College of Science and Technology
From the Dean’s Desk

Bi-weekly Newsletter March 26, 2009

CSAT’s IT Department Hosts Competitions this Weekend

The information technology department will host an IT game programming competition on Friday and Saturday, and a Programming Competition for High School Students and an IT programming competition on Saturday.

These events are designed to promote software development skills among Virginia’s high school and community college students and foster stronger relationships between the information technology programs in the state’s school systems and RU. The participants will include IT students from high schools and community colleges within Virginia. Prizes will be awarded.

Student Brian Prall Finalist for National Research Award

Biology major Brian Prall was selected as a finalist for the David S. Bruce Award for Excellence in Undergraduate Research. This is the highest honor bestowed on an undergraduate student for original research by the American Physiological Society (APS). According to APS, this award is highly competitive and 51 applicants from across the country were vying for one of the coveted 15 finalist positions. The final section will be made based on Prall’s presentation at the Experimental Biology 2009 meeting in New Orleans.

Nicole Eastep Receives Rogers Research Award

Sophomore biology major Nicole Eastep was recently awarded the Rogers Undergraduate Research Award by the CSAT scholarship and award committee.

The 2009 Rogers Undergraduate Research Award for the College of Science and Technology funds an outstanding undergraduate research project conducted during the spring and summer of 2009 and completed during the 2009-2010 academic year.

Under the mentorship of biology faculty Justin Anderson, Eastep will characterize bacteria that break down chitin in mosquitoes. In her research proposal, she says that she hopes to understand how to use the bacteria to break down the chitin in the mosquitoes bodies.

“Many types of mosquitoes carry diseases that can infect humans and other animals. “Our research will contribute to various methods currently available for controlling mosquito populations, and can potentially be incorporated into an easy, cost-effective control program,” says Eastep.

Eastep hopes to later use her knowledge and skills in the medical field. “This research will help me gain knowledge about certain diseases and understand scientific processes that could benefit me,” adds Eastep. Eastep hopes to submit her findings for publication in a peer-reviewed journal.
Volunteers Ensure Super MACC Success

Close to 100 high achieving high school students competed for the championship title in the Super MACC tournament on March 16 in Bondurant Auditorium in Preston Hall and Reed Hall.

Students competed in social studies, math, science, all around and English categories throughout the evening.

RU faculty Karen Francl, Christine Hermann, Don Cunningham, Mary Ferrari, Sid Smith and Steve Fawthrop volunteered their time to judge the competition.

At 4:15 p.m., the competition began with a welcome from CSAT dean Dr. Orion Rogers and the first round matches in the auditorium and Reed Hall at 4:30 p.m. The winners of the first round matches faced off for the championship trophy.

Radford City’s social studies and all around teams, Carroll County’s English team, Auburn’s math team and Christiansburg’s science team are this year’s Super MACC champions.

This successful event was made possible by Radford City AP history teacher Elaine Argabrite, College of Science and Technology and the College of Humanities and Behavioral Sciences faculty judges and CSAT’s Dean’s Student Advisory Council members Gabby Miles, Erin Fowler, Erin Waddell, Trevor Twyford, Angela Giuliano, Stephanie Kinsella and Andrew Shortt. The council members served as timekeepers, scorekeepers and outstanding student ambassadors to our guests.

Left: Rocky Gap High School and Radford High School students compete in the first round social studies match in Preston’s Bondurant Auditorium. Radford H.S. won the match 68 to 45.
Sethi’s Rockin’ Art Published in a Variety of Learning Tools

Geology professor Parv Sethi researches sedimentary rocks and clues they contain regarding ancient climate changes. Conducting field research has taken him to more than 20 countries in Asia, Europe and North America. While all geologists take photographs of their research in the field, Sethi’s photographs are unique because they capture both the science and the aesthetics of geological landscapes - a skill that has landed several dozens of his landscape photographs in geosciences textbooks and electronic media.

“One of my favorites is the one of lava flows dripping into the crashing waves of the Pacific Ocean in Hawaii, I was only about 10 feet away from the flows, collecting samples for my research, and I had a full-body protective suit, a gas-mask and hiking boots that had no tread left due to the heat of walking so close to active lava flows,” says Sethi.

That photograph was chosen for the front cover of an introductory geology textbook this year titled - Essentials of Physical Geology Fifth Edition published this year by Brooks/Cole. Many of Sethi’s photographs published, from full-page chapter-opener photographs to CD/DVD-ROM covers. “It has been a very unexpected spin-off of something that I was already doing for my research. I just didn’t realize that all this time - I was also exercising my aesthetic sense of visualizing and capturing landscapes,” adds Sethi. What excites him most about his photographs being published internationally is that he can include the photos in classroom lessons at RU. “I usually end-up sharing a story or two about the geology, and a sense of adventure behind these photographs. It seems to be a compelling factor for getting students excited about the science of geology,” says Sethi.
The College of Science and Technology inspires students to look beyond their world and into the global arena of ingenuity, invention and research.

College faculty dedicate themselves to their students' success. They are mentors who guide inquiring minds through the process of discovery in the classroom and in real-world research.

The College of Science and Technology houses the Departments of Mathematics and Statistics, Information Technology, Geology, Chemistry and Physics, and Biology.

College faculty and students collaborate across disciplines in research and real-world problem solving. This synergy inspires many opportunities for faculty and student innovation to take root and grow to meet the ever changing needs of the global community.

Thank you for being a part of our CSAT faculty. You inspire excellence within our students and your colleagues.