

FROM THE DEAN'S DESK – September 28, 2018

THE RADFORD UNIVERSITY ARTIS COLLEGE OF SCIENCE AND TECHNOLOGY NEWSLETTER



2018 NASA Institute for High School Mathematics participants at NASA Langley Research Center

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NASA AND RADFORD UNIVERSITY HELP TEACHERS DISCOVER NEW MATH EDUCATION FRONTIERS

For the past eight years, the National Air and Space Administration (NASA) has partnered with Radford University for the NASA Institute for High School Mathematics. Funded by a Math Science Partnership (MSP) grant from the Virginia Department of Education, the institute allows 25 secondary math teachers to visit and learn from education specialists and engineers at NASA Langley Research Center in Hampton. Representing Radford University at this Institute are Dr. Agida Manizade, Professor of Mathematics and a principle investigator for the grant, and Dr. Darryl Corey, Associate Professor and Program Coordinator for the Online Masters in Mathematics Education.



2018 NASA Institute for High School Teachers Participants



Designing a parachute for use with a Mars rover vehicle

The MSP grant is the fuel for this project that helps teachers think about math education differently. “RU NASA Math Institute is an externally funded 2-week institute” stated Dr. Manizade. “It is an amazing experience for our graduate students in Mathematics Education to learn to effectively facilitate their students’ as well as their colleagues’ subject matter knowledge in STEM with a focus on teaching real-world applications of simulation-based mathematics (MODSIM).”

As career fields increasingly move toward science, technology, engineering and mathematics (STEM), students need to approach challenges with new and inventive techniques. Many times, this involves critical thinking and problem solving that utilize skill sets from multiple disciplines. To help these students advance, K-12 educators need opportunities for innovative growth and development. Learning environments can be fully redeveloped through the immersive experiences gained at the institute for participants from partnering school divisions.

For two weeks during the summer, teachers work with a team of NASA scientists, engineers and educational specialists, touring various NASA facilities, attending presentations and collaborating with NASA engineers and education specialists. Content from NASA missions and innovations including elements from the Mars rover project, is used in modeling and simulation activities that take real-world engineering projects and help fine-tune them for use in mathematics lesson plans.

Other activities include the experience of being in a shuttle flight simulator, learning more about how astronauts live and work in space, and how NASA engineers design important elements utilized within missions.

Participants are from across the Commonwealth and bring rich, diverse backgrounds to the program which enhances the experience for all.



Institute participant Lori Henderson with NASA Education Specialists demonstrating an astronaut sleeping bag



Amanda Booth and Victoria Lowery inside a NASA flight simulator

2018 NASA Institute for High School Mathematics participant biographies

Tom Heflin

Metallurgical engineer from The Ohio State University teaching high school level mathematics with the Hampton City School system. MBA from Tennessee Tech and MS in applied statistics from Wright State University. Owner of We Love Kids child development and education center, Kiln Creek, Newport News with wife Gwen.



Tim Smith



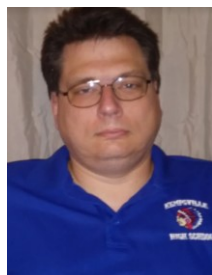
My name is Tim Smith. The dog in the picture is Hermione (yes, named for the Harry Potter character!). I grew up in Roanoke, VA and live and work closely nearby in Salem as a Special Ed teacher at Salem High School, where I do a little bit of everything from co-teaching in Computer Math, and English 10, teaching independently in Resource, Life Skills, to Computer Applications class. I have a B.A. from Roanoke College in Religion and Philosophy, and an Master of Arts in Teaching from Randolph College. In my spare time I am a college cross country and track coach for my alma mater, Roanoke College, and an independent author. I have written two fantasy novels, which are available through Amazon.

Amanda Booth

I have been teaching high school mathematics courses for the last 8 years after graduating from Concord University with my Bachelor's Degree in Education. I am currently pursuing my Master's Degree through Radford University. This fall I will be teaching at Princess Anne Middle School, this will be my first time teaching in a middle school. I love being active and learning new skills, which I try to bring into the classroom through activities, projects, and technology.



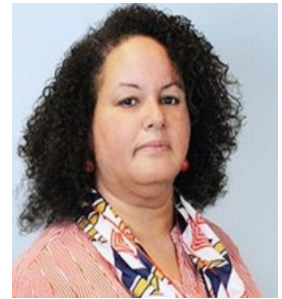
Walter Pianka



I work at Kempsville High School, VA Beach, VA. I teach math from algebra to calculus. I have a Masters in Education in Science from Old Dominion University. My Bachelors are in Chemistry and Forensic Science. I am also the chess coach for the high school.

Ronijean Horton

Ronijean (Roni) Horton teaches mathematics at Henrico High School in Henrico Virginia. She transferred to teaching after a career of over 18 years in the health insurance industry where she most recently worked as a Configuration Analyst II for Virginia Premier Health Plans and formerly worked with Ally Align Healthcare as an Operation Business Analyst. She began her career with Trigon of Virginia (now Anthem) and in her 15 years of tenure with Anthem held many titles. Ronijean earned her B.S. in mathematics (concentration in statistics) from Virginia Commonwealth University during her employment with Anthem Blue Cross and Blue Shield of Virginia. She also holds her certification for business analysis (CBAP). She attended the Teacher Licensure Program at the University of Richmond where she completed all her coursework for her teacher licensure. Ronijean currently tutors mathematics, focusing on supplying free tutoring services to at-need working women.



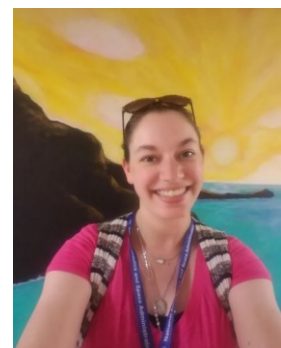
Alison Bish



Alison Bish is an 8th grade math teacher for Roanoke County Public Schools in Roanoke, VA where she has been teaching for 5 years. Prior to teaching 8th grade, she taught various high school classes: Algebra I, Geometry, and Algebra II. Ms. Bish will be starting her 11th year of teaching this upcoming school year. She earned her Bachelor's degree from West Liberty University in Secondary Mathematics Education and her Master's degree from Radford University in Education with a concentration in Mathematics Education. Alison enjoys serving on various curriculum and development assignments for the school district. Her most recent contribution was helping to plan the Math 8 pacing guide to implement the 2009 SOL's for the upcoming 2018-2019 school year. She enjoys applying new activities and technologies within her classroom. Every lesson has room for improvement. Ms. Bish aspires to one day teach at a post-secondary level.

Lori Henderson

Lori Henderson received her BS degree in Mathematics from Averett University in 2014 and also met requirements for her VA teaching license for mathematics 6-12. Prior to this she received her AAS in Liberal Arts with a mathematics focus from Danville Community College. She is currently enrolled in Radford University's MS in Mathematics Education program. Beginning her fifth year of teaching this fall, Henderson has taught grades 8-12 and in her undergrad field and volunteer experiences also has worked with 6th and 7th graders. She has taught in two different divisions, Danville Public Schools and Pittsylvania County Schools, and is still with the latter. This upcoming year will be her third year at Chatham Middle School as an 8th grade teacher teaching Math 8 (Pre-Algebra) and Algebra 1. She has always enjoyed and had a passion for learning mathematics and hopes this is apparent to her students and hopes to pass a tiny bit of it on to them, or to at least make them dislike mathematics a little less for those that come into her classroom not already liking mathematics.



Victoria Lowery



Victoria Lowery is a mathematics teacher at Kempsville High School in Virginia Beach, VA. She completed her education at Old Dominion University, receiving a B.S. in Applied Mathematics in 2013 and a M.S.Ed in Mathematics Education in 2014. Victoria currently teaches Algebra 1 Series and Algebra 2 Trigonometry and is the adviser for the Kempsville chapter of the GSA.

Kristen Heaney

Kristen Heaney graduated from La Salle University with a B.S. in Mathematics and Johns Hopkins University with an M.S. in Education. She began her teaching career through Teach For America in 2013. Her first job in education was as a seventh grade math teacher at LEAP Academy University Charter School in Camden, NJ. She currently teaches a range of math courses at Gloucester High School in Gloucester, VA where she lives with her husband and 2 sons, ages 3 years and 11 months.



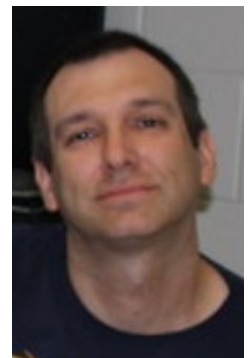
Shayna Hastings



Shayna Hastings is a graduate of Virginia Tech with a B.S. in Mathematics. She teaches Geometry and AFDA at William Fleming High School in Roanoke, Virginia. Prior to teaching, Shayna worked as a data analyst for 12 years. She channels her experience with real-world mathematical applications into learning opportunities for her students. When she is not teaching, she enjoys spending time with her husband Michael and children Xander (10) and Ethan (6).

Richard Marciniac

Richard Marciniac is a Math Teacher at Salem High School in Salem, Virginia. He has been teaching high school students for ten years, with subjects taught including AP Calculus AB and BC, Precalculus, Algebra II, and Physics. He earned his B.S. and M.S. Degrees in Mechanical Engineering at Worcester Polytechnic Institute in Worcester, Massachusetts. Prior to teaching, he worked for 13 years as a mechanical design engineer working predominantly on 3D CAD modeling. He greatly prefers teaching over engineering.



Kenya Whitney



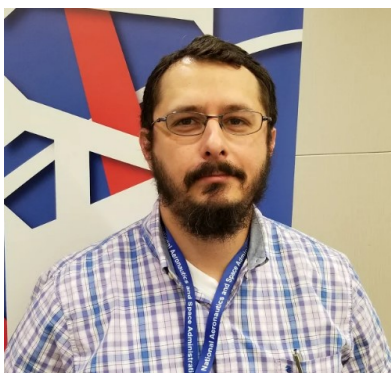
Kenya Whitney is a native of the Hampton Roads area. She currently teaches mathematics at Hampton High School in Hampton, VA. Kenya received her bachelor's degree in Applied Mathematics from Old Dominion University. She doubled minored in Secondary Education and Special Education. She decided to become a teacher when she realized she could communicate mathematics effectively to others. Over the course of 3 years she has taught Geometry, Pre Calculus, and AP Calculus at Hampton High School. Before teaching in public school she did have the opportunity to teach a technology enhanced Algebra course at Tidewater Community College during the 2014-2015 school year. Kenya is currently studying to receive her Masters Degree in Education with a concentration in Mathematics Education from Radford University.

Megan Julien

Megan Julien has a bachelors degree in Applied Mathematics from Old Dominion University. She currently teaches Algebra and Geometry at Syms Middle School in Hampton, Virginia. She has also worked as a C.H.R.O.M.E (Cooperating Hampton Roads Organization for Minorities in Engineering Inc.) sponsor. She hope to inspire the next generation to pursue careers in Stem.



Andrew Stanley



Andrew Stanley is a secondary Mathematics teacher for Wise County Public Schools in Wise, VA where he teaches Algebra 1, Geometry, and AFDA. He received his B.A. in Mathematics from The University of Virginia's College at Wise and attended East Tennessee State University where he studied real analysis, complex analysis, graph theory and differential equations with application to chaos. He was a Combat Engineer with the 2nd Infantry Division in Iraq and spent eight years in the National Guard. He spends his free time doing woodworking and building guitars and playing them. He lives in Dickenson County, VA with his wife Sarah and their dog Rudy.

Mellissa Holzhauser

Mellissa Holzhauser has been a Special Education Math Teacher at Phoebus High School in Hampton, VA since 2016. Prior to that, she taught at Jones Magnet Middle School and began her career as a First Grade Teacher at Chester Community Charter School in Chester, PA. She graduated Summa Cum Laude with a BS in Elementary Education with a minor in Special Education from Neumann University in Aston, PA, where she was awarded the Kelly Vaughn Chase Award for Excellence in Elementary Education. Mellissa lives in Virginia Beach with her partner Robert and their daughter Metta (9) and enjoys spending time at the beach, crafting, and playing and listening to music.



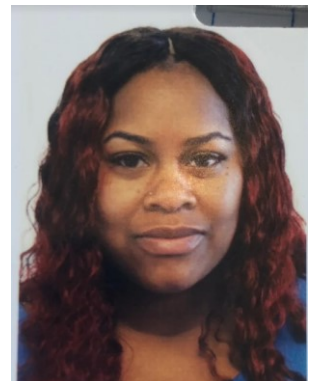
Wilbur Powell



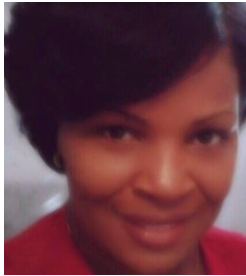
Wilbur Powell is a ten year veteran mathematics teacher in the Hampton Roads area of Virginia. He has 20 years' experience in the education field. His research and educational interest include the retention of highly qualified mathematics teachers through administrative support; and insuring that minority students are receiving fair and equitable education opportunities. Wilbur grew up in Bronx New York. He received his Bachelor of Science degree in Mathematics from Hampton University, Master of Education in Educational Leadership from Regent University, and Ph.D. in Educational Leadership from Old Dominion University. His continuous journey is dedicated to his wife Alicia and son Xavier.

Alexandria Burke

Alexandria Burke is a math teacher in Henrico County Public Schools at Highland Springs High School. She teaches Collaborative 10th grade Geometry and Honors Geometry. Alexandria graduated from Virginia State University with a Bachelors of Science in Mathematics with a minor in Secondary Education. She will be attending George Washington University in the Fall to work on a graduate certificate.



Tessie Armstrong



Tessie received her B.S. degree from East Carolina University with a double major in Psychology and Speech/Hearing Science. She is currently a Special Education Teacher for Hampton City Schools and serves as one of their inclusion teachers for the 6th grade math team at Syms Middle School. She is enrolled in Old Dominion University's Commonwealth Special Education Endorsement (CSEEP) Program to fulfill Virginia's state licensure requirements. She is committed to lifelong learning and teaching. Armstrong's educational philosophy is built upon one of the lower level principles of learning described by the American Educational Psychologist Benjamin Bloom, the affective domain (emotion-domain). In this domain, Bloom stated that a human being's basic needs must first be met before learning can occur. Armstrong is not only concerned about the content that students learn but she is also interested in how students learn. "Children do not care how much you know until they know how much you care." She has a peculiar eye and understanding that allows her to identify challenges that students who have deficits in learning struggle with and is very passionate about meeting their diverse needs.

Carlos Morales

Carlos Morales is the Algebra 1 Lead teacher at Gloucester High School since 2012. He started his teaching career at New Kent High School from 2001 to 2011 before moving to his hometown of Gloucester County and teaching at his Alma Mater. Carlos earned his Bachelors in Middle School Education at Southeastern University in Lakeland, Florida. He earned an Algebra 1 Add-on to his certification through the University of Virginia's College at Wise. He enjoys working with his collaborative teachers and helping students who have struggled all their life with math. Technology is a very important part of his classroom as he uses it on a regular basis through either video lessons, classwork on specific websites, and online research. He has his students take control of their education through the online gradebook, PowerSchool. Students are to check



their grades on a regular basis so to keep up with their grade average. Carlos was born in San Juan, Puerto Rico. He lived there as a little kid and moved to the US when he was 7 years old. Because he was an ESL student for several years, he enjoys helping those students coming into the high school level having the same struggles as he did. At GHS, Carlos is also the Sponsor for the W.E.B. DuBois Honor Society for minority students. He guides them get into their college of choice through mentorship and coaching. He enjoys playing tennis (which he coaches in the spring), gardening, and taking care of his 30 plus chickens and 4 dogs.

U.S. STATE DEPARTMENT SCHOLARSHIP HELPS STUDENT ENGAGE IN RARE EXPERIENCE

Dharmindra Dulal, a Radford University student majoring in Biology, was the recipient of the Benjamin A. Gilman International Scholarship from the U.S. Department of State's Bureau of Educational and Cultural Affairs. The award, which is highly competitive and sought by many deserved students each year, helped fund Dharmindra's participation in the Radford Amazon Research Expedition (RARE) held in Peru over the summer.

"If it wasn't for that scholarship, I wouldn't have gone to Peru" said Dharmindra. "The Peru trip was the best trip I've been to. Along with research of course, we also spent time discovering new things."

The Radford Amazonian Research Expedition (RARE) is a three-week trip to Peru on which students not only conduct original research, but develop new knowledge, build strong relationships with each other and faculty, explore the exotic terrain, and provide service to the residents of the region.



Dharmindra Dulal



RARE participants in a hollow tree examining bats and bugs found there

Dharmindra felt that his work in Peru helped him better understand plants that could be used in the fight against cancer. “In Peru, I collected the plants sample that native consider as ‘medicinal plants’” he recalled. “I brought those samples here and now I’m actively looking over the chemical composition of those plants via ethanoic extraction. I’m interested to see if there’s similarities between the chemicals in those plants and the medicines we have here in US.”

The work could impact many people suffering from various forms of cancer. “I’m focusing mostly on the Anti-cancerous properties of those plants” Dharmindra stated. “Once I extract the active ingredients (chemicals) from those plants, I’ll also use those chemicals and treat pancreatic cancer cells to see how those chemicals can affect the growth of the cells.”



2018 RARE students at a foggy Machu Picchu

The RARE program has gained a reputation as being a life-changing and enriching experience over the past three years which has increased interest from across the University community resulting in students from many majors applying to participate. Cost can be a factor for many students, so scholarships similar to Dharmindra’s are crucial to help students explore this intriguing region.

The U.S. Department of State’s Benjamin A. Gilman International Scholarship enables students to study or intern abroad, thereby gaining skills critical to our national security and economic competitiveness. The program is open to U.S. citizen undergraduate students who are receiving Federal Pell Grant funding at a two-year or four-year college or university.

RARE participants share their experiences at National conferences, regional meetings, and at on-campus events. A review of the activities from summer 2018 will be held on October 3rd in the Center for the Sciences. Participants will be presenting their research at a poster symposium from 4pm-6pm, followed by a roundtable discussion and Q&A session in M73 in the Center for the Sciences.

GEOLOGY DEPARTMENT CONDUCTS UAS REMOTE PILOT TRAINING COURSES

Unmanned Aerial Systems (UAS also known as drones) are becoming ubiquitous across the United States and around the world. This modern marvels are the treasure of hobbyists and enthusiasts, but are quickly becoming valuable to research and industrial uses by facilitating inspection and research that would be difficult using traditional methods.

The Radford University Department of Geology has been at the forefront of UAV and Unmanned Systems deployment and utilization for several years, incorporating the devices into research projects with the Virginia Department of Transportation at Natural Bridge and on the Blue Ridge Mountains Council reservation of the Boy Scouts of America. They have produced a great deal of new useful information that has helped decision makers plan for the future and have a better understanding about their present lay of the land.



A 3-D rendering of Natural Bridge created through the use of UAS research

As a part of this effort, the Department of Geology is facilitating FAA Remote Pilot Training on campus during the fall 2018 semester for unmanned aerial systems (drones).

The FAA (Federal Aviation Administration) has established 3 categories of operations for Unmanned Aerial Systems (UAS).

1. Recreational – Hobbyists flying purely for fun
2. Commercial – Professionals flying as a paid service
3. Public – Government entities, including educational institutions, flying as part of their service to the public

Different rules and regulations pertain to each of these groups. Most importantly, flights for compensation require the presence of an FAA-Certified Remote Pilot in Command. This is described in the Part 107 rules established by the FAA for UAS.

The Part 107 FAA Remote Pilot Certificate is obtained by taking a comprehensive exam at an FAA Testing Facility. The exam covers essentially the same basics as Flight Ground School for anyone wishing to obtain a private pilot's license to fly manned aircraft. In other words, it includes:

1. Airspace Classification & Restrictions
2. Aviation Weather
3. Airport Operations
4. Radio Communications
5. Emergency Procedures
6. Preflight Procedures

The FAA Part 107 Exam DOES NOT cover actual flight skills associated with specific UAS, such as how to take off and land; how to program flights for different kinds of missions; types of sensors; how to download and store data; how to process data; how to generate georeferenced maps and orthophotos; how to create aerial virtual realities; how to extract relevant geologic structure data; how to print 3D models of landscapes; and, much more.

Preparation for the FAA exam is covered in GEOL 481, flight related skills are covered by GEOL 408 – Spatial Data Applications in Geology class.

“The purpose of the FAA Part 107 exam requirement is simply to ensure that anyone operating UAS commercially in the national airspace is familiar with what the manned aircraft are doing and how to interact safely with them in that environment” stated Dr. Skip Watts, Professor of Geology. “BUT, it is required by law for anyone flying UAS for compensation.”



Mr. George Stephenson with one of the Radford University drones

Mr. George Stephenson, faculty member and lab coordinator in the Department of Geology, is the first FAA -certified Pilot-in-Command and is helping students learn the ropes when it comes to drones and government expectations. He explained that there are many responsibilities and privileges that come with certification from the FAA. “I have to be aware of the National Airplane System (NAS) in areas such as airspace classifications and communicate, when appropriate, with Airport Air Traffic Control” he said.

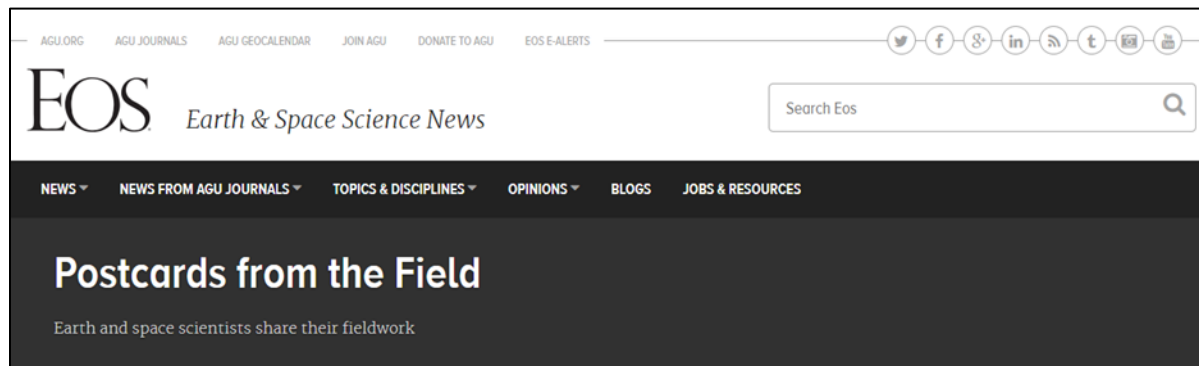
Students participating in this program will have a valuable credential exceeding many of their peers in the Geology world once they have successfully completed the Part 107 Exam.

The courses are continuing through the fall semester.

GEOPHYSICS RESEARCH FEATURED IN NATIONAL DIGITAL MAGAZINE

Radford University has been on top of the world for more than a decade when it comes to Geophysics research. Every two years, Dr. Rhett Herman organizes an expedition to Barrow, Alaska to study polar ice and explore the measurements that can be made to determine the impact of climate on the environment there.

The 2018 visit included a photo of students enjoying a beautiful view of the Aurorae Borealis which was featured in *Earth and Space Science News* the monthly newsletter of the American Geophysical Union.



Dr. Herman shared the story of the trip stating “This photo is from an Arctic Geophysics research class that I teach every other spring. My group was in Utqiagvik (ne’ Barrow), Alaska at the end of February working on a new method for quickly determining the thickness of the sea ice.”

“One night we saw the aurorae were out and put on our gear (it was (-)40F with the wind) to go out and see them” he added. “We got to the beach and this rise at the edge of the shore ice, and the students were just amazed.”



Radford University experiencing the aurorae borealis

“I quietly moved back and put my camera on a 30-second exposure, hoping the students wouldn’t move” recalled Dr. Herman. “I shouldn’t have worried about that since they were utterly mesmerized by this once-in-their-lifetimes event. They were astounded by the beauty of the deadly particle flux from our sun being caught by Earth’s magnetic field, and turned into this amazing, living exhibition of now-benign color.”

Learn more about the AGU and this publication at <https://eos.org/>

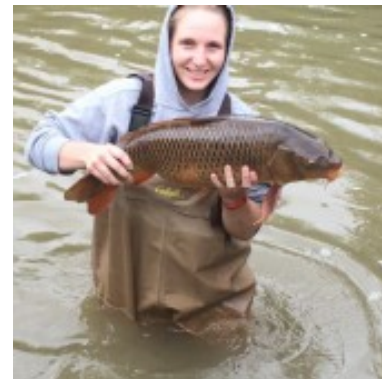
NEW FACULTY JOIN ARTIS COLLEGE – PART 2 OF 2

We continue our visit with new faculty who have joined the Artis College for Fall 2018.

In the Department of Biology:

Dr. Nicole Chodkowski - postdoc, B.S. Biology, Cortland University, SUNY, M.S. Biology, Hofstra University, Ph.D. Environmental Science, Ball State University

Dr. Chodkowski is an aquatic ecologist/parasitologist who studies host-parasite interactions and parasite effects on host nutrient recycling and metabolism in ecosystems. Although she primarily studies snail-trematode systems, she has also worked with other invertebrates, fish, and turtles. As part of her postdoc with QUBES, Nicole helps to plan and facilitate the faculty mentoring networks centered around adapting and sharing open educational resources for teaching quantitative skills.



Dr. Nicole Chodkowski

In the Department of Information Technology:



Mr. Richard Joyce (left) with some of his students testing the mobile VR system they built for an art director for major motion pictures

Mr. Richard Joyce – Special Purpose Faculty, B.S. Computer Science/Mathematics Florida State University, M.S. in Computer Science, Virginia Polytechnic Institute and State University

Mr. Joyce's career includes being a distinguished researcher at AT&T Bell Laboratories - a 1% honor among the research staff, as well as a professor at James Cook University in Australia, Montana Tech of the University of Montana and Landmark College. Mr. Joyce was CEO of a software company which built network management tools for the telecommunications industry, and his company grew to

\$3M annual revenue over 3 years. He later served as the CEO for a Warburg Pincus IT portfolio company with \$20M+ revenue.

Outside his life in Information Technology, Mr. Joyce served four years in the military and is an avid builder having constructed boats and various other fun items. He is also a unicyclist and a juggler.

In the Department of Mathematics and Statistics:

Dr. Miodrag Lovric, Bachelor of Economics, University of Belgrade, Serbia,
M.S. Statistics, University of Belgrade, Serbia,
Doctor of Statistical Sciences, University of Belgrade, Serbia

Dr. Lovric has been a teacher of Statistics at undergraduate, postgraduate, and Ph.D. levels for twenty years in Australia, New Zealand, Brazil, Malaysia, Serbia, Malta and Bosnia. He has coordinated and developed new courses in Australia, Brazil, Serbia and Bosnia, and his research background is in Applied Statistics, Bayesian methods, Computational Statistics, and Data mining.



Dr. Miodrag Lovric

Dr. Lovric was nominated for the 2013 Nobel Peace Prize as well as for the 2014 Nobel Prize. He edited the three volume International Encyclopedia of Statistical Science, and has established the final resolution of the most famous point of divergence between frequentists and Bayesian statisticians – Jeffreys-Lindley paradox – the problem that statisticians have been trying to resolve without success for past 60 years.

In the Department of Physics:



Dr. Sandra Liss (left) teaching students about galaxy classification using the Hubble Deep Field in an outreach program entitled "Dark Skies, Bright Kids"

Dr. Sandra Liss, B.A. Physics, Swarthmore College, M.S. and Ph.D. Astronomy, University of Virginia

Dr. Liss' dissertation research is focused on determining how and where stars form in interacting low-mass galaxies, with the ultimate goal of understanding how large galaxies like our Milky Way are formed.

In recognition for her work at UVA, Dr. Liss has received both department and university-wide teaching awards. She has also been invited to lead teaching workshops for both graduate students and K-12 teachers, and she was selected to be a member of UVA's 'Tomorrow's Professor Today' program.

Dr. Liss is very active with STEM outreach, especially with children, and was an active member of "Dark Skies, Bright Kids", an outreach group based out of UVA's Department of Astronomy focused on promoting science education and literacy for underserved elementary and middle school students in central Virginia.

Dr. Todd Rutkowski – postdoc, B.S. Physics and B.S. Mathematics, The College at Brockport, SUNY, Ph.D. Physics, Binghamton University, SUNY

Dr. Rutkowski's doctoral research studied ultracold atoms and exotic magnetic phases of neutral atoms near absolute zero temperature.

He served as Senior Teaching Assistant for Physics I & II and Teaching Assistant for Quantum Mechanics. He also collaborated with materials science, archaeology, and graphic design faculty to create a new transdisciplinary course entitled "Materials Matter," Volunteer Educator for the Physics Outreach Program (POP).



Dr. Todd Rutkowski

We are fortunate to have these outstanding professionals join the Radford University family.

REALISE TEAM SEEKS PROPOSALS FOR KICKBOX MINIGRANTS

The Radford University REALISE team is seeking proposals for kickbox minigrants. The concept of this project is that faculty and students receive a virtual “box” of resources that kickstart making-themed or project-based learning pilot activities. Awards are available up to \$500.00 and proposals are accepted throughout the year where they are reviewed on a rolling basis.

The Radford University REALISE project stands for REALising Inclusive Science Excellence in Biology, Chemistry, and Physics at Radford University and is driven to build a community of empowered faculty and student learners that is student-ready, welcoming and inclusive. The goal of the program is to deeply engage students in learning through problem-based and project-based pedagogies--through Making. REALISE aims to change faculty and student mindset through developing and implementing engaging and inclusive pedagogies while expanding and cultivating a culture of excellence where all students believe they can succeed.

Dr. Tara Phelps-Durr or Dr. Jeremy Wojdak can work with applicants to clarify grant guidelines and make suggestions that might sharpen your proposal.

GEOSPATIAL SCIENCES STUDY ABROAD CLASS COINCIDES WITH FRANKENSTEIN 200 CELEBRATION

The story of Frankenstein and his "modern prometheus" has captured the imagination of generations of fans worldwide on the screen, the stage, and the written page. 2018 marks the 200th anniversary of the publishing the original novel Frankenstein by Mary Shelley and Radford University is helping celebrate this occasion with a variety of events this fall and a special study abroad program in the Spring of 2019. Students have an exciting opportunity to study the Geography of Frankenstein with Dr. Christine Mitchell.

This tale grew out a dream Ms. Shelley had in June 1816 during the "year without a Summer." It is thought that a volcanic winter event had caused ash to impact the climate for Europe and much of the Northern Hemisphere. Cooler temperatures resulted in food shortages and a massive increase in poverty during that period, providing a dismal setting and dreary conditions that influenced Ms. Shelley.

Study the Geography of Frankenstein

with Dr. Christine Mitchell
June 11—30, 2019
1 credit Spring
3 credits Summer
GEOG 280.2

Travel to Chamonix, France; Geneva, Switzerland & Frankfurt, Germany as you take in the countryside where Mary Shelley wrote her famous novel, Frankenstein.

Why Join This Study Abroad?

- Topics include: Why do we Create? What are our Responsibilities as creators, scientists and more?
- Under what conditions do we Create?
- Hands on Learning at the intersection of multiple disciplines for Sophomores and up. Personalized Projects. Topics include Equity & Inclusion, Science & Technology, Medicine, Human Ingenuity, Philosophy & Politics,
- Explore Mary Shelley's writings through the lens of cultural geography, visiting those places that inspired her such as Mont Blanc, Geneva, Chamonix, Lausanne, the Castle of Chillon, Frankenstein Castle, and more!

Statue of Frankenstein in Geneva at the site of the first murder

Last stop before coming back to the US...Visit the Frankenstein Castle in Darmstadt.

Geneva's Ferris Wheel and Public Ferries to cross the lake

View of Mont Blanc from Voltaire's Chateau

For detailed information about the program, contact Dr. Mitchell at cmitchell11@radford.edu or visit her in 138 Cook Hall

Upon revealing her story to others, she was encouraged to expand her ideas and the work resulted in the novel "Frankenstein and the Modern Prometheus" published January 1, 1818 in three parts. Dr. Mitchell's geography 280 class will travel to France, Switzerland, and Germany to learn more about the countryside where Mary Shelley wrote her novel and to discuss topics related to science and humanity. Students will have the opportunity to explore the cultural geography of Ms. Shelley's work while visiting the locations that inspired her.

Everyone will have the chance to participate in the Frankenstein 200th anniversary celebration through events and programs that will be posted on a special website housed in the Department of Geospatial Science <https://www.radford.edu/content/csat/home/geospatial-science/frankenstein200.html> Events will be updated as they are added to the calendar.