

**APRIL 23-24 2019**

**28TH ANNUAL**

**STUDENT**

**ENGAGEMENT**

**FORUM**

**RADFORD UNIVERSITY**

*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

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Ellen Taylor, Career and Talent Development Career Advisor

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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.

## 28<sup>th</sup> Annual Radford University Student Engagement Forum

### SCHEDULE AT A GLANCE

#### **Tuesday, April 23<sup>rd</sup>**

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

#### **Wednesday, April 24<sup>th</sup>**

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

#### **Wednesday & Thursday, May 1<sup>st</sup>-2<sup>nd</sup>**

Student Choreography Showcase	Peters Hall B112	7:30 pm-9:30 pm	pp 31
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## 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 21<sup>st</sup> 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 Keeseey, 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, Jasmine 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  
Karrah 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 JiuJitsu 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): Roby 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****The Puzzle of Learning: A Historical Review of the Influence of Edward L. Thorndike**

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, Kyla 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): Jasmine 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. Garskol

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



**Biology Poster Showcase: Kyle Hall 340, 5:30-6:45 pm****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

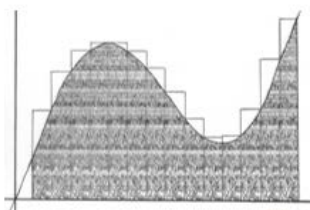
**Developmental effects on Fenoxycarb and Royal Jelly in Lobster Roaches (*Nauphoeta cinerea*)**

Student Author(s): Kelly Carter and Emmaleigh Mondell

Faculty Mentor(s): Jason Davis

**SCIART SHOWCASE**

Kyle Hall 340, 5:30 pm - 6:45 pm



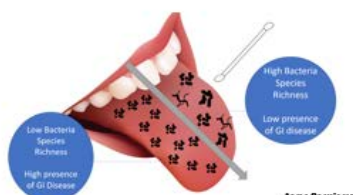
Diana McDavid



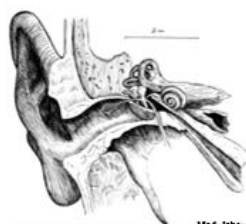
Sydney Lobina



Mary Brown



Aaron Sammis



Mark Jabourian



**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****Photo-degradation of Organic Contaminants Using a Novel Nano-carbon / TiO<sub>2</sub> Layer-by-layer Composite**

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 Pflanzner

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 Stabilities of Various Isomers of C<sub>32</sub> and C<sub>36</sub> 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 Tana Vance (page 8) are also Highlander Reserch 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 4<sup>th</sup> 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 4<sup>th</sup> 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 4<sup>th</sup> 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 4<sup>th</sup> 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) Jasmine 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 4<sup>th</sup> 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 4<sup>th</sup> 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 Flamboyant 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 4<sup>th</sup> 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

**MCEAP Thrift Store**

Student Author(s): Tyler Rudd

**One More Victory Royale**

Student Author(s): Justin Neagle

**We Are New River Radio**

Student Author(s): Logan Brown

**GOTE: Come Out and Get You Some**

Student Author(s): Luke Hayes

**Main Street Grant**

Student Author(s): John Steinbach and Jennifer Blake

**Interstate-81**

Student Author(s): Tanis Enos and Camden Lazenby

**Flamingo Fleet**

Student Author(s): Hunter Hogsten

**Live Music Announcing**

Student Author(s): Cora Rasnake

**Why Radford?**

Student Author(s): Patrick Deets

## 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

**Notes:**

# *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





# RADFORD UNIVERSITY

Office of Undergraduate Research and Scholarship