

## SUMMER RESEARCH

In its 47<sup>th</sup> year, the Smith College Summer Research Fellowship (SURF) Program will have 140 participants working with 60 faculty mentors. Details of the SURF Program can be found here:

[www.science.smith.edu/surf/](http://www.science.smith.edu/surf/)

Affiliated with SURF are the Agnes Shedd Andreae Fellows in Environmental Science & Policy. Five will intern at NOAA sites across the US and 6 will participate in the [Coral Reef EdVentures](#) education project and associated research in Belize.

Three Smith mathematics and statistics majors were awarded highly competitive [National Institute of Standards & Technology SURF internships](#) and will do research this summer at NIST's Gaithersburg, MD campus:

- Yadira Flores , '15
- Maja Milosavljevic, '14
- Sara Stoudt, '15

All summer researchers -- whether part of the SURF Program or not -- are encouraged to submit a summary of their research and experience for *Women in Science, 2014*.

Details available here:

<http://www.science.smith.edu/surf/>

The publication, [Women in Science 2013](#), is available here: <http://www.science.smith.edu/>



# FROM THE CLARK SCIENCE CENTER DIRECTORS' OFFICE

May 2014

## *LOOKING BACK, MOVING AHEAD: A YEAR IN REVIEW*

On a lovely day in early May, about 50 science faculty and staff members gathered in the Alumnae House to contemplate the future of the sciences at Smith. At this launch of our strategic planning process, we talked about the strengths and challenges of our work at various levels (self, department, division, and college) and shared our ideas about threats and opportunities external to Smith that relate to science education. We also articulated the values driving our work and discussed how to sustain conversations about on-going strategic planning moving forward. The day was filled with good conversation and exciting ideas. I was buoyed by the energy and presence of so many at such a busy time of year.

This work will continue throughout the summer, with the following individuals agreeing to serve on this summer's strategic planning committee: Michael Barresi, Lauren Duncan, Eric Jensen, Margaret Lamb, Borjana Mikic, Joyce Palmer-Fortune, Sara Pruss, Kate Queeney, Kevin Shea, and myself. If you are still interested in serving, please do let me know. We have our first meeting scheduled for this week during which we will sort through ideas from our workshop and put some shape to our process for the summer. I will keep you apprised of our progress through newsletter updates. Once the fall arrives, Science Planning Committee will help spearhead our strategic planning efforts.

Our May workshop capped the end to a busy year in the Science Center. Margaret and I have worked to develop relationships with faculty and staff within the sciences and connect with offices on campus, including Facilities, Finance, Development, the Lazarus Center, and Institutional Research. Making these

connections has helped us to improve communication, through our monthly Directors' columns, as well as processes, for welcoming new faculty in the sciences and supporting students for prestigious fellowship competitions (see below). We have also witnessed successes of so many of our programs,

including the addition of Bob Newton and Bob Merritt's HHMI-funded course for introducing first-year students to research, the announcement of our STEM Posse partnership to begin in Summer 2015, and the recent \$300,000 PKAL/TIDES grant to Computer Science and allied departments to revise their gateway courses in order to broaden the science pipeline in the discipline. We were happy to see a successful year of fellowships and research funding (see sidebar and below) as well as conference presentation and publication for so many of our students.

Margaret and I look forward to continuing our work on your behalf next year. We will press forward on our efforts to increase the visibility of our equipment and facilities expenses and to address our ongoing needs in each of these areas. Strategic planning will continue, especially as we look forward to a potential invitation from HHMI for a next grant submission sometime in the spring of 2015. I am also pleased to announce that our proposed lecture series, *She is a Scientist*, a joint initiative with the Lazarus Center for Career Development, has been funded by the Lecture Committee so keep an eye out for fascinating speakers who will help us to imagine ways in which Smith can have an even greater impact on the representation of women and underrepresented groups in STEM fields.

Thanks to you all for a vibrant and rewarding first year.

Happy summer!

Patty DiBartolo  
Faculty Director of the Sciences

## **FELLOWSHIPS AND SCHOLARSHIPS FOR SMITHIES IN STEM FIELDS**

The end of the academic year is a great time to look back and congratulate our current students, new graduates, and recent graduates on their successes of all sorts, including in nationally and internationally competitive fellowship and scholarship programs. It's also the time to look forward to next year.

Participation in academic award competitions (even if unsuccessful) can enhance the clarity of the applicant's academic and professional goals. Fellowships and scholarships provide much needed graduate school funding. Winning an award sends a strong message about the quality of a student's promise as a scholar and scientist. Several of the Smithies who have just been awarded NSF Graduate Fellowships cite all of these aspects of their application process and receipt of the award (see below). The marquee fellowships and scholarships carry with them wonderful opportunities: to study at Oxford or Cambridge, to fund research and travel, and to network in new circles.

Now is the time to begin to encourage and mentor the students who will be next years' applicants for competitive fellowships and scholarships. Like all things that really matter, successful applications need time and careful attention to come together. This means starting early with conversations to encourage applications and shape how students think about their opportunities. This means encouraging students to prepare their application drafts early, leaving plenty of time to get feedback and to redraft (and draft again!).

Margaret Lamb  
Administrative Director

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*The Science Center Fellowships & Scholarships Committee will outline ways to enhance institutional support for applicants, choose institutional nominees, and provide feedback to candidates.*

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## SCIENCE CENTER FELLOWSHIPS & SCHOLARSHIPS COMMITTEE

Smith College very effectively provides institutional support to candidates for some fellowship applicants; Fulbright is a shining example. The whole College rallies 'round when a student reaches the final stages of the Rhodes Scholarship, as occurred for our 2014 Rhodes Scholar, chemistry major, Clark Knight, '14. For other awards, including those tailored for students in the sciences, students work with faculty members and other advisors in their home departments. With thriving academic programs and extraordinary students, Div III can be confident that its students are and will be highly competitive applicants for awards like the Rhodes, Marshall, Churchill, and Gates Cambridge Fellowships (for graduate study at Oxbridge) and the Goldwater and Udall Scholarships (for sophomores and juniors). Next academic year, we'd like to take some steps to help support the fellowship and scholarship efforts of our students and their faculty mentors.

The Science Center directors and Science Planning Committee wish to establish a Science Center Fellowships & Scholarships Committee for 2014-2015 (volunteers welcome!). The committee will play the important roles of outlining ways to enhance institutional support for student applicants, choosing institutional nominees for competitive awards in STEM areas (Churchill, Goldwater, and – potentially – Udall), and providing feedback to promising candidates. Together with revised application processes (using Qualtrics), we expect to provide better information for potential applicants and selected nominees. A streamlined process within the Science Center will make better use of faculty time and effort.

Margaret Lamb  
Administrative Director

### Opportunities for STEM students:

These three opportunities are open to US citizens. Goldwater and NSFSGF are open to US permanent residents.

[Churchill Fellowship](#) (one year of STEM graduate student at University of Cambridge) – September '14 internal deadline for Smith nomination by rising senior or recent graduate

[Goldwater Scholarship](#) (one or two years of scholarship for a rising sophomore or junior) – late October '14 internal deadline for Smith nomination

[NSF Graduate Fellowship](#) (three years of STEM graduate study at US institutions) – mid-November '14 deadlines, no institutional nomination required.

Often our international students ask "what scholarships may I apply for?" Here is a list of possibilities:

[http://scholarships.berkeley.edu/main\\_content/schol\\_details/pdf/int\\_student\\_opportunities.pdf](http://scholarships.berkeley.edu/main_content/schol_details/pdf/int_student_opportunities.pdf) including [Rhodes](#), [Gates Cambridge](#), and [Fulbright](#).

Smith College's [Fellowship Office](#) provides information about the [Rhodes](#), [Marshall](#), [Gates Cambridge](#), [Fulbright](#), and [Udall](#) opportunities.

## FIVE SMITHIES AWARDED NATIONAL SCIENCE FOUNDATION GRADUATE FELLOWSHIPS



**Emily Flynn**, '14, will start her biomedical informatics graduate program at Stanford University this fall knowing that her NSF Graduate Fellowship (NSFGF) will provide three years of stipend, allowances for tuition and fees, and opportunities for international research and professional development. "I am really excited that it will give me the flexibility to pursue the research I am most interested in, and I do not have to worry about finding funding," Emily said. A biochemistry and computer science double major, with a biomathematics concentration as well, Emily attributes much of her success in the NSFGF competition to support received during her internship at Cold Spring Harbor Labs and cites as well support from Smith mentors Ileana Steinu, Judy Franklin, and Adam Hall. In 2013, Emily was awarded a highly competitive Goldwater Scholarship.

The NSFGF Program is designed to help "ensure the vitality of the human resource base of science and engineering in the United States and reinforces its diversity." The [Program's website](#) says: "the program recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based master's and doctoral degrees at accredited US institutions. The NSF welcomes applications from all qualified students and strongly encourages under-represented populations, including women, under-represented racial and ethnic minorities, and persons with disabilities, to apply for this fellowship."

In 2014, NSF selected 2,000 NSFGR award recipients from an applicant pool of 14,000.

Three NSFGR recipients completed their undergraduate degrees at Smith.

After two years of work as a research associate at the Broad Institute in Cambridge, **Ella Hartenian**, '11, will begin graduate work this fall in molecular and cell biology at Berkeley with her full five years of graduate study funded by the NSFGR (3 years) and a Berkeley Fellowship (2 years). "Writing the [research] grant portion of the NSF application was a time to sit down and dream big about the questions I personally find the most stimulating. To receive positive feedback on the aspect of science I find most challenging - defining what the question is you want to answer - was very encouraging." At Smith, Ella's concentration was environmental biology and sustainable development. Smith mentors include Rob Dorit, Nick Horton (now Amherst College), and Bob Linck.



**Onawa LaBelle**, '12 (Ada Comstock Program), is a first-year graduate student in psychology at the University of Michigan. Onawa, too, cites "the freedom [the NSFGR] gives me to pursue my research full-time while in graduate school" and how exciting is "to know that the NSF believes my research is both interesting and valuable enough to offer their support." She cites Benita Jackson as an important mentor who provided advice and support during the graduate school application process and for the NSFGR application. Other Smith mentors introduced her to contacts that led to formative internships at Harvard (summer internship with Dr. Rosalind Wright) and at UMass (NIH post-baccalaureate internship with Dr. Paula Pietromonaco).



**Catriona ("Catie") Wilson Blunt**, '12, is a first-year graduate student in the chemistry PhD program at Caltech. Catie was a chemistry honors student at Smith who completed an honors thesis under the supervision of Kevin Shea. Other Smith mentors include Dave Gorin and Betsy Jamieson.



**Katherine ("Kate") Meyer**, a 2009 Carleton College graduate, completed Smith's post-baccalaureate program in mathematics in 2012. She is a first-year graduate student in the mathematics PhD program at the University of Minnesota. Her research interests lie in environmental applications of math related to climate, resilience, and control theory. Kate says, "I got my first tastes of mathematical research ... at Smith, and I'm grateful to my research mentors, Professors Paul Baginski, Drew Guswa, and Jim Henle, for supporting me both during the program and during my application to NSF with letters of recommendation. I'm immensely grateful for the post-bac program at Smith in general. I can't imagine making this transition to graduate school without it."

## FULBRIGHT SUCCESS IN THE SCIENCES

### **Kiara Gomez '14 Geosciences**

Greece: Oceanography

"Reducing Seagrass Meadow Decline to Prevent Coastal Erosion and Preserve Fish Habitats"

Mentor: Bosiljka Glumac

Recommenders: Bosiljka Glumac, Sara B. Pruss, L. David Smith

Consultants: Allen H. Curran, Sara B. Pruss, L. David Smith

Foreign Language Evaluator: Michail Charalampidis (Five Colleges)

Full list of Fulbright successes available: <http://www.smith.edu/fulbright/news.php>

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