

Symposium for Student Research, Scholarship and Creative Achievement

Thursday, April 17, 2025

8:00 AM – 3:00 PM Registration

12:15 PM Welcome from the Provost

Robert M. Smith Student Center Ballroom

POSTER PRESENTATIONS SCHEDULE

12:30 – 1:45 PM

Biology

Evaluating Drug Resistance of Intestinal Parasites of Well-Maintained Horses at the Storm Harbor Equestrian Center, Slippery Rock University – a Preliminary Study

Presenter: **Meriele DeCicco**

Faculty and Staff Sponsor: Dr. Wayne Forbes and Ms. Courtney Gramlich

Essential Oils and Antibiotics Properties

Presenter: **Parker Evans**

Faculty Sponsor: Dr. Evan Guiney

Investigation of the Hyperglycemic Stress Response in Crayfish

Presenter: **Anna Greer**

Faculty Sponsor: Dr. Paul Falso

Examining E-Cigarette Condensate for Impacts on Human Cell Viability

Presenters: **Ryleigh Henry and Adedayo Adegbulu**

Faculty Sponsors: Dr. Stacy Hrizo and Dr. Jennifer Piechowski

Metal Tolerance Among Microbial Communities Impacted by Acid Mine Drainage

Presenters: **Jennifer Klink and Summer Smith**

Faculty Sponsor: Dr. Christopher Maltman

A 2024 Campus Wide Survey Analysis of Climate Change Understanding, Perspective, and Overall Willingness at Slippery Rock University

Presenters: **Pierce Landis, Jordyn Ponchione, Kelly Carbone, Mara Strauss,**

Nicholas Ferzetti, Elena Lucas, and Maya Yost

Faculty Sponsors: Dr. Shawn Davis and Dr. Rebecca Thomas

Effects of Using Cardboard as Bedding Material on Earthworm Feeding Habits

Presenters: **Erin Melcher and John Gargas**

Faculty Sponsor: Dr. Cory Shoemaker

Biology

Investigation of Drug Resistance of Small Strongyles in Horses at the Storm Harbor Equestrian Center,

Slippery Rock University

Presenter: **Qiuke Pebly**

Faculty and Staff Sponsor: Dr. Wayne Forbes and Ms. Courtney Gramlich

Taxonomic Description of Serratia SP. J2, Which Possesses Metallophore Activity Towards, and Resistance To, The Rare Earth Elements

Presenter: **Alicia Pflugh**

Faculty Sponsor: Dr. Christopher Maltman

Selective Feeding by Lumbricus terrestris: Implications for Native and Invasive Plant Litter Decomposition

Presenter: **Madison Pifer**

Faculty Sponsor: Dr. Cory Shoemaker

Evaluation of Sustainable Single-Use Honey Packaging

Presenter: **Morgan Sarver**

Faculty Sponsor: Dr. Amber Eade

Toxicity of the Rare Earth Elements Towards Bacteria Isolated from Acid Mine Drainage

Presenters: **Aliyah Slifkin and Roni Kaufman**

Faculty Sponsor: Dr. Christopher Maltman

Utilizing RNA-SEQ To Understand the Molecular Effects of Sublethal Concentrations of Imidacloprid in the Human Cell Lines SH-SY5Y and MCF7

Presenters: **Melana Vaughn and Brandon Dedrick**

Faculty Sponsor: Dr. Martin Buckley and Dr. Stacy Hrizo

Early-Successional Habitats: The Effects of Select Cutting on Songbird Populations in Moraine State Park

Presenter: **Lexie Vincent**

Faculty Sponsor: Dr. Rebecca Thomas

Investigating the Mechanisms of Resveratrol-Induced Heat Stress Resistance in Drosophila: The Role of Heat Shock Response and Unfolded Protein Response

Presenters: **Heer Zaveri and Joseph Wilkinson**

D Faculty Sponsors: Dr. Martin Buckley and Dr. Stacy Hrizo

Chemistry & Environmental Geoscience

PFAS Contamination in the Environment and the Effect on Human Health: A Comprehensive Literature Review

Presenter: **Alyssa Hogue**

Faculty Sponsor: Dr. Patrick Burkhart

University Specimen-Based Databases: The Essential Resource

Presenter: **Logan Jordan**

Faculty Sponsor: Dr. Patricia Campbell

Communication, Media & Sport Management

Public Relations Case Study Integrated Marketing Communications, PEEPS

Presenters: **Kendel Connolly**
Faculty Sponsor: Dr. Allison Peiritsch

The Untold Stories of Wolf Creek

Presenter: **Danielle Ferguson**
Faculty Sponsor: Dr. Franklyn Charles

Public Relations Case Study: Community Relations and Public Service of Live Long DC

Presenter: **Emma Leichty**
Faculty Sponsor: Dr. Allison Peiritsch

Public Relations Case Study: Media Relations, Corporate Social Responsibility and Ethics of the National Cattlemen's Beef Association Campaign

Presenters: **Paige McCullough and Natalie Kimmel**
Faculty Sponsor: Dr. Allison Peiritsch

NCAA Transfer Portal Antecedents

Presenters: **Amariah Morgenstern and Amelia Nitsche**
Faculty Sponsor: Dr. Emily Dolan

Colors of the World Crayola Campaign

Presenter: **Amelia Nitsche**
Faculty Sponsor: Dr. Allison Peiritsch

Methamphetamine Addiction in Pike County, Kentucky

Presenter: **Amelia Nitsche**
Faculty Sponsor: Dr. Franklyn Charles

The Slippery Rock University Health Center Research Study

Presenter: **Abagale Stone**
Faculty Sponsor: Dr. Daniel Dieter

Computing & Security

Design and Development of an Authentication Method for Virtual Reality

Presenter: **Zachary Humes**
Faculty Sponsor: Dr. Kwang Lee

Counseling & Development

Looking at Disability Through a New Lens

Presenter: **Emilee Anderson**
Faculty Sponsor: Dr. Natalie Drozda

Criminology & Criminal Justice

The Socioeconomic Impact of Cash Bail

Presenter: **Margaret Morton**
Faculty Sponsor: Dr. Sarah Kuehn

Curriculum, Instruction & Educational Leadership

Robotics Education in the Elementary Classroom

Presenter: **Lauren Pflueger**

Faculty Sponsor: Dr. Hye Ryung Won

Understanding Faculty Involvement in Military Support: A SRU Study

Presenters: **Autumn Crawford and Heaven Jacoway**

Faculty Sponsor: Dr. Enoch Nkana

Dance

Bring the Showgirls In: The Evolving Role of Dance in Musical Theatre

Presenter: **Sarah Sciorilli**

Faculty Sponsor: Ms. Melissa Teodoro

Engineering

Air Pressurized Bottle Rocket Optimization and Research

Presenter: **Jacob Cerra**

Faculty Sponsor: Dr. Louis Christensen

Temperature Monitoring and Implementation of a Heated Chicken Waterer for the Macoskey Center

Presenters: **Jennifer Cichra, Nicole Planter, Isabella Henry, and Lucas Starcher**

Faculty Sponsor: Dr. Louis Christensen

Experimental Mass Flow Rate Systems for Internal Convective Heat Transfer Research

Presenter: **Nicco Mickens**

Faculty Sponsor: Dr. Louis Christensen

Flexible Wearable Sensor for High-Precision Motion Capture

Presenter: **Janey Parks**

Faculty Sponsor: Dr. Jheng-Wun Su

Landslide Susceptibility Analysis

Presenter: **Ashley Rimmel**

Faculty Sponsor: Dr. Iuri Santos

*Dewatering Properties of AMD Precipitate to Improve Rare Earth Element Extraction
and Environmental Impact*

Presenter: **Amina Tandukar**

Faculty Sponsor: Dr. Iuri Santos

Exercise Science

*The Effect of Low-Intensity Blood Flow Restriction Resistance Exercise on Cardiovascular Function
in Normotensive College-Aged Women*

Presenters: **Jaden Boyle, Jacob Jedry, Zachary Herrington, Tanner Horn, Shane Jablonski,
Gina Petropoulos, Grace Smith, and Carli Thomas**

Faculty Sponsors: Dr. Steve Verba and Dr. Joy Urda

Exercise Science

A Comparative Biomechanical Analysis of the Farmers and Zercher Carry Exercises

Presenters: **Accalia Decker, Justin Fagley, Shaylyn McNally, Zachary Regalski,**

Kaylee Rhinehart, and Ava Urda

Faculty Sponsors: Dr. Jeremy Dicus and Dr. Michael Holmstrup

Health & Rehabilitation Sciences

Physical Impact of Chiari Malformation Type 1

Presenter: **Ruthie Hughes**

Faculty Sponsor: Dr. Christopher Hughes

Languages, Literatures, Cultures & Writing

Dismantling and Rebuilding a Culturally Responsive Education System

Presenter: **Tavizjhae Johnson**

Faculty Sponsor: Dr. Marnie Jo Petray-Covey

Emerging Patterns of Confidence and Anxiety in Foreign Language Classrooms

Presenter: **Amanda Spears**

Faculty Sponsor: Dr. Marnie Jo Petray-Covey

The Effects of Multilingual Teaching and Literature on Language Learning and Development

Presenter: **Kaylee Villanueva Santos**

Faculty Sponsor: Dr. Marnie Jo Petray-Covey

Mathematics, Statistics & Physics

Night Vision Goggles

Presenters: **Julia Addink and Owen Shaffer**

Faculty Sponsor: Dr. Krishna Mukherjee

Astrobiological Potential of Mars

Presenters: **Alexander Banish and Isaac Hightree**

Faculty Sponsor: Dr. Krishna Mukherjee

The Effects of Microgravity on the Vision of Astronauts

Presenter: **Adam Cowburn**

Faculty Sponsor: Dr. Krishna Mukherjee

Gamma Ray Neutron Spectroscopy

Presenters: **Cameron Cowder and Marisa Shaffer**

Faculty Sponsor: Dr. Krishna Mukherjee

CMOS VS CCD Image Sensors in Cameras

Presenter: **David Graham**

Faculty Sponsor: Dr. Krishna Mukherjee

eVTOLS for Planetary Exploration

Presenters: **Samantha Grazioli and Nathan Sharp**

Faculty Sponsor: Dr. Krishna Mukherjee

Mathematics, Statistics & Physics

Exploring Exoplanets with JWST

Presenter: **Alexander Kurtz**

Faculty Sponsor: Dr. Krishna Mukherjee

Psyche Mission

Presenters: **Owen Shaffer and Julia Addink**

Faculty Sponsor: Dr. Krishna Mukherjee

Quantum Revolution

Presenters: **Atharva Sumant and Evan Marra**

Faculty Sponsor: Dr. Krishna Mukherjee

Testing Einstein's Theories with Gravity Probe B

Presenter: **Viktor Zahn**

Faculty Sponsor: Dr. Krishna Mukherjee

Psychology, Social Work & Recreational Therapy

Strengthening Stress Coping Skills: Outcomes of an

Honors College Wellness Retreat

Presenter: **Alexandra Caldwell**

Faculty Sponsor: Dr. Jennifer Willford

Adaptive Riding: Effectiveness for Falls Prevention in Older Adults

Presenters: **Chase Decker, Emma Lemire, and Alyssa Snyder**

Faculty Sponsors: Dr. Betsy Kemeny and Dr. Whitney Angelini

Self-Care and Subjective Well-Being in Slippery Rock Students

Presenters: **Katelynn Howarth and Julia Emerick**

Faculty Sponsor: Dr. Elizabeth Boerger

Social Sciences

How Does America's Freeze on Foreign Aid Affect International Relations?

Presenter: **Isaac Hightree**

Faculty Sponsor: Dr. Nicholas Spina

Theatre

Finding Fantasy in a World at War: An Alice by Heart Sound Design

Presenter: **Ryan Munteer**

Faculty Sponsor: Mr. Alexander Barnhart

Childhood Nostalgia Reimagined: Sound Designing Junie B. Jones the Musical

Presenter: **Isaac Perez**

Faculty Sponsor: Mr. Alexander Barnhart

The Astronots Sound Design

Presenter: **Isaac Smith**

Faculty Sponsor: Mr. Alexander Barnhart