

Welcome: It is my pleasure to welcome you to the 7th Winter Creative Activities & Research Days at Radford University. Each semester, we celebrate the close of term by showcasing students who, through curiosity and determination, have created new knowledge while working closely with faculty and peers to address questions that matter to society.

We extend sincere thanks to the faculty who provide these distinctive opportunities for students to gain work-based learning experience. The challenges of tackling ambiguous questions and uncertain outcomes transform students well beyond disciplinary skill building. At Radford, we know that students engaged in research are more likely to be retained, to graduate, and to be employed within six months of earning their degrees.

And it is not easy to create new knowledge. As Ralph Waldo Emerson observed, "The voyage of the best ship is a zigzag line of a hundred tacks. See the line from a sufficient distance, and it straightens itself to the average tendency." Growth comes from confronting results that challenge our expectations, from methods that fail before they succeed, and from balancing research deadlines with exams and the many demands of daily life.

So a huge thank you to everyone: faculty, staff, relatives, friends, and research teammates who offered an empathetic "tack" to keep the research ship moving toward its goals. You are invaluable to every student's research victory. We hope you find the students presenting this week as inspiring as we do in OURS and look forward to seeing the results of that inspiration in the years ahead.

-With Highlander Pride, Dr. Joe Wirgau, Director of the Office of Undergraduate Research

Winter CARD Coordinators in OURS

Joe Wirgau, Director

Jennifer McDonel, Associate Director

Raven Lee, Administrative Assistant

Hanna Tavassoli, Graduate Assistant

Krystal Drummond, Executive Student Assistant

Haley Gilley, Executive Student Assistant

Lily McConkey, Executive Student Assistant

Lilly Porter, Executive Student Assistant

The Following Individuals are Acknowledged for Their Contributions:

Hannah Benz, Undergraduate Program Coordinator, Department of Psychology

Michaela Clark, Assistant Professor, Department of Psychology

Beth Johnson, Director, Library Operations

Jonathan Mayer, Manager, Printing Services

About the Cover Art: The cover art is a creation of Lily McConkey, a senior Psychology major at Radford University.

The cover art is meant to evoke the stillness and sharp beauty of winter. The piece features hand-drawn, frost-covered leaves resting on black ice, accented with pinecones and snow to create contrast and depth. Through the color palette, I sought to capture the clear, quiet resilience that winter represents.

As my first and final cover design for this event before graduation, Winter Card reflects both a culmination of my artistic growth and a personal farewell. I approached the work with care and intention, layering intricate textures and details to create an atmosphere that mirrors the event's spirit of reflection and renewal.



Winter CARD Schedule at a Glance:**Tuesday December 2nd****Heth 014 & 022***Psychology & Gender Research Symposium*

5:30 – 6:45 pm

Wednesday December 3rd**McConnell Library, Ross Gallery***Musical Exploration of the Oud*

9:00 – 9:30 am

Perspectives on Global Travel and Tourism 1

11:00 – 11:50 am

Perspectives on Global Travel and Tourism 2

12:00 – 12:50 pm

Interdisciplinary Session 1

3:00 – 3:50 pm

Interdisciplinary Session 2

4:00 – 4:50 pm

Thursday December 4th**Center for the Sciences, Planetarium***Cosmic Catastrophes: How the Universe is Trying to Kill You*

2:00 – 3:15 pm

Thursday December 4th: Poster Sessions**Artis Center Performance Hub***Interdisciplinary Poster Session 1*

11:00 am – 12:15 pm

Interdisciplinary Poster Session 2

12:30 – 1:45 pm

Interdisciplinary Poster Session 3

2:00 – 3:15 pm

Interdisciplinary Poster Session 4

3:30 – 4:45 pm

Interdisciplinary Poster Session 5

5:00 – 6:15 pm

Expectations for Participating in Winter CARD:

The Honor Pledge at Radford University not only applies to classes, it encompasses all events including Winter CARD. Each student at Radford University has made a commitment to support and uphold the Honor Pledge without compromise or exception.

Radford University is committed to fostering an environment that is safe and brave, pluralistic and inclusive, and conducive to academic inquiry, free expression, student engagement, and student success. An academic community exists based on shared values and principles. At the University, student members of the community are expected to uphold and abide by these values and principles that form the basis of the Standards of Student Conduct. These Standards are embodied within a set of core values that include integrity, fairness, respect, trust, freedom, community, and responsibility.

When it comes to complex academic and public problems, informed people often hold differing views, and a diversity of perspectives can lead to individual and collective growth. Disagreement should be thoughtful and respectful, and criticism of another's view should be coupled with evident and empathetic care for the person who holds it. Please think of our various learning environments as opportunities for building community, including the presentations at Winter CARD, and consider your actions and words appropriately.



**Psychology & Gender Research Symposium
5:30 – 6:45 pm Heth 014 & 022**

The Student Role Identification Scale (SRIS)

Aidan Bell, Grace Kinsky, Eliza Bain, Rory Calabria
Faculty Mentor(s): Young-Kook Moon

Love in the Modern Era: Does Time Change Romance?

Alexis G. Horton, Erin K. Frederick, Shyheim O. Woods
Faculty Mentor(s): Dr. Yong-Kook Moon

The Analysis of Microplastic Absorption in Rats

Carly T. Dixon, Erin K. Frederick
Faculty Mentor(s): Dayna M Hayes, Sara O'Brien

Establishing an Operant Conditioning Paradigm to Investigate Working Memory in Rats

Erin K. Frederick, Davis K. Smith-Corben, Mackenzie Treadway, Carly T. Dixon,
Caroline G. Hogie, Lucas Walker
Faculty Mentor(s): Dayna M. Hayes, Matthew L. Eckard, Sara O'Brien

Driving Blind: Investigating Pluralistic Ignorance and Drunk Driving Attitudes

Jackson Meador, Sela Beatty, Olivia Carrico
Faculty Mentor(s): Jeff Aspelmeier

Enhancing Transgender Youth Well-Being: Understanding and Providing Resources in Educational Settings

Jena Nelson
Faculty Mentor(s): Teresa Ristow

Applied Research in Dementia: The Challenges and Impact of Spaced-Retrieval Therapy (SRT)

Julia Miller, Rachel Ekanem
Faculty Mentor(s): Jenessa Steele, Michaela Clark

Does Adversity Predict Empathy and Compassion in the Lab?

Kaity Woodby, Lauren Zevnik, Grace Kinsky, Ivy Phillips, Paige Dickerhoof
Faculty Mentor(s): Dan Berry

How Creativity is Found in the Brain

Kalyn Pinner
Faculty Mentor(s): Kathleen Arnold



**Psychology & Gender Research Symposium
5:30 – 6:45 pm Heth 014 & 022**

Does Openness Affect Pluralistic Ignorance and Mental Health Rx?

Katherine Falvey, Kelleigh Messick, Selam Hadis
Faculty Mentor(s): Jeff Aspelmeier

Mirror, Mirror On Wall: The Illusion Body Image Norms

Kayla Kyle, Samantha Smith, Madison Altizer
Faculty Mentor(s): Jeff Aspelmeier

The Development of the Virtual Team Cohesion Scale

Margaret Stephan, Emma Bryant, Elise Ambrose
Faculty Mentor(s): Young-Kook Moom

Sexism is not Sexy: Sexism, Pluralistic Ignorance, and Political Ideology

Mya Thomas, Ashleigh Merritt, Kaitlyn Woodby
Faculty Mentor(s): Jeff Aspelmeier

When We Think Others Don't Care: Pluralistic Ignorance in Attitudes Toward Academic Cheating

Nicholas Beach, Mackenzie Salter, Mason Wyatt
Faculty Mentor(s): Jeff Aspelmeier

When AI Does the Generating: The Generation Effect in Academia's Generative AI Era

Olivia Weller, Eliza Bain, Alex Peralta Vera, Madison Ashley
Faculty Mentor(s): Kathleen Arnold

Compassion in Action: Serving as a Crisis Intervention Intern at the Women's Resource Center

Sophie Crawford
Faculty Mentor(s): Hannah Benz

Listen to Your Heart: An Assessment of Heart Rate Variability

Alexis G. Horton, Shyheim O. Woods
Faculty Mentor(s): Thomas Pierce

Vengeful Mask: Does Social Desirability Moderate Pluralistic Ignorance within Revenge Attitudes?

Lucas Walker, Shakira Rector
Faculty Mentor(s): Jeff Aspelmeier



Musical Exploration of the Oud
9:00–9:30 am McConnell Library, Ross Gallery

An Exploration of the Oud

Wilson Purdue

Faculty Mentor(s): Robert Trent

Perspectives on Global Travel and Tourism 1 & 2
11:00 am–12:50 pm McConnell Library, Ross Gallery

A Trip to Scotland

Makenna Adan

Faculty Mentor(s): Anita Zatori

Travel and Tourism to Tahiti

Liam Barron

Faculty Mentor(s): Anita Zatori

Travel and Tourism to Japan

Ethan Buhyoff

Faculty Mentor(s): Anita Zatori

Tourism and Travel in Spain

Berkeley Hines

Faculty Mentor(s): Anita Zatori

Travel and Tourism in Cadiz, Barcelona, and Madrid, Spain

Miah Leadbetter

Faculty Mentor(s): Anita Zatori

Travel and Tourism to England

Neal Thompson

Faculty Mentor(s): Anita Zatori

Travel and Tourism to France

Victoria Wood

Faculty Mentor(s): Anita Zatori



Interdisciplinary Oral Session 1
3:00–3:50 pm McConnell Library, Ross Gallery

The Discovery of the Lunar Phases

Thomas Ashcraft
Faculty Mentor(s): Marco Brizzolara

Evaluation of Microbes Cultured from Worm Castings as Fertilizers

Natalie Jimenez
Faculty Mentor(s): Sarah Redmond

Interdisciplinary Oral Session 2
4:00–4:50 pm McConnell Library, Ross Gallery

A Survey of the De La Burde African Art Collection

Jessica McCann
Faculty Mentor(s): Carlee Bradbury

Using Electrical Resistivity to Locate and Image Subterranean Karst Features

Victoria Dean
Faculty Mentor(s): Hannah Krueger



Cosmic Catastrophes: How the Universe is Trying to Kill You
2:00–3:15 pm Center for the Sciences Planetarium

Snacking on the Sun: A Hypothetical Black Hole Scenario

Andariel Martin, Dona Panayotova, Kaylei Greer

Faculty Mentor(s): Sandy Liss

Swallowed by the Stars

Anya Bednar, Sara Johnson

Faculty Mentor(s): Sandy Liss

Aliens and Pop Culture: How Current Depictions of Aliens Arose

Baily Bramlet, Jacky Turman, John Godfrey

Faculty Mentor(s): Sandy Liss

They're Here, They're Evolving: The Cosmic Catastrophe of First Contact

Chloe Lane, Kara Davis

Faculty Mentor(s): Sandy Liss

How Space Weather Can Affect Our World

Elijah Tegenkamp, Amber Hunt

Faculty Mentor(s): Sandy Liss

Milky Way Atmospheres and Their Cosmic Affects

Meghan Smith, Camryn Miller

Faculty Mentor(s): Sandy Liss

The Life of a Black Hole

Miranda Epley

Faculty Mentor(s): Sandy Liss

Galactic Hopscotch

Zander Forbes, Shelby Beverly

Faculty Mentor(s): Sandy Liss

Interdisciplinary Poster Session 1
11:00 am–12:15 pm Artis Center Performance Hub

Hunting for the Hampshire Formation: Re-defining the Marginal Marine to Terrestrial Transition of Devonian and Mississippian Sedimentary Rocks in the Central Appalachians

Gordon Alexander

Faculty Mentor(s): Ryan Sincavage

Louis Vuitton: A Legacy Reimagined

Anya Bednar

Faculty Mentor(s): Alexis Yim



**Interdisciplinary Poster Session 1
11:00 am–12:15 pm Artis Center Performance Hub**

Fear of School Shootings

Ryan Best, Makayla Womble, Gianna Loller, Anthony Sherman,
Faculty Mentor(s): Wendy Eckenrod-Green

"Unleash Your Inner Champion Today" - Nike Campaign

Jacob Chaney, Taylor Worstell, Rodell Jacob
Faculty Mentor(s): Alexis Yim

Teen Dating Violence: Teacher Awareness and Action

Joseph Corsetti, Branson Turner
Faculty Mentor(s): Wendy Eckenrod-Green

The Commitment Cure: Exploring How Adherence to Physical Activity Boosts Mental Well-Being

Riley Cross, Kylee Turman, Grace Cox, Karly Bush,
Faculty Mentor(s): David Brock

Cosmic Misfires: Debunking Shooting Star Myths

Aaron Dennis
Faculty Mentor(s): Marco Brizzolara

Nike "Own The Street"

Joseph DeRose, Mason Forsyth, Tommy Beddow
Faculty Mentor(s): Alexis Yim

Tectonics or Climate? Investigating Causes of Large-Scale Neogene Drainage Basin Reorganization in the Himalayas Through Clay Mineralogy Across a Geologic Contact

Jennah DiMaggio
Faculty Mentor(s): Ryan Sincavage

Digging Deep: Cultivating Mental Health in Veterans Through Gardening

Josie Driggers, Madison Myers, Lindsee Williams, Wolf Herrera-Davila,
Faculty Mentor(s): David Brock

Schools Responsiveness to Students' Mental Health

Cassie Frantz, Karly Bryant
Faculty Mentor(s): Wendy Eckenrod-Green

Investigating Differential Uplift Rates in Calabria, Southern Italy, Through Mapping and Geochronology of Marine Terraces

Ethan Gray
Faculty Mentor(s): Ryan Sincavage



**Interdisciplinary Poster Session 1
11:00 am–12:15 pm Artis Center Performance Hub**

Teachers Carrying Guns

Aaliyah Hairston, Anthony Hairston, Dylan Gaston, Evan Foley
Faculty Mentor(s): Wendy Eckenrod-Green

Common Misconceptions About Black Holes: Myths, Media, and Modern Science

Logan Hamilton
Faculty Mentor(s): Marco Brizzolara

Geological, Geomorphological, and Meteorological Characterization of a Proposed Data Center in Tucker County, West Virginia

Steven Harris
Faculty Mentor(s): Ryan Sincavage

The Secrets and Mysteries of Black Holes

Luke Harrison, Max Bredehoft
Faculty Mentor(s): Marco Brizzolara

adidas Basketball: Understanding the Brand's Marketing Strategies and How They Compete Against Others in the Industry

Katie Holler
Faculty Mentor(s): Zehui Dai

Using Traditional and New Geologic Field Methods to Investigate Episodic vs. Periodic Patterns of Deposition in the Elbrook Formation, Radford, Virginia

Bode Lindauer
Faculty Mentor(s): Ryan Sincavage

Excessive Drinking and Peer Networking: A Party or a Purgatory?

Ashley Loudermon, Emily Jackson, Mason Self, Veronica Buchanan
Faculty Mentor(s): David Brock

Innovation in Rehabilitation: Explaining the Positive Impact of Technology on the Scope of Physical Therapy Practice

Ashley Loudermon, Jordyn Johnson
Faculty Mentor(s): David Brock

Strategic Brand Marketing: Chick-fil-A

Benjamin Lyon, Anna Mason, Kevin Habibelahy
Faculty Mentor(s): Alexis Yim

Judgement vs. Comfort: Environmental Determinants of Anxiety and Body Image Distress During Exercise

Liam McDonald, Carter Ackerman, Dakota Redmon
Faculty Mentor(s): David Brock



**Interdisciplinary Poster Session 1
11:00 am–12:15 pm Artis Center Performance Hub**

Myth: Earth's Shadow Causes Lunar Phases

Zackary Nelson

Faculty Mentor(s): Marco Brizzolara

Redefining Victory: Nike's "Run Your Own Race" Campaign

Gabrielle Parton, Pernell Cannon

Faculty Mentor(s): Alexis Yim

A Scaled Model of the Solar System and Its Celestial Bodies

Michael Plafcan, Angel Ortiz

Faculty Mentor(s): Sandy Liss

Interaction in the Modern Era: Characterizing the Impact on Bedside Manner and Proposing a Novel Solution

Abby Potter, Lizzie Singleton, Jordyn Johnson, Anijah Hairston

Faculty Mentor(s): David Brock

Are Astronomy and Astrology the Same Thing?

Elizabeth Powell

Faculty Mentor(s): Marco Brizzolara

Truths on the Dark Side of the Moon

Victor Rodriguez

Faculty Mentor(s): Marco Brizzolara

Teen Dating Violence: Teacher Awareness

Jada Samuel, Selilah Hopkins

Faculty Mentor(s): Wendy Eckenrod-Green

Teen Dating Violence School Responsiveness

Miles Serenity, Adaleigh Strock, Kiley McCleary, Nicole Gomez,

Faculty Mentor(s): Wendy Eckenrod-Green

Automating Grain Size Measurements of a Catastrophic Outburst Flood Using Image Processing of Uncrewed Aerial Vehicle Imagery

Emma Stipes

Faculty Mentor(s): Ryan Sincavage

Why Pluto No Longer Qualifies as a Planet

Anna Sturges

Faculty Mentor(s): Marco Brizzolara

What The Singularity of a Black Hole Is and Is Not



Robby Suthers
Faculty Mentor(s): Marco Brizzolara

Interdisciplinary Poster Session 1
11:00 am–12:15 pm Artis Center Performance Hub

Double the Taste with Chick-fil-A's BOGO Deal

Kimberly Teos, Nora Beck, Riley McMillen
Faculty Mentor(s): Alexis Yim

Lock Down Drills and Student Mental Health

Hailey Wilson, Haley Linkous, Emily Glass, Emma Sexton
Faculty Mentor(s): Wendy Eckenrod-Green

Local Impact of Youth Vaping

Abby Walsh, Jaden Redd, Kate Ratliff
Faculty Mentor(s): Joe Wirgau

Interdisciplinary Poster Session 2
12:30–1:45 pm Artis Center Performance Hub

Pre-service Teacher Anxiety

Matthew Alderson
Faculty Mentor(s): Wendy Eckenrod-Green

School Responsiveness to Student Mental Health

Leiby Argueta, Miranda Blevins
Faculty Mentor(s): Wendy Eckenrod-Green

Development of an Assay to Investigate the Potential Enzyme Activity of Albumin

Emily Bandlow
Faculty Mentor(s): Ben Caldwell

Why People Explode in Space

Sabrina Belkhous
Faculty Mentor(s): Marco Brizzolara

Teen Dating Violence

Macy Brizendine, Kaley Tanner, Lizzy Simmons, Vallie Anderson, Morgan Smith, Avery Ewert
Faculty Mentor(s): Wendy Eckenrod-Green

Can Dogs Cause Antibiotic Resistance?

Ellie Buskill, Kara Davis, Emily MacInnis, Emily Bishop, Kynslee Blankenship, Janea Boyce, Iyanah Donaway, Lauren Freisenbruch, Madisyn Hite, Amshuma Khanal, Jacob Lehnert, Autumn Osborne, Kaileih Slusser, Morgan Tew
Faculty Mentor(s): Joyce Caughron



How Land Use Affects Soil Chemistry

Joshua Czorapinski, Seth Kane, Alexis Domingues
Faculty Mentor(s): Kristina Stefaniak, Steven McBride

Interdisciplinary Poster Session 2
12:30–1:45 pm Artis Center Performance Hub

Red Flag

Autumn Dillow, Riley Murphy, Kallie Grow, Mia Benavides, Zachary Puchalik,
Mackenzie Salter, Bryson Crawford
Faculty Mentor(s): Lindsay Semprevivo

From Institutions to Incarceration: The Modern Fate of the Mentally Ill

Krystal Drummond
Faculty Mentor(s): Tara Mullins

SipSense: An App-Based Approach to Problematic Drinking Behavior Using Connection and Peer Awareness

Elisabeth Flora, Gavin Martin, Addison Peters, Kadence Fernatt,
Faculty Mentor(s): David Brock

Is a Life Worth the Salary? The Impact of a European Union Paid Maternal Leave Model on Mother and Infant Health

Joslyn Goode, Lauren Jones, Noemi Worm, Rosan Khamis,
Faculty Mentor(s): David Brock

Journey Through the Solar System

Luke Harrison, Talan Moss, Camden Carlton
Faculty Mentor(s): Sandy Liss

Evaluating the Greenness of Organic Labs

Angelae Heath
Faculty Mentor(s): Sarah Kennedy

Exercise and Environment: A Quantitative Study Focusing on the Comparison of College Students Exercising in Industrial vs. Organic Settings

Chloe Jones, Audrey Shelor, Mary Hoyer, Leah Brown,
Faculty Mentor(s): David Brock

Leveraging Machine Learning to Predict the Number of Injuries in Virginia Car Crashes

Lucas Jones
Faculty Mentor(s): Andrew Foy

Lockdown Drills and Mental Health

Serenity Keene, Alora Larsen, Michaela Snodgrass, Salem Brim,
Faculty Mentor(s): Wendy Eckenrod-Green



Effectiveness of PIX4D-Mapper TM, LiDAR Photogrammetry, and Reality Capture TM for Producing High-Resolution 3D Models of Sedimentary Outcrops from SW Virginia

Bode Lindauer, Tyler Luckett

Faculty Mentor(s): Parvinder Sethi, Andrew Foy

Interdisciplinary Poster Session 2

12:30–1:45 pm Artis Center Performance Hub

Evaluating the Effectiveness of Photogrammetry Software for Creating 3-D Models of the Elbrook Limestone-Dolostone in Radford, VA

Tyler Luckett, Bode Lindauer

Faculty Mentor(s): Andrew Foy, Parvinder Sethi

Improving Access to Legal Representation for Unaccompanied Undocumented Minors

Maria Massana Herrera

Faculty Mentor(s): Stephen Owen

School Safety and Bullying

Grace Meredith

Faculty Mentor(s): Wendy Eckenrod-Green

Strategies to Reduce Anxiety in Pediatric Dental Patients

Shamya Norfleet

Faculty Mentor(s): Jamie Lau

Maple Leaves Decomposition in Burned and Unburned Pastures

Nyia Palmer, Jordon Youngblood, Alisia Ford Atwood, Ethan Marshall,

Faculty Mentor(s): Steven McBride, Kristina Stefaniak

The STAND Program: Evaluating the Impact of Telehealth Exercise Interventions on Physical Function and Well-being in Older Adults.

Hannah Repass, Kaylee Towler, Antonio Drozdowicz, Nathan Webb,

Faculty Mentor(s): David Brock

The Effect of Controlled Burned Pastures on the Decomposition of Oak Leaves.

Jahiem Revely, Saniyah Myers, Whitley Kruse, Jakiyah Patterson,

Faculty Mentor(s): Steven McBride, Kristina Stefaniak

How Has Vacant Land in Food Deserts Turned into Community Gardens Reshape Residents' Access to Nature and Healthy Food?

Jaylen Rosser

Faculty Mentor(s): Stephanie Huckestein

Fear of School Shootings

Kylie Simpson, Jayda Hutchinson, Georgia Simonsen, Adrianna Beatty,

Faculty Mentor(s): Wendy Eckenrod-Green

Assessing Water Scarcity in the United States



Tyler Stanhope
Faculty Mentor(s): Naveen Joseph, Andrew Foy

Interdisciplinary Poster Session 2
12:30–1:45 pm Artis Center Performance Hub

Pre-service Teachers' Perceptions of Teachers Carrying Guns

Jacey Underwood, Allison Haney, Oliviana McKenna
Faculty Mentor(s): Wendy Eckenrod-Green

Decomposition of Oak Leaves Along a Simulated Disturbance Gradient

John Van Mullekom, Claire Holmes
Faculty Mentor(s): Steven McBride, Kristina Stefaniak

Pre-service Teacher Depression

Katherine Varelos, Ivy Jamerson, Amanda Farlow, Melanie Manus, Fenic Owens
Faculty Mentor(s): Wendy Eckenrod-Green

**Comparing Plant Decomposition Rates in Burned and Unburned Fields: A Study of
Pokeberry Leaves and Individual Berries**

Mason Weaver, Carissa Smith, Lexi Persinger
Faculty Mentor(s): Steven McBride, Kristina Stefaniak

**How Decomposition Rates Vary Between Leaves with and without Stems at Selu
Conservancy**

Brooklyn Wray, Phoenix Knight, James Passut, Ian Koeppen
Faculty Mentor(s): Steven McBride, Kristina Stefaniak

The Effect of Leaf Position on Decomposition Rate

Ava Janney, Paige Owens, Evan Edwards
Faculty Mentor(s): Steve McBride

Interdisciplinary Poster Session 3
2:00–3:15 pm Artis Center Performance Hub

Realism of FTL Travel in Movies

Michael Bergman
Faculty Mentor(s): Marco Brizzolara

Astrobiology and the Media: What Would Life Beyond Earth Really Look Like?

Michael Brown
Faculty Mentor(s): Marco Brizzolara

Winter Warriors: The Pollinators That Don't Hibernate

Leah Earnest, LaNiya Danner, Morgan Prine, Savannah McBride, Arianna Douglas
Faculty Mentor(s): Chet Bhatta



Beyond the Singularity: The Depiction of Blackholes in Media

Ashton Hairston

Faculty Mentor(s): Marco Brizzolara

Interdisciplinary Poster Session 3

2:00–3:15 pm Artis Center Performance Hub

Is the Earth Flat?

Zane Marshall

Faculty Mentor(s): Marco Brizzolara

Slipping Into Gargantua

Talan Moss, Ulises Royal

Faculty Mentor(s): Marco Brizzolara

Stars vs. Science: Exploring How Astronomy Seeks Evidence While Astrology Seeks Meaning

Julee Myers, Chase Snead

Faculty Mentor(s): Marco Brizzolara

Beyond the Light: Exploring the Dark Side of the Moon

Ethan Richardson, Miles Milligan

Faculty Mentor(s): Marco Brizzolara

Hidden Threats: Molecular Investigation of Eastern Bumblebee Health

Seana Sabol, Sarah Chriest, Cheyenne Cunninghambonds, Alaysha Lang,
Jenna Malloy

Faculty Mentor(s): Chet Bhatta

Measuring the Buzz: Insect Life in Natural and Semi-Urban Environments

Olivia Taylor, Ketsia Di Ntula, Bradley Madison, Ethan Lytton, Jacob Toney

Faculty Mentor(s): Chet Bhatta

Gut Parasite Detection in Pollinators: Honeybees as Model Organisms

Mackenzie Toone, Abigail Mabe, Lorelei Vogel, Charles Davis, Jaseph Gravely,
Joseph Caylor

Faculty Mentor(s): Chet Bhatta

Investigating the Ecological Impact of Fast Fashion on the Soil Microbiome

Kiara Bartoli, Eri Brown, Jade Horton

Faculty Mentor(s): Matthew Close

Oh Deer!: Mitigating Digitally Driven Overpopulation by Removing Tag Limits and Extending Hunting Seasons

Reagan Adams, Hudson Fox, Tedrick Sowder



Faculty Mentor(s): Matthew Close

Digital Footprints in Appalachian Waters: The Ecological Impact of Data Centers on Freshwater Ecosystems

Gabriella DiRenno, Cole Dyson, Shannon Rooney, Brye Smith

Faculty Mentor(s): Matthew Close

**Interdisciplinary Poster Session 3
2:00–3:15 pm Artis Center Performance Hub**

Data vs. Darters: Data Centers and the Decline of Darters

Amelia Naegele, Gabriella Stinson, Haley Taylor

Faculty Mentor(s): Matthew Close

From Bytes to Bugs: Exploring the Ecological Impact of Data Centers on the Big Dipper

Paige Comstock, Zachary Davis, Trinity Roberts

Faculty Mentor(s): Matthew Close

Beyond the Horizon: The Science That Proves Earth Is Round

Michael Hays

Faculty Mentor(s): Marco Brizzolara

Astronomy vs. Astrology: Reality and Misconceptions

Indica Potter

Faculty Mentor(s): Marco Brizzolara

**Interdisciplinary Poster Session 4
3:30–4:45 pm Artis Center Performance Hub**

Fusobacterium Nucleatum: The Microbial Bridge Between Oral Disease and Cancer

Erin Anderson

Faculty Mentor(s): Steven McBride

Comparing Land Use Effects on Soil Chemistry

Jasper Cheers, Montana Oxendine, Cara Rossmeisl, Hunter Schardt,

Mackenzie Bailey, Ronna Ocansey

Faculty Mentor(s): Kristina Stefaniak, Steven McBride

Radford University Solar System Model

Maya Dixit, Lexi Schutte

Faculty Mentor(s): Sandy Liss

Fashion in a Digital Age

Miranda Epley

Faculty Mentor(s): Luke Liska



Insights From the Fanatic Squirrel Watchers: A Study of Stimuli on Radford Grey Squirrels

Stevie Freeman, Julia West, Aerowen Bryant, Fenic Owens
Faculty Mentor(s): Sarah Foltz

The Dolly Hunt Boardgame

Malaysia Gates
Faculty Mentor(s): Kenneth Smith

Interdisciplinary Poster Session 4
3:30–4:45 pm Artis Center Performance Hub

Strategic Storytelling and Media Mastery: Uncovering the Influence of Ask Miracle PR

Darby Gordon
Faculty Mentor(s): Zehui Dai

Trash or Trees? Examining Food Choice of the Eastern Gray Squirrel

Amber Gordon, Nick Beach, Alyssa Plaatsman, Shayna Gonzalez
Faculty Mentor(s): Sarah Foltz

Microplastics' Effects in Correlation with Environmental Justice

David Green
Faculty Mentor(s): Naveen Joseph

Fritz Fox: Farmhouse Frenzy

Benjamin Hess
Faculty Mentor(s): Ken Smith

Importance of RARE Experiences for Academic and Career Development

Jade Horton
Faculty Mentor(s): Jason Davis

Plants vs. Insects: Friend or Food for Carnivorous Plants of Virginia

Ava Janney
Faculty Mentor(s): Stephanie Huckestein

Investigating Learning Behaviors in Zebra Finches (*Taeniopygia guttata*)

Sara Johnson, Eve Manen, Miranda Howard, Alaina Roman, Lily Yacobucci
Faculty Mentor(s): Sarah Foltz

Pecking Order

Aaron Martinez
Faculty Mentor(s): Kenneth Smith

Plenty! For Everyone!

Resa Mattson
Faculty Mentor(s): Zehui Dai



Farmer Ken: Here We Go Again

Anaken McIntosh

Faculty Mentor(s): Kenneth Smith

Wired Worms: How High Doses of Caffeine Affect Composting Efficiency

Lainey Peake, Lily Peters, Grace Parton, Lindsey Santamaria

Faculty Mentor(s): Sarah Foltz

**Interdisciplinary Poster Session 4
3:30–4:45 pm Artis Center Performance Hub**

Finding Your Place: Our Solar System At Radford University

Masami Pearson, Ashton Hairston, Tally Holland

Faculty Mentor(s): Sandy Liss

Mergers and Mistrust: The Case of St. Ambrose University

Mary Rose Prosinski

Faculty Mentor(s): Zehui Dai

The Hackberry Tree

Mikayla Ray

Faculty Mentor(s): Stephanie Huckestein

A Celestial Stroll

Isabella Renfro, Bella Dailey, Holly Dressler, Kailey Ekhahl

Faculty Mentor(s): Sandy Liss

Prevalence of Antibiotic Resistance in the New River

Lauren Rosa

Faculty Mentor(s): Steven McBride

Decades Dash Board Game

Abigail "Abby" Shockley

Faculty Mentor(s): Kenneth Smith

Rising Sea Levels Effect on Plants

Oli Sparks

Faculty Mentor(s): Stephanie Huckenstein

Parental Response Between Adult and Juvenile Deer from Stimuli

Anna Sturges, Cortay Price, Bella Bradley, Alicia Reyes

Faculty Mentor(s): Sarah Foltz

Expanding Media Literacy: A Digital Propaganda Response Toolkit



Erin Torres
Faculty Mentor(s): Paige Tan

Valley Without Walls: The Unhoused Population in the New River Valley

Courtney McMahon, Lillyan Porter, Therese Root, Katherine Rose
Faculty Mentor(s): Joe Wirgau, John Brummette

Pixel-Perfect Propaganda: The Influence of AI Images in the Information Age

Levi Blevins, Steven Hutton, Will Stimpson, Liz Villa
Faculty Mentor(s): Joe Wirgau, John Brummette

Interdisciplinary Poster Session 4
3:30–4:45 pm Artis Center Performance Hub

Under the Influence: How Values Create Pathways to Gender Ideologies and Extremism

Kirsten Cecil
Faculty Mentor(s): John Brummette

Interdisciplinary Poster Session 5
5:00–6:15 pm Artis Center Performance Hub

Women's Resource Center of the New River Valley

Danny Aguilar, Ashton Elander, Mackenzie Toone, Mia Benavides
Faculty Mentor(s): Lindsay Semprevivo

Archival Recovery and Historical Preservation: Transcribing 1860s Freedmen's Bureau Records from the New River Valley Region

Jodi Allen
Faculty Mentor(s): Morgan Montanez, Melinda Wagner

Natural, Yet Unacceptable: The Social Stigma of Female Body Hair

Sahara Allender
Faculty Mentor(s): Katy Shepard

Genomic Identification of Bacterial Species from Earth Worm Castings

Bella Bradley, Natalie Jimenez
Faculty Mentor(s): Sarah Redmond

Rural Nonprofit Focus: Policy and Scope in Isolated, Small Communities

Julius Bradley
Faculty Mentor(s): Morgan Montanez

Mental Healthcare Access in Rural New Mexico

Aidan Bridge
Faculty Mentor(s): Morgan Montanez



Social Media's Impact on Adolescent Minds: Implications for Nursing Practice

Taylor Conner

Faculty Mentor(s): Sarah Knoeckel, Joanna Murray

Bias Behind the Box: Analysis of Jury Impartiality

Randi Dillow

Faculty Mentor(s): Stephen Joyce

Assessing the Impact on Land Use and Water Quality in the Chesapeake Bay Watershed

Kayla Fields

Faculty Mentor(s): Naveen Joseph

**Interdisciplinary Poster Session 5
5:00–6:15 pm Artis Center Performance Hub**

History Doesn't Repeat Itself, but it Often Rhymes

Haley Gilley

Faculty Mentor(s): Katy Shepard

Mythology Poster

Emily Griffiths, Salome Cook

Faculty Mentor(s): Peter Laws, SungEun Park

Analyzing Water Quality Trends In the New River Valley and Richmond in Virginia

Natalie Infante

Faculty Mentor(s): Naveen Joseph

One Time in Fourth Grade...

Autumn Langlois

Faculty Mentor(s): Annemarie Horn

A Link Between Low Grade Inflammation and Insulin Resistance in HepaRG Cells

Miranda McGrady

Faculty Mentor(s): Peter Christmas

The Radford Housing Project: Examining Housing (and Food) Insecurity at Radford University

Isaiah Moore

Faculty Mentor(s): Morgan Montanez

Crustal Structure in the Colombian Andes

Morgan Rife

Faculty Mentor(s): Hannah Krueger

The Rock Problem: Conquering the Use of 3-D Photogrammetry in Modeling Geological Hand Samples

Morgan Rife



Faculty Mentor(s): Parvinder Sethi

Regional Seismic Attenuation Measurements from the Cascadia Subduction Zone

Emma Stipes

Faculty Mentor(s): Hannah Krueger

Not 911, 211: Assessing the Aid Virginians Access Through 211 Services

Kristina Wagner, Therese Root

Faculty Mentor(s): Morgan Montanez, John Brummette

Are Our Eastern Bumblebees Sick? A Molecular Approach to Understanding Pollinator Parasites

Aryana Hayward-Carter, Jensen McCutcheon, Angel Ortiz

Faculty Mentor(s): Chet Bhatta

**Interdisciplinary Poster Session 5
5:00–6:15 pm Artis Center Performance Hub**

The Winter Keeper: How Honeybee Colonies Thrive in the Winter

Brandyn Alston, Alyssa Cadavid, Kylie Fowler, Mina Lockhart, Morgan Widner,
Lena Rockhill, Megan Martin

Faculty Mentor(s): Chet Bhatta

Tiny Invaders: Using Honeybees to Explore Pollinator Parasites

Esther Mason, Kaylee Robertson, Avia Fochtman, Kendall Mayes,

Faculty Mentor(s): Chet Bhatta

Insect Biomass and Community Assemblages in Urban and Semi-urban Environments

Lacey Banks, Lindsay Cox, Daniel Hernandez, Mark Stump, Tiffany Little,
Chelsea Tweneboaa

Faculty Mentor(s): Chet Bhatta

