Letter from the Director

It’s been a busy but exciting fall for STPP! In September, we hosted Kevin LaGrandeur, whose talk *Robocalypse Now? Technology and the Future of Work* was extremely well-attended. STPP students gathered for a lunchtime discussion with STPP (and Ford School) alum Andrew Schroeder, who is the co-founder of WeRobotics, an international NGO creating robotics capacity for social good in the global South. And, together with the Ford School, we hosted Dr. T. Ramasami, the former secretary for science and technology from the Government of India, for a Citi Foundation lecture. Dr. Ramasami spoke about the role of science and technology policy in developing countries.

We’ve also got a great lineup for Winter 2018, with an STPP alumni day featuring a panel on science and technology policy in the Trump administration and Professor Warigia Bowman (University of Arkansas) coming to speak about the role of information technology for African development.

We’re also thrilled to announce that we had a steep rise in STPP graduate certificate applications this fall. 24 new students from across campus, including the Ford School, Engineering, Chemistry, Neuroscience, SEAS, Ross, and the School of Social Work will join us soon. It is so wonderful to see our STPP community growing!

—Shobita Parthasarathy, STPP Director
Get involved with STPP-affiliated student group InSPIRE!

Interdisciplinary Science and Policy Initiative for Research Engagement (InSPIRE) is a Rackham Interdisciplinary Workshop group that brings together graduate students and research fellows from across UM’s campus to discuss policy issues related to science and technology.

InSPIRE was formed in 2013, and just received renewed funding from Rackham in Fall 2017 thanks to student leaders, Rachel Wallace and Pete Ehrett! InSPIRE co-sponsored several events this semester, including:

• **Writing Workshop** with Alex Ralph and David Morse

• **Speakers**: Dr. LaGranduer and Dr. Ramasami

• **Alumni Webinar** with Dr. Andrew Schroeder

If you are interested in getting involved in InSPIRE, please contact Rachel Wallace (rlmerzel@umich.edu) or Pete Ehrett (wpehrett@umich.edu).

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**Fall 2017 Events in Pictures**

Memo Writing Workshop with Alex Ralph and David Morse

Invited Speaker: Dr. Kevin LaGrandeur

Lunch with students

Robocalypse Now?: Technology and the Future of Work Seminar

Alumni Webinar with Dr. Andrew Schroeder

Dr. Ramasami, former Secretary of Science & Technology for India
New STPP Elective
SI 170 - Tech Labor, Entrepreneurial Life & Precarious Creativity

Instructor: Silvia Lindtner
(lindtner@umich.edu)

Semester: Winter 2018, Th1-4pm

Course Description: This graduate readings seminar provides a comprehensive introduction to some of the major themes that cut across studies of tech labor, power, civic engagement, neoliberal technology, and governance. Drawing from core readings in science and technology studies, feminist and autonomous Marxist studies, labor process theory, anthropology, critical computing, and digital studies, students will gain a critical vocabulary to unpack historically contingent and changing formations of work, labor, resistance, power, governance, and control. From low-wage and micro work on Amazon Mechanical Turk to social media platforms like Facebook that mine data from users for ad revenue and the normalization of risk taking in the creative and tech industries, precarious work has become a condition shared by many. Across professions and domains, individuals are called upon to turn themselves into self-entrepreneurializing actors capable to harness individual life as productive machinery of technological and economic futures. As automation and artificial intelligence once again fuel fears over loss of control, peer production, platform cooperatives, and localism are presented as possible solutions to this rise in precarious work conditions brought about by the post-industrial economy and platform capitalism. Often these alternatives, however, share the same neoliberal underpinnings of the systems they are claiming to challenge. In the course we will explore questions such as: What are the analytical and theoretical toolkits to make sense of this seeming capitalist surround? How do the promises of tech activism, feminism, and peer production butt against the rise of unemployment and socio-economic disparity? How do we have to rethink what counts as resistance and alternative to the status-quo?

STPP Program Updates

Attn: STPP Alumni
We want to hear from you!

• Do you have news that you would like to share with the STPP Community? What have you been up to since graduating from UM? How has the STPP certificate helped you professionally?

• Would you like to be involved with STPP Program activities?

• Email us (stpp@umich.edu) with your story and/or updated contact information.
Welcome New STPP Students!

Emmeline Cardozo, MBA
Emmeline is passionate about advocating for the advancement of women and underrepresented minorities in STEM fields. Previously the Associate Director of Partner Engagement at Girls Who Code, a national non-profit, she is interested in understanding the science and technology policymaking process and developing policy analysis skills. She earned a B.A. in American Studies and French from Middlebury College.

Nitya Chandran, MPP
Nitya is a member of the Institutional Review Board at the University of Michigan Medical School interested in the ethical challenges of clinical research faced by regulatory authorities, scientists, and patients. She earned a M.S. in Pharmacology and Toxicology from Virginia Commonwealth University School of Medicine and a Ph.D. in Cellular and Clinical Neurobiology from Wayne State University.

Packy Colgan, MSW/MSI dual degree
Packy is interested in studying inequities in information and data usage, with a specific focus on marginalized populations, information policy, and ethical issues related to big data. He holds a B.S. in Social Work from the University of Nebraska-Omaha.

James Delorme, Ph.D. Neuroscience
James is a third year Ph.D. Candidate in the Neuroscience Graduate Program. He is interested in understanding how policy is crafted for public health issues and implemented following breakthroughs in biotechnology. He is also interested in learning how biotechnology innovations are evaluated for safety, efficacy, and long-term effects by biotech companies and government agencies. He holds a B.S. in Neuroscience from the University of Delaware, and a M.Sc. in Developmental and Neurobiology from Université de Fribourg.

Anuj Dharap, M.S. Electrical and Computer Engineering
Anuj is focusing his engineering studies on Control Systems. He is interested in intelligent control, automation, the socioeconomic impacts of technologies, such as AI, and how science, technology and public policy can interact to produce technological advancements that benefit society. He earned a Bachelor of Technology degree in Electrical Engineering from Veermata Jijabai Technical Institute.
Fall 2017 Cohort
Welcome New STPP Students!

Kelsey Diffley, Ph.D. Chemistry
Kelsey is a third year Chemistry Ph.D. candidate interested in pursuing a career away from the bench related to science policy. She received a B.S. in 2012 from Carnegie Mellon University.

Matthew Dobson, MPP
Matthew is interested in technology policy, specifically how smart cities, the internet, and artificial intelligence can be used to dramatically improve the lives of citizens. He holds a B.S. in Computer Science from Michigan State University, and was previously a software developer at Apigee and Google.

Christopher Fitzpatrick, Ph.D. Neuroscience
Chris is a sixth year Ph.D. candidate in the Neuroscience Graduate Program. His doctoral research investigates individual vulnerability to addiction and PTSD. He is interested in becoming involved in local and national discussions on issues related to his expertise, such as mental health policy and research funding. He holds a B.S. in Neuroscience from the University of Michigan and M.S. in Basic Medical Sciences from Wayne State University. Chris is also an Early Career Policy Ambassador with the Society of Neuroscience.

Sruthi Gaddipati, MPP
Sruthi is interested in learning more about how science and technology influence the policymaking process and how policies regulating new technologies can achieve maximal social benefit. She received a Bachelor of Medicine and Bachelor of Surgery in 2010 from the University of Health Sciences in Andhra Pradesh, India. Sruthi previously worked in the World Health Organization on surveillance of polio.

Chrystopher Garzon-Rivera, MPP
Chrystopher is interested in learning how internet policies can promote equitable access, and engaging in STPP issues related to renewable energy, automation, and internet infrastructure. He received a B.A. in Spanish from the University of Michigan in 2016.
Fall 2017 Cohort
Welcome New STPP Students!

Paul Giessner, M.S. Electrical and Computer Engineering
Paul's area of focus in electrical engineering is power systems, specifically with regard to the integration of renewable energy. He is interested in studying how to craft policy that appropriately puts a cost on carbon and pursuing a career as an electrical engineer that helps policy leaders make better decisions on how to modernize the electric grid. He obtained a Bachelor of Science in Engineering in Electrical Engineering and Bachelor of Musical Arts from the University of Michigan in 2017.

Alissa Graff, MPP
Alissa is committed to social justice and equity in Detroit. She is interested in studying how science and technology can play a role in uplifting historically marginalized voices, and determining what the role of government is in regulating, promoting and/or facilitating technological development. She earned a Bachelor’s degree in Urban Sociology, International Relations, and Political Science from Hampshire College in 2014.

Lindsay Michocki, Ph.D. Chemistry
Lindsay is a third year Ph.D. candidate in Physical Chemistry. She interned at the White House Office of Science and Technology Policy (OSTP) in 2014. She is interested in studying the interaction between science and society, with a passion for applying her technical knowledge to serve the public. She holds a B.S. in Chemistry from the University of Maryland College Park.

Theodore Nowak, M.S. Robotics
Theodore is interested in bridging the gap between technical experts and policymakers to have a positive impact on robotics, automation, and artificial intelligence outcomes. He is also interested in studying the social implications of technological advancement. He received a B.S. in Electrical and Electronics Engineering from Case Western Reserve University in 2015.

Angelica Okorom, MEng, Space Systems Engineering
Angelica is studying the materials that are important to satellite design as well as the future implications of the growing space industry. She is interested in bridging the gap between technical and non-technical experts to help communicate the impact of scientific discoveries and science funding. She has a B.S. in Materials Science and Engineering from the University of Michigan.
Fall 2017 Cohort
Welcome New STPP Students!

Stephanie Sandoval Pistorius, Ph.D. Neuroscience
Stephanie is a first-year pre-candidate student in the Neuroscience Graduate Program. She has a B.S. and M.S. in Neuroscience from Brigham Young University.

Kyle Sanders, Ph.D. Materials Science and Engineering
Kyle is conducting computational research on semiconducting materials. He is interested in energy and environmental issues, understanding how science is treated in the policy making process, and how science policy can be communicated to general audiences. He holds a B.S. from Missouri University of Science and Technology.

Jesse Okwu, MPP
Jesse is a Rackham Merit Fellow interested in studying the role of public policy in harnessing science and technology to address environmental inequities and energy sustainability. As a Doris Duke Conservation Scholar, he previously worked on environmental justice and conservation issues affecting Native Americans, and the impact of community gardens on food accessibility. He received a Bachelor’s degree in Economics and Anthropology/Sociology from Knox College in 2017.

Zachary Prichard, Ph.D. Chemical Engineering
Zachary is a fourth year Ph.D. candidate in Chemical Engineering. He is interested in how policy can shape science research and how science can be used to inform policy. He plans to pursue a career in science policy research, practice, and/or advocacy.

Carlos Puentes, Ph.D. Neuroscience
Carlos is a third year Ph.D. candidate in the Neuroscience Graduate Program. His doctoral research investigates the relationship between cortical slow wave sleep oscillations, synaptic plasticity, and memory. He is interested in how precision medicine and gene technology can be utilized to treat patients without inadvertently creating larger societal disparities or intruding on individual rights. Carlos intends to pursue the AAAS Science and Technology Policy Fellowship after graduate school. He received a B.S. in Psychology from the University of Central Florida in 2012.

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Welcome New STPP Students!

Kevin Schuster, MPP
Kevin’s policy focus is international development. He is interested in understanding how new technologies can improve life in developing countries and the economic and social implications of science and technology policy in the developing world. He received a B.S. in Recreation and Sports Management, Business Management, and Spanish from the University of Tennessee.

Rebeca Villegas, M.S. Environmental Justice and Sustainable Systems in Urban Planning dual degree
Rebeca is interested in understanding the economic and political contexts that intertwine and impact communities across the nation. She is also interested in collaborating with policymakers at the local, state, and national level on sustainable development to benefit people and the environment. She earned a B.A. Environmental Studies, with a concentration in Land Use and Environmental Planning, and Latino Studies from the University of Michigan.

Melvin Washington, MPP
Melvin is committed to serving low-income and communities of color. He is interested in understanding public decision making around science and technology, and the ways in which low-income and communities of color are impacted by contemporary developments in science and technology. Melvin has a Bachelor’s degree in Politics and International Affairs from Wake Forest University. He was previously a political appointee at the USDA working with the Chief Scientists and head of Research, Education, and Economics.

Anna White, Ph.D. Industrial and Operations Engineering
Anna is a first year Industrial and Operations Engineering pre-candidate studying public transportation systems. She is interested in learning about the policymaking process and the role of technical experts in making science and technology policy. She holds a B.S. in Industrial Engineering from Clemson.
Thanks to an STPP Student Career Development Grant, I was fortunate enough to attend the AAAS Science and Human Rights Coalition Meeting in late July. Held in Washington DC at the AAAS headquarters, the workshop brought together representatives from scientific and human rights organizations to explore the meaning and implications of a “human right to science”.

A part of the AAAS Scientific Responsibility, Human Rights and Law Program, the Science and Human Rights Coalition promotes discussions and projects that both encourage scientists to contribute their skills to the defense of human rights as well as seriously exploring the concept that science itself should be guided by human rights principles. The coalition draws motivation from Article 15 of the International Covenant on Economic, Social, and Cultural Rights (1966), a UN treaty that first established a “human right to science”. This treaty builds upon the 1948 Universal Declaration of Human Rights, and in regards to science requires the 165 ratifying countries to:

1. recognize the right of everyone to enjoy the benefits of scientific progress and its applications;
2. conserve, develop, and diffuse science;
3. respect the freedom indispensable for scientific research; and
4. recognize the benefits of international contacts and co-operation in the scientific fields.

Although the idea that both scientific processes and products should be accessible by all is probably familiar to STPP students, it may be surprising to learn about this well established, international precedent of viewing science through a human rights lens. At the same time, it is probably difficult to assess the significance of Article 15, given how old the treaty is, the vagueness of its requirements, and a general uncertainty of the influence and processes of the United Nations. Both were certainly true for me!

The Article 15 right to science is little known after 50 years because not much has been done to develop an understanding for what the right entails or how it is to be implemented. However, at the workshop I learned that there is currently a surge of interest in the topic, driven by a soon-to-be-released report from the UN Committee on Economic, Social, and Cultural Rights (CESCR) that will provide both an interpretation of the right to science and guidelines for how nations are to implement it. Due to the complexity of the issue and a lack of data, CESCR has asked for input from the scientific community to guide their report.

The July AAAS workshop brought together a broad array of human rights activists and scientists who have been working to identify the key components of both the human right to science and the mechanisms by which it can be measured and enforced. The conversations were remarkable due to the diverse
I can honestly say that it was one of the most intellectually stimulating spaces I’ve encountered, with new issues raised at every turn and then explored from a multitude of perspectives.

Learning about international treaties and science policy issues was wonderful, but I think the most personally impactful aspect of the workshop was just discovering this diverse community of scholars that actively pursue an optimistic and inclusive ideal of the role science should play in society. Too often we linger in our comfort zones, confident only in our knowledge of a narrow slice of the world, but this group shatters academic boundaries in order to ensure that science both enables and embodies human rights principles.

I would definitely recommend attending the next AAAS Science and Human Rights Coalition meeting to STPP students. If you’re interested in learning more about the committee’s work or founding principles, check out these references:


I first learned about Science Outside the Lab (SOtL) from a Google search -- I was looking for science and technology policy internship opportunities in Washington, D.C. Because of the timeline for applying and the cost of the program, I decided I was going to participate in the program more than a year and half before I actually went. I remember being so excited because SOtL promised to be an incredible opportunity to spend two weeks learning the intricacies of S&T policy from a wide variety of people who work in and shape S&T policy.

So, finally, in June 2017, nine other PhD students from all around the country and I went to Washington, D.C. to participate in SOtL, a science and technology (S&T) policy “boot camp” run by the Center for Engagement & Training in Science & Society at Arizona State University. We had the opportunity to learn from and network with policy makers, program officers, analysts, advisers, career civil servants, and educators from executive agencies, legislative committees, professional societies, museums, and consulting firms. It was invaluable to hear from so many people about the opportunities, jobs, and career pathways that exist in the rather nebulous field of S&T policy.

Now almost six months later, I have come to appreciate the impressive breadth of the SOtL program: we met with people at all levels of government, in agencies and organizations with diverse S&T policy missions, and no one had the same path to a career in S&T policy.
During the first few days before we met with many of these experts, however, we had “lessons” on the basics of S&T policy and communication. Much of what we covered echoed the basic training of the STPP program, but SOtL took a different tact and forced us to do something entirely new and unexpected instead of just learning to explain our science to “the public.” Stephanie Long, the Director of Live Science at the Science Museum of Minnesota tasked us with writing short plays about our research. SOtL then hired professional actors to perform our plays! Our SOtL cohort initially had some resistance to this - it was an exercise well outside the comfort zone for S&T PhD students - but in the end we all felt it was a valuable exercise which forced us to think creatively about how to explain our research. (I wrote about targeted drug delivery as a crime drama and prisoner interrogation.) This exercise ultimately proved to be successful when we all commented afterwards that we finally understood the research everyone else was doing.

The rest of our time was devoted to conversations with the various experts. The people we met were excited to speak with us, and all of them provided insightful and thought-provoking perspectives on their paths to their current positions and their experiences working in S&T policy. Ira Bennett, the director of SOtL and Assistant Research Professor, Consortium for Science, Policy & Outcomes, specifically tries to bring in people positioned in the middle of their organization’s hierarchy. He explained that people at the top of an agency or organization must stick to the “party line,” and the group does not learn anything that cannot be read in a newspaper or press release. Staff members in positions below the top but still high to have access to privileged information tend to have the most interesting perspectives on the S&T policy work and the organization’s overall mission. Our conversations were unstructured, and we were encouraged to ask hard, probing, and interesting questions. But, the one rule was that the question “couldn’t be something you can look up with a Google search.”

In particular, we asked every SOtL speaker we met if and how their work has changed and what they think will happen in their field under the current Presidential administration. Given the atmosphere and political unrest in Washington, D.C., it was fascinating to hear about the wide range of responses, even from staff within the same organization. The responses ran the full spectrum from, “Things are pretty much business as usual. We’re just keeping our head down and doing our work until we hear otherwise.” to “It’s absolutely awful. No one knows what’s happening. This administration is a disaster.” On average, people said that not much had changed yet; they were still doing their work day-to-day, but they were wary disturbed by signals from the administration and wary of potential changes to come. Those conversations occurred back in June, and I would love to know how answers have changed, particularly from those working in organizations such as the EPA and OMB.

As soon as SOtL was over, I knew the program had proven to be an excellent opportunity to be “on the ground” in Washington, D.C. In addition to being purely educational, I was encouraged by observing the wide variety paths on which to find your way in the S&T world. I was particularly excited to learn about the FDA’s efforts to develop field of regulatory science. One of the speakers, an SOtL alum and Mirzayan fellow who had recently earned her PhD in Pharmacology, was one of the first cohort of new scientists the FDA hired into their regulatory science positions. As she talked about her job, I was thrilled to see how her work ties together her scientific and technical skills with her policy expertise. I had never heard about this type of policy work before, and I realized that it is exactly what I want to find in my own S&T policy career. SOtL is a critical component in building the path to get there.

More information about SOtL can be found here: http://cspo.org/program/science-outside-the-lab/

The week of April 2, we found ourselves headed to Washington, DC for the American Association for the Advancement of Science’s CASE workshop – Catalyzing Advocacy in Science and Engineering. The four-day program was designed to give PhD students in science and engineering a view into how science and technology governance is conducted through the legislative process and executive-branch agencies, with a particular focus on appropriations and budgetary issues. In short: Science and Technology Policy Boot Camp.

Our first day started off with a talk from Toby Smith (Vice President for Policy at the Association for American Universities) about the history of S&T policy in the US (back to Vannevar Bush and Harley Kilgore - PubPol 650, anyone?), and his views on the real-world interactions between politics and policy (cue flashbacks to PubPol 510). He also impressed upon us that, while advocating for S&T funding is important, the government’s discretionary budget isn’t the real problem - ballooning entitlement liabilities are the real long-term fiscal threat (a theme we’d return to often in the following days). Then we broke for dinner, drinks, and getting to know our comrades from universities and professional societies all over the country.

Day two definitely started off with a bang. More specifically, with the uniquely engaging Judy Schneider, Specialist on the Congress at the Congressional Research Service. She is, without a doubt, one of the most fascinating and dynamic people we have ever met. Part of her job for the past 40 years has been training incoming Members of Congress in the legislative process. In her 90-minute whirlwind presentation, we learned more about how legislation is really made and how Congress actually works than we ever learned in our high school civics classes (and Schoolhouse Rock to boot). The rest of the day’s sessions gave us a crash course in S&T policymaking throughout the executive branch, with perspectives and panel discussions from the former White House Office of Science and Technology Policy and various federal agencies including the NIH, NSF, and U.S. Geological Survey, capped off by dinner and discussion with our fellow students and AAAS representatives.

We headed over to the Capitol early the next morning, where we were greeted by Rep. Bill Foster (D-IL), one of the 1.5 physicists currently serving in Congress (apparently the other counts as half a physicist because he “only” has a B.S.). He shared his personal background and his thoughts on the current political situation while raising yet another theme that persisted throughout the workshop: how the long-term nature of research is often at odds with the short-term incentives that pervade the political sphere. He also lamented how government employees who are neither trained nor deeply immersed in research are the ones making science and technology-related decisions worth billions of dollars, while highly qualified university faculty spend significant amounts of time competing for grants for relatively little money. The rest of the morning was a crash course (yep, another – hence “boot camp”) on how Congress deals with money through appropriations bills, continuing resolutions, committee structure, etc., plus talks with assorted Congressional staffers on how things work behind the scenes. Then we headed over to the AAAS headquarters to discuss public engagement, future opportunities, and the upcoming March for Science before breaking off with our comrades from Michigan State (gasp! the disloyalty!) to strategize about our very, very intense final day: meetings with policymakers on the Hill.

We connected first with Madeline Nykaza and Kristina Ko, who work with the UM Government Relations office in DC and had set up a packed agenda with an assortment of their former colleagues, UM alums, and other staffers with Michigan’s Congressional delegation, (A huge thank you to the two of them for organizing!) Talking with folks from the offices of four Senators and two Representatives about the importance of S&T
funding and a long-term policy perspective, and hearing their backgrounds and thoughts on current budgetary debates, was incredibly valuable. It was also enlightening to see firsthand the cultural difference between House and Senate – we really got a sense of the Senate as much more calmly deliberative and the House as a frenzy of putting out fires under the never-ending need to get re-elected.

After our whirlwind of meetings, we came up for air at the nearby Tortilla Coast pub to debrief with the AAAS organizers and with the other members of our CASE cohort who’d had meetings in Congress. Then it was time to bid adieu to DC – although we expect for many of us it will end up actually being “see you later”!

As a final note, we both want to say a huge thank you to Rackham for sponsoring this trip! We really appreciated the experience both personally and professionally - see below - and we hope that other students in the future will get as much out of these sorts of events as we did.

**Pete’s reflection**

Overall, I have to say that the best part about CASE had nothing to do with the formal program – the talks from big names in S&T policy, or the discussions of how Congress and the appropriations process work in practice, or the presentations on how to talk with government officials about research funding, useful as all those were. Rather, the best part was simply being around a group of intelligent and engaged people from all over the country, with highly diverse backgrounds, of various political persuasions, and seeing just how powerful rational, well-reasoned discourse can be - from the dinnertime conversation about education policy and funding structure with a former Teach for America’er from urban Tennessee to picking Kristina’s brain about how to bridge the gap between the disparate timescales of scientific research and DC policymaking.

Setting aside emotions and preconceptions to really listen to each other and discuss important issues could go a long way towards addressing today’s pressing political, societal, and technological questions. It was really heartening to spend several days around a group of young scientists and policymakers who feel similarly, and I hope I can, er, catalyze these sorts of discussions both back here at UM and wherever else my future career may lead.

**Rachel’s reflection**

During the AAAS CASE workshop, it was exciting to apply the knowledge and skills I have acquired in the STPP program to real-world S&T policy. It was refreshing to see how information that, initially in class seemed so removed from practice, informs day-to-day work and decision-making processes.

Now, whenever I think about Congressional happenings, I remember Judy’s three “P’s” of “procedure, politics, and policy” have to be in balance for anything to get done. While reading recent news on various laws moving through Congress, I have been focusing on picking out which of these three pieces is paramount and noting how it’s driving the outcome of a particular situation. I appreciated Rep. Bill Foster’s unique perspective on the current science bureaucracy as a misallocation of human capital. I also liked his advice on advocating for science and correcting inaccurate representation: criticism should be directed at the statement and not at the person or the party. Putting this advice into action would serve to elevate much of the current rhetoric and help along meaningful policymaking.

Our most memorable meeting on the Hill was with Sen. Tim Scott’s (R-SC) Chief of Staff, a UM Law School alumna. She left her job as a prosecutor and came back to Capitol Hill (with some interesting career stops along the way) because working on the Hill is “less stressful.” She has an insightful and refreshing take on what is actually important and what is just politics in the DC bubble. Now, when I get really stressed out about graduate school (or politics), I try to remember her perspective.

Overall, CASE was a fantastic experience and provided me with a whole set of new tools to become an advocate for meaningful and sustainable science policy. I highly recommend this workshop to anyone who may have the opportunity to go in the future

**More information about the CASE Workshop can be found here:** [https://www.aaas.org/page/about-0](https://www.aaas.org/page/about-0)
AACR Annual Meeting 2017 in Washington, D.C. On April 1-5, 2017, I attended my first AACR Annual Meeting where I learned about the newest findings in cancer research, heard stakeholders talk about regulatory and policy issues related to new drugs and technologies, and networked with science policy and regulatory professionals, cancer research advocates, and cancer patients.

Regulatory Science and Policy Sessions. Sessions were held on various topics related to cancer policy and drug regulation, professional advancement activities, and a special session on the Cancer Moonshot featuring Joe Biden and leaders from government, academia, industry, patient advocacy organizations, and Capitol Hill.

Unsolved Mysteries: Why is Pancreatic Cancer So Difficult to Treat? During this session, pancreatic cancer experts defined clinical challenges of the disease and presented new insights that could eventually help solve one of the most enigmatic and complex cancers. I found this session especially interesting because I had written a testimony earlier this semester for a PUBPOL 650 assignment advocating for more pancreatic cancer research funding, knowing that a lot more work still needs to be done to terminate the deadliest cancer. At the end of this session, the floor was open to public forum. As I was knowledgeable on this issue due to my research from the PUBPOL 650 assignment, I shared my thoughts with the experts and other scientists in the room.

Professional Advancement. During the conference, I attended various professional advancement activities, including a career fair and career panel. At the career fair, I learned about job opportunities ranging from post-doctoral positions and American Association for the Advancement of Science (AAAS) Fellowships to science writing and funding management.

Careers in Science Policy and Advocacy: Industry, Government and Non-profit Organizations. This was one of my favorite sessions from the entire conference. During this session, panelists from the FDA, National Institute of Health (NIH), and other institutions spoke about how they navigated their research training towards a career in science policy. Each panelist had a unique career path, and they each discovered their love for science policy in different ways. For example, Carrie Wolinetz, Associate Director for Science Policy and Director of the Office of Science Policy at the NIH, began her career as a zookeeper while studying lemurs. She then earned her Ph.D. at Cornell in a reproductive physiology lab, but during her last year, she was enlisted to review potential faculty for her university; she looked at their resumes and realized that she did not want to become a professor. Carrie’s next step in her career path began after she was accepted into the AAAS Fellowship Program; Carrie loved the work she did there. Later, she began to work for political campaigns and eventually found her niche at the NIH. The panelists also offered key advice for a career in science policy. They said it is important to see across fields, think with flexibility, problem solve in many ways, have strong communication and writing skills, be able to talk to multiple audiences and translate jargon, and be a team player. They also wanted us to remember the value of the Ph.D.; they said don’t underestimate your skills! After this session, I spent time networking with each panelist and other students with similar career aspirations. They will all be great contacts for the future.

Beau Biden Cancer Moonshot: Progress and Promise. This session, led by Joe Biden, focused on the Cancer Moonshot, a $1.8B effort to “accelerate cancer research aims to make more therapies available to more patients,
while also improving our ability to prevent cancer and detect it at an early stage.” Joe Biden emphasized the need for NIH funding and young talent so that we can see the day when “care has less harmful side effects,” “cancer vaccines are available,” and “tumors can be treated at their most vulnerable stages.”

After Biden’s remarks, leaders from the government, academia, industry, patient advocacy organizations, and Capitol Hill gathered to discuss how the Beau Biden Cancer Moonshot provision will stimulate the acceleration of progress against cancer and how it will produce better patient outcomes. Panelist, Elaine L. Chao, U.S. Secretary of Transportation, explained her family’s journey from China and how her family dealt with her mother’s death from cancer. Another panelist, Congressman Kevin Yoder (R-KS), assured us that cancer is a priority in the House, and he has called for doubling NIH funding over the course of a decade. He sees cancer as a national defense issue, one that affects all U.S. citizens. After the panel discussion, I had the opportunity to meet Rep. Yoder and talk to him about my research and interest in making a difference on Capitol Hill.

Stand up for the fight against cancer. Another powerful moment during the conference occurred in the opening ceremonies. The 2016 AACR President, Nancy E. Davidson, stressed the importance of continued and reliable NIH funding as the Trump administration recently proposed that Congress reduce the $2B increase for the NIH that is currently on the table for FY 2017 by 60% or $1.2B. In addition, the administration proposed a shocking budget cut of $5.8B for FY 2018, which is 20% of the current NIH budget. Davidson said, “Proposals would severely jeopardize the progress we’re making right now to prevent and treat cancer, and they would severely hamper our ability to make advances in the future, which would inevitability have negative effects on public health and the wellbeing of patients.” She emphasized the need to maintain highly skilled teams of cancer researchers and nurture the upcoming generation of researchers that we depend on for future advancements. To show support for NIH funding as a national priority, Davidson encouraged conference attendees to participate in a display of unity for life-saving cancer research. Over 20,000 attendees stood up in their seats holding signs reading, “Support Medical Research,” “Cancer Research Saves Lives,” “Make NIH Funding a Priority,” “Cancer Research Makes Economic Sense,” and “Invest in Life-Saving Cancer Research.” This display of unity will be shared widely on social media and other channels. In addition, the moment will be shared with those in the White House and those on Capitol Hill.

Exceeding Expectations. The AACR Annual Meeting 2017 in Washington, D.C. far exceeded my expectations. I learned about the newest data in cancer research, participated in regulatory and science policy sessions, listened to Joe Biden and leading experts talk, engaged in professional development sessions, and made many new contacts that I can add to my professional network. I would highly recommend this conference to other STPP students looking for an experience that combines cancer research, professional development activities, and science and regulatory policy discussions! Next year, the AACR Conference will be held in April 2018 in Chicago, Illinois.

STPP in the Field is made possible, in part, by STPP Student Career Development Grants awarded to each of our student authors.

The STPP Student Career Development Grant is designed to provide supplemental support for students to attend STPP-related conferences and professional development events that may otherwise be cost-prohibitive.

Eligibility: Funds are available on a first-come, first-serve basis. You must be in good academic standing and have successfully completed two of the three STPP core courses. Students enrolled in their second STPP core course when the application is submitted are also eligible. You may apply once per fiscal year. Applications will not be considered for retroactive funding. MPP/MPA students should contact the Graduate Career Services department for information on how to apply for FSPP-specific professional development funding.

Award Description: The STPP Student Career Development Grant can be applied to STPP-specific career development activities, including conferences (e.g., AAAS or 4S Conferences), workshops (e.g., Science Outside the Lab), and unpaid or underpaid internships.

Application Procedure: Completed applications must be submitted prior to the start of the professional development activity. You may apply for the funds at any time, but the funds will not be disbursed until we receive your paid registration receipt. For more information: http://stpp.fordschool.umich.edu/grant/
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