

Triumph: Engineering Excellence



Seniors Aly de Silva and Gracie Hackenberg on the track with the Blue Bruiser

Congratulations to Gracie Hackenberg '18, Alysha de Silva '18 and Jessica Wert '18 for the Blue Bruiser's amazing performance at the Grassroots Motorsports \$2017 Challenge in Gainesville, Florida. Spending only \$2,017, the Smith Racing Team retrofitted a 1999 Mazda Miata and competed against 39 entrants including five other schools. Smith placed 7th overall, racking up the Editor's Choice Award and 2nd place finishes among rookie teams and collegiate teams. This is a fantastic example of the hands-on experience and widespread support that gives Smith graduates an edge over their peers.



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Major Gift to SURF

Colette Gandelot '91 and Suzanne Butzow have made a \$137,500 gift to Smith for support of the Summer Undergraduate Research Fellowship program. Their generosity will fund five Fellows in each of the next five years to conduct research projects that span both the Sciences and an Arts, Humanities or Social Science discipline.

Gandelot and Butzow join a diverse list of individuals, government agencies and private foundations who have recognized the importance of fostering the interest of women in Science, Technology, Engineering & Math careers.

Each year some 150 students earn the opportunity to develop and conduct independent research projects under the mentorship of Smith faculty. To read abstracts of past SURF projects, [visit our publications page](#).

We are especially grateful for this gift as we begin the application and selection process for Fellows for next summer. The 2017 application is now open. Details about the program can be found [on the SURF pages](#) on our website.

Quick Facility Updates

Demolition and abatement in Sabin-Reed 324 and 326 started and was scheduled to be completed in December to make way for us to relocate the colonies in the **Animal Care Facility** temporarily to install a new HVAC system and perform some minor updates to the facility itself. Surprise discoveries in the plumbing and gas systems have delayed the demolition. We do not have updated plans, but we continue to expect to relocate the colonies in August 2018 and to complete the construction by June 2019.

The College has agreed to begin installation of additional card readers to **improve safety and security** in the Science Center. Installation began with the exterior and skywalk entrances to McConnell Hall. As with entrance card readers throughout the Center, they will automatically unlock 7 a.m. to 6 p.m. daily. Faculty and staff IDs will open the doors 24/7. Student IDs will open the doors until 11 p.m. (extended access is available for students by faculty request). Please see the [key and card access page](#) for more detail and to request access.

Meet our **new sterilizer!** As part of the Science Center's plan to keep our equipment current and effective, we



have replaced the old autoclave in Sabin-Reed 405 with this state-of-the-art Amsco 250LS Small Scientific Laboratory Steam Sterilizer. It is configured with multiple types of cycles including pre-vacuum, liquid

and gravity. Environmental sustainability features include scheduled shut offs and recycling of steam for cooling.

Over winter break and J-term, we have been renovating the **computer classroom in Bass 002** for Psychology and Statistical & Data Sciences. Flexible seating and tables will replace the fixed rows of computers. The project also includes reconfiguration and an upgrade to the

projection system. The renovated space is intended to foster more interactive learning and easier collaboration.

Did You Know...

...the Katz lab on the second floor of Burton Hall used to be 14 tiny offices and a U-shaped corridor?

Welcome New Administrative Staff

The Science Center and the Lazarus Center collaborated to hire **Elly Mons** as our new Pre-Health Program Director. For the next several months, you can find Elly in McConnell 414. Later this winter, Elly will move into her permanent office in the Lazarus Center.

We have hired **Jamie Dufresne** as our third Stockroom Services Specialist. Jamie will be based in the Sabin-Reed stockroom but will also provide backup coverage of the Ford stockroom.

Administrative Support Assignments

With changes in staffing and staffing levels, we have reassigned administrative support for the Directors' Office and academic departments and programs. The current assignments are:

- Amy Avard (Burton 115) – Biological Sciences and Neuroscience
- Rachel Cook (Scott Gym) – Exercise & Sports Studies
- Kelly DeForest (Ford 255) – Biochemistry and Chemistry
- Laura Fountain-Cincotta (Bass 417) – Psychology, Physics and Astronomy
- Daryl Jett (Ford 255) – Computer Science and Statistical & Data Science
- Donna Kortes (Burton 115) – Geosciences and Mathematics
- Heather McQueen (Burton 115) – Directors' Office
- Kristen Morse (Ford 155) – Engineering

Please take a moment to acknowledge and thank this outstanding group for being the glue that holds us together. We quite literally could not do our own jobs without their expertise.

Young Library Planning Update

Thanks to everyone who participated in discussions related to the future of the Young Library. In addition to a Sigma Xi lunch presentation, we also held two listening sessions for faculty and staff and one for students. Your feedback along with input from our consultants, Sasaki Associates, is helping the committee to formulate a vision and key principles for the future of the project. We encourage you to attend our playback session on January 30 during the first Sigma Xi lunch session of the semester.

Reading Suggestions

With a little time between semesters, January is a good time to catch up on readings. Here are some suggestions that resonated with us.

- [Phys21: Preparing Physics Students for 21st-Century Careers](#). (This is similar to the Vision and Change report that focused on biology.) The utility of this report goes beyond physics and can be applied to all of our disciplines. Especially useful are the discussions about elements of successful programmatic change and learning goals which are grouped into discipline-specific knowledge, scientific and technical skills, communication skills, and professional and workplace skills. These goals should be useful discussion points for curricular discussions and/or departmental self-studies.
- [Challenges and Opportunities for Women in Science](#) (Angela Wilson, Nature Reviews Chemistry). This is an excellent commentary about the gender gap in science from the author's perspective containing useful references and recommendations for change.
- [The Best-Kept Secrets to Winning Grants](#) (Kendall Powell, Nature New Feature) This focuses specifically on NIH funding but it does offer useful advice, especially for early career faculty members.
- [Introductory Physics Labs: We Can Do Better](#) (Holmes and Wieman, Physics Today) Though this article focuses on physics labs, it is likely applicable to

all science disciplines. The conclusions are that standard labs that reinforce classroom instruction do little to improve student understanding. Instead the authors highlight the benefits of course-based research which is consistent with our ongoing support for open-ended research-based experiences in teaching labs.

Clark Science Center Buildings

Bass Hall – Constructed in 1991, it is named after Anne T. and Robert M. Bass. [Psychology and the Anita O'K and Robert R Young Science Library]

Burton Hall – Constructed finished in 1914, it was renamed in 1917 after Smith's 2nd President, Marion LeRoy Burton. [Administration, Geosciences and Mathematics & Statistics, some Biological Sciences]

Ford Hall – Constructed in 2009 and opened for classes in early 2010, it is named for the Ford Motor Company after a \$10 million leadership gift. [Engineering, Chemistry, Biochemistry, Computer Science and Molecular Biology]

McConnell Hall – Constructed in 1966, it is named after Edna McConnell Clark '09. [Statistical & Data Science, Physics and Astronomy, Center for Design and Fabrication]

Sabin-Reed Hall – Constructed in 1966, it is named after Florence Sabin '1893 and Dorothy Reed Mendenhall '1895. [Environmental Science & Policy, Neuroscience, Biological Sciences and Geosciences]

Note that the Department of Exercise & Sports Studies is part of the Science Center, though located within Athletics space in Ainsworth Hall/Scott Gym.

