

FROM THE DEAN'S DESK – September 26, 2014

THE RADFORD UNIVERSITY COLLEGE OF SCIENCE AND TECHNOLOGY NEWSLETTER



Matti Hamed presents her research, "Selu Conservancy's Herpetofaunal Diversity: Establishing a Long Term Monitoring Program," at the 2nd Annual Summer Research Celebration for the Summer Undergraduate Research Fellowships program.

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INTERNATIONAL SCIENTIFIC RESEARCH SOCIETY CHAPTER INSTALLED AT RU

Radford University achieved a new level of interdisciplinary scientific and research dialogue Sept. 16 when a campus chapter of Sigma Xi was installed.



Twenty founding members joined Provost Sam Minner and Cristina Gouin-Paul, Sigma Xi's Mid-Atlantic regional director, to sign the charter that joins RU with the coterie of international educational institutions and research organizations in the scientific research society.

Dr. Minner called the new campus organization "companions in zealous research:" and characterized it as "good friends with good relationships challenging the paths they are taking."

The installation crowned an initiative by Donna Boyd, eminent professor of anthropology and co-director of the Radford University Forensic Science Institute (RUFISI), to bring RU into the organization. The chapter's 20 founding members represent the RU College of Science and Technology (CSAT), Waldron College of Health and Human Services and area businesses.



The Sigma Xi Radford University Chapter founding membership joins Mid-Atlantic Regional Director Cristina Gouin-Paul at the installation ceremony.

The Radford University chapter of Sigma Xi founding membership consists of:

Dr. Donna Boyd *

Dr. Boyd has conducted research on prehistoric, historic, and modern forensic human remains for over 25 years and is the author of over 70 publications and technical reports and over 70 presented papers. Her current research projects include the macroscopic and microscopic skeletal signatures of antemortem and perimortem pediatric trauma, and microevolutionary change in the human mandible.

Dr. Cliff Boyd *

Dr. Boyd has conducted archaeological and skeletal analyses of prehistoric and historic sites in Tennessee and Virginia over the past 36 years, resulting in over 130 publications or technical reports, presentations of over 100 papers at professional conferences, and over 1 million dollars in grant funding. His current research focus is the application of archaeological and anthropological theory to Forensic Anthropology.

Dr. Jack Brockway *

Dr. Brockway's research interests include variable star photometry, astroparticle physics in the early universe, and physics education. He is also the director of the Selu Observatory in Radford, which involves maintaining and operating the observatory's 14.5 inch telescope, helping with public events, and assisting students with research activities.

Dr. Matt Close *

Dr. Close's research has specifically focused on the form and function of extensible soft tissues in snakes and the prey that they ingest. Snakes must swallow prey whole, and many of the major existing groups of snakes are capable of ingesting relatively large prey (macrostomy). He is interested in the aspects of snake anatomy that make this phenomenon possible, the ecological significance of it, and how it has evolved over time.

Dr. Gary Cote *

Dr. Cote's research has ranged from the mechanism of daily rhythms in the common bread mold *Neurospora crassa*, to the details of the inositol phosphate signaling system in plant cells. Currently he is working with students to study the cells in plants that make microscopic crystals of calcium oxalate. They are studying the structure and distribution of the crystals in the plant body and also studying the possible involvement of these crystals in the loss of leaves from deciduous trees in the fall.

Dr. Jake Fox *

Dr. Fox is an archaeologist, and has been a member of Sigma Xi since 2007 when he was nominated for membership in the Arizona State University chapter. His research interests focus on early cultivation and domestication of plants and animals and how these processes transformed human socio-ecological relationships. Although he has worked in different parts of the world, his primary interests in the last ten years have been in Andean South America.

Dr. Christine Hermann*

Dr. Christine Hermann, chair of the Chemistry Department, is currently involved with the development of laboratory experiments that can be used in the Organic Chemistry laboratory. Some of these experiments emphasize the use of green chemistry and items that the students can relate to such as food. Previous experiments that have been developed are a) comparing lycopene in various types of tomato juices, and b) a forensics chemistry lab identifying chemicals in fake urine, identifying fake drugs, and just identifying blood.

Dr. Greg Hodges

Dr. Hodges' research has included doing calculations of radiation dose to target organs from CT Scan protocols like the contrast-enhanced scan for Pulmonary Thrombotic Embolism that can produce doses to the breasts of female patients several times higher than a mammogram. Using adjusted techniques that lower the kVp for smaller-body-habitus patients, he recalculated the dose to the target organs to get mean glandular dose to the breasts on the order of a mammogram by taking advantage of the greater signal response of the Iodine contrast at the lower kilovoltage on the CT x-ray tube. Since the original publication & presentation, some CT scanners now will adjust their kilovoltage as well as the tube current when they try to automatically determine the techniques needed for optimal image quality for the minimum radiation dose.

Dr. Raymond Linville

Dr. Linville's program of research spans 33 years of investigating speech motor control. He has published federally funded research in the areas of laryngeal physiology, craniofacial anomalies, speech aerodynamics, and velopharyngeal anatomy. His current research focuses on smoke inhalation and laryngeal burns.

Dr. Beth McClellan*

Dr. Beth McClellan's research centers around the geological processes required to build mountains, and the time scales on which these processes occur. Her current research involves ~750 million year old volcanic rocks exposed in the Mount Rogers area of SW Virginia, and their role in forming the 'basement' to the Appalachian Mountains.

Dr. Judy Niehaus*

Dr. Niehaus' research has included studying iron metabolism in mycorrhizal fungi, which are mushrooms that produce mycelium around the roots of trees. She discovered that a number of these fungi produce iron binding compounds called siderophores that scavenge iron from the environment and supply this important nutrient to both the fungus and the associated tree.

Dr. Sara O'Brien*

Dr. O'Brien studies the ability of animals to cope with a dynamic environment. Focusing mainly on reproductive physiology, her lab is interested in questions exploring how animals coordinate the initiation and termination of reproduction with changes in the environment. Her lab also explores the influence of man-made changes, such as endocrine disrupting chemical pollutants, on an animal's ability to respond accordingly when under physiological duress.

Dr. Orion Rogers*

Dr. Rogers' published research includes the influence of calcium and hormones on differentiation of embryonic chick intestine as well as the effects of neurotransmitters on feeding and satiety in chicks. Recent pedagogical presentations include the evolution of the Summer Bridge Program and the NSF-SSTEM Scholarship Program at Radford University. Past and current grant support totals more than a million dollars.

Dr. Susan Schoppelrey

Dr. Schoppelrey's research efforts have involved the evaluation of community mental health centers in the Rio Grande Valley region and the design of computerized cultural competency training for Child Protective Service workers. Her dissertation investigated the effectiveness of integrated treatment for people with dual diagnoses.

Dr. Fred Singer*

Dr. Singer is a behavioral and community ecologist, who studied populations of dragonflies, spiders and zebrafish in their natural settings and in the laboratory. With the help of numerous students, he pursued my interest in the evolution of interactions; as such most of our research investigated mechanisms of foraging, predation and sex. Dr. Singer retired in 2013 and is currently writing an ecology textbook.

Dr. Christine Small*

Dr. Small's research focuses on forest ecology, particularly vegetation diversity and disturbance response in eastern forests. Current project areas include impacts of non-native invasive plants and insects; conservation and management of Appalachian "non-timber forest products" (medicinal and edible wild plants); effects of white-tailed deer herbivory on forest regeneration; and the role of historic land use in shaping today's forests. Much of her research is applied – working to understand ecological processes important in conservation and management, and collaborating with conservation and natural resource agencies to address current issues (USDA Forest Service; The Nature Conservancy; Natural Heritage Programs).

Dr. Francis Webster*

Dr. Webster's research is focused on the environmentally benign and sustainable chemistry needed to support the broader goal of global sustainability and recent projects have included:

- The design of "greener" catalysts for biodiesel production.
- The synthesis of functionalized carbon nanoparticles for use in water purification.
- The design of self-assembled structures based on polyelectrolytes found in nature.

Dr. Robert Whisonant*

Dr. Whisonant's current research includes developing the connections between geology and the American Civil War campaigns and battles. He has studied Virginia's mineral deposits (salt, lead, iron, coal, and niter) and their crucial role in supporting the Confederate war machine. He is now writing a book on this topic. In addition, he continues to analyze the effects of geology and topography on casualty rates on national battlefields such as Gettysburg, Chancellorsville, and Antietam. Finally, he is involved with several RU faculty members (Cliff Boyd, Rhett Herman, and George Stephenson) in battlefield protection and preservation efforts here in Southwest Virginia.

Dr. Joe Wirgau*

Dr. Joe Wirgau's research primarily focuses on creating chemical models of siderophore mediated iron acquisition. These models have potential toward environmental remediation and the better treatment of transfusion induced iron overload. Dr. Wirgau has also worked with undergraduate students on environmental testing of local sites including the stormwater remediation wetland on campus.

Dr. Susan Woodward

The research for which Dr. Woodward was nominated to Sigma Xi was a 3-year doctoral field study of feral burros in Southern California. Since then, she has maintained an interest in feral and exotic species, but her focus has been more on writing for a lay audience than on field work as she has published four books on biomes of the world and an encyclopedia of invasive species in the U.S. and has an encyclopedia of Earth's natural landscapes and features in the pageproofing stage of production.

****Indicates current or retired faculty in the College of Science and Technology***

"The RU chapter will enhance and support faculty and student research, promote collegiality among fellow scientists and allow a prestigious venue for presentation of science topics to both the university at large and the public," said Dr. Boyd. "It will be a perfect complement to the new Center for the Sciences and I very much look forward to the support of scientific research and education that Sigma Xi offers."

Sigma Xi is a 125-year-old international scientific organization of scientists and engineers, whose research spans the disciplines of science and technology. Today, Sigma Xi has nearly 60,000 members in more than 500 chapters in the United States, Canada and other countries, including Switzerland, Thailand, Lebanon, New Zealand and Australia. More than 200 Nobel Prize winners have been Sigma Xi members.

Dr. Boyd added the organization is not only a College of Science and Technology-centric society.

"Sigma Xi is not just for the hard sciences. It includes social and behavioral scientists, so our colleagues from across the campus are welcome," she said.

After the chapter names its officers, Dr. Boyd said, Sigma Xi will embark on a local series of Science Cafes, casual events under the Sigma Xi banner, which are open to everyone and feature an engaging conversation with a researcher or scientist about a particular topic.

In 2013, RU students participated in a regional Sigma Xi poster symposium.

Following the formal installation ceremony, Mary Lee Jensvold, associate professor of anthropology, presented the Sigma Xi Distinguished Lecture on her work with chimpanzees that communicate with sign language. Her studies, begun in 1986, include conversational behaviors, private signing, phrase development, chimpanzee-to-chimpanzee conversation, imaginary play and artwork by chimpanzees.

Dr. Jensvold shared stories from her years of experience caring for Tatu, Loulis and their family of signing chimpanzees. Videos of Dr. Jensvold communicating with the group of chimpanzees helped to highlight her work and the ability of the chimpanzees to express their thoughts. Dr. Jensvold also shared some information on her research into primate caregiving practices, zoo visitor effects, public education about chimpanzees and about improving the environment of captive animals. This discussion continued the following day as Dr. Jensvold visited the primatology class in the Department of Anthropological Sciences.

Students and faculty interested in learning more about Sigma Xi membership and activities can contact Dr. Donna Boyd at doboyd@radford.edu and visit the organization website at www.sigmaxi.org. An associate membership is available to anyone who has been nominated and has conducted research that is presented at a conference or poster session regardless of completion of a degree.

Don Bowman contributed to this story

CSAT STUDENTS FEATURED PROMINENTLY AT SUMMER RESEARCH CELEBRATION

Summer research activities were highlighted during a celebration and forum on Wednesday, September 17 from noon until 5pm in the Bonnie Hurlburt Student Center Auditorium sponsored by the Office of Undergraduate Research and Scholarship (OURS). Twelve of the eighteen RU undergraduate students featured are members of the College of Science and Technology in the areas of biology, chemistry, geology, geospatial science and mathematics.

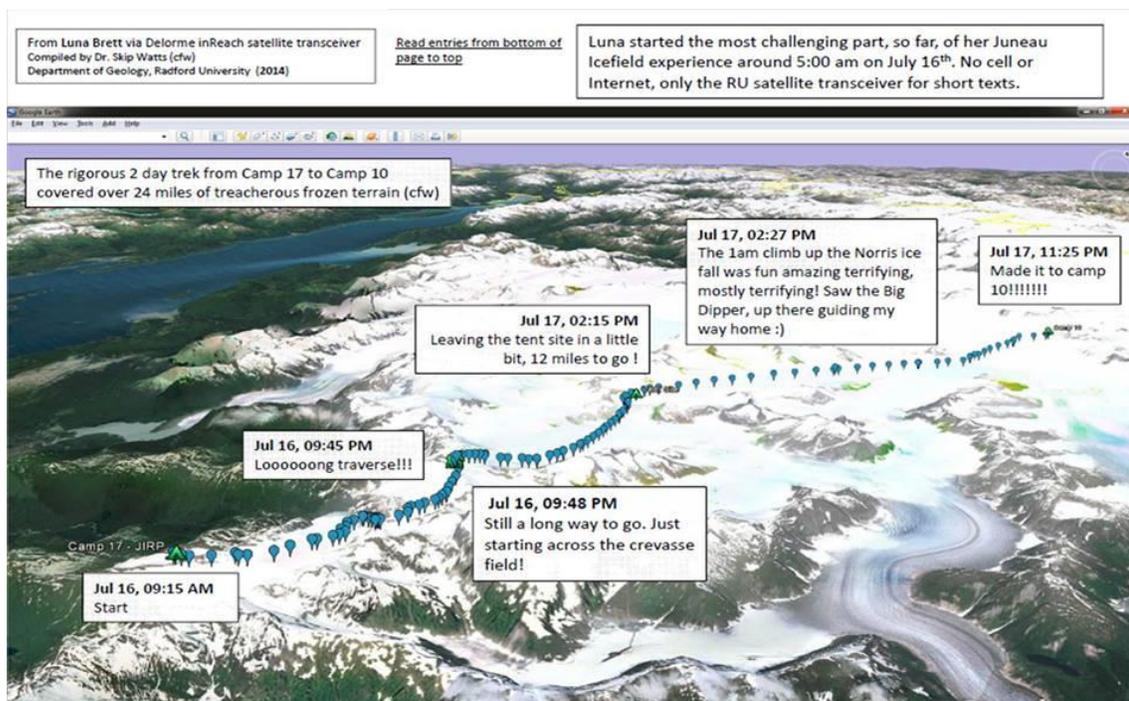


Melissa "Luna" Brett, a senior majoring in physics and geology, served as a keynote speaker and shared her work as a member of a team conducting glacial physics research on the Juneau Icefield in Alaska and Canada. This experience was a follow-up for Luna who was also a part of the RU Arctic Geophysics expedition team from March 2014 that visited Barrow Alaska.



Luna shared her ice field experiences with guests during the summer research celebration and emphasized the value of participation in research projects.

Interested parties were able to follow Luna's Arctic adventure online through pictures and blog postings on CSAT media.



Luna's journey was documented through the use of a satellite transceiver that allowed Dr. Chester "Skip" Watts to chart Ms. Brett's locations along the ice fields from his office in Radford.



*Dan Metz and his friend *Pachygrapsus crassipes* surveying an estuary in California*

Also serving as a keynote speaker was Dan Metz, the Ecological Society of America's SEEDS Research Fellowship recipient for 2014-2015. His work over the summer involved the study of a novel parasitic disease of shore crabs in conjunction with the University of California at Santa Barbara. SEEDS is the flagship, award-winning education program of the ESA. Its mission is to diversify and advance the ecology profession through opportunities that stimulate and nurture the interest of underrepresented students to participate, and to lead in ecology.



Dan in the lab

Additional College of Science and Technology Students who conducted research and presented 15 talks about their work were:

Mandeep Kaur and Caitlin Linville with "The Effects of Vespa Amino Acid Mixture on *Musca domestica*"; Sarah House with "Creating an Online Linear Algebra Course Using Mathematica"; Kathryn Self with "Exploring Effects of Multiple EDC Exposure"; Angel Lambert with "A Study of the C84 Isomeric Set"; Christabelle D'Silva "Early Field Experience and Selu";



Sarah House presents her research, "Creating an Online Linear Algebra Course Using Mathematica,"



Josh Oliver presents his research, "A Tree-Ring Reconstruction of New River Streamflow"

April Tingle "Are the Antiviral Properties of Pseudomonas Pigments Due to ROS Generation?"; Emily Guise "Effects of Ecologically Relevant Exposure to Trenbolone"; Emily Cutshall "Measuring Inhibitory Concentrations of Arsenic for Environmental Bacteria"; Nima Hami "The Synthesis and Potential use of Phenazine Derivatives in the Inhibition of the La Crosse Virus" ; Josh Oliver "A Tree-Ring Reconstruction of New River Streamflow"; and Pat Trout "Assessing Models of Volcanism and Rifting: New Evidence from the Mount Rogers Formation, SW VA."



Pat Trout presents his research, "Assessing Models of Volcanism and Rifting: New Evidence from the Mount Rogers Formation, SW VA"



April Tingle presenting her research "Are the Antiviral Properties of Pseudomonas Pigments due to ROS Generation?"

Some of the presentations were more of a one-on-one discussion using posters to share the information gathered. Matti Hamed, a senior biology major from Roanoke and a 2014 recipient of the RU Scholar-Citizen Initiative Highlander-In-Action award, shared her work assessing the biodiversity of Selu Conservancy as well as designing and leading educational public workshops on identification of and information on local species of reptiles and amphibians.



Matti Hamed presents her research, "Selu Conservancy's Herpetofaunal Diversity: Establishing a Long Term Monitoring Program"

"The highest levels of learning and teaching that occur on any given campus occur when small teams are tackling big questions where the answers are not known. Research, scholarship and creative works represent a clear path for involvement in these highly engaging quests for new knowledge," said Dr. Joe Wirgau, Interim Director of the Office of Undergraduate Research and Scholarship.

Dr. Wirgau encouraged all students who are interested in enhancing their academic experience with a summer internship, research or scholarship experience to reach out to a faculty mentor for guidance and to contact the OURS office for assistance.

RADFORD UNIVERSITY COLLEGE OF SCIENCE AND TECHNOLOGY TO BE FEATURED AT INAUGURAL VIRGINIA SCIENCE FESTIVAL

Science and Technology from across the Commonwealth will be celebrated at the first Virginia Science Festival during the week of October 4th through October 11th. The goal of the Virginia Science Festival is to fascinate families from all corners of the State and provide hands-on, interactive inspiration at a time when science-based careers offer the most opportunity for future employment, social and financial advancement.

Radford University CSAT faculty and students will be featured in a variety of sessions throughout the week-long program on the RU campus, at Virginia Tech and in Roanoke's Elmwood Park.



RU Professor of Physics, Dr. Rhett Herman will be featured in a session entitled "Meet the Scientist - Geophysical Properties of Arctic Sea Ice" on Saturday, October 4th at 2:00 in the Drillfield Room of The Inn at Virginia Tech. Dr. Herman will share his experiences from research trips to Barrow, Alaska.



Dr. Rhett Herman with RU Students Jesse Dodson and Sarah House in Barrow, Alaska.

"Radford University students and faculty have studied the properties of the Arctic sea ice near Barrow, Alaska, with the goal of quickly determining the thickness of the sea ice over large areas" said Dr. Herman. "While it is easy to measure the horizontal extent of the polar ice cap with satellite imagery, the depth of the surprisingly-thin ice is difficult to accurately gauge for a number of reasons. The results of this ongoing polar research will be presented, along with the current preparations for the next trip."

He adds "In addition, a possible method for determining ice depth over large areas will be presented. This research effort is actually a regular class offering in which a number of students—all undergraduates—have participated over the past 8 years, giving our students a unique educational opportunity early in their careers. The impact of this experience on our students and their careers will be discussed."

Through this presentation, Dr. Herman will help attendees learn about some physical characteristics of the arctic sea ice including its thickness and also explore some geophysical remote sensing methods for determining sea ice properties.

Also on Saturday, October 4 at the Moss Center for the Arts on the Virginia Tech Campus, The Department of Biology and the RU Forensic Science Center will staff booths from 10am to 4pm. The biology exhibit is titled "ROACHZILLA: Bugs and Beyond" and Dr. Donna Boyd, co-director of the RUFSCI, will be on hand to showcase the work conducted by the Institute.

On October 7 and October 9 at 7:30 pm, the RU Planetarium Shows are featured attractions in Reed/Curie Hall, Room B43.

On October 11 from 10am until 4pm, Dr. Francis Webster will feature Chemistry Magic in Roanoke's Elmwood Park. Joining Dr. Webster under the Radford University Tent Pavillion will be the Department of Biology ROACHZILLA display and the RU Forensic Science Center.

Also on October 11 across the Radford University Campus as a satellite location for the Virginia Science Festival:

10 a.m. – 4 p.m. Greenhouse Tours

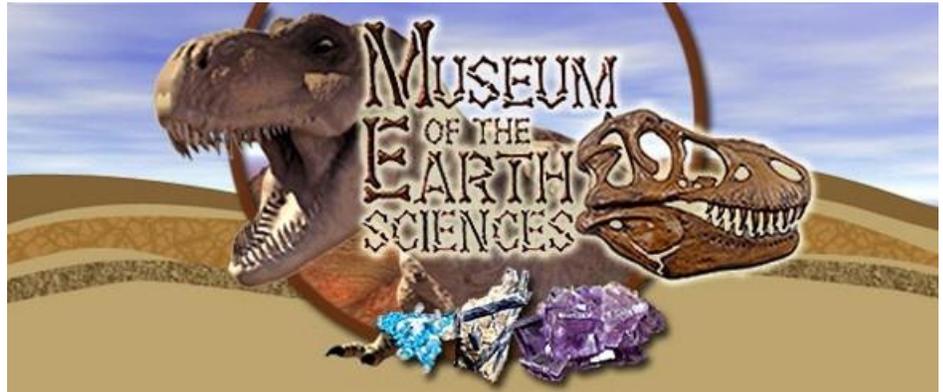
Reed Hall, First Floor Sponsored by the Biology Department

Sometimes you have to stop and smell the roses. Enjoy a tour of RU's Greenhouse, which maintains a diverse living collection that demonstrates ecological concepts and culturally important plants throughout the world.

10 a.m. – 4 p.m. Museum of the Earth Sciences

Curie Hall, Room 143 Sponsored by the Geology Department

Learn about the amazing planet on which we live! Through exhibits that encompass the earth science-related fields of geology, oceanography and physical anthropology, learn about the Earth, its past, present and future, and its interaction with those who inhabit it. Enter through Reed Hall main entrance.



10 a.m. – 2 p.m. Tours and Demos by the Department of Anthropological Studies and the RU Forensic Science Institute

Preston Hall Annex & Reed Hall 106 Sponsored by the Department of Anthropological Studies and the RU Forensic Science Institute

10 a.m. – 3 p.m. Table Top Trebuchet Demonstration

Reed Hall Lawn Sponsored by the Math Department

Come and observe a floating arm trebuchet launch small, soft projectile after using math and trigonometry to determine where the objects will land.

1 p.m. – 7 p.m. Planetarium Shows

Reed/Curie Hall, Room B43

Show times are 1 p.m., 3 p.m., 5 p.m. and 7 p.m.

Pick up free tickets to the show at the Hurlburt Student Center Information Desk. Space is limited.

2 p.m. – 5 p.m. Science Super Show sponsored by the RU College of Science and Technology STEM Club

Alumni Village, Moffett Hall Lawn

Ongoing demos of a vortex cannon, air pressure strength, magnetic levitation and more.

For more information, please visit <http://virginiasciencefestival.org/>.

RU PLANETARIUM 2014-15 SEASON FEATURES MARITIME STAR SHOW

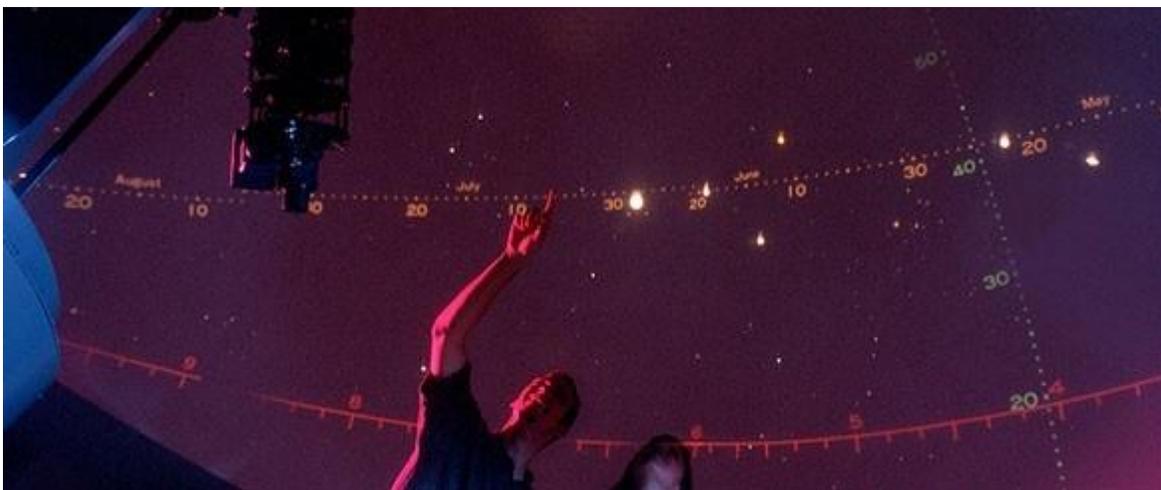
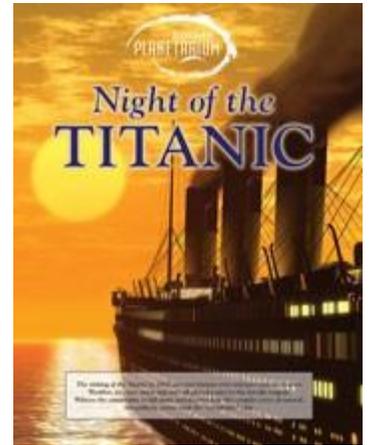
Viewers will be on deck the night of the Titanic's sinking in "Night of the Titanic," a star show featured at the RU Planetarium on Tuesdays and Thursdays at 7:30 p.m.

The show recreates the experience of the doomed ocean liner and explores the unique conditions of Earth and space that, coupled with human errors, contributed to its sinking on April 15, 1912. Produced by Discovery Dome, the show explores ocean currents, iceberg formation and drift and global warming.

On Saturdays at 10:30 a.m., the RU Planetarium Kid's Show features "Dinosaur Prophecy." The show examines the decline of the dominant and ferocious creatures and the Earth's enormous power for dramatic change. Viewers will meet several dinosaur species, from the Coelophysis of 205 million years ago to the Allosaurus and Diplodocus of the mid-Jurassic period. "Dinosaur Prophecy" is a co-production of the Rice Space Institute and the Houston Museum of Natural Science, NASA's Office of Earth Science, Home Run Pictures and the Carnegie Museum of Natural History.

The RU Planetarium seats 45, including 32 reclined planetarium seats within its 24-foot diameter dome and can accommodate large groups. To visit the planetarium at times other than its regularly scheduled show times or with a group, contact Rhett Herman.

All shows are free and open to the public. The planetarium is located in Curie Hall room 43. Enter through Reed Hall from the main campus and follow the signs in the building. A complete RU Planetarium schedule can be found on the [planetarium website](#).



COLLEGE OF SCIENCE AND TECHNOLOGY TO HOST FORUM DURING FALL DIVERSITY AWARENESS AND CELEBRATION WEEK

As a part of the Fall 2014 Diversity Awareness and Celebration Week, RU CSAT will host a forum entitled “The Gender Gap: Where the Girls Aren’t” to discuss the challenge of engaging women in science and technology related fields.

This event will take place on Wednesday, October 15 at noon in the Bonnie Hurlburt Student Center Auditorium and will feature Dr. Jill Stewart, Chair of the Department of Mathematics and Statistics and Dr. Orion Rogers, Dean of the College of Science and Technology.

Faculty and students are encouraged to join in this program to help find ways to address the problem and to open STEM-related fields to a broader audience. Admission is free. For more information, please contact Brooke Chang, Director of Diversity and Equity at 831-5307.



Celebrate!
DIVERSITY
FALL 2014 DIVERSITY AWARENESS AND CELEBRATION WEEK

Monday, October 13

2 – 3:15 p.m.
Heth 016
Race Relations, Social Justice and Social Injustice: Challenges Within Our Justice System
Dr. Abdul-Ra'uf, Dept. of Criminal Justice

4 – 5 p.m.
Heth 022
Negotiating Family Life: Equality is Hard to Achieve
Dr. Lips, Dept. of Psychology, and Drs. Liss and Erchull, University of Mary Washington

7 p.m.
Bondurant Auditorium
Preston Hall
Ash Beckham: Give Voice to Your Truth
Savannah LeBarre
Sponsors: Club Programming Committee, Psy.D. Student Organization, and Women's Studies Club

Tuesday, October 14

1 p.m.
Peters Hall A041
Diversity and Young Adolescents: More Than Color
Dr. Dore, School of Teacher Education and Leadership [STEL]

5 – 6:15 p.m.
Heth 043
Hard Times Come Again No More: Vulnerability During Hard Times
Dr. M. Hrezo, Dept. of Political Science, and Dr. Roger Hepburn, Dept. of History

Wednesday, October 15

12 – 1 p.m.
Bonnie 250
Persistence and Power of Appalachian Stereotypes: A Twenty-First Century Critique
Dr. Burris, Appalachian Studies Program

12 – 1 p.m.
Bonnie Auditorium
The Gender Gap: Where the Girls Aren't
Dr. Rogers, College of Science & Technology, and Dr. Stewart, Dept. of Mathematics and Statistics

4 – 5:30 p.m.
Heth 016
Presentation & Roundtable: How We Can Support the LGBTQ Community and Discussion on National Trends
Brooke Chang, Office of Diversity and Equity

6 p.m.
Heth 014
Let's Talk About Race: A Discussion on Race Relations in America
Lee Hicks, Student Government Association
Sponsors: Sociology Club, Diversity Awareness Programming Board, and Center for Diversity and Inclusion

Thursday, October 16

12 – 1:30 p.m.
Heth 022
International Student Perspectives at RU
Dr. Jacobsen, College of Graduate and Professional Studies

12:30 – 1:30 p.m.
Bonnie 248
Diversity Dialogue: Sticks and Stones: Environments We Create With Words
Dr. Shoemaker and Dr. Wallace, College of Education & Human Development

2:15 p.m.
Heth 043
Race on Campus
Dr. Carroto, Department of Sociology

4:30 – 5:30 p.m.
Covington Center
Diversity Awareness and Celebration Week Reception
Keynote Speaker: President Penelope Kyle
Faculty Performances: Department of Music

6:30 p.m.
Heth 043
Faithful on Campus: Religious Diversity at RU
Dr. Turner, Department of Philosophy & Religion

7:30 – 9:30 p.m.
Pridemore Playhouse
Porterfield Hall
Theatre Production of "Clybourne Park"
Director: Tommy Iafrate, Department of Theatre;
Discussion immediately following the performance

9:30 – 10:30 p.m.
See above
Reflecting on Diversity: Race, Disability, and Beyond
Brooke Chang, Office of Diversity and Equity

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. Dr. Liptak will also be providing short articles for our CSAT faculty and students to help prepare for the upcoming STEM Career Fair.

“Tips for Student Success at Career Fairs” PART 2 by Dr. John Liptak

With the STEM Career and Internship Fair scheduled for Wednesday, November 5th from 11 am to 2 pm, it is time for you to begin preparing! In the last installment of this series, we talked about beginning to prepare for career fairs and identifying your goals for the fair. The fair is getting closer and it is time to get serious about your preparation. Following are some additional tips that you can begin using to ensure you are successful at the STEM Fair:

Prepare a professional resume!

1. Make sure you have a concise, well written, dynamic resume
2. You can create your own resume by using the Resume Resource on the Career Center website @ <http://www.radford.edu/content/career-services/home.html>
3. Meet with John Liptak in Davis 113 to have your resume critiqued and suggestions made for improvement
4. Copy/print on quality resume paper of white, buff, almond, or gray. If you do not have resume paper, stop by the Career Center in Walker 275 to receive some
5. View list of employers attending the STEM Fair, and conduct thorough research

Research the organizations

- Know the structure of the organization (Philosophy, mission, goals)
- Organization size (personnel, locations), products and services
- Condition of the organization (financial, growth, facilities, etc.)

Prepare a Thirty Second Commercial

Following is a good format for your 30 second commercial: Introduce yourself (name, major, goal); Express your interest in a certain type of position or area in the organization; Describe what you have to offer the organization; Demonstrate what you know about the organization; and PRACTICE!!! & PRACTICE!!!

Prepare Questions for the Prospective Employers

TIP: Make sure you are not asking questions about information that is easily accessible on their website, and connect your background with the needs of the organization!

- What do you want to know about the organization?
- What do you want to know about the opportunities?
- What have you read about the organization?
- Do you have unique qualities or characteristics that match their needs?
- What do you have to offer the organization?

Practice your interpersonal skills!

- ✓ Be professional and introduce yourself with a firm handshake
- ✓ Speak clearly and concisely, but answer questions readily
- ✓ Have your resume and portfolio with you and easily accessible
- ✓ Demonstrate confidence, while being open and honest
- ✓ Maintain good eye contact and show enthusiasm and interest

Consider your attire!

- Remember that you are making a strong impression
- What does it mean to dress business casually, but professionally?
- You do not have to wear a suit, but it is an option
- **DO NOT** wear jeans, t-shirts, pajamas, flannel, shirts, sweatshirts, sweatpants, boots, white socks, baseball hats or sneakers

When you get to the STEM Fair...

- A. Go to the registration table and pick up a list of attendees and the map
- B. Zero in on specific organizations you want to approach & their location
- C. Make sure your resumes are easy to access
- D. Take a deep breath, stand up straight, think positively & go into action!

When Approach the organization's representative...

- Introduce yourself and give your Thirty Second Commercial
- Ask and answer questions and pick up materials
- Offer your resume and ask for a business card & ask the best method for follow-up

After the STEM Fair...

- Send a follow-up thank you e-mail/letter to all your contacts and indicate your continued interest in the organization and opportunities

Job fair no-no's

- Not dressing neatly or professionally or not bringing enough resumes
- Lacking knowledge of the organization or confusing the organization with a competitor
- Lacking enthusiasm or interest in the organization or job opportunities
- Asking about salary
- Not asking any questions or asking inappropriate questions
- Not making eye contact

CSAT CLUB CORNER

The CSAT STEM club is working on a variety of projects including science demonstrations for the upcoming Highlanders Festival on October 4th and Homecoming/Family Weekend Celebration on October 11. Teams within the club are also exploring additional outreach, programming, and robotics. The CSAT STEM club is open to all students interested in science and technology. Club meetings take place on Tuesdays at 6pm in Stuart Hall lounge.

The RU Chemistry Club meets each Wednesday in Currie 336 at 5pm. Upcoming events participation with Dr. Webster at the Virginia Science Festival and a bake sale at the end of October. The group is making plans for other activities including participation in National Chemistry Week October 19-25.

To include activities of other CSAT clubs and organizations, contact David Horton, rhorton@radford.edu.

SPECIAL GUESTS AND PROGRAMS ON CAMPUS



Mohsin Kazmi

Mohsin Kazmi shared his adventures in Peru with RU students in a presentation titled “The Amazon: an unfinished country” on Tuesday, September 23. Mohsin is a photographer and conservationist who has visited Peru many times and will be helping guide the Radford Amazonian Research Expedition (RARE) in May 2015. Throughout his presentation he shared his experiences from his journeys to this exotic region and the need to preserve its natural state from the predators that threaten it.

The title of his lecture was taken from a quote by filmmaker Werner Herzog “ *It's an unfinished country. It's still prehistorical. The only thing that is lacking is - is the dinosaurs here. It's like a curse weighing on an entire landscape. And whoever... goes too deep into this has his share of this curse. So we are cursed with what we are doing here. It's a land that God, if he exists has - has created in anger. It's the only land*

where - where creation is unfinished yet. “

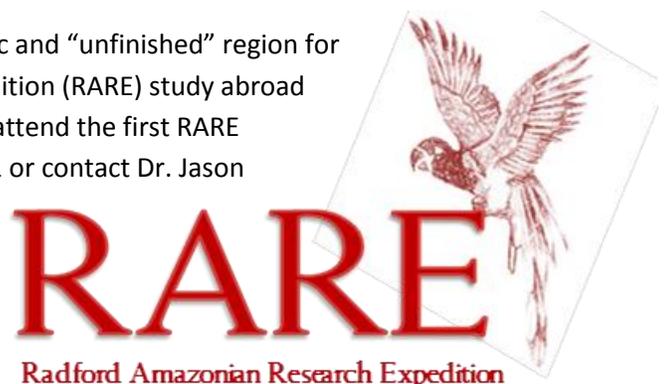
Mohsin shared his thoughts on why he felt that the area was unfinished based on the fact that it is still evolving and changing. “New species of insects are discovered everyday” he said. “They are right under our feet and if we look down, we can marvel in their exotic beauty.”

Mohsin respected Herzog’s thoughts, although pointing out that the filmmaker is a nihilist and that his dark view is an extreme observation. “There is tremendous competition for resources” Mohsin added. “If you leave a t-shirt out for a day, there is a good possibility that it will be consumed by various creatures such as leafcutter ants that might chop up the fabric and take it back to their colony for their use.”

RU students will have the opportunity to explore this exotic and “unfinished” region for themselves during the Radford Amazonian Research Expedition (RARE) study abroad program taking place in May 2015. To learn more, please attend the first RARE information session on October 21 at 6pm in Reed Hall 201 or contact Dr. Jason Davis at jdavis319@radford.edu.



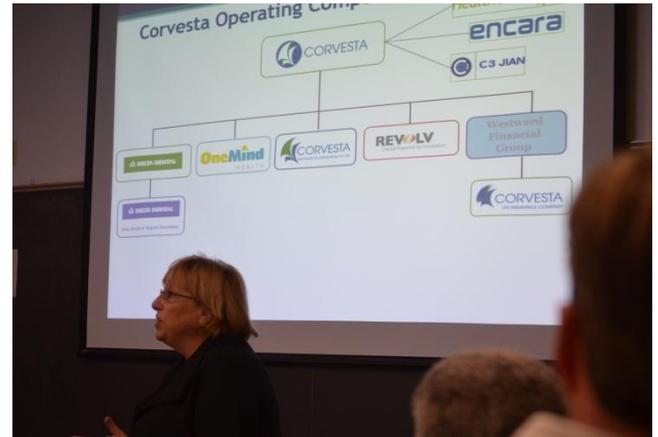
One of Mohsin Kazmi's favorite pictures he has taken of the jungle in Peru as it shows the lack of light within the deep foliage.





Representatives from Corevesta Companies met with students on Monday, September 22. Corvesta is best known for their insurance subsidiary “Delta Dental,” but is also home to a variety of additional organizations including software solutions and financial services.

Kathy Claytor, Vice President for Human resources, shared the company history and vision for the future with ITEC 490 students. “Our business strategy changed from focus on a single state single line of business to a national company with multiple product lines, multiple target customer groups” she stated. “As we continue to expand our product line, we are looking to add Information Technology support.” Ms. Claytor added “In early 2014, we hired an additional 30 highly skilled IT people, representing nearly 10 percent of our workforce. We anticipate a similar process in early 2015.”



Kathy Clayton sharing information about Corvesta's product lines

Mr. Dean Rodil, Director of Technology, and Mr. Micah Almond, Director of Application Delivery and Enterprise Architecture, continued the discussion about the technology future of their organization. “We are team focused” stated Mr. Rodil “and we look for new employees who can work within that team.” Mr. Almond added “we work together to solve these problems for our company and we need to know that you will be a good fit if we hire you.”

Mr. David Danco, Director of IT Governance and PMO and a 2013 MBA graduate from RU, shared his thoughts on the job search process and the transition from school to the workplace. “You have to be genuine in your interview” he stated. “We are interested in what you have to say and how your thought process works.” Mr. Danco also added “the early impressions that you make are critical and your reputation will precede you. Be in the driver’s seat from day one and be intentional about your choices.”



Dean Rodil sharing information about Corvesta's facilities and technology growth

All three IT professionals cautioned students about their online presence and reminded them that their company along with others does search for information on prospective hires, just like candidates for a position will search for information on a company. “Nothing on the internet every really goes away” said Mr. Rodil.



On September 24, Multivision recruiter David Gaines was on campus and with the ITEC 490 class to discuss opportunities that his organization is offering. Along with the company's Chief Operating Officer Ashwin Bharath, Mr. Gaines shared information on their new eintern program that allows

students to attain job skills while working on real world projects that they would experience following graduation. Mr. Gaines said "70% of the people who participate in our program secure jobs with Fortune 500 companies following completion." Mr. Bharath added "We struggle to keep up with the demand for well-trained IT professionals in our business. Opportunities continue to grow every day." Both gentlemen gave the students sound advice on career preparation and securing jobs. "When I ask you about your interests outside school, I am not looking to hear that you are great at playing video games" said Mr. Gaines. "I would rather know about projects that you might have worked on as an intern or part-time employee. Keep it relevant to the work you are seeking to do."



To learn more about this free program, please visit www.eintern.com

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

To include other upcoming guests to campus and special events, contact David Horton, rhorton@radford.edu.