

Alumni Letter



ENVIRONMENTAL SCIENCE & PUBLIC POLICY CONCENTRATION

AUGUST 2017

Dear Alumni:

It is a pleasure to write to you and reflect on last year during which I served as Head Tutor in ESPP. I greatly enjoyed my time working with students and faculty in this concentration. This year we celebrated the completion of twelve senior theses—a full list thesis titles and writers are inside. Together with Professor Richard Forman, I hosted two local field trips for ESPP students—one overnight trip to the Harvard Forest and a one-day trip to Ipswich, MA. We have included some photos of the trips inside as well.



This past year we also settled into our beautiful new space in the Harvard University Center for Environment. Students and faculty have found this to be a wonderful place for course meetings and seminars and as well as informal gatherings and study space. It is wonderful to see so many of our students connect, relax and work here. We hope that if you are in the Cambridge area, you will drop by for a visit. We will host a fall welcome back pizza party on Wednesday, September 6 from 5-6:30pm in the HUCE space—if you are in the area, please join us!

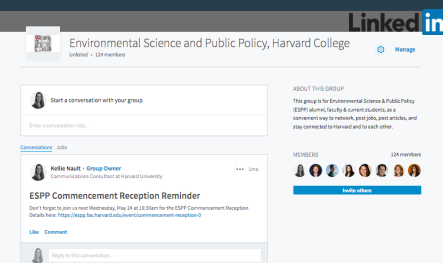
In this fifth edition of the ESPP Alumni Letter, we are pleased to profile two ESPP alumni from the class of 2001: Caroline DeFilippo and Peter Gage. Please read more about them and their careers inside.

Paul Moorcroft will return as Head Tutor this fall. I will be on sabbatical during fall semester at the University of Tasmania in Hobart, Australia. I look forward to returning to the classroom with ESPP students in the spring junior seminar I co-teach with Forest Reinhardt and Rob Paarlberg on World Food Systems and the Environment.

Enjoy the newsletter!

Best wishes,

N. Michele Holbrook
Bullard Professor of Forestry and
Professor of Organismic and Evolutionary Biology
On behalf of the ESPP Board of Tutors



Our LinkedIn Presence

The ESPP LinkedIn Group is designed for current and former students to connect and network, and discover what others have been involved in professionally since graduation. It is our hope that this group will further expand the breadth and depth of the ESPP concentration and our community at large.

This closed group is only open to ESPP students and alumni, and can be accessed via **[HTTPS://WWW.LINKEDIN.COM/GROUPS/4925975](https://www.linkedin.com/groups/4925975)**. Once you connect with us, we will approve your request.

We encourage you to submit event and job opportunities to Lorraine Maffeo at maffeo@fas.harvard.edu. After a quick review, we will post these submissions for the group's members to view.

The success and usefulness of this page depends in large part on our community, and we really encourage you to join in on the conversation. We look forward to engaging with more alumni!

Health, the Environment, and Our Future

"ESPP provided a wonderful foundation to help me pursue my passions in both health and the environment. I love that I can understand the science behind climate change and that I can then apply that information to the shifting patterns of disease.



As a practicing primary care physician, when a patient asks me about mosquito born illness, I can answer them about the practical aspects of which mosquito species might be in a certain region of the globe but

also put the mosquito lifecycle in context for them. As our globe continues to grow smaller and illness spreads in new dimensions, this background is critical to help me engage patients on a higher level.

I chose to practice internal medicine and pursue a masters degree in public health after my undergraduate studies because it provided me with the greatest opportunity to use these skills both with individuals and broad communities. I now am in a position where I can influence patients through direct education but also guide my fellow physicians through programmatic changes about the best ways to combat chronic and emerging diseases. Being a physician leader in a larger private practice affords me the flexibility to apply these skills simultaneously. In addition, my knowledge of policy has been critical in guiding my understand of the changing health care policy arena. I find that so many of the principles that I learned about in introductory government and economics classes, continue to inform me as I follow the changing landscape of healthcare.

I don't think I could have projected upon graduation that I would have been a practicing physician many years later. However, I can confidently say that the ESPP concentration provided me with the broad set of skills in a multidisciplinary fashion that has propelled my varied yet overlapping interests in the environment, healthcare and policy. I am grateful to have enhanced my education with such a strong foundation."

—Caroline DeFilippo '01, MD, MPH, Associate Medical Director, WestMed Medical Group

SENIOR HONORS THESIS WRITERS

This academic year, ESPP had a number of senior honors thesis writers, who then presented research posters in April. The 12 senior thesis writers are (*from left to right in photo below, which also includes Professor N. Michele Holbrook on the far left and Lorraine Maffeo at far right*):

Olivia Chen, "Pursuing Environmental Justice in Hong Kong's Land Use Planning: The Central Harbourfront Case Study"

Melissa Balding, "Bicycling for Transportation: The Role of Social Marketing Strategies in Facilitating Behavior Change"

Savannah Bradley, "The Winners and Losers in the Olympic Games: Assessing Equity in the Olympic Legacies of London and Beijing"

Clifford Goertemiller, "Reducing Harvard University's GHG Emissions 50% by 2050"

Mayer Chalom, "Type II Diabetes as an Environmental Mismatch: A Molecular Approach"

Karl Aspelund, "When and Where the Weather Matters: Changing Seasonal Cycles in Employment Since 1990 and Implications for Adaptation to Heat and Cold"

Tuna Hayirli, "Hopes, Fears and the Futures of Gene Drives"

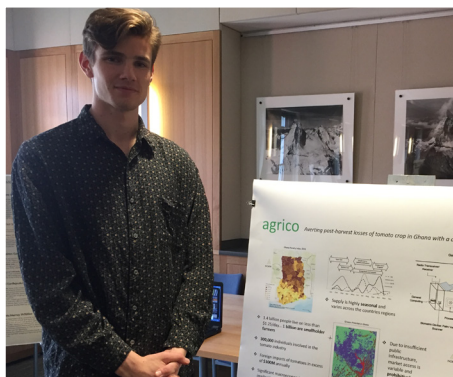
Jacob Barton, "Two Centuries of Shorelines in Flux: Reading our Climate Crisis through Coastal Literature"

Forrest Lewis, "Quantifying the Magnitude of the Kok Effect through the Growing Season for Dominant Species in a Temperate Forest"

Johann Colloredo-Mansfeld, "The End of the Dirt Road: Presenting an Innovative Solution to Promote Sustainable Economic Growth Among the World's Smallholder Farmers by Addressing Post-harvest Losses" (*bottom left photo*)

Deng-Tung Wang, "Addressing Urban Stormwater Management Under Climate Change: A Case Study for Cambridge" (*bottom right photo*)

Joy Jing, "Moving Masses: The Role of Institutions in Post Natural Disaster Relocation"



ESPP FIELD TRIPS

This year, ESPP students were able to participate in two field trip experiences, both of which were led by Professor N. Michele Holbrook and Professor Richard Forman. The first was a Fall excursion to Harvard Forest in Petersham, MA, where students explored the various research projects of the 4000 acre ecological research center. The second was a spring visit to Crane's beach in Ipswich, MA, where students discovered the flora and fauna of the Crane Estate's native tidal pools and marshes. Some photos of the field trips are below (*top: Crane's Beach; bottom: Harvard Forest*).



CONCENTRATION COURSES

In academic year 2017-18, ESPP will offer the following courses:

Introductory Courses

- ESPP 11. Sustainable Development (William Clark)
- ESPP 77. Technology, Environment, and Society (Sheila Jasanoff)

Junior Seminars

- ESPP 90d. Planetary Health: Understanding the Human Health Impacts of Accelerating Environmental Change (Samuel Myers and Christopher Golden)
- ESPP 90e. Conservation Biology (Aaron Hartmann)
- ESPP 90n. China's Energy Economy: Perspectives from the Past: Challenges for the Future (Michael McElroy and Xinyu Chen)
- ESPP 90s. The Technology, Economics, and Public Policy of Renewable Energy (George Baker)
- ESPP 90x. Current Issues in U.S. Environmental Law (Shaun Goho)
- ESPP 90y. World Food Systems and the Environment (N. Michele Holbrook, Robert Paarlberg and Forest Reinhardt)
- ESPP 90z. Climate Policy—Past, Present and Future (Gernot Wagner)

Policy and Our Future

"My entire career ties back to an ESPP tutorial on climate change taught by Professor Jim McCarthy and author/climate activist Bill McKibben. That class defined ESPP's multidisciplinary approach: exploring the complex interconnections of a problem, and how we might actually do something about it. I still apply what I learned in that class every day.

After graduating, I continued working on energy technology and climate policy for a few years at the Rocky Mountain Institute and the World Resources Institute (WRI). At the time, it wasn't clear that we could



solutions quickly enough to catch the accelerating threat. It was an exciting field, and there was earnest effort and even some bipartisan cooperation at the time, but the scale was not large enough.

An ESPP alumni connection in DC encouraged me to look at electoral politics as the missing leverage that might help jump start some solutions. I found myself working days at WRI and nights volunteering for political campaigns, which led to stints working on the 2004 and 2008 Presidential races.

This build up came together after President Barack Obama's election. From 2009 to 2014, I held a series of positions for which ESPP was exactly the right preparation—working on climate and clean energy at the White House and the Department of Energy (DOE). I started in Secretary Steven Chu's office immediately after the Inauguration in 2009. ESPP was not far away—in 2009 I traveled with Secretary Chu to London for a climate symposium at which Professor McCarthy also spoke. I then moved to the White House Office of Energy and Climate Change to work on a team assembled to work on climate legislation and the BP oil spill response. Following this, I spent nearly three and a half years as the Chief of Staff for the largest clean energy research and deployment organization in the country, DOE's Office of Energy Efficiency and Renewable Energy.

Today, we have the technology solutions necessary to address the climate problem at nearly the necessary costs. The challenge is how to get them to sufficient scale in time, which only the combined efforts of the public and private sectors can do. I moved to the private sector three years ago and now work at Renew Financial developing new renewable energy and energy efficiency financing products with a mix of public and private partners. I use ESPP's unique mix of science, economics, policy, technology and business training at work every day and I am grateful to be part of the broader ESPP network."

—Peter Gage '01, Vice President, Renew Financial

ESPP in Beijing

The Harvard Global Institute and the Harvard-China Project on Energy, Economy and Environment at Harvard's Paulson School of Engineering and Applied Sciences partnered with the ESPP concentration to offer a summer academic immersion experience in Beijing, China in early August 2017.

The intensive, non-credit program, "China's Environmental Challenges: Summer Course in Beijing," sent nearly 30 Harvard students to Tsinghua University School of Environment. They were joined by eighty other students from China and other countries, and spent two weeks focusing on various environmental and climate change issues in China, including clean energy, air pollution, waste water management, and urban sustainability, through: site visits to clean tech companies, water and power facilities, and a government climate institute; guest talks by local environmental actors; and academic lectures and discussions led by Tsinghua and Harvard faculty. Professor Michael B. McElroy led this program.

Stay tuned to our website for photos from the program.



ESPP SETTLES IN TO NEW SPACE

Last August, ESPP and the Harvard University Center for the Environment moved to a new space on the 4th floor of the Harvard Museum of Natural History, located at 26 Oxford Street, Cambridge.

Designed by Perry and Radford Architects, the new space is roughly three times larger and features two seminar rooms, an expansive central lounge, smaller gathering spaces, areas for affiliated programs like the Planetary Health Alliance and Harvard Solar Geoengineering Program, and offices for affiliated faculty and staff.

Please do visit our new offices if you are ever in the Cambridge area!

Photos by Alex Griswold, HUCE and Perry and Radford Architects

