Student Engagement Forum Coordinators

Joe Wirgau, OURS Director
David N. Sallee, OURS Associate Director
Alyssa Thompson, OURS Administrative Assistant

The following individuals and officers are acknowledged for their contributions:

Donna Boyd, Sigma Xi Chapter President
Mary Hagan, Honors College Administrative Assistant
Jason Davis, Honors College Associate Director
Norma Riggins, University Services Event Planning Manager
Samantha Blevins, CITL Instructional Designer and Learning Architect
Charlie Cosmato, CITL Director
Ellen Taylor, Career and Talent Development Career Advisor
Jonathan Mayer, Radford University Printing Services.
Phillip Hardy, Director of Graduate Recruitment
Karen Everett, OURS Graduate Assistant
Zoe Millard, OURS Graduate Assistant
Samantha Doncaster, OURS Executive Student Assistant
Hunter Brandon, OURS Executive Student Assistant

About the Cover Art

The cover art is the creation of Marcus Reed, a third year Graphic Design major at Radford University

Artist Statement:

With more than 1,000 students that attend this university with hopes and dreams of showcasing their talents and knowledge, I had the pleasure of designing this cover art to express just that. Just as anyone else who gets to show theirs, I get to show mine in a different way. A way that will grasp the attention of all viewers who will hold this day in their memories. That is why I designed this cover with a more realistic theme to show that we all can be a part of something greater. Giving the color scheme mesh in this design I wanted the feeling of “We are all in this together.” With how ever long our college journey is we are in this together! Hope you all enjoy.
28th Annual Radford University Student Engagement Forum

SCHEDULE AT A GLANCE

**Tuesday, April 23rd**
- Agida Manizade Keynote Address, HU AUD 11:30am-12:30pm pp 3
- Digitizing History Digital Archives Showcase, Heth 014 9:30am-11:00am pp 4
- Art History Showcase: Censorship and the Arts, Heth 016 2:00pm-3:30pm pp 4
- Anthropological & Biological Sci. Primatology Oral Session, Heth 022 2:00pm-4:00pm pp 4
- History Oral Session: Soviet World War 2, Heth 044 2:30pm-3:30pm pp 5
- Biology Oral Session, CS M073 3:30pm-4:50pm pp 5
- Creative Writing Showcase, Heth 022 4:30pm-5:30pm pp 5
- Interdisciplinary Oral Session, Heth 043 4:30pm-6:30pm pp 6
- Chemistry Oral Session, CS M070 5:00pm-6:20pm pp 6

**Wednesday, April 24th**
- Innovations in Forensic Science Oral Session, Heth 022 8:00am-12:00pm pp 7
- Geospatial Poster Showcase, Kyle 340 2:30pm-3:45pm pp 9
- Interdisciplinary Poster Showcase, Kyle 340 2:30pm-3:45pm pp 10
- Visual Sociology Poster Showcase, Kyle 340 2:30pm-3:45pm pp 11
- Psychology Poster Showcase, Kyle 340 4:00pm-5:15pm pp 12
- Biology Poster Showcase, Kyle 340 5:30pm-6:45pm pp 15
- SciArt Showcase, Kyle 340 5:30pm-6:45pm pp 17
- Accelerated Research Opportunities Poster Showcase, Kyle 340 7:00pm-8:15pm pp 18
- Chemistry Poster Showcase, Kyle 340 7:00pm-8:15pm pp 19
- Highlander Research Rookie Poster Showcase, Kyle 340 7:00pm-8:15pm pp 20
- Nutrition and Dietetics Poster Showcase, Kyle 340 7:00pm-8:15pm pp 21
- Psychology Poster Showcase II, Kyle 340 7:00pm-8:15pm pp 21
- Honors College Capstone Showcase, CS M073 & Lobby 3:00pm-9:00pm pp 22
- Center for Gender Studies Keynote Presentation, Heth 022 3:30pm-4:30pm pp 25
- Center for Gender Studies Showcase, Heth Lobby 4:30pm-5:30pm pp 26
- CITL Digital Media Showcase, McConnell 4th Floor 4:00pm-7:30pm pp 26
- Production Technology Showcase, McGuffey 203 6:00pm-8:00pm pp 30

**Wednesday & Thursday, May 1st-2nd**
- Student Choreography Showcase, Peters Hall B112 7:30pm-9:30pm pp 31
Welcome

It is my great pleasure and privilege to welcome you to the 28th Annual Radford University Student Engagement Forum! The Student Engagement Forum (SEF) showcases the highest levels of academic achievement and creation of new knowledge at Radford University through our campus community’s undergraduate and graduate students’ creative works, scholarship, and research. The displayed work represents a tremendous undertaking, often involving teams of students and faculty, to make progress on answering important questions for society.

Although what you hear and see represents countless hours of work, it is only the tip of the iceberg. Everyone who has worked to create new knowledge knows it is a crooked path filled with dead ends and back-tracking before finally arriving at progress. This progress requires great perseverance, belief, and support. I want to publicly thank all the presenters for staying the course, everyone who sparked or encouraged the needed curiosity to get started, and everyone who said a supporting word or offered a shoulder to lean, or even cry on, when the inevitable challenges of conducting relevant research arose.

The “Forum” as so many refer to this event continues to adapt and grow to meet the needs of campus. It is exciting and humbling to see so many emerging projects and programs on campus represented here. The SciArt Exhibits is the result of the Realizing Inclusive Science Excellence (REALISE) team while the CITL Digital Media Showcase is piloting the university’s digital media displays, which could usher in a whole new era of presentation types. President Hemphill’s vision for the Highlander Research Rookies has become a reality and represents in a microcosm the innovative mindset being embraced by Radford University.

To support these emerging needs requires a team effort and the success of this year’s SEF is due to the preparation and hard work put in by the OURS team. It is an honor for me to work with such a dedicated group whom believe in this event and supporting research in all its forms across campus. Karen Everett and Hunter Brandon have been excellent in managing the poster printing workflow. Zoe Millard jumps in as needed with projects, like the name badges. Alyssa Thompson for her tireless work in the department handling a wide variety of projects while making the office a warm, inviting, and interesting place to work. Dave Sallee has been amazing at keeping up with the myriad of microchanges that occur over the course of putting this event together and has added such a warm, calm, and down to earth touch to our occasional organized chaos. Sam Doncaster is the lone returning member of the team from last year and provides me great perspective on student researchers. Dr. Jeanne Mekolichick has continued to act as transformative mentor to me in this role and her leadership continues to be a driving force for student-faculty research on campus. She is the embodiment of high impact practices making a difference in the life of others. I can honestly say I enjoy coming to the office every day, it is full of intelligent, interesting, caring professionals who find a way to keep working with a smile and laugh even on the most stressful days. I am truly blessed to work with such a team.

Enjoy the celebration of new knowledge and I hope to see you all next year for the 29th version of the Student Engagement Forum!

Dr. Joe Wirgau
Director, Office of Undergraduate Research & Scholarship (OURS)
Keynote Speaker
Dr. Agida Manizade

Being a Researcher in the 21st Century
Hurlburt Auditorium
11:30 am-12:30 pm

Agida G. Manizade is a Professor in the Department of Mathematics and Statistics in the Artis College of Science and Technology at Radford University where she joined the faculty in 2009. Whether she delivers online graduate classes or in-person undergraduate classes, she enthusiastically engages students and helps them to comprehend mathematics and mathematics pedagogy through hands-on activities, visual examples, use of technology, and students’ immersion in original research.

Dr. Manizade’s major scholarly interests include research in mathematics teaching and teacher education, mathematics teachers’ knowledge, and use of technology in the mathematics classroom. Award-winning faculty, the Editor-In-Chief of the Virginia Mathematics Teacher (VMT) journal, she received the 2018 Outstanding Publication Award from the National Council of Teachers of Mathematics for the journal, was recognized as a 2019 Outstanding Faculty Award Recipient by the State Council of Higher Education for Virginia, the Distinguished Creative Scholar by RU Foundation in 2017, received Million Dollar Circle award in 2014 and Artis Outstanding Faculty Award for Scholarship and Service in 2013, and was awarded more than $2.5 million in external grant funding.

Dr. Manizade is widely published in national and international academic outlets including, but not limited to, Educational Studies in Mathematics, Zentralblatt für Didaktik der Mathematik (ZDM) The International Journal on Mathematics Education, Education Sciences, Mathematics Teacher, International Perspectives on the Teaching and Learning of Geometry in Secondary Schools, and International Perspectives on Teaching and Learning Mathematics with Virtual Manipulatives. She has published more than 25 articles and presented at more than 75 professional conferences.

In addition, Manizade served as a Founding Director and is currently a co-Director of the Secondary Mathematics Professional Development Center. She also served as a Founder and Board President for a non-profit corporation, Radford Child Development Inc., which develops and supports high-quality child development programs.

She received her bachelor’s degree and master’s degree in mathematics from Baku State University, second master’s degree from The College of William and Mary, and doctorate degree from University of Virginia.
Digitizing History: Digital Archives Showcase  
Heth 014, 9:30-10:45 am
Student Author(s): Amanda Dean, Imani Rose, Trey Vaughan, Lindsey Builta  
Cassidy Leonard, Amber McMillan, Clint Eaton, Pete Troia
Faculty Mentor(s): Sharon Roger Hepburn

Art History Showcase: Censorship and the Arts  
Heth 016, 2:30-3:30 pm
Student Author(s): Brandon Crawford, Chayla Downer, Austin Eva  
Xale Manhertz, Madeline Murchie-Beyma, Marcus Reed  
Jasmine Rivera, Maya Smalls, Christian Torres-Cruz  
Eddie Umana, Jordan Via, Sonia Wu
Faculty Mentor(s): Roann Barris and Carlee Bradberry

Anthropological and Biological Sciences Primatology Oral Session  
Heth 022, 2:00-4:00 pm

2:00 pm  Lemurs In the Rain
Student Author(s) Alexandra Wilson, Justin Wood, Kyle Putman, Matthew Donathan  
Faculty Mentor(s) Cassady Urista

2:15 pm  Dominance hierarchies and territorial boundaries between Lemur catta and Varecia rubra
Student Author(s) Tyler Miller, Jack Williams, David Kleppinger  
Faculty Mentor(s) Cassady Urista

2:30 pm  Grooming and Aggression in One Male Units of Hamadryas Baboons (Papio hamadryas) at the North Carolina Zoo
Student Author(s) Katherine Harris, Aubree Marshall, Jessica Wollmann, Allanah Cross  
Faculty Mentor(s) Cassady Urista

2:45 pm  Aggression and Group Dynamics in Captive Hamadryas Baboons (Papio hamadryas)
Student Author(s) Sadie Friend, Caleb Kipps, Allyssa Ghans, Selena Angel, Julia Yoder  
Faculty Mentor(s) Cassady Urista

3:00 pm  The Effects of Mother-Juvenile Relatedness on Interactions and Proximity
Student Author(s) Kara Keesey, Alexa Stapleton, Josh Howard, Cheyenne McCleese  
Faculty Mentor(s) Cassady Urista

3:15 pm  Correlation Between Blackback Behavior and Group Interactions in Captivity
Student Author(s) Margo Lobins, Camille Hamway, Bryce Kuehn, Sierra Bradley  
Faculty Mentor(s) Cassady Urista

3:30 pm  Affiliative Social Interactions Between Adult & Juvenile Female Chimpanzees
Student Author(s) Amber McMillan, Miracle Davis, Bailey Mitchell, Jacob McCoy  
Faculty Mentor(s) Cassady Urista
Anthropological and Biological Sciences Primatology Oral Session
Heth 022, 2:00-4:00 pm

3:45 pm    Adult and Juvenile Chimpanzee Activity in Arboreal and Terrestrial Environments
Student Author(s) Erin Dimino, Jasemine Brown, Bernice Adjaloko
Faculty Mentor(s) Cassady Urista

History Oral Session: Soviet World War 2
Heth 044, 2:30-3:10 pm

2:30 pm    An Examination Of The Soviet Union During World War II
Student Author(s) Kaitlyn Partanen
Faculty Mentor(s) Suzanne Ament

2:50 pm    The Battle of Kursk 1943: Turning the Tides on the Eastern Front
Student Author(s) Zachary Paul
Faculty Mentor(s) Suzanne Ament

Biology Oral Session
Center for the Sciences M073, 3:30-4:50 pm

3:30 pm    Perspectives and Pollutants: an Interdisciplinary Approach to examining EDCs Impact in Aquatic Environments
Student Author(s) Kristina Wade, Alex Atwood, Abbey Ouellette
Faculty Mentor(s) Christopher Monceaux and Sara O’Brien

3:50 pm    Neutrophil/Lymphocyte Ratio as a Measure of Immune Response in Humans Exposed to Novel Microbiomes
Student Author(s) Aubree Marshall, Haley Mullins
Faculty Mentor(s) Jason Davis and Cassady Urista

4:10 pm    Comparing Survey Methods to Maximize Allegheny Woodrat Occupancy Detection in Virginia, 2017-2018
Student Author(s) Karissa Ellis
Faculty Mentor(s) Karen Powers

4:30 pm    Parental investment in nest defense varies by species and nest stage
Student Author(s): Nolen Miller and Layne DiBuono
Faculty Mentor(s): Sarah Foltz

Creative Writing Showcase
Heth 022, 4:30-5:30 pm

Elsewhere

Student Author(s): Alexander Burnley, Abigail Bailey, Cassidy Shepherd
Karah Davidson, Brandon Moore, Austin Lumpkin

Faculty Mentor(s): Rick Van Noy
**Interdisciplinary Oral Session**  
**Heth 043, 4:30-6:30 pm**

**4:30 pm**  
**FMS Scores Among Brazilian Jiu-jitsu Athletes in Correlation with Rank and Time in Sport**  
Student Author(s) Matthew Brisendine  
Faculty Mentor(s) Melissa Grim, Angela Mickle, David Sallee

**4:50 pm**  
**Influence of Knowledge on Perceived Exertion with Blind Resistance Exercise**  
Student Author(s) Ian Niday  
Faculty Mentor(s) Melissa Grim

**5:10 pm**  
**The Effects of Climate Change on Tourism in the Mid-Atlantic**  
Student Author(s) Allison Brennan and Mary Kate Thornburg  
Faculty Mentor(s) Joshua Carroll

**5:30 pm**  
**Roots with Wings**  
Student Author(s) Amanda Burroughs, Shaylee Hodges, Cora Bland, Sharmaine Ramirez  
Faculty Mentor(s) Melinda Wagner

**5:50 pm**  
**The Oversexualization and Desexualization of Appalachian Women**  
Student Author(s) Amanda Burroughs  
Faculty Mentor(s) Aysha Bodenhamer

**6:10 pm**  
**Movement Matters!**  
Student Author(s) Eliza Green, Jennifer Blake  
Faculty Mentor(s) Stirling Barfield and Kevin Bowers

---

**Chemistry Oral Session**  
**Center for the Sciences M070, 5:00-6:20 pm**

**5:00 pm**  
**Method Development of Phosphite Using Ion Chromatography**  
Student Author(s) Patrick Webb  
Faculty Mentor(s) Cindy Burkhardt

**5:20 pm**  
**Developing A Stimuli Controlled Drug Delivery System For Breast Cancer**  
Student Author(s) Kayla Leatherman and Hannah Pierce  
Faculty Mentor(s) Kristina Stefaniak

**5:40 pm**  
**Preparation of a glycerol-based carbon/iron nanocomposite for the removal of contaminants in aqueous systems.**  
Student Author(s) Justin Daniels  
Faculty Mentor(s) Francis Webster

**6:00 pm**  
**Investigation of an Active Dimeric form of Beta-glucuronidase**  
Student Author(s) Jacob Britton  
Faculty Mentor(s) Kimberly Lane
Innovations in Forensic Science Oral Session
Heth 022, 8:00-11:40 am

8:00 am  
A Validation Study of the huMANid Program for Estimating Ancestry and Sex of Unidentified Prehistoric and Historic Human Remains
Student Author(s) Ashley Dawson
Faculty Mentor(s) Donna Boyd

8:10 am  
The Effects of Diabetes Mellitus on Bone Fracture Susceptibility and Repair: Application to Forensic Abuse Case Evaluations
Student Author(s) Sadie Friend
Faculty Mentor(s) Donna Boyd

8:20 am  
Effect of Repetitive Saw Use on Identifying Tool Mark Characteristics in Bone
Student Author(s) Tyler Miller
Faculty Mentor(s) Donna Boyd

8:30 am  
Sexual Dimorphism of the Supra-orbital Foramen
Student Author(s) Pearl Moore
Faculty Mentor(s) Donna Boyd

8:40 am  
The Influence of Fabric on Sharp Force Trauma Signatures on Bone
Student Author(s) Amy Rogers
Faculty Mentor(s) Donna Boyd

8:50 am  
Metric Assessment of the Patella for Sex Estimation of Unidentified Decedents
Student Author(s) Victoria Cristwell
Faculty Mentor(s) Donna Boyd

9:00 am  
The Effect of Soil Acidity on the Rate of Bone Decomposition
Student Author(s) Cristian Torres-Cruz
Faculty Mentor(s) Donna Boyd

9:10 am  
Legibility of Handwriting Based on Robusticity
Student Author(s) Jessica O'Connor
Faculty Mentor(s) Donna Boyd

9:20 am  
Assessment of Handedness From Measures of Hand Robusticity
Student Author(s) Jessica O'Connor
Faculty Mentor(s) Donna Boyd

9:30 am  
Vegetation Associated with Covert Grave Sites in the Humid Subtropical Climate of Southwest Virginia
Student Author(s) Jack Williams
Faculty Mentor(s) Donna Boyd

9:40 am  
Detection of Covert Human Remains Through Vegetation and Soil Analysis in a Forensic Setting
Student Author(s) Jack Williams
Faculty Mentor(s) Donna Boyd
Innovations in Forensic Science Oral Session
Heth 022, 8:00-11:40 am

9:50 am  Rib Fracture Patterns in Decedents Undergoing High Velocity Blunt Force Impact
Student Author(s) Alexandra Wilson
Faculty Mentor(s) Donna Boyd

10:00 am  Survivability of Fingerprints when Submerged in Fresh Water and Bleach
Student Author(s) Erin Dimino
Faculty Mentor(s) Donna Boyd

10:10 am  The Use of an Alternate Light Source in the Detection and Recovery of Forensic Human Remains
Student Author(s) Tyler Miller
Faculty Mentor(s) Donna Boyd

10:20 am  Quantification of Nicotine in e-Cigarette Cartridges
Student Author(s): Leslie Molina-Arana
Faculty Mentor(s): Kristina Roth Stefaniak and Donna Boyd

10:30 am  Location Accuracy of Bluetooth Apple Watch Devices
Student Author(s) Alexandra Wilson
Faculty Mentor(s) Donna Boyd

10:40 am  A Macroscopic and Microscopic Forensic Atlas of Sharp Force Trauma Defects in Decedents Undergoing Fatal Stabbing
Student Author(s) Tana Vance
Faculty Mentor(s) Donna Boyd

10:50 am  The Effect Chemicals Can Have On Decomposition
Student Author(s) Rachel Parker
Faculty Mentor(s) Donna Boyd

11:00 am  The Effects of Arson-induced Thermal Damage on Fingerprint Evidence
Student Author(s) Samantha Gibson
Faculty Mentor(s) Donna Boyd and Todd Jones

11:10 am  The Relationship Between Childhood Trauma And Criminal Behavior
Student Author(s) Kara Johnson
Faculty Mentor(s) Donna Boyd

11:20 am  The Effects of Crime Scene Fluids and Other Substances on Forensic Hair Analysis
Student Author(s) Brenna Lowe
Faculty Mentor(s) Donna Boyd

11:30 am  Causes of Death in Fatal Cases of Child Abuse
Student Author(s) Reneisha Leeper
Faculty Mentor(s) Donna Boyd
Geospatial Science Poster Showcase: Kyle Hall 340, 2:30-3:45 pm

Spatial Patterns of Cancer Rates and Radio Frequency Towers
Student Author(s): Nathan Blankenship
Faculty Mentor(s): Andrew Foy

Modeling Red Spruce Habitat in the Southern Appalachian Region
Student Author(s): Thomas Callahan
Faculty Mentor(s): Richard Roth and R. Stockton Maxwell

An Analysis Comparing Didactic Teaching and Virtual Reality Learning in Physical Geography
Student Author(s): Christopher Carter
Faculty Mentor(s): Andrew Foy

Sea Level Rise Impact On Wetlands In Virginia Beach
Student Author(s): Zachary Coverstone
Faculty Mentor(s): Rick Roth and Andrew Foy

A Comparison of Risk Terrain Modeling and Deep Learning in Crime Prediction
Student Author(s): Matt Crichton
Faculty Mentor(s): Andrew Foy and Caleb Bradberry

Ocean Acidification and Analysis of Coral Reef Bleaching
Student Author(s): Alden Dunn
Faculty Mentor(s): Richard Roth

A Comparison Of Indoor 3D Modeling Techniques
Student Author(s): John Edmond
Faculty Mentor(s): Andrew Foy and R. Stockton Maxwell

Solar Power Adoption by Institutions of Higher Education in Virginia
Student Author(s): Megan Flint
Faculty Mentor(s): Richard Roth

How Distance is Determined Impacts Classification of Food Desert Status
Student Author(s): Megan Flint
Faculty Mentor(s): Richard Roth

Crime Analysis In Roanoke, VA
Student Author(s): Colton Grant
Faculty Mentor(s): Richard Roth

Back Bay's Declining Submerged Aquatic Grasses: A 30 Year Timeline Using Remote Sensing
Student Author(s): Conner Knight
Faculty Mentor(s): Andrew Foy

Using satellite imagery to assess forest fragmentation throughout Giles County caused by construction of the Mountain Valley Pipeline
Student Author(s): Andrew Kopjanski
Faculty Mentor(s): Rick Roth and Andrew Foy
Geospatial Science Poster Showcase: Kyle Hall 340, 2:30-3:45 pm

Analyzing Contamination Plume of Local Brownfield Cleanup Site Over 5 Year Interval
Student Author(s): Olivia Ligon
Faculty Mentor(s): Andrew Foy and Richard Roth

Macroinvertebrates in First-Order Streams in Peru and Southwest Virginia: A Comparison
Student Author(s): Austin Lumpkin
Faculty Mentor(s): Richard Roth, Jamie Lau, Stockton Maxwell

Comparing Climate-Growth Relationships in Eastern Hemlock Before and After a Climate Regime Shift
Student Author(s): Brittany Rinaldi
Faculty Mentor(s): Richard Roth and Stockton Maxwell

Predicting the Potential Future Spread of Lythrum salicaria Using GIS and Remote Sensing in the Allegheny Highlands, Virginia
Student Author(s): Robert Slusser
Faculty Mentor(s): Andrew Foy and Richard Roth

Using Satellite Imagery from Landsat 8 to Record the Percentage of Land Cover Change at Mountain Top Mining Sites in Eastern Kentucky, near the Daniel Boone National Forest
Student Author(s): Olivia Swientisky
Faculty Mentor(s): Andrew Foy and Charles Manyara

Human Detection Software in Comparison to Human Analyst Object Detection Ability with Orthorectified Mosaic Imagery in RGB and IR Spectral Images
Student Author(s): Albert Walters III
Faculty Mentor(s): Andrew Foy

Interdisciplinary Poster Showcase: Kyle Hall 340, 2:30-3:45 pm

Testing the Use of Unmanned Aerial Systems (UAS) to Extract Geologic Structure Data from Unstable Rock Slopes in Southwest Virginia for VDOT Studies
Student Author(s): Samantha Farmer, Amanda Thomason, Courtney Wilson
Faculty Mentor(s): Chester Watts and George Stephenson

Mapping the West View Cemetery in Radford, Virginia and Identifying Potential Unmarked Graves Using Unmanned Aerial Systems (UASs)
Student Author(s): James Young and Michaela May
Faculty Mentor(s): Jake Fox, Chester Watts, Andrew Foy

Anti-Bullying Programs are Ineffective
Student Author(s): Adrian Ghee
Faculty Mentor(s): Michele Ren and Mikaela Kelley

From Pressroom to Classroom: The Path of a Secondary Social Studies Textbook in Virginia
Student Author(s): Alyssa Thompson
Faculty Mentor(s): Kristan Morrison
Visual Sociology Poster Showcase: Kyle Hall 340, 2:30-3:45 pm

**Restart- Sociology Club**  
Student Author(s): Russel Alvarez  
Faculty Mentor(s): Roby Page

**An Amusing Perspective**  
Student Author(s): Cora Bland  
Faculty Mentor(s): Roby Page

**A Photo Ethnography Of The Tartan**  
Student Author(s): Chad Boxley  
Faculty Mentor(s): Roby Page

**Men's Club Lacrosse: A Cultural Description**  
Student Author(s): Ke'Von Brooks  
Faculty Mentor(s): Roby Page

**The Day Cycle of Quickway**  
Student Author(s): Haley Courtney  
Faculty Mentor(s): Edwin Page

**Behind Closed Doors.**  
Student Author(s): Timothy James  
Faculty Mentor(s): Edwin Page

**Hoard House**  
Student Author(s): Molly Mattox  
Faculty Mentor(s): Roby Page

**A Case Study On The Radford University Student's Daily Life**  
Student Author(s): Casey McClelland  
Faculty Mentor(s): Roby Page

**The Legendary Gaming Association**  
Student Author(s): TyJuan Moulden  
Faculty Mentor(s): Roby Page

**Ordinary or Significant?**  
Student Author(s): Sharmaine Ramirez  
Faculty Mentor(s): Roby Page

**Social Engagement in the Night Life**  
Student Author(s): Shaniah Stephens  
Faculty Mentor(s): Edwin Roby Page

**Who is Mike Blevins?**  
Student Author(s): Spencer Thompson  
Faculty Mentor(s): Roby Page
Visual Sociology Poster Showcase: Kyle Hall 340, 2:30-3:45 pm

The Life of a Future Mechanical Engineer
Student Author(s): Danielle Vogt
Faculty Mentor(s): Roby Page

Visual Sociology
Student Author(s): Montrell Waters
Faculty Mentor(s): Roby Page

Life At Starbucks
Student Author(s): Jasmine Zepeda-Argueta
Faculty Mentor(s): Roby Page

Psychology Poster Showcase: Kyle Hall 340, 4:00-5:15 pm

NFL Fantasy Selection Using Machine Learning Techniques
Student Author(s): Hau Tuang, Robert Wellman, Mitchell Camerano
Faculty Mentor(s): Benjamin Biermeier-Hanson

Effects of Social Housing Conditions on Hippocampal Neurogenesis in Male Long-Evans Rats
Student Author(s): Carline Bien-Aime, Gabriel Medley, Camille Hamway, Eilish Bailey
Faculty Mentor(s): Dayna Hayes

Tropomyosin Receptor Kinase B and Attentional Deficits
Student Author(s): Lauren Buynack
Faculty Mentor(s): Catherine Middlebrooks

Thinstagram: Instagram Usage, Body Satisfaction, and Disordered Eating Attitudes
Student Author(s): Mandy DeCarlo
Faculty Mentor(s): Catherine Middlebrooks

Identification with Fictional Characters
Student Author(s): Salena Diaz
Faculty Mentor(s): Nicole Iannone

Effects of Monoracial Media on Biracial Individuals
Student Author(s): Salena Diaz
Faculty Mentor(s): Catherine Middlebrooks

On Cognitive Bias, The Basis of Mental Heuristics
Student Author(s): Tyler Grossheim
Faculty Mentor(s): Ruth Riding-Malon

The Effects of Office Layout and Employee Ranking on Job Satisfaction
Student Author(s): Charlotte Lackey
Faculty Mentor(s): Catherine Middlebrooks

The Effects Of Social Media On Productivity
Student Author(s): Celie McKinley
Faculty Mentor(s): Catherine Middlebrooks
Psychology Poster Showcase: Kyle Hall 340, 4:00-5:15 pm

Student Author(s): Lesli Taylor
Faculty Mentor(s): Ruth Riding-Malon

Learning from Tests: Testing as a Study Tool
Student Author(s): Lesli Taylor
Faculty Mentor(s): Kathleen Arnold

The Impact of Team Versus Individual Sports on the Frequency of Organizational Citizenship Behaviors: An Investigation of Stress Levels
Student Author(s): Kasey Warren
Faculty Mentor(s): Catherine Middlebrooks

On the origin of psychology: how the work of Darwin influenced the field
Student Author(s): Phil Schulte
Faculty Mentor(s): Ruth Riding-Malon

Environmental Impacts on Pour Drinking Decisions
Student Author(s): Hailee Strobel, Emily Harrell, Wesley Davis
Faculty Mentor(s): Jeff Aspelmeier

Who Is Hooking Up At Radford University?
Student Author(s): Hanan Ouchene, Sam Smith, Alya Al-Ahmed
Faculty Mentor(s): Jeff Aspelmeier

Texting While You Drive, Is It Worth It?
Student Author(s): Jermisha Woolridge, Mariah Chamberlain, Joseline Flores
Faculty Mentor(s): Jeff Aspelmeier

Body Image and Media
Student Author(s): Sydney Sasser, Andrea Ruiz, Morgan Hilton
Faculty Mentor(s): Pei-Chun Tsai

In the game of thrones, you win or you die; But is that really all?
Student Author(s): Jackson Dierberg, Joe Dellosso, Caitlin Martin, Kayla Bryant
Faculty Mentor(s): Pei-Chun Tsai

The Effects of Chlordiazepoxide (CDP) and Withdrawal on Female Long-Evans Rats' Memory and Anxiety.
Student Author(s): Lindsay Thompson, Chelsey Fleming, Kari Mayberry, Salena Diaz
Faculty Mentor(s): Pamela Jackson

Transracial Barriers in Adoption
Student Author(s): Katie Jennelle, Tiffany Conner, Isabel Nolasco, Laneeka Banks
Faculty Mentor(s): Pei-Chun Tsai

Does self-esteem moderate pluralistic ignorance for abusive relationships?
Student Author(s): Brittany Elias, Brittany McLean, Claudia Raful
Faculty Mentor(s): Jeffery Aspelmeier
Psychology Poster Showcase: Kyle Hall 340, 4:00-5:15 pm

Diversity in Hollywood: Linking the African American Race to Caucasian
Student Author(s): Wynter Young, Lexi Lewis, Britney Reynolds, Samantha Lary
Faculty Mentor(s): Pei-Chun Tsai

The Importance of Diversity in American Universities
Student Author(s): Christopher Trussell, Tybreoin Green, Austin White, Nate Dobos
Faculty Mentor(s): Pei-Chun Tsai

Reality Versus Media: Is What We See An Accurate Representation?
Student Author(s): Sarai Maguire-Hernandez, Michael Watts, Kristine Stuart
Faculty Mentor(s): Pei-Chun Tsai

College Student Stress, Basic Psychological Needs satisfaction, Academic Encouragement, and Well-Being
Student Author(s): Katty Mancia, Dominic Sierra, Iris Traylor, Jasmine Young
Faculty Mentor(s): Pei-Chun Tsai

Cultural Differences in Mental Health
Student Author(s): Crishauna Rolack, Amanda Fithian, Jeannie Utt
Faculty Mentor(s): Pei-Chun Tsai

Do Political Attitudes Moderate Pluralistic Ignorance of Xenophobia on Radford University’s Campus?
Student Author(s): Katty Mancia, Kylie Duncan, Zoe Young
Faculty Mentor(s): Jeffery Aspelmeier

Smoking, Vaping, and College
Student Author(s): Christian Cassella-Chandler and Rachel Millard
Faculty Mentor(s): Jeff Aspelmeier

Correlates of the Fear of Missing Out
Student Author(s): Hanna Hatfield
Faculty Mentor(s): Nicole Iannone

Learning from Closed-Book Essays: An Intervention Study
Student Author(s): Lauren Wright and Brody Dawson
Faculty Mentor(s): Kathleen Arnold

The Views of Ageism in College Students
Student Author(s): Marissa Yow
Faculty Mentor(s): Jenessa Steele

The Life and Death of Structuralism: The Edward B. Titchener Biography
Student Author(s): Paul Pohto
Faculty Mentor(s): Ruth Riding-Malon
Biology Poster Showcase: Kyle Hall 340, 5:30-6:45 pm

Impacts of the invasive Emerald Ash Borer on Ash Trees in Southwest Virginia Forests
Student Author(s): Stephen Ruppert, Brian Ditch, Adam Allen
Faculty Mentor(s): Christine Small

Bird-window Collisions at Radford University: Light Pollution as a Source of Disorientation for Birds
Student Author(s): Anastasia Mejia, Kyvia Luna, Taylor Brown
Faculty Mentor(s): Karen Powers

Creating CRISPR/Cas Mutants in Arabidopsis
Student Author(s): Tayler Lewis, Megan Calvanese, Angie Leon
Faculty Mentor(s): Tara Phelps-Durr

Tibial Torsion and Patterns of Metatarsal Robusticity in Humans: An Osteometric Study
Student Author(s): McKenzie Schrank, Jessica Wollmann, Aubree Marshall
Faculty Mentor(s): Laura Gruss

Tibial Torsion and Pressures in the Feet During Walking and Standing in Humans: an Experimental Study
Student Author(s): Jessica Wollmann, Aubree Marshall, McKenzie Schrank, Celinna Haber
Faculty Mentor(s): Laura Gruss

A new method for obtaining tibial torsion in living humans
Student Author(s): Aubree Marshall, McKenzie Schrank, Jessica Wollmann
Faculty Mentor(s): Laura Gruss

Lichens of Wildwood Park
Student Author(s): Richard Brooks
Faculty Mentor(s): Gary Cote

Deer Spotlighting Surveys at the Radford Army Ammunition Plant: Impacts on Harvest Data
Student Author(s): Jasemine Brown
Faculty Mentor(s): Karen Powers

Alkaloid Extraction And Identification From Dieffenbachia seguine
Student Author(s): Cole Faulkner
Faculty Mentor(s): Gary Cote and Cindy Burkhardt

Relating Bird-window Collisions at Radford University to Wind and Precipitation Metrics
Student Author(s): Miranda Flack
Faculty Mentor(s): Karen Powers

An Internship at the Science Museum of Western Virginia: Investigating Freshwater Fish Schooling and Aggressive Behavior
Student Author(s): Miranda Flack
Faculty Mentor(s): Karen Powers

Internship at Science Museum of Western Virginia: Trouble-Shooting Captive Care of Poison-Arrow Frogs
Student Author(s): Stanford Horbacz
Faculty Mentor(s): Karen Powers
**Biology Poster Showcase: Kyle Hall 340, 5:30-6:45 pm**

**Interning at PrideRock Wildlife Refuge: Learning to be a caretaker**
Student Author(s): Meghan Howard  
Faculty Mentor(s): Karen Powers

**Calcium Oxalate Crystals in the Leaf Buds**
Student Author(s): Samantha Jones-Carlyle  
Faculty Mentor(s): Gary Cote

**Does the Time of Day Have An Impact on the Number of Bird-Window Collisions at Radford University?**
Student Author(s): Lindsey Lee and Lauren Burroughs  
Faculty Mentor(s): Karen Powers

**Analyzing Relationships of Bird Window Collisions at Radford University to Landscaped Vegetation and Anthropogenic Perches**
Student Author(s): Diana Nickle  
Faculty Mentor(s): Karen Powers

**Internship with the U.S. Forest Service: Research on Sensitive Species**
Student Author(s): Kayla Ogden  
Faculty Mentor(s): Karen Powers

**COI Barcoding in bird carcasses from building collisions on Radford University Campus**
Student Author(s): Claudia Paniagua-Ugarte  
Faculty Mentor(s): Karen Powers and Bob Sheehy

**Examining Window-collision Locations on Radford University’s Campus: Migratory versus Resident Bird Species**
Student Author(s): Hannah Reed and Zoe Krajcirovic  
Faculty Mentor(s): Karen Powers

**Radford University Bird-Window Collisions: Impacts of Window Area, Aspect, and Building Height**
Student Author(s): Laura Soares  
Faculty Mentor(s): Karen Powers

**Exploration of Inflammatory Response in Alcohol-Treated Rodents**
Student Author(s): Alicia Wood  
Faculty Mentor(s): Joyce Caughron and Dayna Hayes

**Identification of signals that regulate CYP4F gene expression**
Student Author(s): Sabrena Hodnett, Harvest Farrer, Emma LaBarr, Ashley Franklin  
Faculty Mentor(s): Peter Christmas

**Scale of integration from the alpha-proteobacterium into mitochondrial genome**
Student Author(s): A.L. Hiett, M.K. Barney, P. D. Garuskol  
Faculty Mentor(s): Bob Sheehy and Joyce Caughron

**Analyzing genomic differences between multi-host and single-host bacteriophages**
Student Author(s): C. Fox, M.R. Gonzalez, A. Roberts  
Faculty Mentor(s): Bob Sheehy and Joyce Caughron
Comparison of Tail-Related Proteins in EA Cluster Phages  
Student Author(s): J. Gibson-Cromer, K. Hodges, J. Wyllie  
Faculty Mentor(s): Bob Sheehy and Joyce Caughron

A proposed approach for identifying function for genes where the function is unknown  
Student Author(s): C. Krysa and L. Jones  
Faculty Mentor(s): Bob Sheehy and Joyce Caughron

Development of a Non-invasive DNA Collection technique for Species Determination in Amphibians  
Student Author(s): E. Hansen  
Faculty Mentor(s): Bob Sheehy

Impacts of the Mountain Valley Pipeline: the relationship between aquatic insect richness and riffle morphology or chemistry in Mill Creek, Roanoke County, Virginia  
Student Author(s): Donya Mohamed and Samantha Houck  
Faculty Mentor(s): Jamie Lau and Kristina Stefaniak

Cadaver Brains: A Comparative Analysis to Aid in Post-Mortem Identification of Morphological and Pathological Structures Key to Alzheimer's Diagnosis  
Student Author(s): Claire Dundon  
Faculty Mentor(s): Laura Gruss and Matthew Close

Developmental effects on Fenoxycarb and Royal Jelly in Lobster Roaches (Nauphoeta Cinera)  
Student Author(s): Kelly Carter and Emmaleigh Mondell  
Faculty Mentor(s): Jason Davis
Accelerated Research Opportunities Showcase: Kyle Hall 340, 7:00-8:15 pm

Before Vs After Music Time With Speech Therapy
Student Author(s): Kayla Snyder
Faculty Mentor(s): Patricia Winter

Project Peaceline
Student Author(s): Kaylee Sturgis and Melissa McKeldin
Faculty Mentor(s): Allison K. Wisecup

Exploring EDCs and their Impact on the Environment
Student Author(s): Abigail Ouellette
Faculty Mentor(s): Sara O'Brien

IgA is an Indicator of Stress in the Human Body
Student Author(s): Ian Rolston
Faculty Mentor(s): Sarah Redmond

Examining the Effectiveness of the Brita Filter to Remove Organic Pollutants From Aqueous Environments
Student Author(s): Haley Collins
Faculty Mentor(s): Amy Balija

Analysis of Ligand Binding in B-Glucuronidase
Student Author(s): Rayshell Torres-Santana and Samantha Powell
Faculty Mentor(s): Kimberly Lane

UAV-Assisted Outcrop Study of the Hampton and Erwin Formations in SW VA
Student Author(s): Zachary Dolan
Faculty Mentor(s): Beth McClellan

Dendrochronology in the Greater Yellowstone Ecosystem
Student Author(s): Nicholas Francis and Rosemary Lavelle
Faculty Mentor(s): Stockton Maxwell

Type 2 Diabetes Management Through a High Fat, Low Carbohydrate Diet
Student Author(s): Mary Brown, Liv Morka, Taylor Nugent
Faculty Mentor(s): Wendy Downey

Cosmic Building Blocks: Understanding the Dust in Dwarf Galaxies
Student Author(s): Krislyn Sourivong
Faculty Mentor(s): Sandra Liss

Archaeology & Pseudoarchaeology in Video Games
Student Author(s): Katherine Young
Faculty Mentor(s): David Anderson

Optimal Group Testing for Two-Stage Hierarchical Pool Testing
Student Author(s): Sam Altman Farrell
Faculty Mentor(s): Md Shamim Sarker
Chemistry Poster Showcase: Kyle Hall 340, 7:00-8:15 pm

Student Author(s): Katherine M. Mankowski
Faculty Mentor(s): Francis Webster

Multi-Functional Coatings Formed From The Electrostatic Self-Assembly Of Glycerol-Based Carbon Nanoparticles And Moringa Oleifera Cationic Protein (MOCP)
Student Author(s): Carlie Perry
Faculty Mentor(s): Francis Webster

Analysis of Mutations in Human B-glucuronidase and its Major Role in Mucopolysaccharidosis Type VII
Student Author(s): Haley Pflanzer
Faculty Mentor(s): Kimberly Lane

Determining Relative Interaction Strengths in Thin Films of DBA Grown on a Single Crystal Metal
Student Author(s): Cory Ashworth
Faculty Mentor(s): Shawn Huston and Timothy Fuhrer

Nobel Prize Winning Science Deniers: Albert Einstein
Student Author(s): Samantha Powell
Faculty Mentor(s): Timothy Fuhrer

Analysis of Ligand Binding in Mutated B-Glucuronidase
Student Author(s): Samantha Powell and Rayshell Torres-Santana
Faculty Mentor(s): Kimberly Lane

Quantifying Bacterial Degradation Of Pollutants Via HPLC
Student Author(s): Emma Kange, Maria Gonzalez Bermudez, River Fiedler
Faculty Mentor(s): Sarah Kennedy

Analysis of the Light Induced Degradation of Nitrocellulose Lacquer Coatings using Reflection Absorption Spectroscopy
Student Author(s): Taylor W Pryor
Faculty Mentor(s): Francis Webster

Efficient Synthesis of Novel Four-Armed Cores for Dendrimers and Other Branched Macromolecules
Student Author(s): Cooper Burgin and William Nape
Faculty Mentor(s): Amy Balija

Temperature Dependent Stabilites of Various Isomers of C32 and C36 Endohedral Metallofullerenes
Student Author(s): Sarah Church
Faculty Mentor(s): Tim Fuhrer

Investigating the Expression and Purification of T. thermophilus laccase.
Student Author(s): Katelyn Johnston and Kateri Schoettinger
Faculty Mentor(s): Sarah Kennedy
Chemistry Poster Showcase: Kyle Hall 340, 7:00-8:15 pm

**Synthesis and Modification of Pyrazoline Architectures**
Student Author(s): Twisha Mistry  
Faculty Mentor(s): Amy Balija

**Self-assembly of Functionalized Carbon Nanoparticles on Polyurethane Foam for Low-cost Water Purification**
Student Author(s): Tamera Riffle  
Faculty Mentor(s): Francis Webster

**Synthesis and Electrochemical Characterization of Fullerene Derivatized Fulvenes**
Student Author(s): Kateri Schoettinger and Michael Wieland  
Faculty Mentor(s): Timothy Fuhrer and Anna Curtis

**Operationally simple approach to indole derivatives from 2-alkenylanilines utilizing an oxidation-transannulation-elimination sequence**
Student Author(s): Rachel M. Chapman and Matthew B. Griffey  
Faculty Mentor(s): Christopher J. Monceaux

Highlander Research Rookie Poster Showcase: Kyle Hall 340, 7:00-8:15 pm

**The Mountain Valley Pipeline's Impact on The Water Chemistry of Surrounding Streams**
Student Author(s): Makenzie Bennington  
Faculty Mentor(s): Kristina Roth Stefaniak and Jamie Lau

**Student Retention Analysis: The Making of a Successful Highlander**
Student Author(s): Nalani Story  
Faculty Mentor(s): Caleb Bradberry

**Good Fats? The use of a Low Carb, High Fat Diet for Type 2 Diabetes and Weight Loss**
Student Author(s): Mary Brown, Liv Morka, Taylor Nugent  
Faculty Mentor(s): Wendy Downey

**Being Out Of The Loop On Gender Stereotypes**
Student Author(s): Jillian Rauch  
Faculty Mentor(s): Nicole Iannone

**Poverty's Influence on Academic Achievement in Children**
Student Author(s): Sarah Ward  
Faculty Mentor(s): Wendy Eckenrod-Green

**To Apply, or Not to Apply? When Following a Suggested Timeline Doesn't Work**
Student Author(s): Melissa Wirchansky  
Faculty Mentor(s): Matthew Grimes

**Identifying Cyclicity and Provenance through Thin Section Petrology of Shallow Marine Deposits in the Indo-Burman Ranges**
Student Author(s): Emily Whately  
Faculty Mentor(s): Dr. Ryan Sincavage
Highlander Research Rookie Poster Showcase: Kyle Hall 340, 7:00-8:15 pm

Content Analysis of University Mental Health Websites
Student Author(s): Jose Bermudez
Faculty Mentor(s): Kevin Bowers

Stand-Up Radford: A Pilot Study to Increase Workplace Physical Activity and Improve Overall Health
Student Author(s): Madison Gaminde
Faculty Mentor(s): Kathleen Poole

The effects of river water on antibiotic resistance in *Escherichia coli* and *Staphylococcus aureus*
Student Author(s): Peter Neville
Faculty Mentor(s): Joyce Caughron

Perceived risk can increase an individual's likeliness to own a firearm
Student Author(s) Samantha Doncaster
Faculty Mentor(s) Nicole Hendrix

The Impact of Professional Development Initiatives on Music Teachers’ Perceptions of Self-efficacy and Student Learning in Nepal: Years 3-4
Student Author(s) Bryan Dowd
Faculty Mentor(s) Jennifer McDonel

*Please note: Kristina Wade (page 5) and Tanya Vance (page 8) are also Highlander Research Rookies. Ms. Wade and Ms. Vance are performing oral presentations in the Biology and Innovations in Forensic Science Oral Sessions, respectively.*

Nutrition and Dietetics Poster Showcase: Kyle Hall 340, 7:00 pm - 8:15 pm

Improving Iron Bioavailability and Sensory Characteristics of a Soy Flour-Based Cookie with Addition of Wheat and Spices
Student Author(s): Madison Smith and Allison McBride
Faculty Mentor(s): Laurie Bianchi and Kristina Stefaniak

Assessment of taste discrimination and knowledge of organic foods and genetically modified foods
Student Author(s): Rachel Barron
Faculty Mentor(s): Laurie Bianchi and Anna Devito

Psychology Poster Showcase II: Kyle Hall 340, 7:00 pm - 8:15 pm

Biography and Important Contributions of Wilhelm Wundt
Student Author(s): Rebecca Assadnia
Faculty Mentor(s): Ruth Riding-Malon

Controversial Science: The History, Consequences, and Future Trajectory of Phrenology
Student Author(s): Rachel Scott
Faculty Mentor(s): Ruth Riding-Malon

Plato and the Birth of Psychology
Student Author(s): Alex Latham
Faculty Mentor(s): Ruth Riding-Malon
Honors Capstone Showcase: Oral Sessions
Center for the Sciences M073

3:00 pm  Barriers and Areas for Improvement to Exclusive Breastfeeding Practices During Hospital Stay
Student Author(s): Morgan Bishop
Faculty Mentor(s): Dr. Marjorie Young

3:15 pm  Leishmaniasis Through the Lens of the Host
Student Author(s): McKenzie Schrank
Faculty Mentor(s): Dr. Jason Davis

3:30 pm  Stressors and Challenges of Caregivers of Children with Disabilities
Student Author(s): Jenna von Schlichting
Faculty Mentor(s): Dr. James Newman

3:45 pm  A Comparison of the Push-in and Pull-out Models of School Based Speech Language Pathology and Implications for Student Success
Student Author(s): Katelyn Shubert
Faculty Mentor(s): Dr. Corey Cassidy

4:00 pm  Predicting Healthcare Costs in Rural and Urban Patients
Student Author(s): Jonathan Charnock
Faculty Mentor(s): Dr. Caleb Bradberry

4:15 pm  How to train your fish, and potentially prevent PTSD in the process
Student Author(s): Hannah Stewart
Faculty Mentor(s): Dr. Dayna Hayes & Dr. Sara O'Brien

4:30 pm  Variance of Mutual Funds in Different Economic Environments
Student Author(s): Thomas Truluck
Faculty Mentor(s): Dr. Abhay Kaushik

4:45 pm  The Meaning of Movement: Movement as a Main Method of Criticism in a Dance Choreography
Student Author(s): Fiona O'Brien
Faculty Mentor(s): Dr. Ji-Eun Lee, Dr. Tim Channell

Honors Capstone Showcase: Poster Sessions
Center for the Sciences Ground Floor Lobby 5:00-5:45 pm

Giving Deserved Recognition: Meriam Rejewski and the Polish Codebreakers Contributions to Breaking Enigma
Student Author(s): Cole Bankert
Faculty Mentor(s): Dr. Neil Sigmon

Developmental Impact of the Environment of Poverty on Children
Student Author(s): Alicia Barnett
Faculty Mentor(s): Maude (Molly) Hunter-Sloan
Honors Capstone Showcase: Poster Sessions
Center for the Sciences Ground Floor Lobby 5:00-5:45 pm

Prehabilitation: An Examination in Anterior Cruciate Ligament Injury Prevention
Student Author(s): Jane Everett
Faculty Mentor(s): Dr. Michael Moore

Risks, Rewards and Impacts of Resource Officers within a School Setting
Student Author(s): Taylan Gursoy
Faculty Mentor(s): Dr. Jeffrey Chase

The Turing-Welchman Bombe: The Key for the Downfall of the Third Reich
Student Author(s): Rebecca Journigan
Faculty Mentor(s): Dr. Neil Sigmon

The impacts of the veterinary office and being separated from their owners on stress in canines
Student Author(s): Lindsey Lee
Faculty Mentor(s): Dr. Sarah Redmond

Trends of Opioid Prescribing Practices Among U.S. Physicians
Student Author(s): Cameron Livingstone
Faculty Mentor(s): Dr. Pamela Frasier

Implementation of Interactive 3-D Models in Geosciences for Online and Distance Learning
Student Author(s): Michaela May
Faculty Mentor(s): Dr. Parvinder Sethi

A Comprehensive Analysis of SMIPO Funds
Student Author(s): Matthew Neville
Faculty Mentor(s): Dr. Michael Chatham

Mindfulness in the Elementary Classroom
Student Author(s): Kelsey Peters
Faculty Mentor(s): Dr. Kristan Morrison

Peaked Interest: The Economic Cycle's Impact on the Public's Interest in Hunger
Student Author(s): Jessie Quesenberry
Faculty Mentor(s): Dr. Danylle Kunkel

Preventing Type 2 Diabetes among Adolescents
Student Author(s): Jillian Rush
Faculty Mentor(s): Dr. Christi Callahan

Differences in Substance Abuse among High School Athletes and Non-athletes
Student Author(s): Chase Thompson
Faculty Mentor(s): Dr. David Sallee

Eating Disorders
Student Author(s): Ashley Timbrook
Faculty Mentor(s): Dr. Melissa Grim
Honors Capstone Showcase: Poster Sessions
Center for the Sciences Ground Floor Lobby 5:00-5:45 pm

Recurrent Bilateral Chronic Exertional Compartment Syndrome: A Case Study
Student Author(s): Robyn Toran
Faculty Mentor(s): Dr. Michael Moore

A Pedagogical Project on the Masticatory Biomechanics P. boisei
Student Author(s): Jessica Wollmann
Faculty Mentor(s): Dr. Laura Gruss

Learning from Closed-Book Essays: An Intervention Study
Student Author(s): Lauren Wright
Faculty Mentor(s): Dr. Kathleen Arnold

Grieving Globally: Grieving Processes Around the World and Nursing Implications
Student Author(s): Alyssa Zilka
Faculty Mentor(s): Dr. Sharla Cooper

Cadaver Brains: A Comparative Analysis to Aide in Post-Mortem Identification of Morphological and Pathological Structures Key to Alzheimer's Diagnosis
Student Author(s): Claire Dundon
Faculty Mentor(s): Dr. Laura Gruss

Honors Capstone Showcase: Oral Sessions
Center for the Sciences M073

6:00 pm Heart of a Highlander: a Look at Radford Basketball
Student Author(s): Blake Holmes
Faculty Mentor(s): Dr. Kevin Bowers

6:15 pm Implementing Montessori Methods while Following the Virginia Standards of Learning
Student Author(s): Emily Stinson
Faculty Mentor(s): Dr. Kristan Morrison

6:30 pm Analyzing Target Acquisition Data from Subjects in Different Age Groups Using Different Input Devices
Student Author(s): James Mitchell
Faculty Mentor(s): Dr. Joe Chase

6:45 pm African American History in Dante, VA
Student Author(s): Julia Kell,
Faculty Mentor(s): Dr. Theresa Burriss

7:00 pm A Critique of Robert Cathcart's Movements: Confrontation as Rhetorical Form
Student Author(s): Sarah Derrick
Faculty Mentor(s): Dr. Sandra French
Honors Capstone Showcase: Oral Sessions
Center for the Sciences M073

7:15 pm    Blockchain Technology and Its Impacts on the Business World
Student Author(s): Michaela Ingle
Faculty Mentor(s): Dr. Felix Amenkhienan

7:30 pm    Spread of Microorganisms on Stethoscopes
Student Author(s): Leigha Spangler,
Faculty Mentor(s): Ann Hutchens and Dr. Joyce Caughron

7:45 pm    Truancy, dropout and otvational interviewing: A survey of educators
Student Author(s): Rebecca Radinsky
Faculty Mentor(s): Dr. Kerry Vandergrift

8:00 pm    The Legacy of Josephine Baker: Performer and Activist
Student Author(s): Fiona Scruggs
Faculty Mentor(s): Prof. Deborah McLaughlin

8:15 pm    Second Language Acquisition After the Critical Period
Student Author(s): Rachel Berry
Faculty Mentor(s): Dr. Boyoung Park

8:30 pm    Pop-Developmentalism: The Political Economy of Consumer Activism and Sweatshop Labor
Student Author(s): Rachel Sharrett
Faculty Mentor(s): Dr. Tay Tan

Center for Gender Studies Symposium Keynote Presentation
Heth 022, 3:30-4:30 pm

Dr. Iuliia Hoban

Age and Gender Dimensions of Migrant Detention in the European Union

The presentation will explore the issue of the detention of migrants in the European Union (EU) through the lenses of age and gender. Vulnerable populations, such as children, who encumber on the migration routes, are often at higher risk of marginalization and human rights violations. While there is a robust EU legal regime to provide unaccompanied minors, who face detention, with multiple levels of protection, there is a difference in the implementation of legal principles across the EU member-states. The presentation examines some possible explanations of this variation such as public opinion, geographic and political specificities within individual member states. The types of persecution and challenges that children face on the migration journeys are also gendered in nature. The presentation discusses some similarities and differences experiences that boys and girls face through their migration journeys. I conclude with a consideration of possible policy recommendation on the treatment of unaccompanied minors in detention.
Gender Studies Poster Showcase: Heth Lobby, 4:30-5:30 pm

Blazing a Trail: The History of Women in the Field of Psychology  
Student Author(s): Amanda Chappell  
Faculty Mentor(s): Ruth Riding-Malon

The Effects of Experimenter Gender on Gender Role Attitudes in an Online Survey  
Student Author(s): Amanda Chappell  
Faculty Mentor(s): Jeff Willner

Exploring Age Differences in Responses to Disrespect Among Young and Older Adults  
Student Author(s): Amanda Chappell and Rachel Scott  
Faculty Mentor(s): Jenessa Steele

Are lead Female characters really leading?  
Student Author(s): Ashley Ralston, Devon Johnston, Petre McSwain, Giovanni Ruiz  
Faculty Mentor(s): Pei-Chun Tsai

Sexism in Bob's Burgers  
Student Author(s): Emma Maddex, Chloe Deel, Carter Noell, Maddie Rogers  
Faculty Mentor(s): Pei-Chun Tsai

An Investigation of Discrimination Against Pregnant Women in the Job Application Process  
Student Author(s): Isabella Barker  
Faculty Mentor(s): Catherine Middlebrooks

Predicting Academic Success of First Semester College Women  
Student Author(s): Hanna Hatfield and Kelsey Frank  
Faculty Mentor(s): Jeff Aspelmeier, Ann Elliott, Anja Whittington

Racism Sexism on hip hop and rap lyrics  
Student Author(s): Barbara Hill  
Faculty Mentor(s): Pei-Chun Tsai

Has Gender Influenced the Choice of College Majors Over Time?  
Student Author(s): Brandi Edwards, Sophia Kelly, Jasmine Young, Nicole Ramirez  
Faculty Mentor(s): Pei-Chun Tsai

Race/Gender and Financial Status in Disney Throughout the Years  
Student Author(s): Alexandria Spakes, Kylie Hendrickson  
Faculty Mentor(s): Pei-Chun Tsai

CITL Digital Media Showcase: McConnell 4th floor, 4:00-4:30 pm

A Digital Portfolio of Seasonality and Salamander Research in Appalachia  
Student Author(s): Emily Hansen  
Faculty Mentor(s): Christine Small

Undergraduate Biology Research: A Digital Portfolio  
Student Author(s) Erin Dimino  
Faculty Mentor(s) Christine Small
CITL Digital Media Showcase: McConnell 4th floor, 4:00-4:30 pm

From the Tennessee Valley to the New River Valley: A Research Portfolio
Student Author(s) Raegan Forbes
Faculty Mentor(s) Christine Small

A Young Ecologist: A Digital Portfolio Story
Student Author(s) Conner Philson
Faculty Mentor(s) Christine Small

The Ecosystem of Wildlife and Plants Using Camera traps and Data Analysis Sheet.
Student Author(s) Abigail Nickasen
Faculty Mentor(s) Christine Small

The onset of spring in Wildwood park and Wildlife monitoring of Selu Conservancy
Student Author(s) Beram Taib
Faculty Mentor(s) Christine Small

Research Experience Investigating Seasonal Changes in Wildlife, Plants and Salamanders in Southwest Virginia
Student Author(s) Stephanie Martin
Faculty Mentor(s) Christine Small

A Research Portfolio from Streams to Forests
Student Author(s) Angie Holmes
Faculty Mentor(s) Christine Small

Digital portfolio of my experiences and research on the effects of seasonal changes on animals, salamanders and plants in Southwest VA.
Student Author(s) Randi Robertson
Faculty Mentor(s) Christine Small

Appalachian Conservation Research Projects
Student Author(s) Adam Allen
Faculty Mentor(s) Christine Small

Digital portfolio of my research monitoring seasonal changes at Radford University
Student Author(s) Donya Mohamed
Faculty Mentor(s) Christine Small

CITL Digital Media Showcase: McConnell 4th floor, 4:40-5:10 pm

A digital portfolio devised to present my undergraduate research experiences at Radford University.
Student Author(s) Samantha Jones-Carlyle
Faculty Mentor(s) Christine Small

My Digital Research Portfolio: Ecology Projects
Student Author(s) Stephen Ruppert
Faculty Mentor(s) Christine Small
CITL Digital Media Showcase: McConnell 4th floor, 4:40-5:10 pm

The novel research biologist: a look at seasonal changes
Student Author(s) Selena Angel
Faculty Mentor(s) Christine Small

Digital Portfolio: My experience monitoring plants and wildlife in southwest Virginia
Student Author(s) Miranda Dimas
Faculty Mentor(s) Christine Small

Monitoring seasonal changes in wildlife, plants, and salamanders in Southwest Virginia
Student Author(s) Hailey McArdle
Faculty Mentor(s) Christine Small

An Aspiring Wildlife Biologist: A Digital Portfolio
Student Author(s) Amanda McClelland
Faculty Mentor(s) Christine Small

Research Portfolio
Student Author(s) Angie Leon
Faculty Mentor(s) Christine Small

The Life of an Aspiring Ecologist
Student Author(s) Marnesha Jones
Faculty Mentor(s) Christine Small

Environmental Research Experiences in Ecology: Seasonal Changes and Aquatic Predator-Prey interactions
Student Author(s) Nick Murff
Faculty Mentor(s) Christine Small

Wildlife Studies
Student Author(s) Jasemine Morgan Brown
Faculty Mentor(s) Christine Small

Radford Phenology Basics: Tylis Johnson
Student Author(s) Tylis Johnson
Faculty Mentor(s) Christine Small

Citizen Leader ePortfolio
Student Author(s) Jennifer Cole

CITL Digital Media Showcase: McConnell 4th floor, 5:20-6:50 pm

Mainstreet
Student Author(s) Meg Robertson
Faculty Mentor(s) None listed

Impacts of the Mountain Valley Pipeline: the relationship between aquatic insect richness and riffle morphology or chemistry in Mill Creek, Roanoke County, Virginia
Student Author(s) Donya Mohamed and Samantha Houck
Faculty Mentor(s) Jamie Lau and Kristina Stefaniak
CITL Digital Media Showcase: McConnell 4th floor, 5:20-6:50 pm

Production 1200 Downsizing Review
Student Author(s) Trae Price and Shakis Moore
Faculty Mentor(s) None listed

This I Believe Essay: Oh How the Fireflies Glow
Student Author(s) Nicole Jones
Faculty Mentor(s) Ariel Firebaugh

This I Believe Essay: The Story of the Flamboyan Tree
Student Author(s) Emilie Colon
Faculty Mentor(s) Ariel Firebaugh

This I Believe Essay: Curiosity
Student Author(s) AJ Greene
Faculty Mentor(s) Ariel Firebaugh

This I Believe Essay: From the Creeks of Appalachia: One Man's Perspective
Student Author(s) Cole Faulkner
Faculty Mentor(s) Ariel Firebaugh

CITL Digital Media Showcase: McConnell 4th floor, 7:00-7:30 pm

Boys Who Killed Bloodsuckers
Student Author(s) Meg Robertson
Faculty Mentor(s) None listed

Sunset Series
Student Author(s) Eilish Bailey
Faculty Mentor(s) None listed

Citizen Leader ePortfolio
Student Author(s) Sam Popilarski

Citizen Leader ePortfolio
Student Author(s) Madison Smith

Citizen Leader ePortfolio
Student Author(s) Fiona Scruggs

Citizen Leader ePortfolio
Student Author(s) Claire Dundon

Digital Media Showcase News Package
Student Author(s) Shakis Moore

Adventures in Reading: Utilizing YouTube as an Educational Tool
Student Author(s): Samantha Lett, Alexis Epperly and Alyssa Foster
Faculty Mentor(s): Boyoung Park
### Production Technology Showcase: McGuffey 203 6:00-8:00 pm

Mentors: West Bowers, Matthew Turner, Michael J. Meindl, Joseph Staniunas

<table>
<thead>
<tr>
<th>Event</th>
<th>Mentors/Student Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCEAP Thrift Store</td>
<td>Tyler Rudd</td>
</tr>
<tr>
<td>One More Victory Royale</td>
<td>Justin Neagle</td>
</tr>
<tr>
<td>We Are New River Radio</td>
<td>Logan Brown</td>
</tr>
<tr>
<td>GOTE: Come Out and Get You Some</td>
<td>Luke Hayes</td>
</tr>
<tr>
<td>Main Street Grant</td>
<td>John Steinbach and Jennifer Blake</td>
</tr>
<tr>
<td>Interstate-81</td>
<td>Tanis Enos and Camden Lazenby</td>
</tr>
<tr>
<td>Flamingo Fleet</td>
<td>Hunter Hogsten</td>
</tr>
<tr>
<td>Live Music Announcing</td>
<td>Cora Rasnake</td>
</tr>
<tr>
<td>Why Radford?</td>
<td>Patrick Deets</td>
</tr>
</tbody>
</table>
Student Choreography Showcase

An evening of exploratory dance, Student Choreography Showcase highlights the voices of emerging choreographers enrolled in the Department of Dance’s Choreographic Studies II class. Free admission.

Out of Focus
Student Author(s): Sarah Danaceau
Faculty Mentor(s): Deborah McLaughlin

(dis)connected
Student Author(s): Sarah Danaceau
Faculty Mentor(s): Deborah McLaughlin

Appartato
Student Author(s): Tabitha Kirk
Faculty Mentor(s): Deborah McLaughlin

not yet titled
Student Author(s): Tabitha Kirk
Faculty Mentor(s): Deborah McLaughlin

A vicious habit
Student Author(s) Keagan Vickers
Faculty Mentor(s) Deborah McLaughlin

Barrier
Student Author(s) Cassie Williams
Faculty Mentor(s) Deborah McLaughlin

Daddy’s Little Girl
Student Author(s) Lauren Murphy
Faculty Mentor(s) Deborah McLaughlin
Student Choreography Showcase

May 1 & 2, 2019
7:30 pm
Albig Studio Theatre
Peters Hall Room B112
Free Admission
For Information: (540) 831-6850

RADFORD UNIVERSITY
Department of Dance