What a Year!

We debated and launched our strategic plan, *Vision for the Future*, 2015.

Science Planning submitted 10 linked proposals to CMP for college-wide strategic planning, with the goal of Changing the Face/s of Science.

Our students volunteered 2307 hours of science outreach by teaching 2897 K-12 students.

At an HHMI meeting in June, we presented data on promising life sciences outcomes for students of color since the launch of our AEMES programs.

Our students earned HHMI EXROP awards than any other U.S. college or university.

We held two end-of-semester poster sessions highlighting course-based research experiences spanning five science departments.

We wrote, built, taught, mentored, presented, collaborated, and imagined.

Thanks for all that you did to help make this a wonderful year!



FROM THE CLARK SCIENCE CENTER DIRECTORS' OFFICE



May/June 2015

Looking Back, Moving Ahead

In May, Science Planning Committee hosted an open meeting for Division III with the purpose of informing the next stage of CMP's college-wide strategic planning process. Over 40 faculty and staff engaged in vibrant discussion about the best big ideas for Smith emerging from the 190 suggestions submitted to the Committee on Mission and Priorities this spring.

The cross-cutting theme identified by our group as one of the best ideas for Smith's future (both for our division as well as the College) focused on integrative learning that connects student academic interests to the broader world through purposeful inquiry. We imagined a future where every Smith student has the opportunity—through a capstone opportunity, authentic research collaboration with faculty, or design thinking partnership with industry, government, non-profit agencies, or on our own campus—to engage with a question or issue owned by the student that has impact and meaning beyond the classroom. That day, we talked about how we might cultivate pedagogical spaces that allow our students to tackle this kind of complex work collaboratively, thereby fortifying their agency and leadership while deepening their disciplinary expertise.

The theme identified in our May divisional meeting is consistent with the four directions articulated in our strategic planning report, *Vision for the Future, 2015*. We recognized that this set of aspirations is lofty, requiring that we realign our institutional resources in their pursuit. Our group discussed the importance of staffing, infrastructure, research support, faculty development, and curricular/facilities innovation as critical to this kind of substantial shift in educational enterprise at Smith.

Going forward, we will continue to have opportunities to identify our best ideas for our curriculum, pedagogy, and resources. College-wide strategic planning will continue throughout the fall. Our division will engage in its own discussions about the best ideas for our next round of HHMI institutional funding. Look for an invitation from me for open meetings in July and then throughout the fall as we work together to articulate a compelling set of grant ideas to share with HHMI. I am looking forward to working with you to generate support for our imagined future.

--Patty DiBartolo

WELCOME NEW ENVIRONMENTAL SCIENCE AND POLICY FACULTY!



Alex Barron, Assistant Professor of Environmental **Science and Policy**, graduated from Carleton College with a B.A. in Chemistry in 2000 and obtained his Ph.D. in Ecology and Evolutionary Biology from Princeton University in 2007. Alex's graduate research focused on the patterns and controls of nitrogen fixation in tropical rainforests, demonstrating that bean-family trees can "tune" their fixation rate across different forest types and that molybdenum can limit fixation rates of bacteria in the field. Following his graduate research, Alex was a visiting lecturer in Biology and Chemistry at Carleton College where he taught courses in ecosystem ecology, environmental chemistry, and global environmental change. After teaching at Carleton, Alex worked in Congress for several years — first as a fellow for Senator Joseph Lieberman (I-CT) and then for the House Energy and Commerce Committee, where he worked on the American Clean Energy and Security Act (a.k.a. Waxman-Markey) and covered international climate negotiations. From 2011-2015, Alex worked in the Office of Policy at the Environmental Protection Agency (EPA) where he advised senior EPA leadership and worked on a wide range of environmental regulations, including standards to reduce carbon pollution (including the Clean Power Plan), cross-state air pollution, and mercury and other toxics. He also helped guide EPA's work on environmental economics and climate adaptation.

Camille Washington-Ottombre joined Smith College last summer as Assistant Professor of Environmental Science and Policy. After completing her first degrees in Europe (a bachelor's degree in public administration at the Institut d'Etudes Politique, Strasbourg, and a master's in environmental and natural resource economics at the Ecole des Hautes Etudes en Sciences Sociales in Paris), Camille completed her PhD in natural resource management and sustainability science at Purdue University. Prior to coming to Smith, she was an assistant professor at Oberlin College for four years. She researches adaptation to climate change to agro-systems in Sub-Saharan Africa using qualitative, quantitative, and modeling approaches. Camille has thoroughly enjoyed teaching the ES&P introductory course in the fall as well a research methods course in the spring. She is looking forward to teaching a new course on natural resource management and environmental justice in the fall and to further develop her new research interests on campus resilience and adaptation to climate change in Belize.



SIX SMITHIES AWARDED NSF GRADUATE RESEARCH FELLOWSHIPS IN 2015

Five recent Smith College graduates and one graduating senior were among the 2,000 individuals offered 2015 NSF GRFs. An additional seven Smithies were recognized with honorable mentions in this year's competition!

NSF received over 16,000 applications for the program, designed to attract, recognize, and support outstanding graduate students in science, technology, engineering, and mathematics who are pursuing or will pursue research-based Master's and doctoral degrees at US universities. The award funds three years of graduate study and each fellow may use the award at the university of her choice. Students may apply as graduating seniors or in their first two years of graduate study.

I am so glad (although not surprised) to hear that so many other Smithies received the award!

-- Janet Burke, NSF Fellow

The Smith College graduates offered NSF GRF awards:

Wanda Feng, '15, a double major in astronomy and geosciences, receives her award as a graduating senior. (She joins Emily Flynn, '14 and Sarah Lim, '12 in obtaining her NSF GRF before starting graduate school!) Winning the award was "a validation" of Wanda's hard work and also created new possibilities for graduate study. She will be attending Arizona State University to pursue a Ph.D. in astronomy. Where better than in the great stretches of Southwest sky to study planet formation! Wanda's Smith College mentors were Professors Suzan Edwards and John Brady. Dr. Cynthia Evans, Director of Astromaterials Acquisition & Curation at the NASA Johnson Space Center has also been a mentor.





Stevie Bergman, '09, a graduate student in physics at Princeton University, writes that the award "will enable me to pursue the research I'm most interested in... as well as ensure I can continue to separate time for science education activities that are very important to me." Among Stevie's Smith College mentors are Professors Gary Felder and Suzan Edwards, but the whole of the physics and astronomy departments at Smith get credit for being "a powerfully positive force" in Stevie's life!

Janet Burke, '14, biological sciences, is a first-year graduate student in paleontology at Yale University. She writes: "I was an Ada Comstock Scholar at Smith, and I worked while completing my first two years at community college. Also, for summer internships, I could only take paid opportunities rather than unpaid experiences such as field camps and other training. Because of this, I have always worried that I lagged behind other scientists in experience. Getting the GRF was the final blow to my 'impostor syndrome' and confirmed that my non-traditional experience is an asset and not a burden. Sara Pruss wrote me a recommendation letter, and she is also the professor who inspired me to pursue paleontology and academia."





Maya Lewin-Berlin, '13, physics, is a graduate student at the University of California-Berkeley. Her field of study is physics and astronomy – atomic, molecular, optical physics. She writes: "This fellowship will give me the freedom to pursue projects that may otherwise not have been funded, including efforts to support undergraduate women in physics and girls interested in science." Professor Nalini Easwar was one of Maya's Smith College mentors and wrote a letter of recommendation for the NSF GRF.

Angela Oliverio, '12, a double major in philosophy and biology, will use her NSF GRF to begin graduate school in ecology at the University of Colorado at Boulder. The award, she says, "will let me devote more of my time to both research in the lab and outreach (such as improving microbial literacy and working with K12 educators)." Biological sciences professors Laura Katz and L. David Smith and philosophy professor Jeffry Ramsey were prominent among Angela's Smith College mentors.





Maggie Sawdy, '13, biology, will use her award to begin graduate school in zoology at Michigan State University. She will work with University Distinguished Professor Kay E. Holekamp (Smith College, '73!) and will study spotted hyenas in the Masai Mara, Kenya. Maggie writes: "I am most excited about the independence the award will give me to focus on research and conservation." Maggie's Smith College mentors have been Professors Virginia Hayssen, Sara Pruss, and Laura Katz.

Congratulations to our talented Smithies and thanks to their many Smith College mentors.

-- Margaret Lamb

FOR MORE GOOD SCIENCE FELLOWSHIP AND SCHOLARSHIP NEWS, CHECK OUT THE STORY ABOUT OUR GOLDWATER SCHOLARS ON THE GRÉCOURT GATE:

HTTP://WWW.SMITH.EDU/NEWS/SMITH-GOLDWATER-SCHOLARS/

HAVE A HAPPY AND PRODUCTIVE SUMMER!

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