Environmental Health Sciences <u>Mailman School of Public Health</u> Department Newsletter Fall 2014









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COLUMBIA MAILMAN SCHOOL ENVIRONMENTAL HEALTH SCIENCES

Letter from the Chair

Dear Students, Faculty, and Alumni,

With a demanding schedule like mine, it can be quite a challenge to engage in relaxed conversations with all our students. The academic year passes quickly and I did not want to miss out on the opportunity to get to know all of our students.

As such, at the beginning of the fall semester, I incorporated one-on-one meetings with all MPH EHS students into my schedule, as I already meet with the doctoral students regularly. What a



Dr. Tomás Guilarte, PhD Leon Hess Professor & Chair

wonderful and enriching experience this has been! I am delighted that we have a select group of intelligent and engaging students that care a great deal about the environment and public health. They come from states as near as New Jersey and as far as California, and from countries such as China, Egypt, and Malaysia just to name a few. They have been trained in biology, anthropology, psychology, neuroscience, microbiology, environmental studies, and the list goes on and on.

These young, talented, and energetic students provide the department with a rich culture of diversity, academic background, and life experiences from which we can all learn. The one-on-one meetings are the beginning of what I hope will be a lasting EHS relationship and that continue long after graduation. The EHS community at Columbia Mailman School of Public Health will continue to be a source of knowledge, networking, and friendship for years to come.

It has been a sincere pleasure to get to know many of our students a better. The realization of our EHS students' goals and aspirations will make the world a much better and healthier place to live.

Cheers!

Faculty Spotlight

Repurposed Computers Find a New Home

This past summer, Dr. Norman J. Kleiman, an Associate Research Scientist in EHS, found new homes in the South Bronx for more than 60 working computers that had outlived their useful life at CUMC.

Dr. Kleiman's repurposing initiative, started more than 15 years ago and has extended the lifespan of more than 500 old computers. These machines are given to deserving but less fortunate members in immediate and distant communities. He leads a CUMC-wide effort to collect unwanted computers for use by local and international non-profit groups that, at the same time, delays entry of e-waste into landfills. EHS MPH and doctoral students assist Dr. Kleiman with rebuilding, packaging, and transportation of these machines.



"Tens of thousands of dollars of potentially useful computers were being thrown in the garbage each year" Dr. Kleiman notes. "It's environmentally and economically wasteful and it deprives people of resources that can be reused or repurposed."

National Cristina Foundation serves as a non-profit clearinghouse between donors and recipients. The beneficiaries of these efforts have included individuals and organizations as varied as: subsistence farming communities in Guatemala; a foundation teaching basic computer skills to disabled and cognitively impaired adults in upstate New York State; and, *per Scholas*, a neighborhood effort to train underserved students in the South Bronx for employment in IT and related technologies.

Dr. Kleiman works with Kathleen Crowley (MPH '91, DrPH '13), Associate Vice President of Environmental Health and Safety at Columbia University, who helped find storage space for donated machines. Elizabeth Sparrow Tashiro, Mailman's Associate Dean for Information Technology and her team are responsible for securely wiping information off all donated hard drives.

Continued on Page 4

Risk Assessment in Action

Adjunct Instructor Michael Musso (MPH '07) will participate in the Society for Risk Analysis (SRA) annual meeting in Denver this December. The SRA is a multidisciplinary,

interdisciplinary, scholarly, international society that provides an open forum for members from academia, government, industry, consulting, and non-governmental organizations interested in risk analysis.

He taught a full-day workshop on December 7 entitled, "Fundamentals of Risk Assessment & Toxicology at Contaminated Sites", which provided an overview of the 4 Step process of Human Health Risk Assessment (HHRA) utilized to evaluate chemical contamination at hazardous waste sites, Brownfields, and other types of settings. The workshop also discussed environmental regulatory frameworks (e.g., Federal, State agencies) into which HHRA is integrated for decision-making and case studies regarding hazardous waste sites, contaminated media, and exposure settings relevant to human health.



During the conference, he exhibited 2 posters that describe his work in the field: *Wireless Telecommunications Facilities*

- Risk Assessment, Perception, and Communication and Chemical Contamination at School and at Play - Challenges for Assessing and Communicating Risks.

Repurposed computers find a new home continued...

Dr. Crowley notes "Our repurposing efforts provide better accountability for discarded computers, extends the PC lifecycle, and hopefully delays entry of potentially toxic chemicals into the waste stream to a time in the future when we may have developed better ways of reprocessing heavy metals and other toxic compounds."

In addition to computer equipment, Dr. Kleiman has led efforts to repurpose lab equipment. When the Department relocated to their new lab space, he arranged for the discarded equipment and supplies to be donated to a Queens high school to upgrade their science labs.

If you have old computer equipment you'd like to repurpose, contact Dr. Kleiman at <u>njk3@columbia.edu</u>.

Ebola and EHS

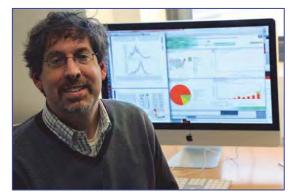
Dr. Jeff Shaman on Modeling the Current Ebola Outbreak

The magnitude and pace of the current Ebola outbreak is unprecedented and requires tools to assess the future scope of the epidemic, as well as the efficacy of intervention strategies. Since August we have been developing and testing mathematical models designed to simulate the transmission dynamics of Ebola in West Africa. Unfortunately, our understanding of Ebola transmission dynamics is incomplete and data on the present outbreak are limited; however, models can be used to fill in some of these gaps and provide a more complete picture of current conditions on the ground, predictions of future case levels, and assessments of intervention employment.

We have used our models to estimate the epidemiological characteristics of the outbreaks in Guinea, Liberia and Sierra Leone, and to forecast Ebola incidence. Since September, weekly forecasts have been posted at <u>cpid.iri.columbia.edu</u>.

The forecast models contain a stochastic component that allows the force of transmission to vary through time. This variability is intended to emulate the spatialtemporal variability of Ebola transmission dynamics within country due to changes in intervention, containment and social practices.





Three scenarios are forecast using the optimized model:

- An *improved* scenario, in which intervention and containment, as estimated during the assimilation process, are more effective in the future;
- 2. A *no change* scenario, in which intervention and containment, as estimated during the assimilation process, continues with the same efficacy;
- 3. A *degraded* scenario, in which intervention and containment, though not absent, are less effective in the future.

These scenarios allow that conditions on the ground are changing rapidly. Interventions may improve or degrade, the virus may evolve, and the effects of herd immunity and asymptomatic infection may manifest.

Our hope is that these forecasts can be used to frame expectations of future case levels and plan for the number of beds, nurses, doctors and other support needed.

Ebola and EHS

Dr. Reilly Provides Guidance on Local New York Response



Michael J. Reilly, DrPH, MPH, Adjunct Assistant Professor of Environmental Health Sciences, has been engaged throughout the New York City metropolitan region in actively preparing health systems for possible cases of Ebola Virus Disease (EVD). He has consulted for numerous

government agencies and health departments throughout New York State. Dr. Reilly has extensive expertise in worker safety issues associated with disaster and public health emergency response and has worked with OSHA on the development of standards for training hospital workers in decontamination following hazardous substances exposures. A main focus of his work with the EVD response has been to train healthcare workers in the proper treatment of a suspected Ebola patient. This includes training to safely "don and doff" personal protective equipment (PPE), procedures of isolation and quarantine, and case and contact tracing of exposed individuals.



Dr. Reilly has participated in local and national news interviews regarding the US response to the Ebola outbreak. Please find a recent media interview with <u>CBS News</u> on PPE usage.

For additional information on the response to the West African Ebola outbreak please visit the CDC's website at <u>www.cdc.gov</u> or contact Dr. Reilly directly at 914-594-1750.

Student Spotlight MPH Class of 2015

EHS in Practice: Saving Lives and Protecting the Planet

July Tran, MPH '15, Environmental Health Policy certificate, completed her practicum in the summer of 2014 at the Center for Effective Government, a Washington, D.C. think tank. There, she co-authored the <u>report</u> "The Benefits of Public Protections: Ten Rules That Save Lives and Protect the Environment". This report examined the projected public health, environmental, and economic impacts of ten proposed or final rules issued between 2009 and 2014 by five federal agencies.

Based on data from the rules benefit-costs analyses and regulatory impact analyses, the report found that these ten rules, in combination, are projected to:

- Save over 10,000 lives a year
- Prevent almost 300,000 cases of disease, illness, or injury a year
- Have a combined net benefit of between \$46 billion to \$122 billion per year
- Have <u>no</u> significant negative impact on the economy



Standard benefit-cost analysis methodology consistently underestimates social benefits and overestimates compliance costs. Despite this, nine out of the ten rules examined here have projected net benefits, even before accounting for significant, unquantifiable improvements in public health and environmental protection.

July also attended Senate hearings and other events at the Capitol. This experience has further solidified her interest in health and environmental policy, and she hopes to obtain a position in legislative staffing upon graduation.

Congratulations to our Fellows!

This year, three EHS MPH '15 students were chosen for the prestigious John D. Solomon Fellowship. Congratulations **Quentin O'Brien**, **Denise Patel**, and **Gagan Verma**!

The John D. Solomon Fellowship for Public Service is the first student fellowship with the City devoted specifically to emergency management. The program provides nine graduate students in the New York City area with the opportunity to complete a nine-month, paid fellowship in an agency of New York City government or a nonprofit organization.

Student Spotlight MPH Class of 2015

Emerging El Niño Conditions: Notes for the Global Health Community

Health Impacts of El Niño

Augusta Williams, MPH '15, worked at the International Research Institute for Climate and Society with Dr. Madeleine Thomson to produce a bulletin communicating the health impacts of El Niño. The bulletin explains that an El Niño is predicted to develop this year and, as a result, there will likely be extreme weather conditions that have associated negative health impacts.

The bulletin provides information for: interventions to reduce negative health impacts; recommendations for health experts to research past health impacts associated with El Niño to assess a community's health risks; strategies and emergency preparedness measures; and forecasts for the anticipated El Niño period through March 2015. Upon release, the global health <u>bulletin</u> was sent to the World Health Organization, the World Meteorological Organization, the United Nations, the World Bank, and member constituents. The bulletin has also been <u>tailored</u> to specifically address malaria in East Africa.

Hello from Abroad

Ryan Napper is currently working in Dakar, Senegal with the non-governmental organization, Africare. His project focuses on



reducing maternal mortality, a heightened concern in Senegal. He is engaged in other efforts including, program monitoring and evaluation and their "STOP ebola" campaign. Before working with Africare, Ryan worked with Institut Pasteur on a syndromic surveillance system used to track disease outbreaks as they are happening.

How healthy is your cereal?

Lauren Westley and Lauren Ghelardini, MPH '15 can tell you just that! This summer, they collected and analyzed data on the actual healthfulness of 301 cereals with the guidance of Dr. Charles Platkin at Hunter College. Check out their recently published <u>report</u> and a brief <u>media article</u> about their findings.

Student Spotlight EHS Doctoral Students



Congratulations Conference Participants!

Several of our faculty, alumni, and students had abstracts accepted for the 26th International Society for Environmental Epidemiology (<u>ISEE</u>) conference, which took place during August 24-28 in Seattle, Washington.

Richard Remigio, PhD candidate:

Optimal sampling duration for household air pollution: Evidence from the Ghana Randomized Air Pollution and Health Study (GRAPHS)

Kate Weinberger, PhD candidate:

Spatial variation in allergenic pollen across New York City

Elisaveta Petkova, DrPH '14:

Towards more comprehensive projections of urban temperature-related mortality; Heat and mortality in New York City since the beginning of the 20th century

Patrick Kinney, PhD, Director of Climate and Health Program:

Health dimensions of New York City's climate mitigation and adaptation initiatives



Exploring the Relationship Between Arsenic, Nutrition & Histone Methylation



Caitlin Howe, PhD

candidate, has been measuring global histone modifications in peripheral blood mononuclear cells (PBMCs) collected from participants enrolled in Dr. Mary Gamble's randomized controlled trial of folic acid and creatine supplementation. This study was conducted in Bangladesh where exposure to arseniccontaminated drinking water is widespread.

For her dissertation project, Caitlin is examining the relationships between arsenic exposure, nutritional indices, and histone methylation marks. She recently finished measuring global levels (%) of histone mark H3K36me2. Using linear regression analyses, Caitlin determined that homocysteine was negatively associated with %H3K36me2, independent of other nutritional indices, including folate. Consistent with these cross-sectional analyses, she did not observe any effects of folic acid supplementation (400 micrograms/day for 12 weeks) on %H3K36me2.

In August, Caitlin presented these findings as a poster titled "Homocysteine is associated with %H3K36me2, independent of folate, cobalamin, SAM, and SAH" at the FASEB conference on Folic Acid, Vitamin B12, and One-Carbon Metabolism in Steamboat Springs, Colorado.



Student Spotlight EHS Doctoral Students

Brandilyn Peters Presents Findings from Bangladesh Study



Brandilyn, a PhD

candidate in Dr. Gamble's Lab, gave an oral presentation entitled "Interactions between Inflammatory Biomarkers and Circulating Intermediates of One-carbon metabolism (OCM)" at the 2014 FASEB Summer Research Conference on Folic Acid, Vitamin B12, and One-carbon metabolism, which was held August 3rd-8th in Steamboat Springs, Colorado. In this presentation, Brandilyn presented results from a cross-sectional study in Bangladeshi adults, in which plasma acute phase proteins were associated with plasma nutrient biomarkers, including plasma B12, plasma betaine, and plasma choline. For example, the acute phase protein alpha-1 acid glycoprotein was positively associated with plasma B12. She then discussed different mechanisms by which inflammatory processes may alter plasma nutrient concentrations, and concluded that inflammation may lead to misclassification of OCM nutritional status, which could complicate studies of the protective effects of OCM nutrients against disease.

MPH Practicum Overview

Every year our MPH students complete practica, which provides an opportunity to apply the concepts and methods of environmental health sciences and public health learned in the classroom to actual public health problems. Read more about the MPH class of 2015 practicum experiences!

Our students work for a variety of organizations including, academic institutions, non-profits, governmental agencies, and more...

Tsingua Univeristy The Connect Project USAID John Snow, Inc. Naval Health Research Center Indian Institute for Human Settlements **UC Berkeley** The Allegheny Front Public Health Solutions California Department of Public Health NYS Office of Attorney General Center for Effective Government Natural Resources Defense Council Irving Comprehensive Cancer Center NYC Department of Health and Mental Hygiene **UNICEF** Uganda WEACT for Environmental Justice Kintampo Health Research Center US Environmental Protection Agency Mujeres en Desarrollo Dominicana (MUDE) California EPA Office of Environmental Health Hazard **Environmental Protection Bureau**

After our EHS students returned from their practicum we asked, "How did your experience in EHS help you perform at your practicum?"

This is what we heard:

"Dr. Julie Herbstman's Analysis of Environmental Health Data class helped a lot in terms of understanding the skills I needed to clean, analyze, and interpret data. Although I used SAS, it was easier to transition to a different system having had experience with STATA. Another class that was immensely helpful was Risk Management because we had so many presentations in that class that I was calm and confident when I had to present at a departmental forum."

-Isabell Lee, Toxicology MPH '15

"STATA, pollution studies, experience working as a research assistant on the subway study with air monitors all prepared me for a fruitful practicum!" - Sara Schlegel, Infectious Disease Epidemiology MPH '15

Our EHS students complete practica throughout the city, country and even the world!

Washington Heights, Tribeca, California, New York, Pennsylvania, China, Ethiopia, Uganda, Senegal, Ghana, Tanzania, India, & Dominican Republic

Lauren Westley, MPH '15, Explores NYC Food Access in Her Practicum Experience

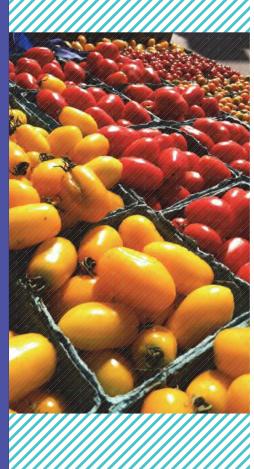
When I started at Mailman last fall, my interests in environmental public health ranged from maternal exposures and asthma to epigenetics. I considered my appreciation of good food and love of nutritional information unrelated to environmental health concerns. However, through my coursework last year, I realized what really sparked my academic interests and passions were the issues surrounding food access, policy, and nutrition education - especially in young children. I realized that a full understanding of the environment an individual inhabits must include all built and natural resources.

Through a fellow EHS colleague, I secured a summer internship with Public Health Solutions (PHS), a large non-profit located in Manhattan. Through this experience, I further explored the possibilities of working in the field of food access. I was, and continue to work within the Food and Nutrition Programs Unit, which focuses on the nine Women Infant and Children (WIC) centers under their management in the Bronx, Brooklyn, and Queens. Federally funded, WIC is founded on the research that maternal nutrition surrounding pregnancy and in young children can have lifelong effects, thereby justifying food budget supplementation and providing education during this critical period.

My primary project at PHS was to perform community asset-map in Queens and promote Farmers Markets around each WIC center. The goal of the community asset mapping was to systematically gather field data to get a better sense of the resources that are locally available, and eventually provide staff with this tool in order to make specific recommendations during visits. As part of a team of eight interns, we canvassed Corona and Jackson Heights, mostly during late June and early July. Over 2,800 site types were recorded and we covered 68 census tracts (this data will be the focus of my GIS coursework for my final project). The next phase of mapping is taking place in Jamaica, Queens. Along with two other interns, we recently provided a orientation session for new additions to the team.

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Practicum Highlights





NYC Food Access Continued...

Not only was this experience beneficial for my future career in a technical aspect, it was also culturally enriching. Being in the diverse neighborhoods, talking with the eager moms, and seeing the dilapidated corner stores, I was able to grasp the gravity of the public health problems that exist in these communities and hundreds like them.

The power of outreach education efforts and peer counselors making connections with participants reinforced my ideas that stricter public health policies can better frame these multi-faceted programs from nonprofits such as Public Health Solutions. Policies regarding equitable access to affordable and nutritious food are essential in markets where a low-income population might take never demand such resources. While community level programming and educational initiatives are effective to inform human behavior to a certain extent, my overall practicum experience leads me to conclude that policy level decisions have the opportunity to impact the way these programs work.

Practicum Highlights

Hello from Abroad

Minti Patel, MPH '15, shares her experience as a Water, Sanitation and Hygiene intern with UNICEF Uganda.

"The main project I have been working on is an evaluation of pit latrine additives that could reduce bad odors, prevalence of insects, and fecal sludge levels in order to improve usage and extend the life of the pit latrine. We're currently testing 3 different products against a control in 94 government primary schools, and we hope to see results and come out with a report by the end of December. I'm living in Kampala, Uganda with a few other Columbia global health students and generally having a wonderful time! "



Recent EHS Publications

- Kinney PL, Sheffield PE, Weinberger KR. Climate, air quality, and allergy: Emerging methods for detecting linkages. In: Global Climate Change and Public Health. KE Pinkerton and WN Rom, editors. Springer, New York (2014).
- Quinn A, Tamerius JD, Perzanowski M, Jacobson JS, Goldstein I, Acosta L, Shaman J. **Predicting indoor heat exposure risk during extreme heat events**. *Sci. Total Environ.* 490C, 686–693 (2014).
- Weinberger KR, Kinney PL, Lovasi GS. **A review of spatial variation in allergenic tree pollen within cities**. Arboriculture & Urban Forestry (in press).

Recent Alumni Publications

Review of Blood Lead Levels in Mexico

Russell Dowling, MPH '13, and Dr. Manuela Orjuela, Assistant Professor, recently coauthored "Blood Lead Levels in Mexico and Pediatric Burden of Disease Implications" in the Annals of Global Health. In this extensive historical review and analysis of available data on blood lead levels in Mexican populations they concluded that lead continues to threaten the health of millions and remains a significant cause of disability in Mexico. Additional interventions in reducing or managing lead-based ceramic glazes are necessary to protect the public health. To read more, <u>click here</u>.

School Guide to Fun Environmental Projects

Sashti Balasundaram, MPH '08, recently contributed to "ioby's Guide to Environmental Projects in Schools". As a garden coordinator for the Brooklyn Urban Garden School (BUGS and a certified Master Composter from the Brooklyn Botanic Garden, he shares his expertise in the article, "How to Start a Compost Program". He is also developing a start-up relating to compost. Check out the full guide <u>here</u>, or reach him directly at <u>Sashti.Balasundaram@bugsbrooklyn.org</u>.



Meet Our New EHS PhD Candidates

Anne Bozack

Anne is in the Molecular Epidemiology track. She is interested in the impacts of environmental exposures on the epigenome and is currently working with Dr. Julie Herbstman for her first rotation. Before joining EHS, Anne worked as a project director for the Center for Evaluation and Applied Research at the New York Academy of Medicine, and as a staff assistant for Senator Barbara Boxer. Anne holds an MPH in Sociomedical Sciences from Mailman and BAs in Environmental Science and Architecture from UC Berkeley. In her free time, Anne enjoys running, photography, and reading.

Dan Carrion

Dan received a BA in Environmental Studies from Ithaca College in 2008 and an MPH from New York Medical College in 2011. His experiences in the workforce are diverse: working for a Latin American solidarity organization, a county's solid waste division, a community health center, and most recently, Columbia's College of Physicians & Surgeons directing the Summer Public Health Scholars Program. He is eager to learn about the field of Climate & Health, specifically hoping to explore strategies to utilize adaptation and mitigation efforts to simultaneously address health disparities. Outside of Columbia, he enjoys spending time at the beach and the challenge of finding delicious cheap meals.



Alex Heaney

Alex is from Portola Valley, California, and studied human biology with a focus on climate change and global health at Stanford University. Her previous research projects focused on the health impacts of climate driven migration in Tanzania and the effects of climate change on the global distribution of H5N1 influenza. At Columbia, she looks forward to continuing these research projects while exploring other ways in which climate change will influence infectious diseases. With Dr. Jeffrey Shaman as her advisor, Alex hopes to expand her methodological expertise to include infectious disease and climate modeling. In her spare time, she enjoys going to concerts, cooking, and playing tennis.



Meet Our EHS MPH Class of 2016

Please welcome our first year EHS Master of Public Health students. They are an enthusiastic group of students who came to Mailman from around the world.

In this section, learn where they are from, what certificate they are in, and an interesting fact they would like to share with you!



Natasha Jhala Nashville, TN Global Health

I like to sing and dance!



Tuan Tran Hanoi, Vietnam Toxicology

I can bend my elbow to a 60 degree angle



Kerui Han China Undeclared



Min Wu New Zealand Molecular Epidemiology

Eating is my biggest hobby.



Valorie Richards New Jersey Undeclared

I'm a huge Pittsburgh Steelers fan!



Shirui Zou China Undeclared

I like photography, music & sci-fi films!

Meet Our EHS MPH Class of 2016



Alyssa Espiritu Southern California Climate & Health

I enjoy playing guitar and piano



Jalisa Gilmore Farmingville, NY Climate & Health

I love to tap dance!



Amanda Cheng Brooklyn, NY Environmental Health Policy

If I could meet anyone from history, it would be Beethoven.



Hetali Jokhakar Queens, NY Environmental Health Policy

I love music playing the guitar & singing!



Cara Smith New Jersey Climate & Health

I always have to put my right shoe on before my left.



Chen Chen China Global Health



Erin Eimutis Dayton, Ohio Undeclared

Worked as a Registered Nurse for five years before coming to Columbia.



Julia Casciotti Arlington, VA Environmental Health Policy

My last name means, "Little Cheese House"





Khristina Ipapo Los Angeles, CA Undeclared

I have pointy ears!



Semmie Kim New Jersey Undeclared

I used to play cello in chamber music groups during college!



Yameng Luan China Environmental Health Policy

I am interested in the connection between EHS & Engineering.



Karina Avila Bronx. NY Global Health

I could probably eat my body weight in food.



Meghan Kiernan Croton, NY Environmental Health Policy

I love cooking, baking, sports and dogs!



Kalon Wang San Jose, California Applied Biostatistics

I practice straight sword and staff for Wushu during my free time.



Robyn Lee Pacifica, CA Toxicology

I am a local Jewelry Designer and have sold my work around California.



Richard Evoy Bend, Oregon Infectious Disease Epi.

I lived in Costa Rica for 6 months in high school where I contracted TB.

Mailman Marches Together September 21st, 2014



Over 170 Mailman students, faculty, and alumni joined more than 400,000 people in the largest climate march in history

Ne the

ENGUINS







CLIMATE

JUSTICE!



Students for Environmental Action

Students for Environmental Action (SEA) was established to promote environmental awareness on the medical campus and surrounding neighborhoods, be the voice of students for environmental concerns, encourage engagement in sustainable practices, and guide discussion on current environmental health issues. With this in mind, it has been our mission over the last year to increase environmental and sustainable engagement by broadening membership in the organization and building partnerships on campus and throughout New York City. Working closely with members from the Department, SEA has been successful in pursuing these objectives. We would like to share with you a brief sample of the events and initiatives we have worked hard to promote over the past year. As well, we are pleased to introduce you to the impressive new Executive Board who will continue to improve on SEA's mission over the next year.

Greenest regards, Corey L. Park, Co-President '13-'14

We are proud to announce the new SEA Executive Board Members for 2014-2015

President: Julia Casciotti Vice President of Communications: Val Richards Vice President of Finance: Robyn Lee Vice President of Outreach: Meghan Kiernan Vice President of Events: Cara Smith



Volunteering with Harlem Grown

Students for Environmental Action



Green Lunch Launch & Paper Reduction

Every semester, Mailman student groups, organizations, and departments host hundreds of events many of them including food. Recent sustainability initiatives, including the elimination of plastic water bottles, help reduce waste and the carbon footprint produced by these events. However, there still exists waste from plastic utensils and nonrecyclable paper plates. The use of these nonreusable, non-recyclable products is avoidable. Beginning in December, SEA will work with the Office of Student Affairs and the Graduate Student Association to reduce the amount of plastic and nonreusable waste produced at Mailman-sponsored events. The Green Lunch Launch will raise awareness about waste management and sustainable practices, to educate and give students the capabilities to reduce waste.

SEA members have been instrumental in the development and implementation of the Paper Reduction Initiative at the Mailman School, launched earlier this year. The goal is to reduce paper consumption in the Allan Rosenfield Building by 20% by the end of the year. SEA proposed expanding the initiative to the entirety of the CUMC campus and are proactively taking steps to reduce paper consumption on a larger scale.



SEA of Thoughts

SEA of Thoughts is a discussion-based lecture series. The series embodies the CORE curriculum by incorporating the interdisciplinary views of Columbia University professors and students on exciting, emerging, and pertinent environmental health topics. Past lecture topics and EHS panelists included: "Energy Efficiency in Urban Environmental" featuring Drs. Diana Hernandez and Darby Jack; "Climate Change & Health" featuring Drs. Pat Kinney and Sylwia Trzaska, moderated by Dr. Joe Graziano; and, most recently, "Infectious Diseases, Climate, & Health" featuring Drs. Jeff Shaman and Steven Morse.

Thank you for another wonderful semester!

Created & Designed By: Erika Eitland Copy Editors: Nina Kulacki & Corey Park

If you have questions, comments, news to share, please contact Nina Kulacki at <u>ninakulacki@columbia.edu</u> or visit our <u>website</u>.