

October 15, 2009

Upcoming College Events:

Nov. 3, 7 p.m.
Hurlburt Auditorium
MES Public Lecture

Nov. 11, 7 p.m.
McGuffey, room 206
CSAT STEM Club Hosts
NASA Speaker

From the Dean's Desk

FSI Receives \$484,092 National Institute of Justice Grant

RU Forensic Science Institute co-directors Donna and Cliff Boyd received a \$484,092 grant from the National Institute of Justice for the Forensic Science Training Development and Delivery Program. The two-year program includes spring and summer workshops in 2010 and 2011 for a total of 600 law enforcement practitioners from rural regions of Virginia, eastern West Virginia, Maryland, East Tennessee, northern North Carolina and eastern Kentucky. The grant will fund the conference materials, curriculum, tuition, room and board for the practitioners.

The training will consist of two and a half day sessions in topics such as medicolegal death investigation, crime scene investigation, digital forensics, forensic biology and chemistry, forensic anthropology and archaeology including search strategy and recovery, forensic entomology, mass disasters, and courtroom testimony.

"Many law enforcement practitioners, particularly in rural regions, seldom have the opportunity to receive the latest training in forensic science. Given that bringing forensic science laboratory specialists to every crime scene is unrealistic, it is vital that forensic science training be made accessible for law enforcement practitioners who have not had access to academic courses in the various forensic science disciplines," say project coordinators Donna and Cliff Boyd.

Manyara Invited to Speak at University in Brazil

Geography associate professor Gichana Manyara will present at the Federal University of Pernambuco (UFPE) in Recife, Brazil during the "II Workshop on Physical Geography of Northeast Brazil" from Nov. 24 – 27, 2009. The conference board will finance Manyara's travel and accommodation expenses.

"The geography program has an exchange agreement with UFPE," says Bernd Kuennecke, director of the School of Environmental and Physical Science. "We have hosted UFPE faculty and students. For example, Antonio Correra, a professor of geography at Pernambuco, earned his undergraduate degree from Radford University," says Kuennecke.



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Boyd Provides Forensic Archaeology Expertise to Radford City

RU Forensic Science Institute co-director and forensic archaeologist Cliff Boyd received a \$5,464.00 grant from Radford City to conduct an archaeological survey of road improvements in the city.

Portions of several streets, including Sixth Street, Scott Street, Park Road and Second Avenue will have their current surfaces removed and the underlying surfaces regraded. A detention basin will also be constructed off of Second Avenue.

According to the Virginia Department of Historic Resources in Richmond, an archaeological survey is required for portions of the Sixth Street area. Boyd will conduct this survey and have the authority to stop the grading if any culturally significant remains are located.

Boyd will also use shovel tests to investigate the sewer line and the detention basin locations prior to road construction. Students will assist Boyd in the fieldwork as a part of a class.



Student Scientist Strives to Break Records

"I chose Radford University because of the opportunity to work with Dr. Cline and my fellow students in the lab." - Brandon Newmyer

From his cowrie shell necklace down to his homemade RU inscribed longboard skateboard, sophomore biology major Brandon Newmyer may not look like a published student neuroscientist. Before enrolling at RU, the Richmond native was the dance captain of his high school's show choir and originally thought he would pursue a degree in performing arts.

Now, you may hear him hum a tune while spending 10 hours a week in biology professor Mark Cline's laboratory researching neurotransmitters in the brain. In addition to his time in Cline's lab, Newmyer is writing a research grant proposal for the Virginia Academy of Science, taking 18 credit hours and completing the nomination process for the Barry M. Goldwater Scholarship program.

"I chose Radford University because of the opportunity to work with Dr. Cline and my fellow students in the lab," says Newmyer. During new student orientation, Cline asked attendees if they were interested in applying to graduate school in the future. "I was the only one in my group at orientation who was interested in pursuing a graduate degree. I asked Dr. Cline if he did research and he took me to his lab. I didn't know what neuroscience was until I met Dr. Cline," says Newmyer.

Newmyer began working in the laboratory with Cline in the fall of 2008 on a study Cline designed concerning the effects of neuropeptide AF on appetite. Newmyer co-authored this study which was published in the *Journal of Neuroendocrinology*. In the spring of 2009, Newmyer wrote, and Cline edited, the manuscript for a similar study that examined neuropeptide SF which was accepted for publication by *Behavioural Brain Research*, a publication that

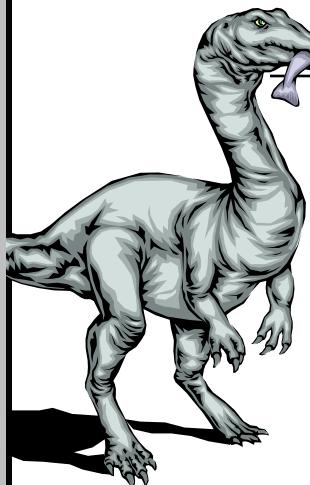
has a selective acceptance rate, Cline said. *Behavioural Brain Research* is an international, interdisciplinary journal dedicated to the publication of articles in the field of behavioral neuroscience.

"Brandon is the first author to report the appetite-associated role of neuropeptide SF in any species," Cline said. "This was demonstrated through a food and water intake study and a comprehensive behavioral analysis."

After his experience as a freshman, Newmyer is currently training three students in Cline's lab to expand upon the lab's research. His goals are to exceed the previous record number of publications by one of Cline's students, and land significant external grants by the time he graduates from RU.

"I have to become a grant writing machine in order to compete at the national level. But I can do it. And Wint Nandar published 13 articles and Brian Prall published seven. I'd like to get up there with Wint. She's in the neuroscience program at Penn State now," adds Newmyer.

In addition to researching the brain to eventually find a cure for obesity, Newmyer loves to skateboard and surf. "After graduate school, hopefully at University of California – San Francisco which is one of the top neuroscience programs in the country, I want to get a job in pharmaceutical research and possibly teach," adds Newmyer. "But it has to be close to the beach so that I can surf on the weekends."



RU Planetarium Offers New Children's Show Saturday

During October, the Radford University Planetarium in Curie Hall is offering a new show for children called "Dinosaur Prophecy" on Saturdays at 10:30 a.m. The program is free and open to the public.

The audience will join paleontologists at the scene of the crime, excavating bones and wondering what killed the mighty dinosaurs. During the program, the prehistoric giants come to life, roam across the dome, and meet their catastrophic deaths. The audience also learns how NASA scientists monitor the Earth and solar system for potential disasters. This show is a co-production of the Rice Space Institute and the Houston Museum of Natural Science, funded by NASA's Office of Earth Science under the "Immersive Earth" project, NASA cooperative agreement NCC5-316. Other production partners include Home Run Pictures and the Carnegie Museum of Natural History.

For more information, visit <http://planetarium.radford.edu/>

Golf Tournament to Help Fund Scholarship for Summer Bridge 2010

Summer Bridge sponsor Project Discovery of Virginia is hosting a golf tournament "Tee Off for Education" at the Ashley Plantation in Daleville on Saturday, Oct. 30 at 1 p.m. A portion of the proceeds from the tournament will fund a scholarship for a rising sophomore, junior or senior high school student to attend CSAT's Summer Bridge Program July 11—16, 2010 on RU's campus. Project Discovery has already pledged funds to support 10 students for Summer Bridge 2010, and this fundraiser will provide funds for an additional student scholarship.

The tournament will include lunch, dinner and award ceremony by the Ashley Foundation, a silent auction and first, second and third place prizes.

For more information about "Tee Off for Education" or to register for the tournament, visit Project Discovery's website at www.projectdiscovery.org.



Physical Science Alumna Living Her Dream at the National Weather Service

RU 2003 physical science alumna Robyn Brown, formerly Robyn Van Dyke, is living her dream of predicting the unpredictable. The Vansant, Va., native is a Journeyman Forecaster for the National Weather Service in Blacksburg, VA. "You learn something new every day," says Brown. "Even on a quiet weather day where it's sunny and 90 degrees anything can happen. You're always trying to figure out what is going on, what is going to happen, and why," says Brown.

Brown transferred to RU from Southwest Virginia Community College. "In part, I chose Radford because it was close to home and it felt like home as soon as I arrived," she says. She met with physics professor Rhett Herman when she visited campus before making her final decision of which college to attend to finish her four-year degree. "I talked with him about my interests and what RU could offer me to fulfill my career goals. He was awesome in putting forth the effort to help me," she says. I've always been very interested in the science field, especially in Meteorology and Astronomy." At the time, she wasn't sure which direction she wanted to go, but she knew it was going to be either Meteorology or Astronomy. After meeting with Dr. Herman, she decided to major in physical science with a concentration in Earth and Space and a minor in physics.

"Physics is the background for everything especially in meteorology. You can't have a developing thunderstorm without physics playing a role," says Brown.

Herman created an independent study class in meteorology just for her. "He really made a difference for me. Dr. Herman cared so much about giving me the experience and education that I needed to go on with my career," she adds. During her independent study, she built an antenna that collected data from the Polar-Orbital Operational Environmental Satellite or POES and installed the appropriate software needed to acquire the satellite data. This equipment is still used at RU. POES is run by the National Oceanic and Atmospheric Administration's Office of Satellite Operations. She also created a website that included daily weather observations, a weather picture of the day, and a weather terminology dictionary.

In addition to the independent study, she participated in the physics and astronomy club's trip to the National Radio Astronomy Observatory in Green Bank, W.Va., and a geophysics class trip to Cape Hatteras, N.C. Knowing of her extreme interest in meteorology, Herman told Brown about a volunteer opportunity at the National Weather Service office in Blacksburg. "As soon as I stepped in the door at the National Weather Service, I knew this was where I wanted my career to go, and it was where I was supposed to be," adds Brown.

As a Journeyman Forecaster at the National Weather Service in Blacksburg, Brown's main job is to protect life and property by issuing the best quality weather forecasts, advisories, warnings, and special weather statements possible for what is going to happen. To do this, she examines, analyzes and interprets model data along with using her education and knowledge of meteorology to the best of her ability. This is a team effort since everyone in the office pitches in to best serve the public. She thinks she is very fortunate to be where she is today. "Normally, it takes a while for someone to get to their 'garden spot' for many different reasons. I feel very fortunate and blessed to be working in the field that I love in Blacksburg, which is very close to my home in Vansant, Va.," says Brown. For her, it's a dream come true.



RADFORD
UNIVERSITY

College of Science and
Technology
PO Box 6936
Radford University
Radford, VA 24142

Phone: (540) 831-5958
Fax: (540) 831-5957
E-mail: jorogers@radford.edu

CSAT STEM Club Spotlight: Activities and Upcoming Events

The College of Science and Technology's STEM Club is busy building community among students and faculty across the college.

In September, the club hosted the CSAT student and faculty picnic and a presentation by biology alumna and successful entrepreneur Nancy Artis, organized a hike at the Cascades in Pembroke, Va., and offered science and math children's activities at the Highlanders Festival.

Upcoming events include a game night social at the Bonnie on Monday, Oct. 19 from 7-9 p.m., a pumpkin patch trip with the group leaving at noon from behind Reed and Curie Halls, and a 100 canned food drive from Monday, Nov. 2—Friday, Nov. 13 with collection boxes in Walker, Reed, Curie and Davis Halls.

The STEM Club will also host NASA scientist Russell De Young of the Chemistry and Dynamics Branch at Langley Research Center on Wednesday, Nov. 11, at 7 p.m. in McGuffey Hall, room 206.

All CSAT faculty and students are encouraged to join this community of student scientists, mathematicians and information technology gurus in fun filled events, educational presentations and community service activities.

"The club as a whole is working on building membership. It is very new at this point, so the officers are very appreciative and open to any new ideas. CSAT Stem has very dedicated, creative, and enthusiastic members so far. It is an interdisciplinary club and welcomes anyone who is interested in the College of Science and Technology. This type of club allows students from different backgrounds to come together and share ideas. It is great for networking," says club secretary Arielle Reynolds.

For more information about the CSAT STEM Club, contact Reynolds at areynolds27@radford.edu or club president Gabby Ness at gamiles@radford.edu.



Top: The CSAT STEM Club hiked the Cascades in Pembroke, Va.

Left: CSAT STEM Club participated in the RU Club Fair.