



faith | discovery | leadership | community



News from the School of Natural Science and Mathematics

Fall 2013

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A Message from the Dean

A common question I hear is, who is in the School of Natural Science and Mathematics? Usually the person is interested in the departments that fall under our umbrella, so I give the short answer, "psychology, science, and math and computer science." But the question can have a deeper meaning. Are we just a conglomeration of three distinct disciplines? What is our identity? Who is the School?



Let's start with the obvious - the students are the School. Their quest for knowledge gives the School purpose and their aspirations and interests shape the curriculum. Also, the faculty are the School - their dedication to their disciplines and love of knowledge create a challenging yet supportive learning environment for students. Yet, the School extends beyond the walls of Coad Hall. It encompasses our graduates, who shaped the curriculum and influenced the faculty while at the Mount and now serve as our link to the world outside the Mount. The School is our donors, the Advisory Council and friends, who support it through gifts of money, time and expertise and enrich the curriculum by helping current faculty and students achieve more. Together, we are the School of Natural Science and Mathematics and, just like an ecosystem, all of the components must be abundant and active to thrive.

In this issue of FYI, you will find examples of all of that and more.

- Jeff Simmons, Ph.D., Interim Dean

Save the Date!

Join us for these upcoming events:

Dec. 3 & 4 - [Psychology Senior Project Poster Sessions](#)

Feb. 7, 2014 - [Undergraduate Seminar Series: Medical School Admissions Process](#)

New Speaker Series



Throughout the year, the School of Natural Science and Mathematics hosts speakers to present their research or provide an informative lecture on their field of study. These speakers are recommended by current faculty or are alumni who come back and share their experiences after the Mount. This fall Nicole Calabro, C'11, spoke about her graduate research at Yale University involving an experimental biomaterial that could help heal wounds faster.

A Summer of Science

Grant Gives Students Rare Research Opportunity

Thanks to the generosity of several donors, four students had the unparalleled opportunity to conduct original, professional-level research under the mentorship of science department faculty this summer. The students received Summer Research Internship Program (SRIP) grants which allowed them to stay on campus and work one-on-one with faculty in the labs. The students gained valuable training and experience, while the faculty received help with their own research. [Learn more about the students' projects](#), and support SRIP by [making a donation to the Deans Fund for Excellence](#).



Grants Provide New Instruments

Chemistry Professor Receives Grant Funding

Four letters are generating a lot of excitement in the science department. Those letters are GC and IR and to chemists they mean Gas Chromatograph and Infra-Red Spectrophotometer. These instruments are the latest acquisitions for the chemistry program thanks to a \$39,000 award from the [Marion I. & Henry J. Knott Foundation](#) to Chris Bradley, Ph.D., assistant professor of chemistry. This is his second grant award for equipment this year. [Find out how Mount students will use the new instruments](#).



Thinking Shaped by Faith

Lecture Examines Religion's Effect on Scientists

This year's Meredith Lecture explored the relationship between faith and scientific thought. Dr. Steven Gimbel, philosophy department chair at Gettysburg College, related how the religious beliefs and education of several famous scientists, including Copernicus and Einstein, influenced their perception of the world around them. [Read more](#) about the annual lecture series, which honors Professor Emeritus William Meredith.



[Learn more about her work](#), and [contact us](#) if you would like to be a speaker!

Graphs From Beyond the Grave

Student's Research Combines Zombies, Theory

Mathematical graph theory doesn't usually involve zombies, but Michelle Rose, C'15, made the connection. Rose was part of an undergraduate research team that studied dominating sets in graph theory. As part of their work, the team created an algorithm to find minimally double dominating sets. Explaining the formula's importance to others was difficult, until one group member thought of using the zombie apocalypse as an example. [Read how](#) the algorithm could help the National Guard save us from mobs of zombies ... just in case.



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