza in Europe and Globally: The role of absolute humidity and human travel, and the potential for use in public health decision making"*.

Annie Nigra, PhD defended on June 8th, 2020. The title of her dissertation was *"Arsenic Exposure in US Drinking Water: Spatial Patterns, Temporal Trends, and Related Mortalities"*.

Yanelli Nunez, PhD defended on September 2nd, 2020. The title of her dissertation was *"The Effect of Air Pollution on Aggravation of Neurodegenerative Diseases: An analysis of long-term exposure to fine particulate matter and its components"*.

Bhupesh Parashar, DrPH defended on September 3rd, 2020. The title of his dissertation was *"Risk of Radiation-Induced Cancers in Patients Treated with Contemporary Radiation Therapy for Early-Stage Lung Cancer"*.

Roheeni Saxena, PhD defended on August 4th, 2020. The title of her dissertation was *"Nutrition, Arsenic, Metals, and Cognitive Function in Adolescents"*.



Updates: Alumni

Sarah Kramer, PhD recently started a position as a postdoctoral researcher at the Max Planck Institute for Infection Biology in Berlin, Germany, in Matthieu Domenech de Cellès' group. Her work will focus on exploring the seasonality of immune responses to vaccination among infants.

Jenna Manheimer, MPH works at the EPA as the regional tribal drinking water coordinator in the Pacific Northwest. Covid-19 has presented new challenges for public utilities and tribal communities, and as a result, her team has increased its technical, regulatory and financial assistance to public water systems, in partnership with other federal and private agencies, all while adjusting to working from home. Recently [she co-authored a paper](#) applying a qualitative cumulative risk assessment framework for migrant workers living in Kuwait.

Megan Niedzwiecki, PhD is currently an Assistant Professor at Mt. Sinai and is a Co-Investigator on her first grant with Dr. Mary Gamble. She presented the preliminary data for the folic acid grant at the FASEB Summer Research Conference on folate and one-carbon metabolism and received a prize for best selected short presentation.

Annie E. Nigra, PhD recent alum and current postdoc in EHS, is the co-author of the paper on ['Correctional Facilities' Drinking Water may put innate health at risk](#). The paper was selected as the 'Paper of the month' by the NIEHS in August 2020.

Roheeni Saxena, PhD presented a poster at the FASEB Summer Research Conference.



Updates: *PrIMER* Trainees

Jorge Carranza Bonilla, PrIMER Trainee in 2016, is currently a middle school science teacher and participated in environmental and sustainability projects in Bronx. Below is a testimonial sent to Dr. Norman Kleiman:

"I am forever grateful for the research we did and the foundations in public health. I am deeply committed to the well-being of our communities and inspired by the work you do."

Han Oo, current PrIMER trainee, had an abstract accepted for [Emory's Break the Cycle program](#). Dr. Julie Herbstman and Han are working on a research project as part of Break the Cycle of Health Disparities to investigate the extent to which children's positive health is influenced by their neighborhood. Since neighborhood qualities can be altered, the aim of this research is to identify possible interventions that can enhance neighborhood quality to help end health disparities and to promote positive health.

Michelle Rodriguez, PrIMER trainee in 2017, and Dr. Norman Kleiman have recently had their article on '*Microbial Contamination Risk and Disinfection of Radiation Protective Garments*' accepted for publication in 'Health Physics'.



Summer Workshops

The [SHARP Training Program](#), hosted by EHS, successfully transitioned 13 in-person, skills-based trainings to live, virtual offerings this summer due to the covid-19 pandemic. With immense support of the EHS family, the SHARP Program had record participation with 500+ attendees from 40 states and 16 countries on topics ranging from lab management and NIH grant writing to machine learning and the exposome.

We'd like to give a shout out to all the EHS faculty members, researchers, staff, and students involved:

- **Faculty Training Directors:** Andrea Baccarelli, Marianthi Kioumourtzoglou, Norman Kleiman, Gary Miller, Jeremy Porter, and Diane Re
- **Faculty session leaders and panelists:** Darby Jack, Micaela Martinez, Ana Navas-Acien, Brandon Pearson, and Matt Perzanowski
- **Staff:** Kiara Garcia, Fernando Luque, Bernice Ramos-Perez, JoAnn Schneider, and Abby Welbourn
- **Student Assistant:** Saoi Sope
- **Doctoral Student and Postdoc Workshop Guides:** Ahlam Abuawad, Nicole Comfort, Xu Gao, Lizzy Gibson, Vrinda Kalia, Allison Kupsco, Maggie Li, Sarah McLarnan, Yanelli Nuñez, Robbie Parks, Jenni Shearston, and Howie Wu

Your effort was instrumental in making the program a (virtual) success this year, thank you!

If anyone has ideas for new, skills-based training topics or course instructors, [submit ideas here!](#)

Grants & Awards

Ahlam Abuawad, PhD candidate, submitted and received funding for her NIEHS F31 grant titled: "*Arsenic Methylation, One-Carbon Metabolism, and Diabetes Incidence.*" Ahlam, with Dr. Maya Deyssenroth, received the KC Donnelly award through NIEHS. This award supports Ahlam to participate in externships with investigators at Dartmouth University and the US Geological Survey, respectively.

Nicole T. Comfort, PhD candidate, received an award titled "*Air Pollution, Salivary Extracellular Vesicles, and Asthma Severity in Children with Asthma*" from the National Institute of Health (NIH F31). In Spring this year, she also received the Department Award for Exemplary Teaching Assistant in Environmental Health Sciences in Spring 2020.

Mary Gamble, PhD, MS received two R01 grants: "*Metabolomic and Nutrigenetic Effects of Folic Acid Supplementation and Unmetabolized Folic Acid*" from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and "*Interdisciplinary Approaches for Understanding the Metabolic Effects of Arsenic and Manganese*" from the National Institute of Environmental Health Sciences (NIEHS).

Publications

Nigra, A. E., & Navas-Acien, A. (2020). Arsenic in US Correctional Facility Drinking Water, 2006–2011. *Environmental Research*, *188*, 109768.

[doi:10.1016/j.envres.2020.109768](https://doi.org/10.1016/j.envres.2020.109768)

Tran, K. V., **Casey, J. A.**, Cushing, L. J., & Morello-Frosch, R. (2020). Residential Proximity to Oil and Gas Development and Birth Outcomes in California: A Retrospective Cohort Study of 2006–2015 Births. *Environmental Health Perspectives*, *128*(6), 067001. [doi:10.1289/ehp5842](https://doi.org/10.1289/ehp5842)

Paksarian, D., Rudolph, K. E., Stapp, E. K., Dunster, G. P., He, J., Mennitt, D., **Casey, J. A.** . . . Merikangas, K. R. (2020). Association of Outdoor Artificial Light at Night With Mental Disorders and Sleep Patterns Among US Adolescents. *JAMA Psychiatry*.

[doi:10.1001/jamapsychiatry.2020.1935](https://doi.org/10.1001/jamapsychiatry.2020.1935)

Nardone, A. L., **Casey, J. A.**, Rudolph, K. E., Karasek, D., Mujahid, M., & Morello-Frosch, R. (2020). Associations between Historical Redlining and Birth Outcomes from 2006 through 2015 in California. *Plos One*, *15*(8). [doi:10.1371/journal.pone.0237241](https://doi.org/10.1371/journal.pone.0237241)

Baker, B. H., Lugo-Candelas, C., Wu, H., Laue, H. E., Boivin, A., Gillet, V., . . . **Baccarelli, A. A.** (2020). Association of Prenatal Acetaminophen Exposure Measured in Meconium With Risk of Attention-Deficit/Hyperactivity Disorder Mediated by Frontoparietal Network Brain Connectivity. *JAMA Pediatrics*, *174*(11), 1073.

[doi:10.1001/jamapediatrics.2020.3080](https://doi.org/10.1001/jamapediatrics.2020.3080)

Deysenroth, M. A., Li, Q., Escudero, C., Myatt, L., Chen, J., & Roberts, J. M. (2020). Differences in Placental Imprinted Gene Expression across Preeclamptic and Non-Preeclamptic Pregnancies. *Genes*, *11*(10), 1146. [doi:10.3390/genes11101146](https://doi.org/10.3390/genes11101146)

Publications

Bozack, A. K., Howe, C. G., Hall, M. N., Liu, X., Slavkovich, V., Ilievski, V., . . . **Graziano, J. H., Gamble, M. V.** (2020). Betaine and Choline status modify the effects of Folic Acid and Creatine Supplementation on Arsenic Methylation in a randomized controlled trial of Bangladeshi adults. *European Journal of Nutrition*. [doi:10.1007/s00394-020-02377-z](https://doi.org/10.1007/s00394-020-02377-z)

Sanchez, T. R., Klu, Y. A., Genkinger, J. M., Lacey, J. V., Chung, N. T., & **Navas-Acien, A.** (2020). Association between Rice Consumption and Risk of Cancer Incidence in the California Teachers Study. *Cancer Causes & Control*, *31*(12), 1129-1140. [doi:10.1007/s10552-020-01350-9](https://doi.org/10.1007/s10552-020-01350-9)

Baker, B. H., Wu, H., Laue, H. E., Boivin, A., Gillet, V., Langlois, M., . . . **Baccarelli, A. A.,** Takser, L. (2020). Methylparaben in Meconium and Risk of Maternal Thyroid Dysfunction, Adverse Birth Outcomes, and Attention-Deficit Hyperactivity Disorder (ADHD). *Environment International*, *139*, 105716. [doi:10.1016/j.envint.2020.105716](https://doi.org/10.1016/j.envint.2020.105716)

Staff Spotlight



Nancy Lolacono, MPH '89

Nancy Lolacono has been promoted to Research Scientist. Nancy is an incredibly dedicated faculty member of EHS. As part of her multiple official and unofficial roles she ensures the success of major EHS programs and centers including the Superfund Research Program, the departmental Training Grant, the NIEHS Center for Environmental Health in Northern Manhattan, and numerous other grants. She has a passion for working with students, supporting them, and contributing to their success.

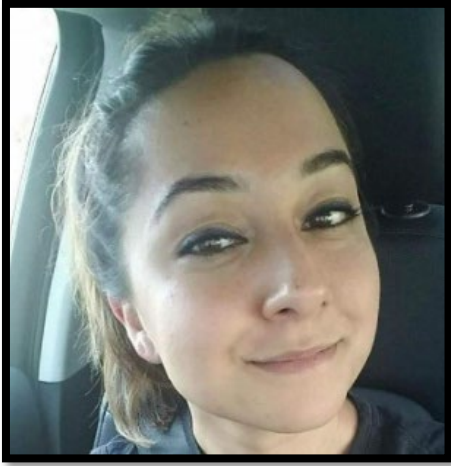
Current Student Spotlight



Irene Martinez-Morata, 2nd year MPH

Irene traveled back to Spain in March and worked on the front lines as a Medical Doctor. During her time in that role, she coordinated the recruitment of 3,000 healthcare workers in Spain for the Healthcare workers COVID-19 Study. This is a multi-centric prospective study in 25 countries supported by PAHO and coordinated by Columbia University and University of Chile to assess the impact of the pandemic in various mental health outcomes in healthcare workers. Over the summer, Irene also worked with Dr. Navas-Acien on a research focused on e-cigarettes and cardiovascular disease endpoints. She presented her research findings at the ISEE conference on August, 2020 and wrote a journal article accepted for publication in "Current Hypertension Reports" journal that will be in press December, 2020.

Meet Our New Students: PhD



Tanya Butt grew up in northeastern Pennsylvania and is the daughter of Pakistani immigrants. She received her BS from NYU where she double majored in Neuroscience and Psychology and minored in Child and Adolescent Mental Health Studies. Following graduation, she worked as a lab manager for Dr. Maura Boldrini at the NY State Psychiatric Institute in the Department of Molecular Imaging and Neuropathology. In 2017, Tanya received her MPH degree from the Dartmouth Institute. Before arriving at Mailman, she was a research project coordinator at Dartmouth-Hitchcock Medical Center in the Department of Neurology. While at Dartmouth, she managed several CDC-funded international collaborations focusing on environmental risk factors associated with the development of Amyotrophic Lateral Sclerosis (ALS). She hopes to continue studying environmental factors implicated in neurological disease as PhD student in EHS. In her free time, she enjoys traveling and searching for edible mushrooms.

Vivian Do was born and raised in San Francisco, CA but moved to Northfield, MN for her BA in Mathematics/Statistics and American Studies at Carleton College. After working as a healthcare policy analyst, Vivian continued her public health training at Columbia where she received an MPH in epidemiology with a certificate in Climate & Health. Up until this point, she did projects on substance use at the San Francisco Department of Public Health, evaluated mental health programs at the NYC Department of Mental Health & Hygiene, and conducted air pollution research with the University of Hong Kong. As a PhD student at Columbia, Vivian is interested in environmental epidemiology, climate change, and the built environment through a health equity lens. Fun fact: She unironically likes discussing the weather and its underlying science.



Meet Our New Students: PhD



Nina Flores grew up in Hurst, Texas. She completed her BS in Computational Biology at the University of Texas at Austin. While at UT, she contributed to projects in the lab of Dr. Fatima Varner, assessing the factors and impacts of school-based marginalization in grades K-12. She is interested in the study of environmental justice, mainly through researching health disparities associated with climate change based on racial, ethnic, and socioeconomic groups. Outside of work, she enjoys running and reading.

Emma Gorin grew up in NYC. She received a BA from Wesleyan University in 2012 and an MSPH in Global Disease Epidemiology and Control from Johns Hopkins University in 2019, where her research included investigating sanitation availability in northern India and mobility among female sex workers in Guinea-Bissau. Before starting her MSPH program, she worked on health education and program implementation as well as clinical and community-based research in domestic and international non-profit, hospital and school settings. Her interests include infectious disease dynamics and modeling, emerging infectious diseases, global disease control, climate, and health equity. In her spare time, you might find her dancing or making pottery (especially before March, 2020).



Meet Our New Students: PhD



Wil Lieberman received an MPH at the Icahn School of Medicine at Mount Sinai and a BA in Physics and Geography at Colgate University. Originally from New York, Wil has spent the last five years working as a Clinical Research Coordinator in the Institute for Translational Epidemiology at Mount Sinai. During his time there, he worked on a variety of research topics including the impact of natural disasters on mental health, racial and health disparities in cancer surgery and outcomes, and the impact of World Trade Center exposure on cancer etiology, biology and outcomes in the WTC Health Program cohort. Most recently he focused on socioeconomic and racial disparities in COVID-19 testing and outcomes across New York City. Wil plans to continue incorporating geographic analyses to identify disparities in environmental exposures in the context of climate change at Columbia. In his free time, he loves hiking and traveling.

Marisa Sobel is from Gladwyne, Pennsylvania. She completed her BA in Chemistry and Studio Art from Franklin & Marshall College, laying the foundation for her interest in cross-disciplinary research. With experience in trace metals labs focusing on environmental cycling and an interest in connecting exposure to health outcomes, she came to Mailman for the MPH program in Environmental Health Sciences. Following a great experience in the program, and a year as a research assistant, Marisa is excited to continue her development as an environmental epidemiologist in the EHS department. She enjoys long walks and just about anything creative.



Meet Our New Students: MPH



Mohammad Alayyoub

Certificate: Molecular Epidemiology

Hometown: Kuwait City

Previous School: Royal College of Surgeons

Favorite Food: Pizza

Fun Fact: I am a movie addict!

Kaila Boyer

Certificate: Molecular Epidemiology

Hometown: Yorktown Heights, NY

Previous School: Fordham University

Favorite Food: Pizza

Fun Fact: I love to bake.



Nikki (Edna) Franks

Certificate: Environmental Health Policy

Hometown: Stoutsville, Ohio

Previous School: Barnard College

Favorite Food: Lentils

Fun Fact: I'm a Yoga and Meditation instructor.

Meet Our New Students: MPH

Tanya Isaac

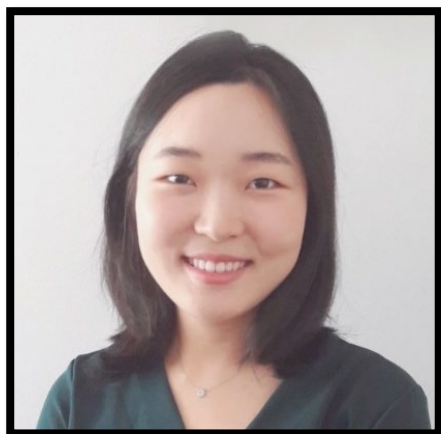
Certificate: Climate and Health

Hometown: Bangalore, India

Previous School: Tulane University

Favorite Food: Biryani

Fun Fact: I went to Guatemala and worked at a midwifery in 2017.



Grace (Hyungjin) Jin

Certificate: Climate and Health

Hometown: Seoul, Republic of Korea

Previous School: SUNY Geneseo

Favorite Food: Black raspberry ice cream

Fun Fact: I love learning new languages.

Josh (Joshua) Klett

Certificate: Toxicology

Hometown: Camano Island, Washington

Previous School: University of Washington

Favorite Food: Goat curry

Fun Fact: I've never traveled outside of the US, but plan to post-COVID.



Meet Our New Students: MPH



Kendall Kruchten

Certificate: Climate and Health

Hometown: Houston, TX

Previous School: The University of Alabama

Favorite Food: Tomatoes

Fun Fact: I have competed in international equestrian competitions for competitive show jumping.

Eleanor Medley

Certificate: Molecular Epidemiology

Hometown: Wellesley, MA

Previous School: University of Toronto

Favorite Food: I love breakfast food.

Fun Fact: My family has a dog and 5 chickens.



Sultana Morioum

Certificate: Toxicology

Hometown: Brooklyn, New York

Previous School: Fordham University

Favorite Food: Anything spicy

Fun Fact: I like magic so much that I started a genie lamp collection.



Meet Our New Students: MPH

Jack Morris

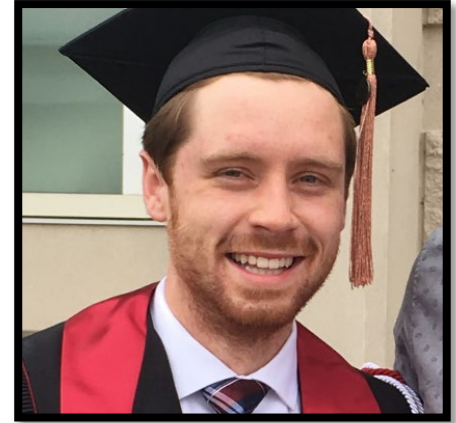
Certificate: Climate and Health

Hometown: Carmel, Indiana

Previous School: Indiana University

Favorite Food: Saag Paneer

Fun Fact: I have participated in the Running of the Bulls in Pamplona, Spain.



Sarah Nekoufar

Certificate: Environmental Health Policy

Hometown: Decatur, Alabama

Previous School: The New School

Favorite Food: Ash (Iranian bean and noodle soup)

Fun Fact: I was a science teacher in the Bronx for three years prior to attending Mailman.

Christina Ng

Certificate: Climate and Health

Hometown: Brooklyn, New York

Previous School: SUNY Binghamton

Favorite Food: A nice hot bowl of noodle soup

Fun Fact: I can ride a motorcycle.



Meet Our New Students: MPH



Tom (Thomas) Onsi

Certificate: Climate and Health

Hometown: Hopkinton, MA

Previous School: University of Michigan

Favorite Food: Sandwiches

Fun Fact: I've hiked the Incan trail and visited Machu Picchu.

Lauren Stiene

Certificate: Toxicology

Hometown: Northport, NY

Previous School: Barnard College

Favorite Food: Perogies

Fun Fact: I love ballet dancing and I have been taking virtual lessons during this time!



Zhiru Wang

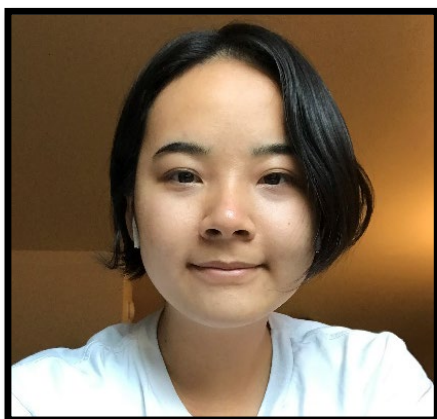
Certificate: Climate and Health

Hometown: Chengdu, China

Previous School: Lawrence University

Favorite Food: Anything my mom cooks.

Fun Fact: I'm a plant lover.



Meet Our New Students: MPH

Jenna Wilf

Certificate: Climate and Health

Hometown: Manhattan

Previous School: Washington
University in St. Louis

Favorite Food: Guacamole

Fun Fact: I was a DIII All-American Swimmer in
college (breaststroke was my specialty).



Meet Our New Students: MPH Dual



Sophie Kimball

Hometown: Santa Monica, CA

Previous School: Harvard

Dual Degree with: Columbia Business School

Favorite Food: Ice cream

Fun Fact: I can't snap my fingers.

Yuning Feng

Hometown: Yunnan, China

Previous School: Wake Forest

Dual Degree with: GSAPP Urban Planning

Favorite Food: Pumpkin

Fun Fact: I went to Stephen Colbert last year and saw Elizabeth Warren.



Meet Our New Students:

MPH 4+1



Tasneem Elkoush

Hometown: Staten Island, New York

Undergrad Institution: Barnard College

Favorite Food: Mangoes

Fun Fact: I am bilingual (English & Arabic)!

Sooik Son

Hometown: South Korea

Undergrad Institution: Dickinson College

Favorite Food: Any types of pizza

Fun Fact: I am allergic to red fruits (haven't had apples for almost 8 years!).



Meet Our New Students: MS



Carine Lama

Hometown: New Orleans

Previous School: Johns Hopkins University

Favorite Food: Pizza

Fun Fact: I can play piano.

Eli Lessman

Hometown: Great Neck, NY

Previous School: Brooklyn College

Favorite Food: Chocolate Chip cookies

Fun Fact: I like ride to my bicycle.



Chidera Nwosu

Hometown: Miami, FL

Previous School: University of Miami

Favorite Food: Custard and Akara

Fun Fact: I am Nigerian.



Meet Our New Students: MS

Irena Pavlovic

Hometown: Hightstown, New Jersey

Previous School: Rutgers University

Favorite Food: Baby carrots

Fun Fact: I'm a very bad driver unfortunately.



Shasity Tsosie

Hometown: Gallup, NM

Previous School: University of New Mexico

Favorite Food: Blue corn mush

Fun Fact: I speak Navajo.

Tracy Wu

Hometown: Orlando

Previous School: University of Central Florida

Favorite Food: Sushi

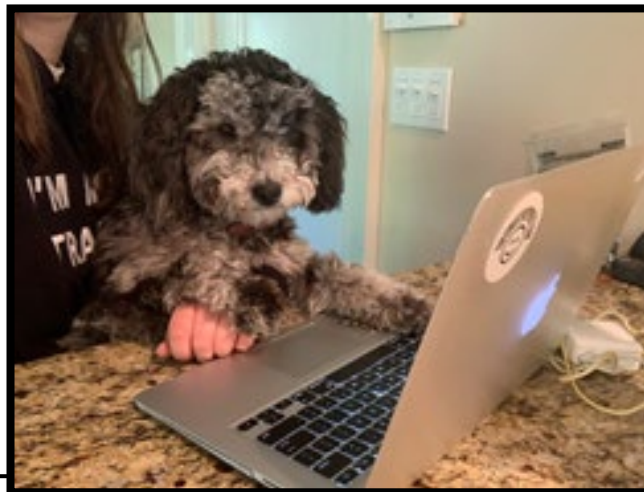
Fun Fact: I have two adorable cats!



Practicum Portraits: MPH Students

Between their 1st and 2nd years, Mailman students complete a required practicum. To find out more about the EHS 2nd year students and their experiences, we asked them:

- Practicum Organization / Mentor Practicum Location
- Description of Practicum Experience
- What was your favorite part of the summer?



Victoria Bortfeld

Organization: The Earth Institute, Columbia University

Location: New York City, NY (Remote)

Description: As the Director's Office Intern, I worked to support the department team in tasks related to the strategic initiatives and priorities of the Earth Institute. Some of the projects I worked on included Climate School planning, EI's project database, and CSUD website creation.

Favorite thing you did this summer: Hiked in the Adirondacks!

Practicum Portraits: MPH Students



Jaron Burke

Organization: Natural Resources Defense Council (NRDC)

Location: Ahmedabad, Gujarat, India (Remote)

Description: As a student researcher, I conducted a literature review to inform one of the NRDC's projects aimed at estimating potential health benefits associated with cleaner energy sources and adaptation measures in a large city in India. I used the findings from my literature review to develop a narrative about the relationship between climate change and health, and to guide the project's climate change and energy models.

Favorite thing you did this summer: I went camping in Baxter State Park in Maine, and hiked along Mount Katahdin, which is the highest mountain in Maine.

Haley Campbell

Organization: Columbia University Earth Institute

Location: New York City

Description: I conducted qualitative research for a book project titled "Strategic Community Partnerships, Philanthropy and Non-Governmental Organizations". The content focuses on how multi stakeholder partnerships are addressing critical social concerns and issues of common interest. It was lots of reading!

Favorite thing you did this summer: I filled my apartment with plants, and I learned how to play the guitar.



Practicum Portraits: MPH Students

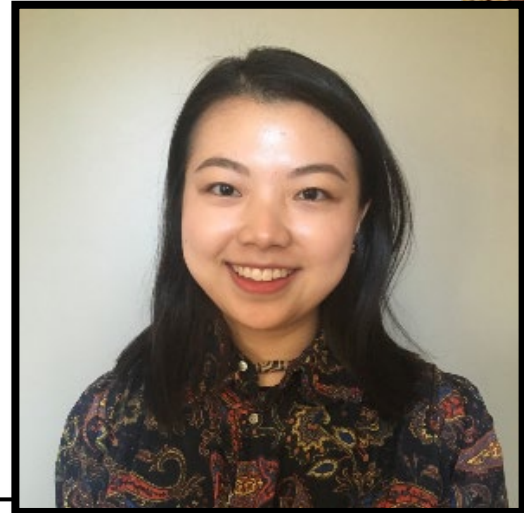
Karina Carrillo

Organization: Office of State Senator Alessandra Biaggi

Location: New York City, NY (remote)

Description: My role in the office was in constituent services. Every day, I addressed issues, via phone and email, that constituents were most concerned about. To do this, I worked with other elected officials' offices and local, state, and federal agencies as needed.

Favorite thing you did this summer: Learned to play tennis with boyfriend while we were in CA!



Grace (Yifan) Chao

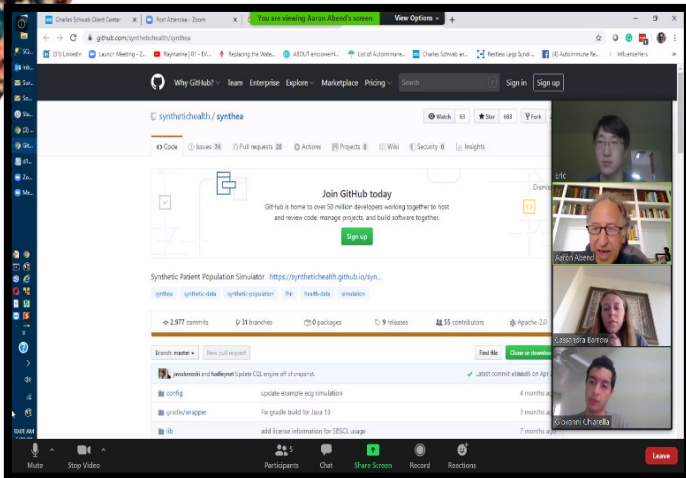
Organization: Public Health and Health Policy Research Center

Location: Virtual

Description: My practicum aimed to assess the construction and the development of health industry in a newly formed Free Trade Zone. I researched the Free Trade Zone and composed files regarding the health industry in this Free Trade Zone to help formulate future planning.

Favorite thing you did this summer: Bake keto cookies!

Practicum Portraits: MPH Students



Eric Chen

Organization: Autoimmune Registry

Location: Remote

Description: I did some work in patient recruitment and website management. I also primarily worked with the All of Us database to identify prevalence information for autoimmune diseases in the states.

Favorite thing you did this summer: Talking with Dr. Graziano and filling out my applications for med school.

Kathleen Chen

Organization: Cardno ChemRisk

Location: Boston, MA (Remote)

Description: This summer, I applied molecular epidemiological and toxicological concepts I learned in class to assess the health risks associated with both occupational exposures and consumer products. I also gained experience with connecting findings from research to applying them in practice.

Favorite thing you did this summer: Visiting Acadia with 2 friends from college!



Practicum Portraits: MPH Students

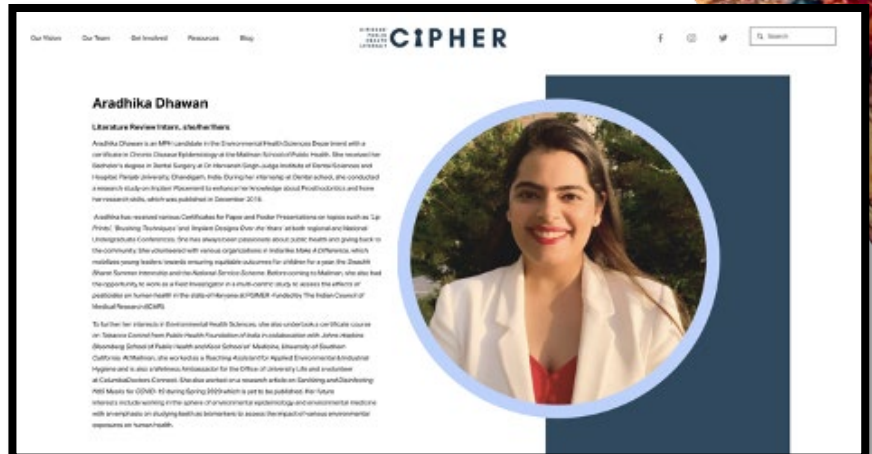
Kunsorya Chhea

Organization: South Bronx Unite/NYP Division of Community and Population Health

Location: New York City, NY (Remote)

Description: It completed a needs assessment on the impact of COVID-19 on the South Bronx community. I learned a lot about community-based participatory research, and it was great to work on a project with an interdisciplinary team.

Favorite thing you did this summer: Recording season 1 of Ask Your Public Health Friend with a few of the other EHSers and chilling in Central Park!



Aradhika Dhawan

Organization: Citizen's Public Health Literacy (CIPHER)

Location: New York, NY (Remote)

Description: As a part of this role, I researched and carried out literature reviews on Adult Education Programs and Public Health Messaging. This was done to help the Curriculum Development Team at CIPHER develop a curriculum for the residents of New York City. Our goal is to increase public health literacy by increasing accessibility and transparency of health information. We've also collaborated with other organizations such as WH Senior Link to help senior citizens during the pandemic.

Favorite thing you did this summer: I did a lot of calligraphy, home workouts and cooking!

Practicum Portraits: MPH Students



Caroline Hoffman

Organization: Rhode Island Department of Health

Location: Rhode Island, MA (Remote)

Description: I worked in the RIDOH Climate & Health program this summer where I assisted in developing and executing Heat Watch, an urban heat island mapping program in Providence and surrounding neighborhoods. I led communications material development for Heat Watch and additionally developed social media posts for the Heat Watch program and days with extreme heat or air pollution. I also developed an internal report summarizing research on the health effects of energy efficiency and weatherization programs and services.

Favorite thing you did this summer: I biked my first metric century (~62.4 miles) and started a garden!

Pratik Lakhani

Organization: Maypole Environmental Inspections, LLC

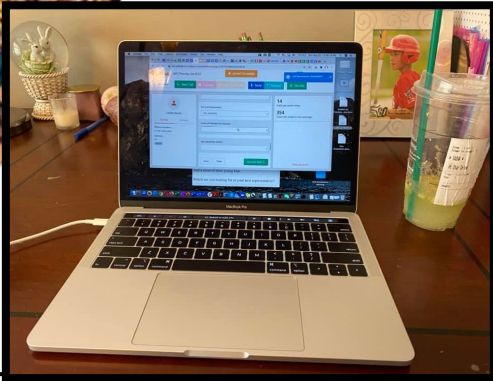
Location: New York, NY

Description: I spearheaded the coronavirus surface testing project at Maypole which included analyzing samples for SARD-CoV-2 via qPCR method. I performed occupational and environmental inspections for residential and industrial spaces. I developed the company's Health and Safety program and the COVID-19 safety protocol.

Favorite thing you did this summer: I floated down the James River in Virginia.



Practicum Portraits: MPH Students



Jennifer Lu

Organization: Public Health Congressional Campaign

Location: New York City, NY (Remote)

Description: At Natalia for Congress, I contribute to putting a voice for public health, racial equity, and social and environmental justice in Congress. I provide ad-hoc support to various teams throughout the campaign.

Favorite thing you did this summer: I went hiking at Rancho San Antonio Open Space Preserve.

Irene Martinez-Morata

Organization: Mailman School of Public Health, Columbia University

Location: Spain (Remote)

Description: I did my practicum remotely working with Dr. Navas-Acien in the topic of e-cigarettes and cardiovascular health and metals in the strong heart study. During my practicum, I also worked with physicians and researchers specialized in the topic like Dr. Shimbo. I presented my work at the 2020 Conference of the International Society of Environmental Epidemiology (ISEE). Finally, I wrote up a publication that will be in press in December, 2020 in an indexed Internal Medicine Journal. I completed my practicum while working full time as a physician in my home country (Spain) with Covid-19.

Favorite thing you did this summer: I spent some time doing outdoor and water sports and I went surfing by the first time.



Practicum Portraits: MPH Students

Shannon (Seonyoung) Park

Organization: Columbia University
Children's Environmental Health Center

Location: New York, NY

Description: Participated in a research project to see the long-term effects of PBDE exposure on children's executive function. It was a good opportunity to apply my knowledge in environmental health sciences and data analysis skills.

Favorite thing you did this

summer: While COVID situation, all the research/data analysis work could be done virtually and Dr. Herbstman is genuinely supportive and an awesome mentor.



Kevin Patterson

Organization: Department of Environmental Health Sciences, Mailman School of Public Health

Location: New York, NY

Description: I conducted research under Dr. Ana Navas-Acien in partnership with the Columbia SRP. I investigated dietary sources of heavy metal exposure in the Strong Heart Study with a later investigation into chronic disease associations that I am still completing. I was responsible for preparing the paper proposals, data analysis, and drafting the manuscript for review.

Favorite thing you did this summer: I was in NYC over the summer, so as the city slowly underwent reopening phases I was reading a lot of books.

Practicum Portraits: MPH Students



Jamie Ponmattam

Organization: Department of Environmental Health Sciences, Mailman School of Public Health

Location: New York, NY (Remote)

Description: I worked with Dr. Joan Casey to examine associations between sociodemographic characteristics and PM2.5 concentrations due to coal-fired powerplants in Ohio between 2000-2018. We examined the relationship using OLS modelling and spatial econometrics in R. It was a great opportunity to learn about data analysis and the research process.

Favorite thing you did this summer: Found a fantastic bakery- Domi in Canal Street Market.

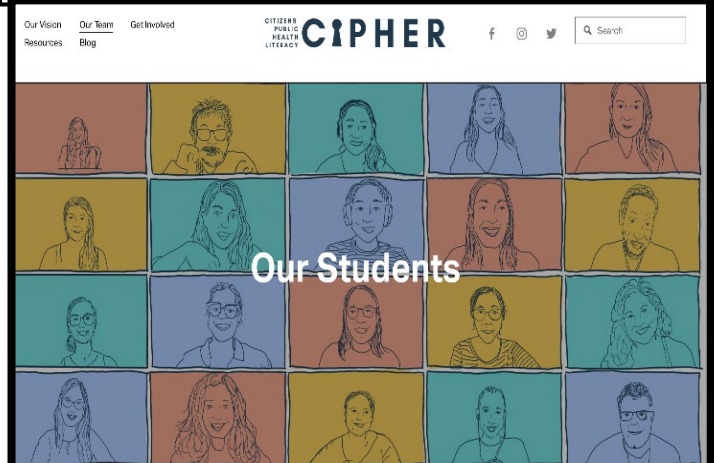
Stephanie Puwalski

Organization: Citizen's Public Health Literacy (CIPHER)

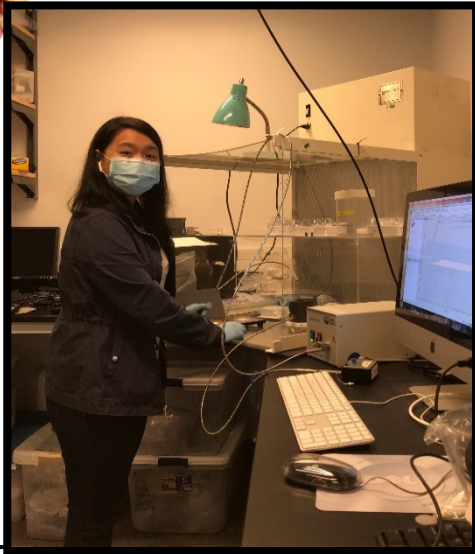
Location: New York, NY (Remote)

Description: I worked within CIPHER as a curriculum development intern and assisted with the creation of an online public health curriculum for the Washington Heights and NYC communities. I worked in collaboration with a team of other Mailman students to develop lessons that are engaging and interactive, and that make public health information more accessible to the general public.

Favorite thing you did this summer: Spent time on Long Island with family.



Practicum Portraits: MPH Students



Nalyn Siripanichgon

Organization: Department of Environmental Health Sciences, Mailman School of Public Health

Location: New York, NY (Remote)

Description: I worked with Drs. Jack and Chillrud this summer on developing a black carbon model using an environmental proxy. The project involved some lab work, which I did at Lamont Doherty Earth Observatory, as well as some data analysis, which I was able to do at home!

Favorite thing you did this summer: Some friends (also in the EHS department) and I started a podcast this summer called Ask your Public Health Friend!

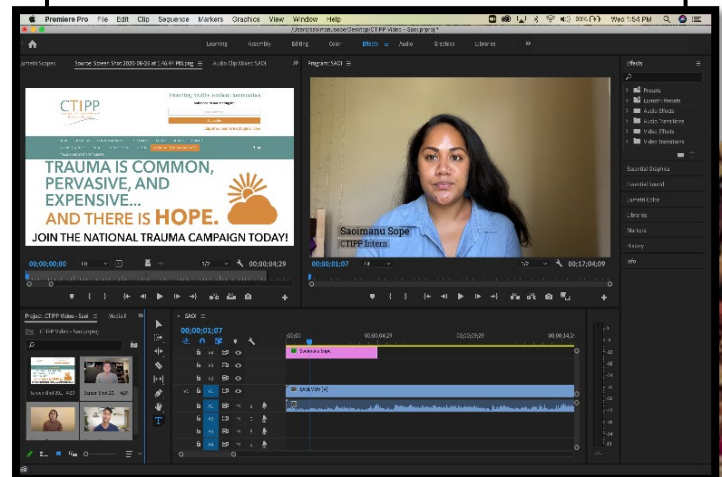
Saoimanu Sope

Organization: Campaign for Trauma-Informed Policy and Practice (CTIPP)

Location: Washington D.C. (Remote)

Description: I worked as a Communications Intern and developed creative content that would be used to conduct outreach and recruitment for the organization.

Favorite thing you did this summer: I started a podcast called Ask your public health friend! with three friends that are also in EHS!



Practicum Portraits: MPH Students

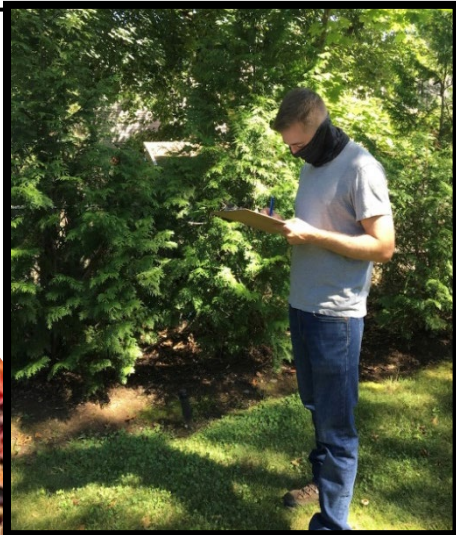
Benjamin Steiger

Organization: Columbia University Ecology, Evolution and Environmental Biology Department

Location: New York, NY

Description: I was a research assistant for a study investigating the human dimensions of and ecological risk factors affecting Lyme disease risk in Staten Island, NY. Due to COVID, I conducted epidemiological surveys over the phone of SI residents asking about their experience with ticks and prevention methods they use. We were able to do a month of field work dragging for ticks in people's yards and examining the vegetation that impacted susceptibility to tick-borne diseases.

Favorite thing you did this summer: Getting to do outdoor activities while working remotely, like going to the beach or hiking.



Mingyong Tong

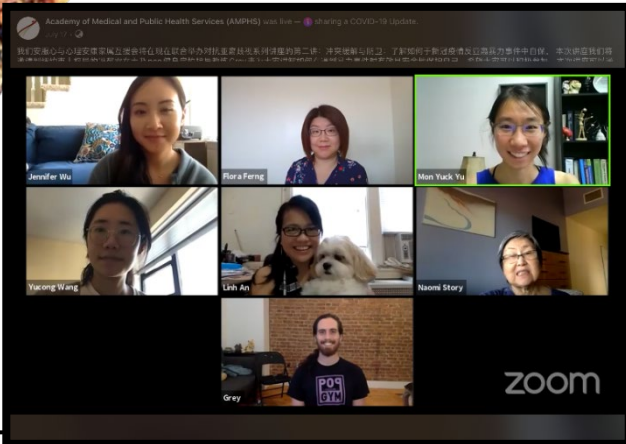
Organization: Columbia Center for Children's Environmental Health

Location: New York, NY (Remote)

Description: I held mini virtual sessions in Mandarin for young Chinese mothers in NYC who are interested in receiving environmental health education. I translated the Healthy Home Healthy Child pamphlets to Mandarin and these are now available to be viewed and downloaded on CCCEH's website. I created a program directory of Head Start and Early Childhood Agencies to facilitate outreach and dissemination of CCCEH's research findings.

Favorite thing you did this summer: I celebrated my grandma's 70 yr-old Birthday virtually with my family in China.

Practicum Portraits: MPH Students



Connie (Yucong) Wang

Organization: Academy of Medical & Public Health Services

Location: New York, NY (Remote)

Description: My practicum included coordinating workshops that cover different topics about COVID-19 such as: the CARES act, rent allowances, self-defense, and even mental health concerns. I developed summaries for these workshops and worked with team members to create blog posts based on the summaries. We also collected federal, state, and city response to COVID-19. We used this information to develop COVID-19 updates to disseminate them to our community members.

Favorite thing you did this summer: I went picnic with my friend by the Hudson River, and we together covered a song we love badly!

Lucy Zhao

Organization: FEMA Region II-One World Trade, National Preparedness Division

Location: New York, NY

Description: I worked in the National Preparedness Division for FEMA Region 2. I was part of a COVID-19 Continuity of Operations task force that contributed to FEMA's national response to the COVID-19 pandemic.

Favorite thing you did this summer:

I played way too much Guitar Hero.



PrIMER Trainees: Summer 2020



Koshiq Hossain

Faculty Mentor: [Dr. Andrea Baccarelli](#)

School: Hunter College

Project: *The Effect of Lead on DNA Subtelomeric Methylation and Cognitive Ability in the Elderly*

One in four people in the world will be affected by mental or neurological disorders at some point in their lives. Every year there are 10 million new cases of dementia. Experimental and epidemiological research has shown that environmental exposures to black carbon and lead may accelerate cognitive decline. Researchers have found that subtelomeric regions are more methylated in Alzheimer's Disease individuals than in controls, and it has been proposed as a characteristic of Alzheimer's Disease. Subtelomeric methylation is a regulator of telomere length, a proposed biomarker of biological aging. Alzheimer's Disease is also characterized by high rates of oxidative damage, which could be modifying telomere length through demonstrated changes in subtelomeric methylation.

PrIMER Trainees: Summer 2020



Lea Jean-Francois

Faculty Mentor: [Dr. Brandon Pearson](#)

School: Barnard College

Project: *Usage of Instability Index to Determine if Chemicals Disrupt Trinucleotide Repeats in Huntington's Disease*

Huntington's Disease is a severe neurodegenerative disorder resulting from expanded CAG nucleotide repeats in the Huntington (HTT) gene. Instability in the expansion of the repeat sequence can lead to ongoing instability as a result of environmental chemical exposures. Investigation utilizes cell models of Huntington's disease to determine if pesticide exposure expands CAG repeats that leads to an increase in repeat instability.

PrIMER Trainees: Summer 2020



Salwa Najmi

Faculty Mentor: [Dr. Micaela Martinez](#)

School: Hunter College

Project: *Covid-19 Disparities in NYC: Active Digitization and Analysis*

In March 2020, the World Health Organization formally declared COVID-19, the disease brought on by the severe syndrome coronavirus 2 (SARS-CoV-2), as a global pandemic. The CDC has indicated that racial and ethnic disparities in COVID-19 may be partially attributable to socioeconomic disadvantages requiring some individuals to continue working outside, limiting their ability to adequately social distance and quarantine in their homes. By analyzing data released by the New York City Department of Health, MTA, as well as Traffic data, we hope to better understand how disparities in the COVID-19 public health crisis may be related to essential work, and thereby an inability to effectively social distance.

PrIMER Trainees: Summer 2020



Han Oo

Faculty Mentor: [Dr. Julie Herbstman](#)

School: Fordham College

Project: *The Neighborhood Quality and Positive Health*

Positive health is a new approach of measuring health that can be characterized as both a function of positive and negative resources. The positive aspects allow children with chronic illness to utilize their own skills to promote well-being by adapting to environmental challenges, obtaining goals, fulfilling needs while the negative aspects such as their chronic illness led to a limitation or interference in their functioning. This measure of positive health provides more context about what "Health", which is traditionally measured as an absence of illness. Neighborhood quality, which is measured using a self-perceived neighborhood quality reported by the guardian, affects one's positive health. By analyzing neighborhood quality and positive health, we hope to explore the question of what healthy aging is and examine predictors of positive health.

PrIMER Trainees: Summer 2020



Dahiana Pena

Faculty Mentor: [Dr. Matt Perzanowski](#)

School: Columbia College

Project: *Parasympathetic Nervous System Activity and Exercise-induced Bronchoconstriction*

The autonomic nervous system, which consists of the parasympathetic and sympathetic branches, regulates involuntary movements such as heartbeat and bronchodilation/bronchoconstriction of the lungs. Studies have indicated that there is an association between the asthma phenotype exercise induced wheeze and dysregulated activity of the autonomic nervous system. For this project we measured heart rate variability (HRV), which is an index for parasympathetic vagal activity, in young-adult asthmatics. We conducted data analysis to determine the relationship between parasympathetic activity (measured through HRV) and Exercise-Induced Bronchoconstriction.

PrIMER Trainees: Summer 2020



Charlene Redhead

Faculty Mentor: [Dr. Norman Kleiman](#)

School: Hunter College

Project: *Heavy Metal Contamination in Hair from Feral Dogs in Chernobyl*

34 years after the Chernobyl nuclear disaster and the subsequent multi-year cleanup, thousands of individuals continue to work on remediation, deconstruction, and in two newly constructed nuclear fuel reprocessing facilities. In addition to continuing public health concerns regarding radioactive contamination, the area surrounding the reactors and surrounding military-industrial complex is likely also contaminated with a variety of heavy and toxic metals. To model potential human health risks in the region, hair samples from feral dog populations within the Exclusion Zone were analyzed for toxic metal content. When compared to samples from control animals, data indicates significantly higher concentrations of numerous potentially toxic and/or carcinogenic metals in hair samples from dogs living alongside workers in the Exclusion Zone.

PrIMER Trainees: Summer 2020



Monique Slowly

Faculty Mentor: [Drs. Regina Santella](#) and [Hui-Chen Wu](#)

School: Columbia College

Project: *Blood DNA Methylation and Liver Cancer: Evidence from Strong Heart Study*

Liver cancer incidence has risen over the past 10 years in the United States, especially in American Indian populations. Along with genetic and environmental factors, epigenetic alterations such as DNA methylation can contribute to cancer development. Blood cell DNA methylation can be used as a biomarker to assess cancer risk. In order to evaluate the association between liver cancer mortality and blood DNA methylation, an epigenome wide association study was conducted to identify CpG sites of significance with relation to liver cancer.

Letter from SEA

Dear EHS Family,

Although we all are still adapting to a reality that is virtual, we'd like to thank everyone who has contributed to our virtual events this semester thus far and are looking forward to continuing to create meaningful programming. We hope that you continue to stay engaged in our group! This semester, we aimed to continue SEA's goal of advocating for, and educating about environmental action, while aiming to make our events relevant and intersectional.

The SEA of Thoughts discussion topic this semester addressed "*The Future of Climate Change & the 2020 Presidential Election*" and was moderated virtually on Zoom. SEA was thrilled to host Jeffery Shaman, PhD, Michael Gerard, JD, and Matthew Neidell, PhD. The panelists focused their conversation around the economic and political implications of climate change based on the uncertain (at the time) outcome of the election. We thank the panelists and those who attended for a fruitful and insightful discussion of what the nation can expect under a Biden Administration!

Additionally, we hosted a film screening and conversation about "*The Great Divide*." The short film illustrates ongoing challenges between two California communities less than a mile apart, located in one of the nation's staple agricultural regions. The event featured the film director, [Casey Beck](#), who answered questions about her work on the film and how these farming communities demonstrate their fight for clean and affordable drinking water.

Finally, as we near the end of this semester (already!), we look forward to supporting a new Executive Board for SEA beginning in 2021. As the 2020 Executive Board, we have all thoroughly enjoyed our time leading SEA and, of course, are sad to leave our positions; but we are excited to pass the lead to rising environmental leaders - here's to looking at you, first years!

Please stay tuned for our virtual updates and regularly scheduled environmental news-sharing!

Victoria Bortfeld, Saoimanu Sope, Valeria Mazzanti, Haley Campbell
The Executive Board of Students for Environmental Action
Facebook: facebook.com/sea.columbia.publichealth
Instagram: [@seacolumbia](https://instagram.com/seacolumbia)
Engage: [SEA on Engage](#)



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 [nj2128@columbia.edu](mailto:njk2128@columbia.edu) with your submissions.

We look forward to hearing from you.

Be well and keep in touch!