

Department Newsletter Spring 2021



 **COLUMBIA**

MAILMAN SCHOOL
OF PUBLIC HEALTH

ENVIRONMENTAL
HEALTH SCIENCES

Table of Contents

Letter from the Chair	2
Updates	3
Faculty	3
New EHS Leadership	4
Students	5
Alumni	6
Summer Workshops	8
Grants and Awards	9
Publications	9
Spotlights	12
Faculty	12
Staff	14
Alumni	16
PRIMER	17
Letter from SEA	19

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:

While the Winter season begins to thaw, we're happy to report new changes in the department. At the end of 2020, we were very honored to recognize former Chair of EHS, [Dr. Joe Graziano](#), for his long service to EHS in leading and mentoring the department. Friends, family, colleagues, and students connected from across the country and as far Bangladesh and Taiwan to express their deep gratitude. We are so grateful to his longtime collaborators Nancy, Vesna, [Ana Navas-Acien](#), and so many others for putting together this incredible farewell for Joe.



Recently, we held our first mixed online and in-person PhD Defense. Congratulations to Dr. Vrinda Kalia and all of our most recent PhD graduates on their successful doctoral defenses. We are eagerly looking forward to the day we can celebrate in-person.

This Spring marks the anniversary of the world going into lockdown. We hope to catalog the incredible contributions students, postdocs, and faculty have made during this times for future generations. For those interested in sporting the vaccine rollout, there are still [volunteer opportunities available](#).

In our January Town Hall, [Dr. Gary Miller](#) and our Vice Dean, Finance & Administration, Sepi Sepasi noted the ever-evolving plans to return to campus. In the near future, and based on federal, state, and University guidelines, we hope to implement a system to allow for increased occupancy.

We're rather ambitious this year as we work with our new leadership team including Vice Chair of Research and Faculty Affairs, Ana Navas-Acien and Director of Faculty Mentoring, [Julie Herbstman](#). Our admissions committee has also received a new addition with [Dr. Norman Kleiman](#) serving as our lead for the Master's Application Review and [Marianthi-Anna Kioumourtzoglou](#) as the new PhD Program Director.

This year, I had the honor of becoming the president-elect of the International Society for Environmental Epidemiologists (ISEE), the largest and best recognized environmental epidemiology association worldwide. Together with [Drs. Joan Casey](#) and Marianthi-Anna Kioumourtzoglou, and a committee of Columbia University and New York investigators, we are working to bring the ISEE 2021 Conference to New York City this August in a hybrid virtual event. Overall, the 2020-2021 academic year will be a crucial inflection point for Mailman as the school approaches its centennial. The department of EHS has an important role moving forward into the School's centennial and we're excited to share our research with the world.

[Andrea Baccarelli](#), MD, PhD, MPH
Leon Hess Professor and Chair

Updates: Faculty



Dr. Gary Miller was interviewed by NIEHS Director Rick Woychik for the [March issue of the NIEHS Environmental Factor Newsletter](#). They discussed the need for more researchers to study the exposome, the study of environmental exposures people experience throughout their lives.

"Learning as much as we can about the external factors that affect human health is at the heart of exposome research. This involves analyzing more than just chemicals. Outside stressors of any sort, whether related to socioeconomic issues, mental health, or lack of green space, for example, are also part of the equation." – Dr. Gary Miller



Frederica Perera, DrPH, PhD, along with Alique Berberian, MPH, MIA (Class of 2019) completed a [study](#) on the potential health benefits in New York City if the reduction of air pollution levels seen under the COVID-19 shutdown were extended for 5 years. The estimated co-benefits include thousands of avoided cases of illness and death, and \$31.8 - \$77 billion in economic savings. This scenario can serve as an "aspirational benchmark" for New York City's future climate and transportation policies. Read more about the study in the [Environmental Health, Urban Health](#).

"Air quality improvements from the shutdown happened as the result of a tragic situation. However, our hypothetical clean air scenario could be achieved through air pollution and climate mitigation policies, including those that support low carbon modes of transportation and reduce emissions in other sectors."
– Prof. Frederica Perera

New EHS Leadership



Ana Navas-Acien
Vice Chair of Research and Faculty Affairs

[Dr. Navas-Acien](#) started as our new Vice Chair of Research and Faculty Affairs in February 2021. In her role, Ana will address strategic planning, research support, and faculty affairs.



Julie Herbstman
Director of Faculty Mentoring

[Dr. Herbstman](#) will lead the career development program of our P30 NIEHS Center, while also coordinating the department's early-career faculty mentoring and onboarding of new EHS Faculty.



Norman Kleiman
Master's Application Review

[Dr. Kleiman](#) will lead the EHS Master's Admission Committee starting this Fall. He will coordinate strategies with the EHS educational leadership and the chair for admission decisions.



Marianthi-Anna Kioumourtoglou
PhD Program Director

[Dr. Kioumourtoglou](#) will coordinate the activities of the PhD Program, chair the EHS doctoral committee, and serve as the faculty point-of contact for our PhD students starting this Fall.

Updates: Students



Ahlam Abuawad, PhD candidate, presented her work entitled *Methods for accounting for urine dilution in arsenic analyses: comparisons to blood arsenic* at the ISEE conference (August, 2020) and [NIEHS Super Fund Program 2020 Annual Meeting](#) (December, 2020).



Brennan Baker, PhD candidate, presented his work entitled *Association of Prenatal Acetaminophen Measured in Meconium with Risk of Attention-Deficit Hyperactivity Disorder* at the ISEE conference (August, 2020).



Adnan Divjan, DrPH student and Staff Associate in EHS, gave an oral presentation at the annual American Academy of Allergy, Asthma & Immunology meeting (February, 2021). The title of his talk was *Effect modification of the association between domestic mold report and wheeze by age and seroatopic predisposition among children living in lower-income New York City neighborhoods*.



Wil Lieberman-Cribbin, PhD student, was featured in the [NYTimes](#) and [Mailman news](#) for his recent work regarding Covid-19 testing disparities. Wil summarized his findings stating that, "*Overwhelmingly, the wealthiest neighborhoods—in fact, most of Manhattan below 110th Street—showed the highest rates of testing, while the poorest neighborhoods, in Central Brooklyn and the South Bronx, for example, largely correlated with the lowest... the differences between the most affluent communities and the least advantaged were four times as great.*"

Updates: Students



Maya Spaur, PhD student, presented her work entitled *Associations between private well water and community water supply arsenic concentration in the U.S.* at the ISEE conference (August, 2020) and the [NIEHS Super Fund Program 2020 Annual Meeting](#) (December, 2020).

Updates: Alumni



Sashti Balasundaram, (MPH '08), [WeRadiate](#), a clean tech hardware and software company, received a \$25,000 MATCH GRANT from NextCorps. He and his company are planning a Spring Fundraiser to enhance smart-sensor compost systems to support local manufacturing and provide climate solutions for healthy soils.

"To continue success, WeRadiate has launched a fundraiser [Invigorate Soil Ecology Through Compost Technology](#). All contributions are tax deductible and support local compost efforts through education, open data compost map, and compost bike tour."

Updates: Alumni



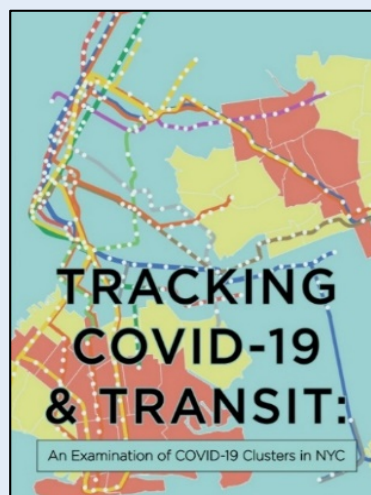
Vrinda Kalia, PhD successfully defended her dissertation on January 15th, 2021. The title of her dissertation was *Metabolic Evaluation of Genetic and Environmental Contributors of Alzheimer's Disease*.



Darwin Keung,
MPH '17 -Tri-State Transportation Campaign,
Climate and Health Policy Manager

Tracking COVID-19 & Transit:

"This is a piece that explored the spatial relation between coronavirus clusters found at the onset of the fall wave of cases and NYC subway ridership in October 2020. We developed this piece to add to the conversation around riding covid transmission and the perceived and actual risk of riding the subways. Thanks to Jeremy Porter for assisting with the GIS analysis and concept."



Summer Workshops

EHS' SHARP Training Program continues to grow, with an exciting lineup of virtual offerings for summer 2021! We will offer 18 trainings June – August this year, with some exciting new topics in Environmental Justice led by our very own Dr. Joan Casey, Multi-omics, Python Data Wrangling, and Google Earth Engine.



The image is a promotional graphic for the SHARP Program. At the top, it says "SHARP PROGRAM Skills for Health and Research Professionals". Below this, there is a grid of 12 small icons representing different training topics: Microbiome Data Analytics Boot Camp, Single Cell Sequencing Boot Camp, Electronic Medical Records Boot Camp, Mendelian Randomization Boot Camp, Environmental Mixtures Workshop, Environmental Justice Boot Camp, NIH Grant Writing Boot Camp, Python Data Wrangling Boot Camp, GIS Workshop Visualizing and Analyzing Health Data, Machine Learning Boot Camp, PI Crash Course Skills for Future or New Lab Leaders, Epigenetics Boot Camp, Causal Mediation Analysis Training, Google Earth Engine Boot Camp, The Exposome Boot Camp, and Quantitative Genomics Training. A central blue box highlights "SUMMER 2021 2-3-day intensive, hands-on boot camps. Live-stream, virtual offerings. Led by experts." At the bottom right, an orange box says "MORE INFO PublicHealth.columbia.edu/SHARP-training COLUMBIA UNIVERSITY".

We'd like to welcome new team members Nader Elmehdawi and Meaghan Doherty who will coordinate different aspects of the SHARP Program this year. Welcome Nader and Meaghan!

Check out the upcoming EHS-led trainings:

- 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
Dr. Andrea Baccarelli
- Exposome Boot Camp: Measuring Exposures on an Omic Scale
Dr. Gary Miller
- GIS Workshop: Visualizing and Analyzing Health Data
Dr. Jeremy Porter
- PI Crash Course: Skills for Future or New Lab Leaders
Dr. Diane Re
with co-instructors Drs. Ana Navas-Acien and Matthew Perzanowski
- Radiation Safety Officer (RSO) Training
Dr. Norman Kleiman

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



Grants and Awards

Ahlam Abuawad, PhD candidate, was awarded an F31 grant for her dissertation work entitled, *Arsenic, One-Carbon Metabolism, and Diabetes Incidence*. She was also granted the [K.C. Donnelly Externship Award](#) to travel to Hanover, New Hampshire, to work with Margaret Karagas, Ph.D., at the Dartmouth College SRP Center.

Craig Connolly, Postdoctoral Research Scientist, received funding for a Research Assistant and summer (2021) REU student in the Columbia Earth Institute. In winter of 2020, Craig was the LDEO nominee for the Blavatnik Regional Postdoctoral Award.

Josh Klett, MPH student, was awarded the Huo Foundation Practicum Fellowship. The fellowship provides financial support for summer practicums placements focused on enhancing community health.

Publications

Adams, M., Garcia, K., **Keung, D.**, & Park-Rogers, F. (2021, March). Tracking COVID-19 & Transit: An Examination of COVID-19 Clusters in NYC. [tstc.org. http://www.tstc.org/wp-content/uploads/2021/03/Tracking-COVID-19-Transit.pdf](http://www.tstc.org/wp-content/uploads/2021/03/Tracking-COVID-19-Transit.pdf)

Abuawad, A., Spratlen, M. J., Parvez, F., Slavkovich, V., Ilievski, V., Lomax-Luu, A. M., **Saxena, R.**, Shahriar, H., Nasir Uddin, M., Islam, T., **Graziano, J. H.**, **Navas-Acien, A.**, & **Gamble, M. V.** (2021). Association between body mass index and arsenic methylation in three studies of Bangladeshi adults and adolescents. *Environment international*, 149, 106401. <https://doi.org/10.1016/j.envint.2021.106401>

Publications

Casey, J. A., Mango, M., Mullendore, S., Kiang, M. V., Hernández, D., Li, B. H., Li, K., Im, T. M., & Tartof, S. Y. (2021). Trends from 2008-2018 in electricity-dependent durable medical equipment rentals and sociodemographic disparities. *Epidemiology* (Cambridge, Mass.), 10.1097/EDE.0000000000001333. Advance online publication. <https://doi.org/10.1097/EDE.0000000000001333>

Chillrud, S. N., Ae-Ngibise, K. A., **Gould, C. F.**, Owusu-Agyei, S., Mujtaba, M., Manu, G., Burkart, K., Kinney, P. L., Quinn, A., Jack, D. W., & Asante, K. P. (2021). The effect of clean cooking interventions on mother and child personal exposure to air pollution: results from the Ghana Randomized Air Pollution and Health Study (GRAPHS). *Journal of exposure science & environmental epidemiology*, 10.1038/s41370-021-00309-5. Advance online publication. <https://doi.org/10.1038/s41370-021-00309-5>

Drace-Brownell, D. (2021). Binocular Vision Disorder: A Patient's Guide to a Life-Limiting, Often Underdiagnosed, Medical Condition. Chisinau, Republic of Moldova: Eliva Press.

Fang Guo, **Vivian Do**, Rachel Cooper, Yu Huang, Pei Zhang, Jinjun Ran, Qiang Zhang, Linwei Tian, Zuntao Fu, Trends of temperature variability: Which variability and what health implications?, *Science of The Total Environment, Volume 768*, 2021, 144487, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2020.144487>

Fisher, J. A., **Spaur, M.**, Buller, I. D., Flory, A. R., Beane Freeman, L. E., Hofmann, J. N., Giangrande, M., Jones, R. R., & Ward, M. H. (2021). Spatial Heterogeneity in Positional Errors: A Comparison of Two Residential Geocoding Efforts in the Agricultural Health Study. *International journal of environmental research and public health*, 18(4), 1637. <https://doi.org/10.3390/ijerph18041637>

Perera, F., Berberian, A., Cooley, D., Shenaut, E., Olmstead, H., Ross, Z., & Matte, T. (2021). Potential health benefits of sustained air quality improvements in New York City: A simulation based on air pollution levels during the COVID-19 shutdown. *Environmental research*, 193, 110555. <https://doi.org/10.1016/j.envres.2020.110555>

Publications

Locke, R., McGinty, M., Guerrero Ramirez, G., & Sellers, K. (2021). Attracting New Talent to the Governmental Public Health Workforce: Strategies for Improved Recruitment of Public Health Graduates. *Journal of public health management and practice : JPHMP*, 10.1097/PHH.0000000000001336. Advance online publication. <https://doi.org/10.1097/PHH.0000000000001336>

Locke, R., Gambatese, M., Sellers, K., Corcoran, E., & Castrucci, B. C. (2020). Building a Sustainable Governmental Public Health Workforce: A Look at the Millennial Generation. *Journal of public health management and practice : JPHMP*, 10.1097/PHH.0000000000001247. Advance online publication. <https://doi.org/10.1097/PHH.0000000000001247>

Nardone, A., Rudolph, K. E., Morello-Frosch, R., & **Casey, J. A.** (2021). Redlines and Greenspace: The Relationship between Historical Redlining and 2010 Greenspace across the United States. *Environmental health perspectives*, 129(1), 17006. <https://doi.org/10.1289/EHP7495>

Nunez, Y., Boehme, A. K., Weisskopf, M. G., Re, D. B., **Navas-Acien, A.**, van Donkelaar, A., Martin, R. V., & **Kioumourtzoglou, M. A.** (2021). Fine Particle Exposure and Clinical Aggravation in Neurodegenerative Diseases in New York State. *Environmental health perspectives*, 129(2), 27003. <https://doi.org/10.1289/EHP7425>

Nunez Y, Gibson AE, Gennings C, Tanner EM, Goldsmith JA, Coull AB, and **Kioumourtzoglou M-A.** Good Practices for Applied Statistical Learning in Epidemiology. *International Journal of Epidemiology*. 2021 Jan. <https://doi.org/10.1093/ije/dyaa259>

Spotlight: Faculty

Looking Back, but Moving Forward with Dr. Joe Graziano

by Saoimanu Sope

The true beauty of retirement is that time is no longer of the essence. For [Dr. Joe Graziano](#), who retired last semester after 42 years with Columbia University and 8 years with Rockefeller University and the Weill Cornell Medical College, time is so plentiful that he is finally getting nine hours of sleep each night (amazing, right?).

These days, Dr. Graziano can be found reading the books that he was recommended over the years or testing out new recipes in the kitchen. He is also happy to report that every day he has been able to nurture his love for music by playing piano.

If he's not indoors, you will most likely find him out on the hiking trails adding onto his already recorded 105 miles as of the new year. During an interview, we asked Dr. Graziano to reflect upon his time in the Environmental Health Sciences (EHS) Department and to share his hope for the future of our public health students.

NIH National Institute of Environmental Health Sciences
Your Environment. Your Health.

Joe's Remarkable Work at the Columbia SRP

- **Center director:** 2000-2017
- **Project leader:** Consequences of Arsenic and Manganese Exposure on Children (2000-2017).
- **Pioneer investigator:** Observed new arsenic exposure effects on children
- **Leader:** Trace Metals Core (2000-2017), Integrated Science Support Core (2017-2021).
Co-lead: Training Core (2017-2021)
- **Chair of the National Research Council's Committee** that provided recommendations to the EPA about arsenic



Here's what he had to say:

SS: What do you look forward to the most now that you're retired?

JG: *I'm excited to spend more time with my family. I'm vaccinated now and I'm really looking forward to seeing my children and grandchildren. Before COVID, we would have big family gatherings and with seven talented musicians in the family, we would often fight over the piano. I miss that!*

Spotlight: Faculty

Looking Back, but Moving Forward with Dr. Joe Graziano



SS: Knowing that you're still involved in the EHS community, what does your role look like these days?

JG: I'm still mentoring a few MPH students, both in and outside of the EHS department. I attend a few lab meetings for my former lab and participate in the occasional seminar. Sometimes the department will ask me to review a grant, which is better than having to write it. For the most part, my role is really scaled back, and I feel fortunate to be able to pick and choose what I want to do.

SS: What do you envision for the EHS department in, let's say, the next 10 years?

JG: First of all, [Dr. Andrea Baccarelli](#) has recruited an amazing group of assistant professors and I think that the turnover into youth has been wonderful to witness.

Today, there's a lot of focus on big data and -omics research, which is very different than before, where research was hypothesis driven. Within the field, there's been a shift towards data analysis thanks to the amount of preexisting data that can be quickly generated and accessed through technology. So, I see the department adjusting to these times and catering to this development.

SS: As we prepare to bid farewell to this year's graduating class and welcome a new group of students in the fall, what is your hope for our public health students?

JG: I think that we've now entered a time where we don't have to explain what "environmental health" or "public health" means/is, and I hope that this makes it easier for you all to find meaningful work. Regardless, wherever you go, I would encourage you all to find a mentor. For me, I was the first in my family to graduate from high school and it was because of some great mentors that I was able to find my way. It's really difficult to do things on your own and people who do, tend not to do so well. My hope is that you all find a mentor that you can lean on and learn from as you move forward and shape your future.

Thank you, Dr. Graziano. The EHS Department and field of Public Health are better because of leaders like you. Enjoy your retirement and all of the new adventures that await! Watch his retirement tribute [here](#).

Spotlight: Staff

Craig Connolly, PhD **Postdoctoral Scientist**

Craig recently received a NIEHS Postdoctoral Fellowship in the Environmental Health Sciences (EHS) Department at Columbia in fall 2020, under the supervision of Drs. Benjamin Bostick (LDEO), [Ana Navas-Acien](#) (EHS), and [Jeffery Shaman](#) (T32 postdoc program lead).

Prior to joining the EHS department, Craig earned his PhD in Marine Science from the University of Texas at Austin and was Postdoctoral Research Scientist and U.S. Geological Survey Powell Center Fellow at the Lamont-Doherty Earth Observatory (LDEO) of Columbia University.



The overarching theme of Craig's postdoctoral research is to provide effective solutions to combat the global threat of arsenic (As) exposure by conducting interdisciplinary, transformative, research that merges environmental chemistry and biogeochemistry, satellite remote-sensing and geospatial analysis, data science and machine learning, and public health. He recently applied this research approach in South and Southeast Asia (Cambodia, Vietnam, and Bangladesh), where he found that flooding behavior is a master variable that integrates the environmental conditions that control groundwater As contamination and that can be used to predict As-safe and unsafe groundwater across the entire countries. The manuscript for this research is currently under consideration for publication.

Continued on next page

Spotlight: Staff

Craig Connolly, PhD (*Cont'd*)

Craig's work has also been presented at several conferences:

- *Flooding drives groundwater arsenic contamination in southeast Asia.* (2020, October 25 - 29). Presented at Geological Society of America Conference.
- *Flooding regulates groundwater arsenic contamination in southeast Asia.* (2020, December 14 - 15). Presented at NIH Superfund Research Program Annual Meeting.
- *Linking surface flooding behavior to groundwater arsenic heterogeneity across scales in southeast Asia.* (2020, December 1 - 17). Presented at American Geophysical Union Fall Meeting.
- *Predicting arsenic contamination and heterogeneity across scales using environmental geospatial analysis and machine learning.* (2020, December 14 - 15). Presented at Columbia University Data Science Institute Conference: Machine Learning in Science & Engineering.

He has additionally given departmental seminars at LDEO, EHS, and Union College. He is currently applying this approach to study the drivers of As contamination in the U.S. Northern Plains, particularly in Native American Reservation communities with a strong connection to ongoing epidemiological and exposure studies as part of the [Columbia Superfund Research Program](#), (SRP).

Spotlight: Alumni

Amy Nematollahi, MPH '16

We were excited to hear from Amy as she shared a bit about her post-MPH time and her current PhD program. Here's what she shared with us!

I am currently a third-year student in the Environmental Health Sciences PhD program at the University of Arizona Mel and Enid Zuckerman College of Public Health in my hometown of Tucson, Arizona. I am being supported by an NIEHS environmental toxicology training grant fellowship and will be completing my comprehensive exams this semester. My dissertation work involves a series of analyses that explore levels of serum per- and polyfluoroalkyl substances (PFAS) in an occupationally exposed population. I am doing a cross-sectional analysis of PFAS serum levels in incumbent and recruit firefighters, as well as longitudinal analysis for recruit firefighters. Over the next year, I will look at whether firefighters' PFAS serum levels have an effect on differential expressions of microRNA. I am also involved in the development of an NIEHS time sensitive R21 grant project that will evaluate the effect of PFAS levels on immune responses related to coronavirus disease 2019 (COVID-19) exposure in firefighters. So, as you may have guessed, I'm really into PFAS!

Life in Tucson is great. I still enjoy baking and I have a small garden – beats using a fire escape for plant space! My partner, Saman, and I have a nearly 5-year-old son named Nolan who continues to amaze us with his humor and wit. I will always remember that Pinterest-worthy surprise baby shower the EHS crew put together for me! I have so many fond memories of my time at Mailman, especially during the second year when I was surrounded by the kind and supportive EHS family. I know I wouldn't have even dreamed of getting my PhD if it were not for the guidance and encouragement I received from my mentors and friends in EHS who pushed me to work hard and think even harder.

PrIMER

Some of our PrIMER Trainees will graduate from their home institutions this year and will complete their training in the PrIMER program. They shared a bit about what they'll be up to after graduation:



**Léa
Jean-François**

I am a senior at Barnard College studying Environmental Science with a minor in Biology on a pre-medical track. PrIMER was an enriching educational experience and allowed me to develop my research skills. I really value the learning environment fostered by the EHS community and PrIMER staff, especially [Dr. Pearson](#) and the lab team that allowed me to cultivate my knowledge of toxicology research. Dr. Pearson's mentorship was influential in engaging with scientific investigations, and the learning paved the way for my abstract to be accepted in the 2021 Society of Toxicology Annual Meeting that I am presenting on March 24th, 2021 at the annual SOT meeting. I am planning to pursue a research position in environmental health and/or toxicology, and then apply to a joint PhD and MD program. I am truly grateful for the learning opportunities PrIMER granted, thank you!



**Han
Oo**

I will be receiving a Bachelor of Science with Honors in Psychology. My home institution is Fordham University. I am taking a gap year and applying for MS in Epidemiology. My PrIMER experience was very rewarding, and I learned so much about research and what it takes to conduct research from the very beginning. I am thankful that [Dr. Herbstman](#) recommended me to apply for the Break the Cycle which is a program through which I will be published for. I appreciate all the hard work you put into this program. As a first-generation college student, I am thankful for this program and everyone who is a part of it.

PrIMER



**Dahiana
Pena**

I will be receiving a Bachelor of Arts with a Major in Neuroscience and Behavior with a concentration in Latin American and Caribbean studies. My home institution is Columbia College at Columbia University. I have been accepted to Mailman for an MPH in Epidemiology with a concentration in Social Determinants of Health and to NYU with a scholarship also for an MPH in Epidemiology! I am extremely grateful to the EHS department for providing me with an incredible PrIMER experience and affording me the opportunity to participate in asthma research which disproportionately impacts low-income NYC communities like my own. I am most grateful for gaining [Dr. Perzanowski](#), [Dr. Ana Navas-Acien](#), and Nina Kulacki as mentors and for the connections I was able to make with my fellow PrIMER peers.



**Charlene
Redhead**

I am a senior at Hunter College and am part of the Yalow Scholars program for pre-medical students. I am majoring in biochemistry with a focused study in mathematics. After graduating, I would like to pursue a master's degree in biomedical sciences before going to medical school. The PrIMER program was my first research experience and it opened my eyes to the field of public health and environmental health science. Having been a trainee for three years, I couldn't have asked for a better research experience and to have met better people. I had the opportunity to work under my mentor [Dr. Norman Kleiman](#) and I have become more confident in my ability to speak about my research, preparing and analyzing samples, and reading though scientific articles, skills that I can definitely take with me in my future endeavors.

Letter from SEA

Dear EHS Family,

Our first semester as the SEA executive board continues to be done fully online, and we would like to thank everyone who has helped with program planning and who has continued to be engaged in the group! Though the sustainability initiatives we help run on campus are on hold, we are looking forward to creating meaningful programming for the rest of the year.

The semester kicked off with SEA's General Body Meeting where we got to introduce ourselves to club members. We bonded over an environment-themed Kahoot game and learned interesting facts about sustainability, climate change, and climate activists.

Our main event of the year, SEA of Thoughts, featured [Dr. Matt Perzanowski](#) from the Environmental Health Sciences department and Dr. Robert Fullilove from the Sociomedical Sciences department for a discussion on the built environment and urban health. Specifically, Dr. Perzanowski spoke about his asthma research and how asthma prevalence is influenced by the built environment. Dr. Fullilove spoke about incarcerated populations and poor health outcomes as well as problems associated with built infrastructure in low-income neighborhoods. Special thanks to our panelists for leading an amazing conversation and providing more insight into issues in environmental impacts on urban health.

When we return to campus, we will continue the composting program within EHS and begin working towards a CUIMC campus-wide composting initiative. We have continued discussing future programs with Jeet Viswanathan, CUIMC's Director of Energy Management and Sustainability for Facilities Engineering. As we continue the efforts of SEA boards that preceded us, we plan to take on previous initiatives when back on campus. However, in the interim, we plan to focus on promoting and analyzing energy management and sustainability on campus.

Stay tuned for virtual updates and environmental news updates!

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!