What’s New at STPP?

by Jeanne Bisanz, Program Administrator

This past fall, an unprecedented number of new students (18 in total!) were accepted into the STPP graduate certificate program. These graduate students come from a wide range of backgrounds including Engineering, Dentistry and English (See page 6 for more info on all the new STPP students). Through their involvement in the STPP Program, this diverse group of students will participate in classes that investigate S&T policy topics such as intellectual property, human embryonic stem cell research, energy sustainability, and the ethics of innovating, attend lectures on science and technology policy topics, and take advantage of the unique experiences offered by the program’s strong interdisciplinary infrastructure.

The new Winter STPP Lecture Series begins with our first speaker, Dr. Paul Wilson, on Monday, February 1, 2010. Dr. Wilson’s talk is entitled, “Financing the Development of Drugs and Vaccines for Neglected Diseases.” Commentary will be provided by Matthew Davis, Associate Professor of Pediatrics and Communicable Diseases, Internal Medicine, and the Gerald R. Ford School of Public Policy. The STPP Lecture Series is a great place to learn about current S&T policy and to meet new and current STPP students, faculty, and staff. Please see page 2 for detailed information on the STPP Winter Lecture Series and mark your calendars! (continued on page 3)

STPP’s New Practicum on Science and Technology Policy

by Joy Rohde, STPP Postdoctoral Fellow

Eight students engaged in “real world” science and technology policy, research and analysis through the STPP Program’s new Practicum on Science and Technology Policy (Public Policy 657) which I taught during the Fall, 2009. Working in teams, students evaluated Southeast Michigan’s progress in specific science and technology policy sectors. After devoting three months to original policy research, including dozens of expert and stakeholder interviews, case comparisons, and surveys of best practice, the teams produced comprehensive policy analyses that offered specific recommendations for local and state agencies.

STPP students Kate Gallup and Heather Claxton teamed with Dharma Akmon (SI) to address Detroit’s digital divide and craft recommendations to enhance internet access for disadvantaged city residents. The team identified the city’s underserved populations, the causes of their exclusion, and the means to reach them. Taking into account the dire financial situation in the city, they argue that Detroit should partner with local non-profits to (continued on page 3)
The STPP lecture series is sponsored by The Herbert H. and Grace A. Dow Foundation

Events are held on Mondays, 4:00-5:30pm in the Betty Ford Classroom (1110 Weill Hall)
at the Gerald R. Ford School of Public Policy

01 February 2010

“Financing Development of Drugs and Vaccines for Neglected Diseases”

Paul Wilson
Assistant Professor of Clinical Population and Family Health, Mailman School of Public Health, Columbia University

Commentary by Dr. Matthew Davis, Associate Professor of Pediatrics and Communicable Diseases, Associate Professor of Internal Medicine, Medical School, and Associate Professor of Public Policy, Gerald R. Ford School of Public Policy

Co-sponsored by the Department of Health Management and Policy, School of Public Health and the International Policy Center

22 February 2010

“The Emerging Revolution in Emissions Trading Policy”

Leigh Raymond
Associate Professor of Political Science, Purdue University and Associate Director of the Purdue Climate Change Research Center

Commentary by Dennis Assanis, Jon R. and Beverly S. Holt Professor of Engineering, Department of Mechanical Engineering, Director, Michigan Memorial Phoenix Energy Institute

Co-sponsored by the Graham Environmental Sustainability Institute and the School of Natural Resources and Environment

15 March 2010

“Neighborhood as Sustainability Laboratory: Agency and Agendas in the ‘Green’ Rebuilding of New Orleans’ Lower Ninth Ward”

Barbara Allen
Associate Professor and Director of the Graduate Program in Science and Technology Studies at Virginia Tech's National Capital Region Campus

Commentary by Margaret Dewar, Professor of Urban and Regional Planning and Faculty Director of the Edward Ginsberg Center for Community Service and Learning

Co-sponsored by the Center for Local, State, and Urban Policy

12 April 2010


Joy Rohde
Postdoctoral Fellow in the Science, Technology, and Public Policy Program, Gerald R. Ford School of Public Policy

Commentary by David Thacher, Associate Professor of Public Policy, Gerald R. Ford School of Public Policy & Associate Professor of Urban Planning, A. Alfred Taubman College of Architecture and Urban Planning

Co-sponsored by the Science, Technology, and Society Program


**What’s New at STPP?**

This semester Leah Nichols (STPP Postdoc) will be teaching *Innovation Policy* (PubPol 658) which is one of two new STPP courses offered this semester. This course will explore processes of innovation and the public policies used to promote and govern science, R&D, and innovation. The other new course, *History of Computers and the Internet* (SI/History 379) taught by Dr. Paul Edwards (School of Information), covers the development of computers from the ancient world to the present. Please check the STPP course list on page 8 or the STPP Website for more information.

As STPP’s new Program Administrator, I hope to build on the strong administrative foundation laid by Bonnie Roberts, who has moved on to a full time position at the Center for Local, State, and Urban Policy (CLOSUP). Previously a project coordinator for the *Pileus Project*, a climate change research/stakeholder project at MSU, I am energized by the opportunity to work with an incredibly diverse group of graduate students, researchers, and scientists, to learn more about science and technology policy.


**AMS Summer Policy Colloquium**
by Kevin Reed, STPP Graduate Student & PhD student candidate in AOSS

This past summer I was one of ten students selected by the American Meteorological Society (AMS) to attend the AMS Summer Policy Colloquium in Washington, D.C. from May 31st to June 9th, 2009. The event is set up through the AMS Policy Program and is designed to provide scientists, students, and government employees (working at the National Weather Service and the National Oceanic and Atmospheric Administration) involved in the field of atmospheric science a ten-day immersion into atmospheric policy. The colloquium offers an overview of policy basics and a crash course in how decisions are made in government, including both in Congress and the White House. In addition, the program provides the participants many opportunities to meet and talk with federal officials, Congressional staffers, and others involved in the policy process.

The colloquium provides an overview of current atmospheric policy issues and uses the method of case study methods to investigate these issues. The first main issue discussed at this summer’s colloquium was the prospects and policy implications of geo-engineering the Earth’s climate to offset the impacts of climate change and global warming. The second significant issue investigated at the colloquium was the creation of the Waxman-Markey climate change bill in Congress, which was taking shape during our time in Washington. During the case studies we worked in groups and imagined that we were staff members of a member of Congress. The goal of both of these case studies was to present the information and suggestions our member of Congress needed in order to make a knowledge-able decision and stance on the legislation or policy issue.

Overall, the colloquium provide me with a better understanding of how the policy process works and how people with scientific backgrounds can play a significant, and very important, role in the policy decisions. The most valuable aspect of the colloquium for me was I was provided the opportunity to meet and discuss with others who are scientists, like myself, but have significant interest in science policy issues. Attending the AMS Summer Policy Colloquium was a beneficial opportunity.


**STPP’s New Practicum on Science and Technology Policy**

(continued from page 1)

provide affordable home broadband services. Their report includes specific recommendations for creating and capitalizing on that partnership. The experts that the team interviewed have been very impressed with their results, and they have been asked to present their work to individuals and organizations in Detroit.

STPP’s Owen Zinaman and Greg Fogel (MPP/MS Environmental Policy Planning) devoted the semester to exploring the feasibility of siting renewable energy projects on Detroit brownfields. Zinaman and Fogel argue that by placing utility-scale wind projects on brownfields in the city, Michigan can work toward meeting its Renewable Portfolio Standard, address urban blight, and stimulate economic development. Fogel and Zinamans’ report identifies strategies that developers, the city, and the state can use to mitigate social opposition and reduce regulatory barriers to wind development. In particular, they argue that Detroit should establish a Wind Working Group that brings together stakeholders and government officials to create an equitable and streamlined siting system.

STPP’s Max Bronstein worked with Gideon D’Assandro (MPP) and Matt Schaar (MBA) to assess Michigan’s investment in clean energy innovation. The team argues that, while Michigan has the potential to build a cleantech innovation cluster, it will require extensive financial and political investments in to create a culture of innovation in the state. Noting that the state has failed to follow through on past innovation fads, including biotechnology, they recommend that the state and federal government invest in Clean Tech Venture Funds and foster cooperative relationships with academia to create a sustainable clean technology sector.
This past summer, I had an amazing experience in Dell’s government relations office as the Dell Thurmond Woodard Fellow, one of seven fellows in the Eben Tisdale Fellowship program for high-tech interns in Washington, DC. The Tisdale Fellowship program offers a chance for graduate and undergraduate students to learn about the intersection of private industry and non-profit organizations with policy in the high tech field. The Fellowship includes a $5,000 stipend for the eight week internship, a weekly lunch and issues seminar hosted by sponsoring companies and associations, the chance to attend various briefings at the state department and by members of congress, and various networking opportunities.

Additionally, I gained real-world policy experience that did not involve making copies or filling water glasses. I wrote policy background papers, represented Dell at various business affairs, took notes at congressional hearings, and participated in a number of other related activities. Many of my write-ups influenced the decisions being made by government and international affair executives. For instance, I worked on issues pertaining to the Chinese mandate to install Green Dam Youth Escort software on all computers sold within China; this measure would have furthered China’s aggressive Internet censorship policies. I compiled documents relevant to the issues of Internet filtering, and was able to take part in trade association meetings of the IT hardware industry to discuss options for preventing free speech violations on the Internet.

Finally, the Tisdale Fellowship provides many opportunities for mentoring. Eben Tisdale was recognized by his friends, family and coworkers at HP as a great mentor to young people entering the policy field. When he unexpectedly passed away, his friends wanted to honor his memory by developing this fellowship program. I cherish the wonderful connections I made at Dell, with the other sponsoring organizations, with the Fellowship organizers and with the other Fellows. It truly was a once in a lifetime experience.

My Summer Tisdale Fellowship Opportunity
by Kaitlin Gallup,
STPP Graduate Student & PhD student in Material Science and Engineering

This program differentiates itself from other internship opportunities students have in our nation's capital through the experience students have with lobbying groups, the hands-on nature of the fellowship, and the emphasis on mentoring. First, working in the government relations office of Dell Inc. taught me about the important role of private industry in policy making. Previously, I had a little-red-riding-hood-esque picture of big-business as a big bad wolf, but that imagining failed to capture the interdependency of private industry and Congress in developing responsible national policies that serve the public interest. I got to work on issues ranging from setting educational standards to include skills such as computer literacy to working on issues of pertaining to electronic health records. Working on these issues demonstrated that Dell had value adding points to make on how to utilize technologies to improve efficiency, allow greater patient choice and help our nation’s students compete in a global workforce.
Are you interested in the Science, Technology, and Public Policy (STPP) Program Certificate?

The certificate requires 15 credit hours of course work designed to teach students:

- How science and technology are influenced by politics and policy
- The role of science and technology in the policymaking process
- Methods and tools for science and technology policy analysis

The political and policy landscape of specific science and technology areas such as biotechnology, information and communication technology, and energy policy.

**Deadline for the STPP Graduate Program Certificate is:**

**FEBRUARY 15, 2010**

Here is what you need to submit:

- Completed STPP cover sheet (Available at website below)
- 2-page statement that explains how the STPP program will contribute to the student’s education and future career
- Current transcript (for currently enrolled graduate students) or an undergraduate transcript (for newly entering students)
- Two letters of recommendation (at least one must be specific to the STPP app.)
- If student is in a Rackham program, he/she must complete the Application for Change of Program or Dual Degree Form. Please use program code 01960. (This form needs to be signed by the student’s current department chair. One of the STPP Directors will also sign it after the application review process has been completed.)
- If the student is not currently enrolled in a Rackham program, the student must complete the Rackham application online and pay the application fee. Please choose “Science Technology and Public Policy Certificate” as your program of application. Note that courses taken to complete certificate requirements should be registered for under Rackham (dual-enrollment is allowed).
- If you unsure if you are enrolled in a Rackham program, please see their program list: Full Rackham Program List (https://secure.rackham.umich.edu/academic_information/programs/#dual/)

Application materials should be sent to: STPP Admissions
2245 Joan and Sanford Weill Hall
Gerald R. Ford School of Public Policy
735 S. State St.
Ann Arbor, MI 48109-3091

For more information, go to:
http://fordschool.umich.edu/research/stpp/admit.php

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**STPP Program Events & Deadlines**

**Tuesday, January 26, 2010**

**INFORMATION SESSION**
for the
STPP Graduate
Certificate Program
5:30pm-6:30pm
Ford School of Public Policy
Classroom 1210 Weill Hall

**Wednesday, Jan 27, 2010**

**INFORMATION SESSION**
for the
STPP Graduate
Certificate Program
4pm-5pm
Taubman Medical Library
GAP Conf Room 2955

**Friday, February 15, 2010**

**APPLICATION DEADLINE**
for the
STPP Graduate
Certificate Program

FOR MORE NEWS AND INFORMATION:
www.stpp.fordschool.umich.edu
from STPP People

Welcome New STPP Grads!

(All of the following students were accepted into the STPP Graduate Program Certificate Program in Fall, 2009)

Rose Afriye is a second year Master student in Public Policy and is interested in how public policy impacts issues of inequality. She received her Master in English Writing and Political Science, and Certificate in Communication from the University of Pittsburgh.

Michael Anderson is working on his PhD in Astronomy and Astrophysics. He completed his Master in Astrophysics from Caltech and Bachelor in Astronomy and Physics from U-M and has a longstanding interest in sustainability issues.

Christopher Avery has a Bachelor in Chemistry from Hope College in Holland, MI and a Master in Chemistry from U-M. He is currently pursuing a PhD in Chemistry and is interested in understanding public policy issues from at least two perspectives: that of the trained scientist and the policy maker.

Daisuke Baba has his Bachelor and Master in Physics and Applied Physics, respectively, from the Tokyo University of Science and is working towards his Master in Public Policy. He has developed interest in policy issues through his work experience at Japan’s Ministry of Education, Culture, Sports, Science, and Technology (MEXT) and is interested in promoting research and scientific infrastructure in Japan.

Jwalin Buch is pursuing his Master of Business from the Ross School of Business and has a Bachelor from the University of California in Computer Science. He is interested in two key areas of government policy: regulation and government investment in new innovation.

Danielle Forsythe is working on her Master in the School of Natural Resources and is interested in the relationship of environmental between research and public policy. While pursuing a Bachelor in Anthropology from University of Michigan, she spent half a year studying Japanese at the Nanzan University in Nagoya, Japan.

Margarita Herdandez is working on her PhD in the Program in Biomedical Science (PIBS) in Molecular Cellular Developmental Biology. She also received her Bachelor in Biology at the University of Texas. She is interested in working in the field of infectious diseases.

Ethan Hyland is currently pursuing his Master in Geology and is interested in the application of science and how it affects various aspects of daily life. He previously attended Carleton College in Minnesota and received a Bachelor in Geography.

Molly Maguire is working on her Master of Public Policy. Previously she received her Bachelor Degree in Modern History from St. Andrews University in Scotland. She is interested in the history and science of medicine and the intersection of science, religion, and culture with moral subjectivity.

Jessie Mannisto is working on her MSI from the School of Information and has a Bachelor in English from Kalamazoo College. She is interested in librarianship in order to serve policy makers through organizations like the Congressional Research Service at the Library of Congress.

Eric Miller is pursuing a PhD in Nuclear Engineering and has a Nuclear Forensics Graduate Fellowship. He also received his Bachelor in Nuclear Engineering from U-M. He is interested in effective public policy with respect to nuclear engineering.

(continued on page 7)
Exploring STPP Fellowships, Internships, and Careers, by Jeanne Bisanz, STPP Program Administrator

A mix of old and new students attended the STPP Career Luncheon at Weill Hall on December 4th to talk about STPP careers and share internship and fellowship experiences. This was an excellent opportunity for students to ask and learn about career opportunities in science and technology policy, and to figure out how to position themselves in the application process.

“Don’t dismiss unpaid summer internships, yet” advised Dr. Shobita Parthasarathy (STPP co-director), who had an internship at RAND’s Critical Technologies Institute during graduate school. She said that internships—both paid and unpaid—can provide valuable insights and connections that often lead to full-time employment. The trick is to find out your responsibilities ahead of time to make sure you won’t be focused on administrative work during your internship. Dr. Parthasarathy also encouraged students to look beyond targeted opportunities like the AAAS fellowships, and proactively contact NGOs, think tanks, US government agencies and international organizations to find out what kinds of positions might be available—or even created.

“Your STPP Certificate provides you with a unique, interdisciplinary aptitude that sets you apart and can be strategically used in order to sell yourself to a fellowship job.”

Why apply for a fellowship? Leah Nichols (STPP Postdoc), who held the Christine Mirzayan Fellowship at the National Academy of Sciences, suggested that if you are unsure of how you want pursue your policy career, a short time in DC may help you decide. In addition to the “awesome” networking opportunities, Leah’s 12-week fellowship afforded her the time and connections to attend hearings on Capitol Hill. The National Academy of Sciences “involved you as much as possible in the policy making process,” by encouraging an active role that included attending committee meetings on the Hill, meeting experts in her area of interest, and contributing to reports. The next deadline for the Mirzayan Fellowship is May 1, 2010 for the fall program.

Kaitlin Gallup (STPP Grad), who held a Tisdale fellowship and worked in the Government Relations Department at Dell Corporation in Washington, DC, agreed that her fellowship offered valuable networking opportunities, but from a different perspective. She commented that “Industry is a huge part of DC” and she found that people were open and welcoming (Read more on page 4).

Several fellowship opportunities were discussed including the American Association for the Advancement of Science (AAAS) Fellowship programs (www.aaas.org/aboutaaas/fellows/). Maitere Ojaruega (STPP Grad Alumni) shared his writing and formatting challenges in regards to the AAAS application process. (AAAS Fellowship programs pamphlets available in room 4204 Weill Hall).

Resource suggestions include: frequenting the STPP Website (stpp.fordschool.umich.edu) which lists both standing internship/fellowship opportunities and STPP-related organizations; specific employer job boards on websites (e.g., National Academy of Sciences); and scientific and engineering professional societies. Also, remember that several UM faculty members have strong ties to DC. Lastly, all of the presenters stressed that applicants should clearly sell the benefits of being an STPP graduate. A person with a PhD in Chemistry who can write a policy analysis memo is better situated to enhance communication among scientists, engineers, and the public!

Welcome New STPP Grads!
(continued from page 6)

Shika Prasad is pursuing her PhD in Nuclear Engineering and Radiological Sciences. She also has her Bachelor and Master in Nuclear Engineering from U-M. She has participated in several professional workshops and is active in a variety of committees and societies that investigate nuclear policy issues.

Lindsay Rayburn a working on her DDS and MS in Clinical Research. She also has a Bachelor in Cellular and Molecular Biology from U-M. She is interested in policy issues as they relate to health care and in the field of Dentistry.

Sonal Sheth is working on her Master of Public Health and is interested in creating effective policy that will ensure safety and access to health technologies. She previously attended Northwestern University and earned her Bachelor from the School of Education and Social Policy.

Gabriel Thoumi has received his Masters Degrees in Business and SNRE, as well as a Certificate in Real Estate from U-M. He is interested in sustainable business practices and would like to promote public/private partnerships in Southeast or East Asia. He is completing the STPP Certificate as a stand-alone program.

Jisan Xue is pursuing her Master of Public Policy, and also has completed a Masters Degree in Mechanical Engineering from U-M and was a lecturer at the Beijing Institute of Technology.
Certificate Program in Science, Technology, and Public Policy (STPP)

Application Deadline: February 15th

CURRICULUM

The STPP certificate requires 15 credit hours of coursework, including three core courses and 2 electives of the student’s choice. These

Core Courses

STPP Core Course 1—PubPol 650: Introduction to Science and Technology Policy Analysis (Offered in Winter; 3 credits)

STPP Core Course 2—PubPol 754: Research Seminar in Science, Technology, and Public Policy (Offered in Winter; STPP Certificate students must enroll in 3 credit option)

STPP Core Course 3—PubPol 585: Political Environment of Policy-making (Offered in both Fall and Winter, Fall option focuses on science & technology policy examples; 3 credits)

Elective Courses

Information/Communication Technology

PUBPOL 720/SI 621: Ethics, Values, and Information Dilemmas
SI 507/703: Foundations of Information Analysis & Design
SI 510: Special Topics: Data Security and Privacy: Legal, Policy and Enterprise Issues
*SI 519: Special Topics: Intellectual Property and Information Law
SI 523: Information and Control
SI 532: Digital Government I - Information Technology and Democratic Politics
SI 533: Digital Government II - Information Technology and Democratic Administration
SI 550: Seminar in Information Policy: Regulation & Politics
SI 579: Government Information –Issues, Resources, and Policy
SI 589: History of Computers and the Internet (New!)
SI 605: Special Topics: The Development and Future of the Internet
SI 645: Information Use in Communities
SI 648/748: InfoCulture: Theory and Method in the History and Sociology of Information Technology
SI 668: Seminar in Information Policy: Regulation and Politics
SI 741: Systems, Networks, and Webs

Biotechnology

*EPID 776: Bioterrorism & Other Weapons of Mass Destruction
HMP 517: Issues in Public Health Genetics
PUBPOL 759: Genetics and Biotechnology Policy

Automotive Technology

UP 572: Transportation and Land Use Planning
UP 671: Public Policy and Transportation

Space Policy

AERO 583: Management of Space Systems Design
AOSS 581/AERO 581: Space Policy and Management

Environmental Policy

CAAS 596: The History of Environmental Thought and Activism
ESENG 501: Energy Science, Technology and Policy
NRE 510: Environmental Decision-making and Governance

General Health/Medicine Policy

ANTHRCL 458/558: Maternal/child Health, the Environment, & Pollution in Africa
ANTHRCL 548: Theory and Practice in Medical Anthropology
CAAS 443: Pedagogy of Empowerment: Activism in Race, Gender, and Health
CAAS 483: Gender Poverty, Medicine
Epidemiology 663: Health, Evidence & Human Rights
HMP 615: Introduction to Public Health Policy
HMP 618: Tobacco From Seedling to Social Policy
HMP 625: Health and Health Systems in the Developing World
HMP 635: Law and Public Health
HMP 684: The Politics of Health Care Policy
HMP 685: The Politics of Health Policy
HMP 693: Mental Health Policy in the United States
*HMP 695: Public Health Policy Issues in Women’s Health Informational Law
PubPol 768: Efforts at Health Care Reform in the US
SOC 475: Introduction to Medical Sociology
SOC 575: Sociology of Health and Aging
WOMENSTD 400: Women's Reproductive Health

General Science/Technology Policy

ANTHRCL 625: Anthropological Approaches to Property and Property Rights
*ChemE 597: Regulatory Issues for Scientists, Engineers & Managers
CSIB 647: Strategy for Technology Commercialization
HISTORY 619: Knowledge/Power/Practice in Science, Technology, & Medicine
HISTORY 629: Technology and Nature in Africa
HISTORY 796: Knowledge and Practice
IOE 438: Occupational Safety Management
IOE 522: Theories of Administration
PUBPOL 564: Government Regulation of Industry and Environment
PUBPOL 654: Science, Technology, and International Affairs
PUBPOL 657: Practicum in Science & Technology Policy
PUBPOL 658: Innovation Policy (New!)
PUBPOL 757: National Science Policy
STRATEGY 647: Strategy for Technology Commercialization

For more information, please see our website: www.stpp.fordschool.umich.edu
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