

## Future Planning



In response to the call for college-wide strategic planning, Science Planning Committee submitted 10 interconnected proposals to CMP informed by our *Vision for the Future* strategic plan. One of them, **Changing the Face/s of Science**, imagines elevating Smith's reputation as a global leader in the education of women in STEM at a liberal arts college.

The 9 additional proposals describe specific programmatic efforts that could help realize this vision and focus on areas in which we have identified significant science faculty and staff enthusiasm and/or momentum that can help propel and build sustainable models of scholarly and pedagogical excellence. These ideas range from investment in classroom renovation to expanding excellence through our SURF program and course-based research experiences.

See all the proposals [here](#) and share your feedback!



# FROM THE CLARK SCIENCE CENTER DIRECTORS' OFFICE

March/April 2015

## Better Science Through Diversity



The Association of American Colleges and Universities just released a report calling for concerted efforts to [promote access and diversity in higher education](#) so that future generations of leaders reflect the diversity of our world more broadly. Advocates of equity cite various reasons to invest in these efforts, ranging from social justice imperatives to economic market competition. To my mind, advocates for equity can sometimes miss another compelling reason for access, one expressed in our own [strategic plan](#): “the best...thinking emerge[s] from healthy climates that promote and value a diversity of perspectives.”

As scientists, we build ideas in community with others, recognizing that diverse views push ideas forward. Embedded in the scientific method is the notion that we become better scientists with better ideas when we communicate our work to others, opening ourselves to their perspectives. This process helps us to move beyond our own subjectivity and blind spots to consider alternatives, weigh evidence, and imagine fruitful future directions.

[A recent article in \*Scientific American\*](#) provides data on the benefits of working in community with others, especially those different from one's self. Years of research across a variety of fields finds that social diversity, whether defined by race, ethnicity, gender, or sexual orientation, helps to provoke thinking, foster innovation, and increase diligence, open-mindedness, and better objective performance outcomes ([including more highly cited scientific research!](#)). Building understanding through discourse, collaboration and sometimes dissent is not always easy. [Recent data](#) from today's *She Is A Scientist* guest, Dr. Buju Dasgupta '92 finds that we need to be aware of the ways in which collaboration promotes (or detracts from) engagement and persistence for underrepresented groups in STEM.

So let us think together about how to create the right kind of learning environments to benefit us all. Come share your ideas at the [May 12<sup>th</sup> faculty development workshop](#) devoted to lessons from our *She Is A Scientist* lecture series. Let's broadcast the fact that investing in diversity in STEM will help improve ideas to address the problems of our world. Add that to the list of compelling reasons for embracing and promoting issues of access and equity in higher education and STEM.

--Patty DiBartolo

welcome

connect

develop

fortify

---

## Not just any old news: Great scholarship and fellowship news!

---

All four of our [Goldwater Scholarship](#) nominees received recognition in this highly competitive national award competition for science students who plan further study and research careers in STEM fields. Catherine (Katie) McGeogh, '16, CHM and Arcadia Krakiewicz, '16, BCH are 2015 Goldwater Scholars. Jamie Cyr, '16, MTH, Biomath and Jane Weinstock, '16, GEO, BIO received honorable mentions. Katie and Arcadia are among 260 award winners this year selected from the 1,206 nominees (each four-year college may nominate only four). Two striking things about all four of Smith's 2015 Goldwater nominees: their experiences of undergraduate research started early and are deep and diverse; they have all experienced at least one semester of study abroad this academic year and done research while abroad.

Smith College has more students selected for HHMI's [Exceptional Research Opportunities Program \(EXROP\)](#) than any – yes, any! – college or university in the United States. EXROP links undergraduates with HHMI scientists and is a program designed to encourage EXROP students to pursue careers in academic science, giving its awards to students underrepresented in the sciences. See our February newsletter for news on our three 2015 EXROP awardees. All three of our 2014 EXROP awardees were invited back by their mentors for a Capstone experience: Metasebia Aberra, '15, BCH (Prof. James Bardwell, Michigan); Taleen Dilanyan, '16, CHM, ITAL (Prof. Baldomero Olivera, Utah); Maribel Santos, '15 BCH (Prof. Duoqia Pan, Johns Hopkins).

**The successes of Smith students does not stop here! A number of Smithies have secured places in programs requiring nomination or that are notable for their competitiveness.**

Wanda Feng, '15, AST, GEO was awarded an [NSF Graduate Research Fellowship](#) (GRF) which will fund three years of graduate school. • Celeste Venolia, '17, BIO, ENV was awarded a [NOAA Hollings Scholarship](#). She joins Anna Campbell, '16, BIO (awarded a Hollings in 2014) as a recipient of this prestigious award that combines 1-2 years of scholarship with a funded summer internship in oceanic and atmospheric sciences. • Katie McGeogh, '16, CHM, received an [American Chemical Society, Organic Chemistry Division SURF Award](#) to support work she will do this summer in Kevin Shea's lab. • Jamie Cyr, '16, MTH, Biomath and Katie Blackford, '16, CHM both head to UCLA for the summer as [Amgen Scholars](#). Each of ten leading research institutions host about 20 students each. • Sara Stoudt, '15, MTH and Emmie Knobloch, '17, CHM are heading to Gaithersburg, MD as [National Institute of Technology and Standards \(NIST\) SURF Program](#) participants. Approximately 130 participants are selected each year from a pool of 400-500 applicants nominated by their colleges and universities.

**Congratulations to all the winners, but thanks to the faculty members and staff who supported individual students, and those who supported our selection and nomination processes. --Margaret Lamb**

### HHMI CAPSTONE AND BEYOND

The Howard Hughes Medical Institute (HHMI) has just released information about its next science education grant process.

Smith has been the recipient of over 25 years of continuous funding from HHMI, which we have used to help establish interdisciplinary research centers, innovate curriculum, support science outreach, and sustain AEMES and SURF. We are currently designated as one of a handful of Capstone Awardees, in recognition of our "sustained excellence and important contributions to science education."

Planning for our next submission will begin this summer in order to meet the pre-proposal deadline of November 2015. We'll ground our proposal in our 2014 strategic plan but we need faculty/staff to help put some shape to the specific initiatives we would like to push forward through HHMI. Look for future announcements of this work and please consider participating.

#### IMPORTANT ANNOUNCEMENTS

Week of April 27<sup>th</sup> Course-based Research Experiences posters sessions, McConnell Foyer  
May 12<sup>th</sup> [Final She Is A Scientist lecture](#) with faculty workshop, 9 am-2 pm

CONTACT US: PATRICIA DIBARTOLO ([pdibarto@smith.edu](mailto:pdibarto@smith.edu)); MARGARET LAMB ([mlamb@smith.edu](mailto:mlamb@smith.edu))

welcome

connect

develop

fortify