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From the Dean's Desk

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## Faculty and Architects Discuss Updated Plans For Center for the Sciences

On Friday, January 20, faculty representatives and architects met via teleconference to discuss the updated plans for the new Center for the Sciences building.

Faculty reviewed the detailed drawings and submitted comments and questions to the architects at EYP through their departments' faculty representatives. After addressing all

of the concerns and questions and asking some questions of their own, the architects will be sending final plans for faculty sign off in February. This will give faculty another chance to review floor plans and make comments before the final signed off plans are

The white plastic model represents the size and shape of the new building beside the wooden models of Curie, Reed, Martin and Preston Halls and McConnell Library.

submitted to the construction management firm W.M. Jordan.

Construction is expected to begin in fall 2012 with a tentative completion date of fall 2014.



## Geology Students Visit I-81 Blasting Sites

Drivers on Interstate 81 have no doubt noticed and perhaps even been delayed by the blasting of rock slopes to widen the Interstate and add truck climbing lanes between Ironto and Christiansburg.

Radford University students in geology professor Skip Watts' engineering geology class recently visited I-81 blasting sites to learn about the challenges of excavating steep road cuts in bedrock heavily damaged by

ancient faulting. Watts, a specialist in rock slope stability and safety, served as a reviewer on the project for the design-build firm of CH2M-Hill, along with RU alumnus Brendan Fisher of Fisher & Strickler Rock Engineering.

Radford students were joined by graduate students from Kent State University taking a rock slope engineering class and their professor Abdul Shakoor. Project Manager Joshua Mid-

dleton, of Faulconer Construction Company, guided the group to each site and explained the construction and blasting procedures. Retired state geologist Bill Henika explained the complex faulting that deformed the bedrock layers.



**The CSAT faculty are progressing in grant proposal submissions and awards. The following are total amount of grant submissions and awards from July 1, 2011 to January 24, 2012.**

15 proposals submitted for a total of \$933,052  
 Eight grants awarded for a total of \$295,982

2011-2012 Goals: 30 submissions  
 16 awards

### Inside this issue:

Museum of Earth Sciences Lecture Series	2
From Art to IT	2
Planetarium Welcomes Thousands of Visitors	3
RU Student Researches Equine Health with VT Veterinarians	3
CSAT STEM Club News	4

### Upcoming Events:

- Planetarium Show, Jan. 26 and Jan. 31, 7:30 p.m., RU Planetarium, Curie Hall
- MES Lecture Series, Tuesday, February 7, 7 p.m., Hurlburt Auditorium, RU Geology faculty Elizabeth McClellan and Marcus Jessee, "Breaking up Is Hard to Do: Initial rifting of the supercontinent Rodinia, revealed by ancient sedimentary and volcanic rocks of the Mount Rogers Formation, SW VA."

# Museum of the Earth Sciences Launches Spring Lecture Series

The Museum of the Earth Sciences (MES) announces its spring lecture series. For as long as the museum has been open to the public, the free lectures have drawn audiences ranging from 50 to more than 200 people for each event. MES director Steve Lenhart schedules lectures for the first Tuesday of each month during RU's fall and spring semesters with a total attendance of up to 1200 visitors. Speakers range from Radford University faculty to visiting speakers from Virginia Tech or the Virginia Museum of Natural History. The upcoming spring lectures include:

Tuesday February 7, 2012, RU Geology faculty Elizabeth McClellan and Marcus Jessee will present "Breaking up Is Hard to Do: Initial rifting of the supercontinent Rodinia, revealed by ancient sedimentary and volcanic rocks of the Mount Rogers Formation, SW VA."

Tuesday March 13, 2012, RU faculty members Skip Watts and George Stephenson, Virginia Tech graduate student Luke Joyce and RU students will discuss "Hydrogeologic Investigations into Water Loss at Mountain Lake, Giles County, VA." They will talk about their efforts in creating new perspectives on Mountain Lake, one out of only two natural lakes in Virginia.

Tuesday April 3, 2012, RU Professor Emeritus of Geology Robert C. Whisonant will present "Rocks, Terrain, and Great Battles of the Civil War" and discuss how distinctly different kinds of rocks or sediments created very dissimilar landforms of four American Civil War battlefields.—JF

## A New Adventure—From Art to IT

Going back to school with a goal of changing careers can be daunting, especially for someone with a full-time job and family responsibilities. For recent information technology graduate Debra Casey, Radford University's distance learning software engineering and database administration program made the switch possible.

Throughout her graphic design career, Casey was interested in information technology and the "nuts and bolts" behind the computer software that she was using in her creative work. But the Abingdon, Va., native thought going back to school while working full time and raising a family wasn't an option for her. Then the opportunities for graphic design work became scarce. "Over the years, the graphic design jobs in southwestern Virginia have slowly wilted away and I found the door opening for me to go back to school," says Casey.

At first, Casey was not looking at the possibility of a distance learning program. Then she started investigating bachelor degree programs while taking night classes at Virginia Highlands Community College (VHCC) and working full-time during the day. During one of her computer courses at VHCC, information technology faculty member David Daugherty spoke about the opportunity for students to earn their bachelor's degree through web meeting technology offering students live instruction over the internet. "The software

programming cohort was just the path I was looking to pursue in information technology and it was also distance evening classes that I could do from home," says Casey. "This was very important to me since I needed the evening courses and it didn't place a burden upon my family," she says.

Even though the classes were in the evening and through distance learning, there were still obstacles to overcome. "I think the biggest obstacle that I had to overcome was time management. Working a full-time job and having children that are very active in school activities and sports, it made it hard to juggle the homework, lectures and trying to have as little impact on your daily life," adds Casey.

And there were doubters. "Being one of the older students in class and the only female, it was intimidating and the courses were very challenging in matter. Some people thought I was insane to do a 360 on a career change. I believe that alone fueled the fire. I also wanted to prove to my children that you can do anything that you set out to do as long as you had that drive, and that education was very important," says Casey.

RU's information technology faculty know that many of the students in the distance education program are struggling with the same obstacles as Casey. "All of the professors were aware that most of the students in the distance learning classes

were working adults. They made sure that they were available outside of the normal timeframes and were very helpful in making sure that you had a successful semester," says Casey.

"I could not have accomplished everything that I had without the support and encouragement of my family and professors along the way," Casey says. She has begun her new career adventure as a Front End Developer for client websites at CGI in Lebanon, Va.

"Wow, a lot of things have changed! I went into the program as a graphic designer with many years in the business and a very basic knowledge of information technology. After graduation, I came away with a broad knowledge of programming and databases and the confidence I needed to pursue that IT job I had in my sights for so long. A few weeks before graduation, I was offered the position with CGI. Even though I'm still fairly new, I truly enjoy the work. This would never have been possible without my degree from Radford," adds Casey.



## Biology Student Studies Equine Health with Blacksburg Veterinarians



Radford University sophomore biology student Ashly Goetting is not one to let an opportunity pass her by, especially an experience that would give her a jump on her future career goals. As a freshman she heard about an opportunity to conduct research with veterinarians at the Virginia Maryland Regional College of Veterinary Medicine (VMRCVM) at Virginia Tech in Blacksburg. She seized the chance to get hands-on research experience with large animals.

"I was made aware of these research opportunities by RU biology faculty member Karen Francl, my advisor. Dr. Virginia Maxwell, a large animal veterinarian at VMRCVM, had contacted her about needing some volunteers, and Dr. Francl sent

out an email to all the pre-vet concentration students. Of course I jumped on the opportunity! By doing this research with these veterinarians, it has definitely confirmed that I want to be a vet 'when I grow up'," says Goetting.

"Since then, I've done two research projects with Dr. Maxwell, and I am currently employed by her as her assistant," says Goetting. She has also worked with VMRCVM large animal veterinarian Celeste

Blumerich. "I can still remember the day that Dr. Blumerich asked me if I wanted to 'assist' her with an endoscopic examination. By 'assist' she meant, 'do you want to give the examination while I supervise?' I was ecstatic. My heart was beating so fast! Never did I think I would be doing something so fascinating without having even graduated from college," says Goetting.

An endoscopic examination uses a camera at the end of a long scope to see inside of the body. In this particular case, Goetting inserted the device through the nose of a horse and into the trachea to examine the amount of mucus that accumulated when given two different types of hay, steamed hay versus dry hay. The camera moves forward, back, left, and

right, allowing for a complete view.

The close proximity between Virginia Tech and Radford University gives students like Goetting an advantage. "I chose Radford because of the small class sizes, smaller campus, and the fact that it is far enough away from home to be 'away', but still be able to travel up to Northern Virginia when I wanted to. I also liked the fact that it was so close to Tech. At the time, I didn't think I would be working with anyone at the vet hospital," says Goetting.

After earning her degree from Radford, Goetting hopes to attend graduate school at VMRCVM. "By doing this research with two veterinarians there, I believe that it has opened up a door for me. I believe it will look really good on my application," says Goetting.

She says in high school, she knew she wanted to be a veterinarian and that she was going to be hands-on with animals. "But I never thought that I would get the chance to do it as an under-grad," says Goetting, "Research truly is an amazing thing, and I definitely advise anyone who is thinking about going into a career in biology to do research! It will either confirm what one wants to do, or make one realize that maybe this isn't exactly the right direction," she adds.

## RU Planetarium and Science Alliance Welcomed Thousands of Visitors in 2011

The RU Planetarium welcomed almost 2,900 visitors during 2011 with 121 separate shows under the unique seamless dome in Curie Hall. The RU Science Alliance hosted more than 1,200 regional K-12 students during its Science Days and provided demonstrations, tours and shows in the college's classrooms, greenhouse, planetarium and the Museum of Earth Sciences.

More groups are scheduled for the Spring. "I already have four big groups scheduled for Fall 2012 and two already scheduled for Spring 2013," says physics professor Rhett Herman who directs the planetarium and organizes the Science Days schedule and activities. Science Alliance is a collaboration among the geology, biology, physics and chemistry programs and its outreach facilities. — JF



*The College of Science and Technology (CSAT) is now on Facebook at [www.facebook.com/RadfordUniversityCSAT](http://www.facebook.com/RadfordUniversityCSAT). Visitors have access to the college's general description, contact information, and a direct link to the college website. In addition to general information, the Facebook page offers opportunities for posting photos and college activities and events. Visit the CSAT Facebook page and "Like" it to stay up date on the latest college happenings and achievements.—JF*

# CSAT STEM Club News

## From the Dean's Desk

Davis Hall, Room 127  
PO Box 6936  
Radford University  
Radford, VA 24142  
  
(540) 831-5958  
(540) 831-5957 (Fax)  
abrown238@radford.edu

Innovation Inspired

[www.radford.edu/csat](http://www.radford.edu/csat)

The CSAT STEM Club has many different events planned for the semester, including volunteer events, social events, and lots of fun activities during its meetings. The first upcoming volunteer event is Science Exploration Day on Saturday, February 18 from 7:30am-4pm. We currently need a lot of volunteers for registration, to help with the bake sale, and to act as teaching assistants. Another event that the CSAT STEM will be helping with is the CSAT Open House on Saturday, February 25. Last year there were about 80 high school students who attended and we had RU students from different majors talk to prospective students about life at Radford. Later in the semester on March 12, the CSAT STEM Club will be helping with the Super MACC competition. During this competition high school students come to Radford and compete in different subjects for a trophy. Also, our new meeting times for the club are on Wednesdays at 6pm in Stuart Hall Lounge.

As for our Spring Trip, we will be going to the zoo in North Carolina. The tentative date is Saturday, March 17. We will also be holding our spring guest speaker on Thursday, March 15 at 7 p.m. in McGuffey 203. Please come if you are available. The guest speaker is Dr. Burkes in Anthropological Sciences. There will be a reception held in the Stuart Hall Lounge from 3:30-4:30pm for anyone who would like to ask questions or talk to Dr. Burkes one-on-one. The club will also be holding faculty talks once a month. We look forward to a great semester and seeing many people at our events.

Jasmine Jackson

Secretary of CSAT STEM Club



**Scenes from RU Science Exploration Days. This will be the third year the CSAT STEM Club has hosted the event.**

