Environmental Science & Policy Program
MICHIGAN STATE UNIVERSITY
Annual Report 2014-2015
Overview of ESPP

Environmental Science and Policy Program: Who We Are

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The Environmental Science and Policy Program began in 2003 as an umbrella organization for environmental science and policy research and graduate education at Michigan State University. Since its inception, ESPP has offered graduate education programs that are innovative, interdisciplinary and campus wide. ESPP also strives to facilitate interdisciplinary environmental research at MSU and, in particular, link MSU research with national and global research priorities.

To achieve these goals, ESPP provides Doctoral Recruitment Fellowships to incoming Ph.D. students, several cycles of travel funding to support students presenting at interdisciplinary conferences, grants to faculty to encourage interdisciplinary and international research collaboration, and events to showcase environmental research and policy. We also use our website at environment.msu.edu to provide a home for all environmental
The Environmental Science and Policy Program is pleased to hold several premier events throughout the year. This fall, ESPP held its second Student Research Symposium, a conference organized by doctoral students to allow MSU students - graduates and undergraduates from around the region a chance to present their research (both oral and poster) and receive prizes. The symposium also features two distinguished speakers addressing the annual theme.

ESPP Research Symposium 2014: Environmental Risk and Decision Making

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ESPP Signature Events:
Student Research Symposium and
The Fate of the Earth Symposium

The Fate of the Earth Symposium, now in its second year, brings together the top minds in environmental science and policy around the world to discuss topics of utmost importance to our planet. These multi-day symposia are funded by a generous endowment of Barbara and Don Sawyer-Koch.

New York Times blogger Andrew Revkin shares a song with the 2015 Fate of the Earth audience.
Faculty are an integral part of the ESPP family. In the past year, our core faculty has been expanded from seven to 14 members, housed in three different colleges. In addition, our network of affiliated faculty span the breadth of the university, drawing from 40 departments and 12 colleges.

Lucero Radonic, jointly appointed to ESPP and the Department of Anthropology

Dr. Bruno Basso (Geological Sciences) with his agricultural drone.
ESPP offers several different methods of funding support for faculty researchers. The Visiting Scholars to Advance Science grants (VISTAS) increase networking opportunities for MSU faculty by bringing world-class experts to MSU and facilitate development of multi-University research proposals in the areas of environmental science, technology and policy.

In collaboration with AgBioResearch, ESPP also funds the Interdisciplinary Team Building Initiative. These grants promote collaboration among faculty researchers from different disciplines with the goal of enhancing our capacity to grow broadly defined interdisciplinary environmental scholarship and to compete for external grants.

ESPP is also working with Water Science Network to create the WaterCube Program to provide funding for water research between multiple departments around MSU.
ESPP is in its 12th year of offering a Doctoral Specialization for MSU Ph.D. students. The specialization program is designed to provide students with an understanding of the diverse disciplines brought to bear on contemporary environmental programs. Students are exposed to natural and social science courses in addition to the introductory and capstone courses. Together, they create a community which participates in interdisciplinary research seminars, colloquia and symposia. In addition, students from across the university are now able to receive a doctoral certificate in Modeling Environmental and Social Systems.

Fisheries and Wildlife Doctoral Student Molly Good received ESPP travel funding to present at the Global Conference on Inland Fisheries in Rome in January 2015.
One benefit of being an ESPP specialization student is the many funding opportunities. Doctoral Recruiting Fellowships bring the best and brightest students to MSU by offering a full year of tuition, plus $19,000 to up to seven students a year. In addition, ESPP provides funds for students to present their research at interdisciplinary conferences around the world. Finally, ESPP offers funds to support students’ summer research projects.
The MSU Water Science Network is an effort to link the many water-related research and programs across campus. The Network's goal is to build rapid synergies and working relationships among faculty, facilitate joint research grants, and promote MSU as a center of excellence in water. The Water Science Network offers networking opportunities and innovative funding programs to build these relationships and promote interdisciplinary collaboration across campus. The Water Science Network is supported by funds from the Office of the Vice President for Research and Graduate Studies and is administered by the Environmental Science and Policy Program under the guidance of a water faculty advisory committee.

water.msu.edu is the homebase for all water related research at MSU. Here you will find links to water-related websites, facts about water research, water-related funding opportunities, water-related degree programs and profiles of MSU researchers.

What happened to the Global Water Initiative?
The Global Water Initiative was essentially a hiring initiative and hiring is now complete. Through the Initiative, we added 16 new faculty members to our MSU water community. Although the hiring initiative has ended, fostering water science on campus has not. That’s why we’re transitioning to the MSU Water Science Network. Over the years, many of us- from the Center for Water Sciences to the Environmental Science and Policy Program to individual faculty and many others- have worked to facilitate and advance water science and education here at MSU. Our goal is to build rapid synergies and working relationships among faculty, facilitate joint research grants, and promote MSU as a center of excellence in water. We’ll be offering networking opportunities and other events to build these relationships and promote interdisciplinary collaboration across campus. We’re also designing innovative programs to support research ideas to bolster grant funding. It’s an exciting time for water science at MSU- we invite all faculty to engage in the Network and help us move forward.
WaterCube is not your grandfather’s program for awarding internal grants. There are no pre-defined research goals, no grant proposals, and no review panels. Instead, individual water faculty willing to invest a bit of their own research funds will earn a token that has much more value. But the value can only be realized if the token is united with tokens from one or more faculty partners willing to commit to a cool new research project. The token holders get to decide on the nature of the project. Cubation is designed to create novel water teams and provide them with seed funding to tackle something new. We want to minimize transaction costs, and we want team members to have fun discovering one another and working together. So within very broad bounds, it is up to the cubation team to define objectives and the scope of the work, to make progress towards a solution, and ultimately to attract external funding. Cubation is about putting people together in the right configurations to tackle the right problems. Let the experiment begin. - Dr. Steve Pueppke

WaterCube Quick Facts
- 6 colleges issued a total of 52 tokens
- 13 WaterCube teams involving 45 tokens will be funded
- All teams are multidisciplinary and include:
  - 3 to 4 tokenholders
  - 2 to 3 different colleges
  - at least 1 new collaborator
- $900,000 will be invested in the 13 teams over the next 2 years
- WaterCube funding will support 25 Assistant Professors, including 12 Global Water Initiative hires
- Nearly half (46%) of the WaterCubes will develop and/or apply new technologies