

# ***FROM THE DEAN'S DESK – August 28, 2014***

THE RADFORD UNIVERSITY COLLEGE OF SCIENCE AND TECHNOLOGY NEWSLETTER



*Students participate in a mock archaeological dig during the 2014 Summer Bridge program*

Welcome back for Fall 2014 at Radford University! It has been a fantastic summer of research, travel, study, outreach and many other experiences for the members of the College of Science and Technology. We are pleased to bring you some of the highlights of activity over the past few months as well as some upcoming events over the course of the next few weeks.

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## A FULL SUMMER OF RESEARCH, STUDY, TRAVEL, AND OUTREACH

The three months following graduation each spring bring the opportunity for new experiences for members of the College of Science and Technology. Summer travel and research are an important component in the educational process, and outreach to the community expands the reach of the Radford University experience across the Commonwealth of Virginia and beyond.

Throughout this edition of our CSAT newsletter, we will feature some of the activity of our students, faculty, staff and guests during summer 2014 and will continue to do so over the next few editions.

### *Highlanders around the world*



***Dr. Hermann presenting RU CSAT pencils***

Dr. Chris Herman, Chair and Professor in the RU Department of Chemistry, traveled to China in May and visited a school in Xu Dian Donghan village. Since school supplies are in short supply, Dr. Herman arrived bearing a small gift of red RU College of Science and Technology pencils for the students. Despite challenging conditions in the school, children in the school are taught English at a very early age and were able to read to Dr. Herman in her native language from

one of their workbooks. The tour group that coordinated the trip also helps to support the school financially.



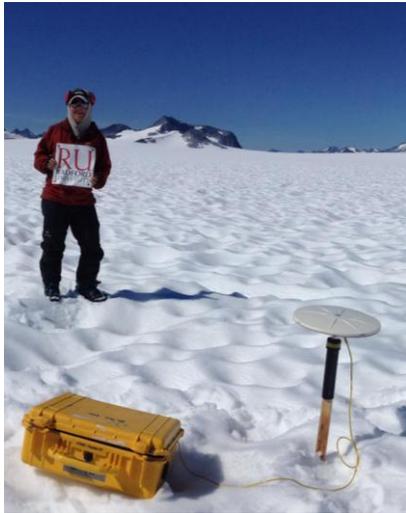
***Students in class reading to Dr. Hermann from their English workbooks***



***Dr. Laura Gruss***

In June 2014, Dr. Laura Gruss, Assistant Professor in the RU Department of Biology, participated in “Human Evolution: The brain, birthweight and the immune system,” a discussion meeting held by the Royal Society in London. The Royal Society, founded in 1660, is one of the oldest scientific organizations in the world, and its membership has included such luminaries as Sir Isaac Newton and Charles Darwin.

Dr. Gruss’s presentation, “The Evolution of the Human Pelvis,” was co-authored by Daniel Schmitt of Duke University and described how the pelvis has changed over the last four million years in response to pressures from locomotion, childbirth, and thermoregulation. Her presentation was subsequently covered in several international papers, including the Sunday Times of London.



*Melissa "Luna" Brett*

Melissa Brett, known to most at RU as “Luna”, returned to Alaska this summer to participate in the Juneau Icefield Research Project. Having been a part of the RU polar expedition last spring, Luna was already somewhat accustomed to the arctic weather conditions of the region. The JIRP program has monitored glaciers in this area since 1942, and her work is critical in the ongoing work on Earth’s climate. Luna, a senior majoring in both Physics and Geology sent back images from her trip and blogged from the field during her two months living and working on glaciers.

Joshua Oliver, a senior geospatial science major, worked with Assistant Professor Stockton Maxwell to study old-growth forests in the region that can provide a long record of environmental history. These old trees can show periods of drought and flooding before stream gauges and weather stations were common practice. The research team will compare their tree ring analysis to existing stream flow data in hopes of aiding water resource managers to better plan for future changes. Their work was recently featured in a Radford University video: <http://vimeo.com/100928385>



*Stockton Maxwell and Joshua Oliver*

Jordan Eagle participated in a one-week intensive workshop in radio astronomy held at the National Radio Astronomy Observatory at Green Bank, West Virginia. This workshop is called “Educational



*Jordan Eagle*

Research in Radio Astronomy”, or ERIRA (<http://skynet.unc.edu/erira/about-erira/>). This workshop was led by UNC professor Dan Reichart and other radio astronomy professionals. Only 15 students nationwide were accepted into this program which is designed to encourage physics/astronomy majors to do research early in their careers.

Jordan’s research continues this fall as she will be setting up RU’s very own dipole antenna and receiver to monitor our sun, Io (Jupiter’s moon), and other radio sources. Results will be made available online later this year.

Junior Joe Ashley spent 11 weeks this summer at the National Institute of Standards and Technology (NIST) facility in Gaithersburg, MD. Joe worked with Dr. Huston to set up the Department of Physics new Scanning Tunneling Microscope in the Curie 039 research lab. Joe describes his experience as such:

*“Most photovoltaic devices in production today are silicon based...Unfortunately, photovoltaics made of silicon need to be relatively thick in order to capture enough energy to be useful, causing solar cells to be expensive and bulky. Some people at NIST (including my advisor Paul Haney) recently developed a way to measure the grain boundaries in polycrystalline semiconductors, and found that even though grain boundaries can reduce efficiency in some cases, in other cases they can actually increase efficiency as well. This would allow us to use a variety of polycrystalline materials which can be more efficient than silicon at a fraction of the thickness. This would hopefully make solar cells much cheaper, as well as introduce them to a variety of applications such as being ingrained into clothing, or maybe even coated onto windows. ... I am [modeling] the drift-diffusion equations for a polycrystalline semiconductor with variable grain boundaries and doping in order to gain a better understanding of the conditions which affect efficiency and how they interact with each other.”*



**Joe Ashley**



**Cassie Bonavita**

Cassie Bonavita collected mosquitoes in San Jose, Costa Rica for her undergraduate research project here at Radford. Cassie was in the country for another experience and used her time wisely to gather additional material.

Along with her faculty mentor, Dr. Justin Anderson, Cassie is exploring the link between the microbial combinations found in mosquito intestines and the presence or absence of the dengue fever virus. Cassie's experience is explored in detail in our "RU Researching" profile in this newsletter.

## ***Research around Radford***

Sarah House mentored by Dr. Rhett Herman and Mr. John McGee worked toward illuminating a new path for quantum field theory calculations that have been agonized by model-specific infinities since the inception of quantum mechanics.



***Sarah House and John McGee***

Angel Lambert mentored by Dr. Tim Fuhrer worked on finding a unifying theory for the stability of cage patterns of fullerenes through computational modeling of various 84 carbon closed caged fullerene geometries.

Patrick Trout mentored by Dr. Beth McClellan mapped the contacts between rhyolites and basalts in Bearpen and in the Mount Rogers Formation. This work aims to ultimately help contextualize the active versus passive rift models associated with plate tectonics.

Nima Hami mentored by Dr. Chris Monceaux worked to synthesize phenazine derivatives to be tested for their anti-viral activity against cells infected with the La Crosse virus, a mosquito spread disease.

Caitlin Linville and Monica Kaur mentored by Dr. Jason Davis worked to test insect reactions to amino acid mixtures derived from the saliva of giant Japanese hornet larva. The mixture in wasps enables extraordinary endurance that allows for longer foraging intervals.



***Matti Hamed***

Matti Hamed, a senior biology major and Highlander in Action scholar, worked with Matt Close, assistant professor of biology, to establish a long-term population study of reptiles and amphibians at Selu Conservancy to determine current species diversity and abundance. In June, Matti and Dr. Close organized "the Selu Reptile and Amphibian Workshop and Survey" in conjunction with the Virginia Herpetological Society (VHS) and the Scholar-Citizen Initiative.

"Citizen-scientists can make an important contribution to science by helping us generate data that will be helpful to understanding the biodiversity of this special place," Close said and added that anyone who is interested in reptiles and amphibians, or is merely curious, has an opportunity to turn their interest and curiosity into scientific research. Matti's summer experience was documented in a Radford University video: <http://vimeo.com/102734950>

April Tingle mentored by Dr. Justin Anderson conducted research quantifying the amount of oxidative damage done to viral cells exposed to a variety of phenazines. The goal is to understand the mechanism of anti-viral activity exhibited by phenazines in order to prevent the outbreak of diseases such as La Crosse virus.

Analise Roccaforte mentored by Dr. Dayna Hayes investigated the combined effect of alcohol and nicotine on spatial learning and memory function in rats.

Katharyn Self mentored by Dr. Sara O'Brien is examined the potential synergistic effect of two common food packaging plasticizers, Butylated hydroxyanisole (BHA) and Bisphenol-A (BPA), on the development of zebrafish.



*Emily Guise and Sara O'Brien*

Emily Guise mentored by Dr. Sara O'Brien is tested the generational effect of exposure to trenbolone, a steroid given to beef cattle, on the reproductive physiology of mosquito fish.

Emily Cutshall mentored by Dr. Georgia Hammond measured the sensitivity of bacteria from the Brinton Arsenic Mine in Floyd, the only east coast arsenic mine, to varying forms of arsenic. The results will be correlated expression of arsenic resistance genes in the bacteria.

Lloyd Jones and Chris Huntington had a summer of research, internships and a conference in Las Vegas.

### ***Outreach***

In addition to the research conducted by faculty and students, members of the College of Science and Technology community participated in programs to enrich the lives of local children and families as well as those of high school students across the Commonwealth of Virginia.

In June, CSAT served as a host site for Camp Invention, a program created by the National Inventors Hall of Fame that is the only nationally recognized summer program focused on creativity, innovation, real-world problem solving and the spirit of invention. Camp Invention partners include the United States Patent and Trademark Office and the Collegiate Inventors Competition.

July brought the annual Radford University Summer Bridge program, also sponsored by the College of Science of Technology. A record number of eighty-three participants from across Virginia traveled to Radford for a week-long immersive, residential, STEM adventure conducted by Radford University faculty and staff.

Also in July, Anthropological Sciences faculty Dr. Donna Boyd and Dr. Cassidy Urista served as faculty for a class in the Virginia Summer STEAM academy which held a session on the RU Campus. The event attracted fifty-six young scientists from the sixth through eighth grades from schools throughout Virginia.

Additional information about CSAT summer outreach programs can be found throughout this edition of our newsletter and further student profiles will be featured in "RU RESEARCHING" segments over the course of the fall semester.

## SIGMA XI CHAPTER TO BE INSTALLED AT RADFORD UNIVERSITY ON SEPTEMBER 16

Radford University is soon to be in elite company as a host institution for a chapter of Sigma Xi the international honor society of science and engineering. One of the oldest and largest scientific organizations in the world, Sigma Xi has a distinguished history of service to science and society for more than one hundred and twenty five years.

Scientists and engineers, whose research spans the disciplines of science and technology, comprise the membership of the Society. More than 200 Noble Prize winners have been members.



Dr. Donna Boyd has shepherded Radford University's effort to bring a chapter to campus over the past several years. The establishment of this chapter also helps to highlight the importance of contributing to original research while participating in the educational process that so many RU faculty and students engage in daily.



*Dr. Mary Jensvold*

Serving as a keynote speaker for the evening will be Dr. Mary Lee Jensvold, an Associate Professor in the Anthropology Department and the Primate Behavior and Ecology Program at Central Washington University. Dr. Jensvold has worked with chimpanzees who communicate with sign languages since 1986. Her studies include conversational behaviors, private signing, phrase development, chimpanzee to chimpanzee conversation, imaginary play, and artwork in chimpanzees. Other research includes caregiving practices, zoo visitor effects, and public education about chimpanzees. She is active in improving conditions for captive chimpanzees.

The installation and Dr. Jensvold's presentation will be held in the Bonnie Hurlburt Hall auditorium at 7pm on Tuesday, September 16. Admission is free and classes are encouraged to attend.



*Dr. Jensvold communicating with chimpanzees via sign language*  
Image: <http://www.friendsofwashoe.org/meet/directors.html>

## RU RESEARCHING: CASSIE BONAVITA



***Biology major Cassie Bonavita takes a break from the heat before some appropriate local street art while collecting mosquitoes in for her undergraduate research project in San Juan, Costa Rica.***

To many, culture shock is to be avoided. Cassie Bonavita, a Radford University senior biology major, relishes it.

"I need to culture shock myself now and then," she said. "It reminds me that the world is more than where I am now and what I know then."

Bonavita was reflecting on the impact of her five-week experience as one of five 2014 Scholar-Citizen Highlanders-in-Action. She studied peace and conflict resolution at the Universidad de Costa Rica in San Jose, the Central American country's capital and largest metropolitan area.

After the course ended, she took to the neighborhoods of San Jose for two weeks to collect mosquitoes for her undergraduate research project here at Radford.

The project is focused on exploring the link between the microbial combinations found in mosquito intestines and the presence or absence of the dengue fever virus. With faculty mentor Justin Anderson, associate professor of biology, Bonavita is looking in that microbial mix for a possible predictor of mosquitoes' susceptibility or resistance to the virus endemic to the area.

"It was both a chance to learn about people and how to help them as a scientist and researcher," said Bonavita, who is considering a peace studies minor to accompany her biology major. "It all connected for me."

As the daughter of a retired Air Force pilot, Bonavita had lived in Europe, so she welcomed another international education opportunity. She called her Costa Rican cultural experience both "beautiful and heartbreaking."

While Bonavita counted the Caribbean, the Pacific, the rain forests and a sloth sanctuary among the experience's highlights, there was a stark contrast to Costa Rica's natural beauty and the poverty where many still live in huts exposed to the elements, she said.

"Since I got back here, I have been motivated to see what I can do to help," she said.

Bonavita is developing a handful of social entrepreneurship initiatives for the upcoming semester that will combine two of her passions: helping the people of Costa Rica and maximizing her experience as a sorority sister.

"I really believe in the Greek system at RU and now I want to see if I can get my sisters and brothers here involved in helping other people live better," she said.

The goal of improving life underlies her scientific research as well. Bonavita spent 10 days with a four-person team combing the urban landscape for bats, mosquitoes and people infected by dengue fever. As the mosquito specialist, she trapped mosquitoes for subsequent dissection in the team's local lab.

"I now have scientific experience and contacts from an international collaboration that enriches my resume and skills," she said. "I have worked with viruses in different populations. I really appreciate the advantages that this experience gives me as a young scientist."

Her time in Costa Rica coincided with the national team's Cinderella run to the semi-finals of the World Cup tournament in Brazil that provided a unique insight into the Costa Rican people and their enthusiasm and passion for "futbol."

"I have never seen thousands of people fill the streets and celebrate like they did when they played," she said. "Main roads were just shut down and people were so spirited. It was a national block party."

While now focused on her work in the RU Arbovirus and Medical Entomology Lab and as a server at a local restaurant, Bonavita recognizes the value of the experience.

"It all came together fast and was so worthwhile. It was as close an opportunity to do what I want to do as a career as I can imagine," she said. "I had my own project; I traveled, studied and learned with other scientists; I got to know other people and their culture and, hopefully, I will find a way to help."



*During her international education experience as a Radford University Scholar-Citizen Highlander-in-Action, RU biology major Cassie Bonavita (third from left) and classmates met Costa Rican President Luis Guillermo Solis, a lecturer at the Universidad de Costa Rica.*

## CAMP INVENTION AT RU WHETS APPETITE FOR SCIENTIFIC CURIOSITY



***Maggie Dent (left) and Kara Nicholson put their heads together to solve a problem with Kara's vehicle as the two take part in the "Super Go" activity during Camp Invention***

Reed-Curie Hall again brimmed with scientific curiosity and creativity in June as more than 70 participants wrapped up Camp Invention.

The 2014 edition of the camp focused on building machines and vehicles and helping the elementary school-age students get in touch with their five senses. It was the sixth year the camp was

hosted by Radford University.

The students showed their inventions off to their parents after closing ceremonies held under the oak tree in front of the venerable science building. College of Science and Technology

Dean Orion Rogers' questions, "Did you have fun?" and "Did you learn anything?" were met by resounding "Yeses" and proud parental smiles.

Mason Mabry, a third-grader at Wytheville's Spiller Elementary School, said he was "smarter" about a lot of things now as he proudly showed off a multi-turreted tank he built out of pieces the campers cannibalized from discarded household items.

"I think I am smarter about mechanics and solving problems," he said. "This beats sitting around the house all week, for sure."

James Newcomer talked about how the Camp Invention experience helped his son, Jaiden, keep him, a former science teacher, on his toes. Jaiden is a sixth-grader at Belle Heth Elementary School in Radford.

"He has challenged me with a lot of questions, some of which I have never even thought of about the way things work," he said of his son, who is a six-time Camp Invention attendee and aspires to be a camp counselor-in-training next year and then a cancer researcher.

Camp Invention has been hosted at RU since 2009. Between its home in Reed-Curie and its staff, it has a distinctive Radford flair. The staff is all RU alumni who appreciate the way the campus enhances the teaching and learning environment.



***Camp Invention attendees working on their "Super Go" project***

"Radford and Reed-Curie are great places to help children discover what science is all about," said Angela Price, MS. '07. "The kids are surrounded here by science and science stuff."

Jessica Hamblin '04, a four-year veteran of the weeklong event which puts campers through four classes that introduce them to contemporary and classic scientists and inventors, said it was unique to teach a class in a room in which she once took classes.

She added, "There is a whole lot of tinkering going on as we try and inspire these children and help them develop problem-solving and teamwork skills in a science setting."

In one class called "PinBug," campers, reassemble parts from old appliances and devices into a custom pinball machine. In the "SuperGo" class, campers design and make their own motor-powered vehicle taking cues from natural forms of locomotion to guide them in their process. Other class projects include morphing everyday objects into robots and dragons utilizing circuit boards and LED lights.

*Story by Don Bowman*

#### **STUDENT COMPLETES BOTANY INTERNSHIP AT NATURAL TUNNEL STATE PARK**



Biology major Jesse Daniels (picture, far left) recently completed a summer-long internship at Natural Tunnel State Park in southwest Virginia. Jesse trained and worked with the horticulturist on staff and local master gardeners. He also worked on the removal of invasive plant species along the trails of Natural Tunnel State Park.

As a culminating project of his garden work, Jesse gave a workshop for the public on gardening, covering topics such as: intensive gardening, companion planting, vertical gardening, composting,

natural weed control, and other techniques.

Each year, a number of our biology students complete summer-long internships at public and private biology-centric organizations. These hands-on experiences not only translate to course credit, but also (and more importantly) are great for networking, and gaining practical experience in their field of choice. Many of these internships, like Jesse's, give students valuable experience in speaking to the public, and/or can ultimately lead to research presentations at state or regional conferences.

*Story by Karen Powers*

## SUMMER BRIDGE IMMERSES HIGH SCHOOL GIRLS IN STEM EDUCATION EXPERIENCES

A week in the classrooms and laboratories of Radford University for aspiring female scientists from high schools across the state concluded with two events.

The events capped the Summer Bridge 2014 program, a residential experience focused on science, technology, engineering and mathematics (STEM) disciplines. The participants assessed biodiversity and habitat health; investigated digital security; explored chemistry, electronics and genetics; and analyzed crime scenes while experiencing collegiate and academic life.



*Flanked by Assistant Professor of Geology Elizabeth McClellan (extreme left) and Geology Instructor George Stephenson (extreme right), the members of the 2014 Summer Bridge Geology sport rock hardhats and rock hammers after a day in the field and lab.*

The Summer Bridge, hosted annually by RU's College of Science and Technology, is a weeklong residential experience for rising sophomore, junior and senior high school girls interested in STEM disciplines. This year's program began Sunday, July 13, and concluded Friday, July 18.



*Summer Bridge 2014 students pictured with RU Alumnus and Summer Bridge sponsor, Ms. Dale Parris Lee following her presentation regarding women in science related career fields*

In addition to class and field work, participants in the summer bridge program had an opportunity to hear presentations from Radford University Alumni, Ms. Dale Parris Lee and Ms. Ellie Coggins. Both women shared their personal journey through their careers and gave advice to the students about navigating professions that have traditionally been dominated by men.

Current RU women in the sciences Emily Guise, Matti Hamed, Sarah House, and Katharyn Self along with recent graduate Eileen Hindmon served as panelists on Wednesday, July 16, to discuss their path to their studies as well as the research they were participating in during spring and summer 2014.

On Thursday, July 17, the young women traded lab smocks and hard hats for dresses and convened for a banquet in the COBE Multipurpose Room. On Friday, they presented and demonstrated the fruits of their labor before their peers and their families at a closing ceremony in McGuffey 203.

Paula Hamel, director of Environmental Policy at Dominion Resources Services, keynoted Thursday's banquet and reflected on the lessons of Maya Angelou's life and her own experience as a woman in the energy industry.

"As I entered a control room one time early in my career, a man there looked at me and asked what a woman was doing in the control room. I told him I was there to point out the readings on one of his turbines and alert him to the danger of it malfunctioning. I got great satisfaction from telling him what he needed to do get things running correctly and then leave," she said.

Ms. Hamel challenged the 81 young women to avoid distractions and get comfortable being out of their comfort zone. She pointed out the unique opportunity they had to study, work on field experiments and apply science with RU professors, teaching assistants and resident assistants.

In addition to classroom lectures and lab experiments, Summer Bridge students visited RU's Planetarium and Museum of the Earth Sciences. Students also made field trips to Mountain Lake in Giles County, the RU Selu Conservancy and to Areva, Dominion Resources and Novozymes production and research facilities.

Students attend the Summer Bridge on scholarships provided by donors and sponsors of the program. The 2014 sponsors are ATK, Areva Nuclear Power, Cliff and Donna Boyd, Dominion Resources, the Jessie Ball duPont Fund, RU Alumna Ms. Dale Parris Lee, the Lynchburg Community Trust, Novozymes Biologicals, Harry and Zoe Poole Foundation and Upward Bound Martinsville.

"I never really knew much about robotics and programming, but now I do and I am very interested," said Taylor Evans, a rising senior from Powhatan High School. "The energy and the atmosphere made me feel relaxed and the professors made things so relatable."

Taylor was part of the "A team" that explored electricity, worked with solar panels, bread boards and electricity among other mechanics of space exploration. From Arduino microcontrollers and Legos, the team created a remote control, wheeled vehicle that they paraded down the aisles of Friday's closing session.



***Summer Bridge students diagraming circuits as they plan their experiments with electricity.***

Among the more than 20 female faculty members and teaching and residential assistants who served as mentors and role models was Assistant Biology Professor Sarah O'Brien, who teamed with Mathematics and Statistics Instructor Carrie Case and Assistant Professor of Geospatial Sciences Stockton Maxwell, to host the first-ever environmental sciences session.

“As a woman, it is always great to take the girls out into the field,” she said. “They get to catch birds, get dirty and exult in exploring.”

Audrianna Donham, a junior at Bassett High School in Henry County, said, “It’s a vast and wondrous world. There are a lot of species and I now know more about them. I think it will change the way I do things.”

Valerie Tran, a junior at Freedom High School in Loudon County, summed up the experience, saying, “It was fun learning to be creative and innovative and just getting to know one another.”



*Summer Bridge 2014 participants gathered in front of the College of Business and Economics building prior to their closing banquet*

## **RU PROFESSOR EXPLAINS ENVIRONMENTAL CHALLENGES ON WITH GOOD REASON**

The story of life has a complex cast of characters, says Fred Singer, and many of those characters are being lost because of poor judgment and "our own astounding biological success."

The Radford University retired biology professor talked to [With Good Reason Radio](#) in 2011 about the Earth's radically changing environment and the challenges posed by a population that has expanded to 7 billion people and counting.

Singer also talked on the program, which was broadcast July 19-25, about writing his new ecology textbook, which he said he hoped would bring awareness to environmental issues.



*Fred Singer*

Listeners in the New River Valley can hear Singer on With Good Reason at 6 p.m. on Tuesdays on [Public Radio WVRU 89.9](#). The program is produced by the [Virginia Foundation for the Humanities](#) for the Virginia Higher Education Broadcasting Consortium and is broadcast in Virginia, Maryland, Tennessee, Georgia, Alaska, California, Michigan and Washington, D.C.

## RU PROFESSORS SHARE UNIQUE EXPERIENCES DURING RADFORD CITY SUMMER NATURE SERIES

Radford University faculty and students were among the experts to lend nature knowledge this summer during Wildwood Park's Outdoor Classroom Lecture Series.

The Radford City park for years has been host to the program, which features presentations by local naturalists, photographers and educators.

The series took place every other Thursday, beginning June 26 and ran through August. Karen Powers, RU associate professor of biology, kicked off the series with a hands-on, conversational presentation about bats.



**A big brown bat (*Eptesicus fuscus*) hangs from a tree in Wildwood Park in Radford.**

Dr. Powers dispelled some of the common myths about the winged creatures, talked about the recent crisis that Virginia cave bats are facing and educated the public about what they can do to help. Specimens of taxidermied bats were on display, and Dr. Powers also demonstrated some of the capture (nets) and detection techniques (echolocation recorders) common in the field of bat biology.

"The Wildwood Park Summer Lecture series is a great way to get the public educated about and interested in a wide variety of natural history topics," Dr. Powers said. "It's a great opportunity for the faculty of Radford University to extend their knowledge outside of the typical classroom and interact with a broader audience."

Other RU presenters included: S. Jane Fisher, RU alumna and volunteer with the Museum of the Earth Sciences; Robert (Bob) Whisonant, Geology Department; Matt Close, Biology Department; and Matti Hamed, an RU biology major, covered topics such as bats, amphibians and geology.

2014 Summer Nature Series included:

**June 26:** "Going Batty Over Bats!"

Karen Powers, Department of Biology, Radford University

**July 10:** "Geology of Wildwood Park: Talk and Walk!"

S. Jane Fisher, RU alumna and volunteer with the Museum of the Earth Sciences, Radford University; and Robert (Bob) Whisonant, Geology Department, Radford University

**July 24:** "Leaf Litter Lookouts: Hidden Reptiles and Amphibians on the Forest Floor!"

Matt Close, Biology Department, Radford University; Matti Hamed, Radford University



**Jane Fisher and Bob Whisonant**

## **CSAT CAREER CONNECTIONS**

As a part of a renewed effort in the Radford University Career Center, Dr. John Liptak will be serving as a dedicated career advisor for the College of Science and Technology and the College of Humanities and Behavioral Sciences. In this role, Dr. Liptak will be present weekly in Stuart Hall lounge on Wednesdays from 8am until 5pm and on Thursdays from 10am until 3pm in Davis Hall to assist our students with resumes, internship and career planning. Students can take advantage of Dr. Liptak's time in CSAT sites and are also welcome to visit the Career Center in Walker Hall as their schedule permits.

Another exciting career opportunity for CSAT students will take place on November 5 when Radford University hosts its first STEM Career Fair in the Bonnie Hurlburt Student Center. Further details will be announced in coming weeks.

## **CSAT CLUB CORNER**

The CSAT STEM club is gearing up for another exciting year of programming and support for the College of Science and Technology. Newly inducted President, Matti Hamed, conducted a meeting of officers to plan the fall slate of events. Regular meetings will take place on Tuesdays at 6pm in Stuart Hall lounge. All parties interested in STEM are invited to join. The club will also be recruiting new members during the annual RU Club Fair on Friday, August 29, 2014 on Heth Hall lawn. Clubs from throughout the College of Science and Technology will be grouped together in one large section during Club Fair this year to allow for better access by students.

## **SPECIAL GUESTS AND PROGRAMS COMING TO CAMPUS**

Rackspace will visit the ITEC 490 class on September 10 at 4pm in Davis 151. A "tech talk" will also be conducted by Rackspace that day at 3pm with a location TBA.

ITEC 490 will host Kathy Claytor, Vice President for Human resources for Corvesta Companies at 4pm on September 22 in Davis 151.

Multivision recruiter David Gaines will be on campus and with the ITEC 490 class on September 24. Details TBA

The RU CSAT Advisory Council will meet on Friday, October 10 in Heth Hall during the annual Homecoming Weekend.

The College of Science and Technology is planning to be a part of the Virginia Science Festival October 4-11. <http://virginiasciencefestival.org/>