



# SUSRC

Salisbury University  
Student Research Conference

**Friday, April 25, 2025 from  
12:30 pm - 7:30 pm**

**Submission Deadline: April 1, 2025**

**Perdue Hall and Guerrieri  
Academic Commons**

**more info at [www.salisbury.edu/surisc](http://www.salisbury.edu/surisc)**

# *23<sup>rd</sup> Annual Salisbury University Student Research Conference Friday, April 25<sup>th</sup>, 2025*

---

## **Contents**

<b><i>Conference Outline.....</i></b>	<b><i>3</i></b>
<b><i>I. Oral Presentation Sessions 1:30 p.m. - 5:50 p.m.....</i></b>	<b><i>4</i></b>
<input type="checkbox"/> <b><i>First Oral Session 1:30 p.m. - 2:50 p.m.....</i></b>	<b><i>5</i></b>
<input type="checkbox"/> <b><i>Second Oral Session 3:00 p.m. - 4:20 p.m.....</i></b>	<b><i>6</i></b>
<input type="checkbox"/> <b><i>Third Oral Session 4:30 p.m. - 5:50 p.m.....</i></b>	<b><i>7</i></b>
<b><i>II. Welcome with Opening Remarks 6:00 p.m. - 6:30 p.m.....</i></b>	<b><i>9</i></b>
<b><i>III. Poster Presentation Session 6:30 p.m. - 7:30 p.m.....</i></b>	<b><i>9</i></b>
<b><i>IV. Outstanding Research Mentor Award .....</i></b>	<b><i>16</i></b>
<b><i>V. Outstanding Student Research.....</i></b>	<b><i>17</i></b>
<b><i>VI. Acknowledgements.....</i></b>	<b><i>28</i></b>

## **Conference Outline**

<b>Registration</b>	<b>Perdue Hall</b>	<b>12:30 p.m. - 4:30 p.m.</b>
<b>Oral Presentation</b>	<b>Perdue Hall</b>	<b>1:30 p.m. – 5:45 p.m.</b>

### **Session 1: 1:30 p.m. – 2:50 p.m.**

<u><b>Panel</b></u>	<u><b>Room</b></u>
<b>A1</b>	<b>PH 151</b>
<b>B1</b>	<b>PH 156</b>
<b>C1</b>	<b>PH 274</b>
<b>D1</b>	<b>PH 275</b>

### **Oral Research Presentations**

<u><b>Title</b></u>
<b>Biology and Exercise Science</b>
<b>Chemistry and Computer Science</b>
<b>Social Work and Communication I</b>
<b>Philosophy Ethics Bowl</b>

### **Session 2: 3:00 p.m. – 4:20 p.m.**

<u><b>Panel</b></u>	<u><b>Room</b></u>
<b>A2</b>	<b>PH 151</b>
<b>B2</b>	<b>PH 156</b>
<b>C2</b>	<b>PH 274</b>
<b>D2</b>	<b>PH 275</b>

### **Oral Research Presentations**

<u><b>Title</b></u>
<b>Communication II</b>
<b>Economics I</b>
<b>History and Library</b>
<b>Philosophy and Mathematics I</b>

### **Session 3: 4:30 p.m. – 5:50 p.m.**

<u><b>Panel</b></u>	<u><b>Room</b></u>
<b>A3</b>	<b>PH 151</b>
<b>B3</b>	<b>PH 156</b>
<b>C3</b>	<b>PH 274</b>
<b>D3</b>	<b>PH 275</b>

### **Oral Research Presentations**

<u><b>Title</b></u>
<b>Modern Language</b>
<b>Psychology</b>
<b>English and Clarke Honors College</b>
<b>Mathematics II and Economics II</b>

### **Poster Presentation**

### **Guerrieri Academic Commons, 4<sup>th</sup> Floor Assembly Hall**

Welcome with Opening Remarks & Outstanding Research Mentor Award	<b>6:00 p.m. – 6:30 p.m.</b>
Poster Presentations & Refreshments	<b>6:30 p.m. – 7:30 p.m.</b>

---

*The Registration & Information table will be open:*

*12:30 p.m. - 4:30 p.m.*

*Perdue Hall Lobby*

*5:00 p.m. - 6:00 p.m.*

*Guerrieri Academic Commons, 4<sup>th</sup> Floor Assembly Hall*

## ***Registration Perdue Hall Lobby 12:30 p.m.-4:30 p.m.***

(Presenters need to register one hour before their presentation session)

### **Information Table Volunteers:**

Pre-sessions (Perdue Hall): 12:30 p.m.-1:30 p.m.

*Claire Williams, Secondary & Physical Education*

*Dean Ravizza, Physical Education Teacher Ed. & Adapted Physical Ed.*

*Kim Quillin, Department of Biological Sciences*

Session 1 (Perdue Hall): 1:30 p.m.-3:00 p.m.

*Jaime Parker, Human Resources*

*Michael Taggart, Human Resources*

*Heather Porter, Department of Leadership & Literacy Studies*

*Margarita Treuth, School of Health Sciences*

Session 2 (Perdue Hall): 3:00 p.m.-4:30 p.m.

*Kelly Cowger, Guerrieri Student Union*

*Emily Zerrenner, SU Libraries*

*Jeff Emmert, Department of Physics*

*Shannon James, Registrar's Office*

Session 3 (Perdue Hall): 4:30 p.m.-5:50 p.m.

*Amy Jones, SU Libraries and Modern Languages*

## ***I. Oral Presentation Sessions Perdue Hall 1:30 p.m. - 5:45 p.m.***

### **Oral Session Moderators:**

**Oral Session 1** (Perdue Hall): **1:30 p.m.-2:50p.m.**

*Meghan East, Medical Laboratory Science*

*Kristen Walton, History*

*Heidi Fritz, Psychology*

*Kwon Jeon, Public Health*

**Oral Session 2** (Perdue Hall): **3:00 p.m.-4:20p.m.**

*Shruti Patel, History*

*Eun-Jeong Han, Department of Communication*

*Steve Hetzler, History*

*Mara Chen, Geography & Geosciences*

**Oral Session 3** (Perdue Hall): **4:30 p.m.-5:50 p.m.**

*Erin Weber, SU Libraries*

*Christina Camillo, Medical Laboratory Science*

*Susan Mahoney, JDE Center for International Education*

*Mou Chakraborty, SU Library*

**A1 Biology and Exercise Science**

*Moderator: Meghan East*

- 1:30-1:45 **Exploring the Park Cool Island Effect at Salisbury University**  
Sanou Delia  
 Faculty Mentor: Kim Quillin, Biological Sciences
- 1:50-2:05 **Differential Habitat and Box Use Between Two Eastern Screech Owl (*Megascops asio*) Color Morphs**  
Alexandra Lipinski  
 Faculty Mentor: Eric Liebgold, Biological Sciences
- 2:10-2:25 **The Impact of a Putative Lipase, TleVf1, on Interbacterial Competition in *Vibrio fischeri***  
Ashlyn Shoemaker  
 Faculty Mentor: Kirsten Guckes, Biological Sciences
- 2:30-2:45 **Pilot Study: Energy Expenditure Among Different Resistance Exercise Protocols with Varying Explosive and Recreational Concentric Muscle Actions**  
Kathryn DiMillo, Austen Cave, Audrey Harrington, Ethan Rodriguez, Jake Banks, Andrew Moxley, Ryan Cascone  
 Faculty Mentor: Scott Mazzetti, Exercise Science

**B1 Chemistry and Computer Science**

*Moderator: Kwon Jeon*

- 1:30-1:45 **Investigating the Influence of Extraction pH on Lake Pigment Properties and Stoichiometry**  
Jenna Doleschal  
 Faculty Mentor: Jessica Heimann, Chemistry
- 1:50-2:05 **Characterization of Temperature Dependent Spin Cross Fe (II) Complexes.**  
Kaitlyn Wolfe  
 Faculty Mentor: Seth Friese, Chemistry
- 2:10-2:25 **GullHacks: Introducing the Salisbury University Hackathon**  
Jairik McCauley  
 Faculty Mentor: Sang-Eon Park, Computer Science
- 2:30-2:45 **The Power of AI in the US Healthcare System**  
Sarah Clawson  
 Faculty Mentor: Yuqi Peng, Information Systems and Operations Management

**C1 Social Work and Communication I**

*Moderator: Heidi Fritz*

- 1:30-1:45 **The Relationship Between Social Support and Stress in College Freshman and Sophomores**  
Wyatt Duncan, Miranda Smith  
 Faculty Mentor: Linda Houser, Social Work
- 1:50-2:05 **Implications of Poor Sleep on First and Second Year Undergraduate Students: A Qualitative Exploration**  
Justin Latzen, Kelsea Sprague  
 Faculty Mentors: Rachel Buchanan, Social Work; Daniel Green, Social Work

2:10-2:25 **What Demographic Factors are Associated with Stress, Coping, and Psychological Well-being?**

MacKenzie Walker, Erin Gebhardt

Faculty Mentor: Rachel Buchanan, Social Work

2:30-2:45 **Governmental Mistrust: How NBC's The Blacklist Normalizes and Portrays Corruption in Government**

Nicholas Spinnato

Faculty Mentor: Michael Moeder, Department of Communication

## **D1 Philosophy Ethics Bowl**

*Moderator: Kristen Walton*

1:30-2:45 **Ethics Bowl**

Emily King, Giana Cauble, Tiana Cyrelson, Sophie Detorie, Kate Gerlus, Levi Cavaleri

Faculty Mentor: Grace Clement, Philosophy

## **Second Oral Session**

**3:00 p.m. - 4:20 p.m.**

### **A2 Communication II**

*Moderator: Eun-Jeong Han*

3:00-3:15 **How the Korean Show Squid Games Has Impacted American Entertainment Culture**

Landon Lewicki, Roman Mychajliw, Mitchell Kemp, Catherine Sylvain, Ryan Minton

Faculty Mentor: Eun-Jeong Han, Department of Communication

3:20-3:35 **American's Opinions on Korean Food**

Michael Ogbonna, Jazmine Goodwin, Ronald Clark, Aidan Camper

Faculty Mentor: Eun-Jeong Han, Department of Communication

3:40-3:55 **Coming to Terms with Coming Out: How Christopher Lloyd & Steven Levitan's Modern Family Led the Way of Acceptance for the LGBTQ+ Community**

Madeline Rathmann

Faculty Mentor: Michael Moeder, Department of Communication

4:00-4:15 **Mirror, Mirror: A Reflection of Korean Idol's Marketing and Beauty Trends through the Eyes of Salisbury University Students**

Samantha Raymond, Mary Hsia, Lily Rothering, Kiersten Williams, Grace Wincovitch

Faculty Mentor: Eun-Jeong Han, Department of Communication

## **B2 Economics I**

*Moderator: Mara Chen*

3:00-3:15 **Pennsylvania's Occupational Forecast: The Past, Present and Future.**

Roman Greenlee, Dylan French, Yahir Fernandez-Ochoa, Wyatt Alexander

Faculty Mentor: Hong Yao, Economics

3:20-3:35 **Labor and Job Market Change in Virginia**

Gil McDougald, Ty Keaton, Ryan Keaton, Nick Thompson

Faculty Mentor: Hong Yao, Economics

3:40-3:55 **New Jersey: Labor Statistics and Future Projections**

Robert Senesi, Paul Jordan, Demi Bob-Oseni

Faculty Mentor: Hong Yao, Economics

4:00-4:15 **Tomorrow's Workforce: Trends, Skills & Transformation**  
Abigail Thomas, Connor Bell, Ryan Orr  
Faculty Mentor: Hong Yao, Economics

## **C2 History and Library**

*Moderator: Steve Hetzler*

3:00-3:15 **Dogs and Humans: Coevolving Minds**  
Samuel Bufano  
Faculty Mentor: Elizabeth Ragan, History

3:20-3:35 **A Trickster's Dual Role**  
Cameron Lord  
Faculty Mentor: Elizabeth Ragan, History

3:40-3:55 **Sugar and Spice: A Colonizer's Vice**  
Charles Reigle  
Faculty Mentor: Kristen Walton, History

4:00-4:15 **Honors Freshman Information Literacy: Building Confidence Through Library Resource Assistance**  
Madeline Blouch  
Faculty Mentor: Katie Delezenski, Library

## **D2 Philosophy and Mathematics I**

*Moderator: Shruti Patel*

3:00-3:15 **Innocent Until Proven Poor: How Monetary Bail Unjustly Targets and Effects Poor Citizens**  
Sophie Detorie  
Faculty Mentor: Grace Clement, Philosophy

3:20-3:35 **A Study of Lattices with an Eye Toward Quantum Cohomology for Flag Manifolds of Type B**  
Stephen Barr  
Faculty Mentor: Ryan Shifler, Mathematics

3:40-3:55 **On the Quantum Parameter in the Quantum Cohomology of a Family of Odd Symplectic Partial Flag Varieties**  
Caleb Shank, Connor Bean  
Faculty Mentor: Ryan Shifler, Mathematics

## **Third Oral Session**

**4:30 p.m. - 5:50 p.m.**

### **A3 Modern Language**

*Moderator: Christina Camillo*

4:30-4:45 **A Crisis of Identity: Secularism, Immigration, and the Issue of Integration in France**  
Anna Belong  
Faculty Mentor: Aurelie Van de Wiele, Modern Languages

4:50-5:05 **Spanish for Kids**  
Kailee Nichols  
Faculty Mentor: Sally Perret, Modern Languages

### B3 Psychology

*Moderator: Susan Mahoney*

- 4:30-4:45 **Living Beyond your Means: Pressing Concerns and Managing Resources**  
Sophia Broyles, Delaney Fairley, Tabatha Hayes, Madelynne Mattare, Odette Pierre, Sam Simmons  
Faculty Mentor: Michele Schlehofer, Psychology
- 4:50-5:05 **Housing Affordability and Mental Health: The Consequences and Solutions**  
Delaney Fairley, Sophia Broyles, Tabatha Hayes, Madelynne Mattare, Odette Pierre, Sam Simmons  
Faculty Mentor: Michele Schlehofer, Psychology
- 5:10-5:25 **Societal Attitudes About Gender Identity and Sexual Orientation**  
Elysha Ross, Vic Androcy, Andrew Black, De'Asia Douglas, Delaney Fairley  
Faculty Mentor: Rachel Steele, Psychology
- 5:30-5:45 **Perceptions of Housing Affordability and Access in Wicomico County: A Mixed Methods Study on Crisis, Causes, and Impact**  
Sam Simmons, Delaney Fairley, Madelynne Mattare, Odette Pierre, Sophia Broyles, Tabatha Hayes  
Faculty Mentor: Michele Schlehofer, Psychology

### C3 English and Clarke Honors College

*Moderator: Erin Weber*

- 4:30-4:45 **Cinematic Reflections of American Marginalization Across Decades: A Comprehensive Analysis of Rosemary's Baby (1968) and Get Out (2017)**  
Jeremy Heilmeier  
Faculty Mentor: Elsie Walker, English
- 4:50-5:05 **The Gold Standard: Promoting Harm Reduction Programs and MAT/MOUD Services for Improved Addiction Treatment**  
Kiernan Johns-Ellis  
Faculty Mentor: Viktoria Basham, Clarke Honors College
- 5:10-5:25 **Boosting Salisbury University's Attractiveness to International Student-Athletes.**  
Gianluca Beaujon  
Faculty Mentor: Lauren Hill, Clarke Honors College
- 5:30-5:45 **Giving Back: Honors, Service, and Tutoring**  
Riley Bruce  
Faculty Mentor: Lauren Hill, Clarke Honors College

### D3 Mathematics II and Economics II

*Moderator: Mou Chakraborty*

- 4:30-4:45 **Empowering Solar and Soil in Maryland: A Suitability Analysis for Agrivoltaic Systems**  
Urijit Chakraborty  
Faculty Mentor: Randall E. Cone, Mathematics
- 4:50-5:05 **Celite: A Collection of Cellular Automaton Simulators**  
Kyle Tranfaglia, Dustin O'Brien, Timothy McKirgan  
Faculty Mentor: Michael Bardzell, Mathematics; Xiaohong Wang, Computer Science



**II. Welcome with Opening Remarks 5:45 p.m. - 6:30 p.m.*****Guerrieri Academic Commons, 4<sup>th</sup> Floor Assembly Hall***

Performance by SU's Pep Band conducted by Dr. Dennis Senkbeil. Welcoming and opening remarks from Dr. Sherry Maykrantz (*chair of SUSRC*), Dr. Carolyn Ringer Lepre (*President*), Dr. Laurie Couch (*Provost and Vice President of Academic Affairs*), Dr. Clifton Griffin (*Dean of Graduate Studies & Research*), & Dr. Rhyannon Bemis (*Director of OURCA*). Awarding of cords to OURCA Fellows and winners of the SUSRC Poster Design and Outstanding Research Mentor Award will be announced.

**III. Poster Presentation Session 6:30 p.m. - 7:30 p.m.*****Guerrieri Academic Commons, 4<sup>th</sup> Floor Assembly Hall*****Information Table Volunteer**

*Martin Hunter, Office of the Registrar*

**Poster Room Set-up Volunteers**

*Brent Fedorko, Exercise Science*

*Dana Price, Biological Sciences*

*James Parrigin, Coordinator of Library Instruction*

**Poster Presentations****1. Advancing Justice**

Lauryn Dennis

Faculty Mentor: Michael Koval, Accounting and Legal Studies

**2. Impact of Type VI Secretion System Toxin VasX Overexpression on *Vibrio fischeri* Fitness**

Nikki Amarasinghe

Faculty Mentor: Kirsten Guckes, Biological Sciences

**3. Does Sex Affect Basking in Spotted Turtles?**

Kristina Bennett, Sean Bulleri

Faculty Mentor: Eric Liebgold, Biological Sciences

**4. Grounds for Concern: Heavy Metal Contamination in Community Garden Soils**

Jasmine Bowie

Faculty Mentor: Jennifer Nyland, Biological Sciences

**5. Impact of VasX on Type-VI System-dependent Interactions in *Vibrio fischeri***

Riley Bozman

Faculty Mentor: Kirsten Guckes, Biological Sciences

**6. Analysis of Lynx Fecal Cortisol Data**

Alayna Bucchioni

Faculty Mentor: Angela Freeman, Biological Sciences

- 7. Snow Big Deal? Comparing Eastern Screech Owl (*Megascops asio*) Body Condition During Severe and Mild Winters**  
Alayna Caveza DeBaca, Noelle Kuhns  
Faculty Mentor: Eric Liebgold, Biological Sciences
- 8. Impact of Putative Catalytic Histidine on Nuclease Activity During Interbacterial Killing in *Vibrio fischeri***  
Colleen Chambers  
Faculty Mentor: Kirsten Guckes, Biological Sciences
- 9. Beaks, Peaks, and Floral Techniques: The Ecological Forces Driving Sexual Dimorphism in *Eulampis Jugularis***  
Ian Clancy-Mallue, Rhoda Adusei, Alayna Caveza DeBaca, Layly Mirlohi  
Faculty Mentor: Chelsea Berns, Biological Sciences
- 10. Kinematics and Burial Behavior of Little Skates (*Leucoraja erinacea*)**  
Angela Cordoba-Flores  
Faculty Mentor: Noah Bressman, Biological Sciences
- 11. Does Regenerative Agriculture Improve Soil Health: A Look At Soil Nutrients**  
Emilie Ekholm  
Faculty Mentor: Christopher Briand, Biological Sciences
- 12. The Effects of Anogenital Distance on Mate Preference in Southern Flying Squirrels**  
Katie Ekholm  
Faculty Mentor: Angela Freeman, Biological Sciences
- 13. Reconstructing Identity: A Preliminary Estimation of Population affinity in the SU Human Skeletal Collection Using Dental Measurements**  
Menat-Allah Elgaddar, Aisha Elhussein, Cara Brown  
Faculty Mentor: Susanne Daly, Biological Sciences
- 14. Functional Redundancy of Type VI Secretion System Gene Clusters in *Vibrio fischeri***  
Madison Harrah  
Faculty Mentor: Kirsten Guckes, Biological Sciences
- 15. Forensic Entomology: A Taxonomic Guide to Forensically Relevant Fly Species Collected in Salisbury**  
Natasha Herlinger  
Faculty Mentor: Dana Price, Biological Sciences
- 16. Toxicity and Alkaloid screening of *Asimina Triloba* (Pawpaw) Seeds**  
Felicity Holder, Carina Kamuf  
Faculty Mentor: Christopher Briand, Biological Sciences
- 17. Seeing Red: Examining Aggression Differences Between Eastern Screech Owl (*Megascops asio*) Color Morphs**  
Benjamin Houser  
Faculty Mentor: Eric Liebgold, Biological Sciences
- 18. Characterization of Non-Canonical Type VI Secretion System Immunity Factor in *Vibrio fischeri***  
Justice Jensen  
Faculty Mentor: Kirsten Guckes, Biological Sciences

- 19. Isolation and Characterization of Soil Bacteriophages for Use in Undergraduate Microbiology Curriculum**  
Min Thway Khant  
Faculty Mentor: Elizabeth Emmert, Biological Sciences
- 20. Unpacking the Eastern Screech Owl's (Megascops asio) Dinner Preferences**  
Tylar Kight, Erin Vorous, Alaina Linton  
Faculty Mentor: Eric Liebgold, Biological Sciences
- 21. The Deception of House Wrens: How Cuteness Hides Destruction**  
Emily Paslick, Catie Egan  
Faculty Mentors: Jeremy Corfield, Biological Sciences; Giulia Franchi, Computer Science
- 22. Investigating the Role of Artificial Photoperiod in Triggering Reproductive Behaviors of Southern Flying Squirrels (Glaucomys volans)**  
Abigaëlle Pierre, Gabriela Maroto  
Faculty Mentor: Angela Freeman, Biological Sciences
- 23. Exploring the Variation in tsiv2 Gene Copy and Sequence in Vibrio fischeri: Implications for Self vs. Non-Self Recognition**  
Alyson Schulze  
Faculty Mentor: Kirsten Guckes, Biological Sciences
- 24. Polychrome Predators: The Influence of Color Morph on Eastern Screech Owl Survival and Home Range Size**  
Rachel Stone  
Faculty Mentor: Eric Liebgold, Biological Sciences
- 25. Impact of UV Filters on the Physiology of the Beneficial Bacterium Vibrio fischeri**  
Chloe Turner  
Faculty Mentor: Kirsten Guckes, Biological Sciences
- 26. Site Fidelity and Habitat Preference of Male and Female Spotted Turtles (Clemmys guttata) with and without Predator-Induced Amputations**  
Trey Wehlan  
Faculty Mentor: Eric Liebgold, Biological Sciences
- 27. Developing RNA Thermometers and Fluorescence Spectroscopy for Enzymatic Reactions in Plasmodium falciparum**  
Andersen Herman  
Faculty Mentor: Joshua Sokoloski, Chemistry
- 28. Synthesis of Potentially Selective 5-HT<sub>2A</sub> Serotonin Receptor Agonists with a Forced Active Conformation**  
Gabriele Miksa  
Faculty Mentor: Jose Juncosa, Chemistry
- 29. Effects of Hemin Concentration on the Swelling Ratio of Acrylate Hydrogels**  
Mahrukh Rizwan  
Faculty Mentor: Zulma Jimenez, Chemistry

- 30. Copper-DNA Interactions and Their Effects of Click Chemistry**  
Hsiangkun Shih  
Faculty Mentor: Joshua Sokoloski, Chemistry
- 31. Analysis of Ethanol in a Bovine Serum Using Headspace and Gas Chromatography**  
Emily Stockman, Ellen Stockman  
Faculty Mentor: Anita Brown, Chemistry
- 32. The Data Adds Up: U.S. Students' Struggles in Math and the Call for Pedagogical Reform**  
Albi Freda  
Faculty Mentor: Lauren Hill, Clarke Honors College
- 33. Picture Perfect Pain: Educating Tattoo Artists About the Overlaps between Self-Harm and Tattooing among Women**  
Tessah Good  
Faculty Mentor: Viktoria Basham, Clarke Honors College
- 34. Hear Me Out: Improving Deaf Accessibility in the Salisbury University Educational Theater Program**  
MJ Marshall  
Faculty Mentors: Viktoria Basham, Clarke Honors College; Lauren Hill, Clarke Honors College
- 35. A Princess's Slim Waist: The Unrealistic Beauty Standards Presented in Barbie Princess Dolls**  
Claire Morin  
Faculty Mentor: Viktoria Basham, Clarke Honors College
- 36. One Post Away from Diversity: The Reality of Instagram for Study Abroad**  
Grace Wincovitch  
Faculty Mentors: Viktoria Basham, Clarke Honors College; Brian Stiegler, Center for International Education
- 37. AI Swing Analysis**  
Walter Euceda-Mendoza, Andrew Mehall  
Faculty Mentor: Yaping Jing, Computer Science
- 38. Synthetic Facial Synthesis and Temporal Manipulation via Neural Networks**  
Vincent Pham, Jorge Armando Verduzco Zavala, Will Lamuth  
Faculty Mentor: Sang-Eon Park, Computer Science
- 39. Thinking Adapter: Enhancing LLM Reasoning with Low-Latency Thought Processing**  
Spencer Presley, Dustin O'Brien  
Faculty Mentor: Junyi Tu, Computer Science
- 40. Mining Intel Sources for Timely Conflict Analytics: Tracking Deforestation & Criminal Activity with Open-Source Intelligence (OSINT) and Imagery Intelligence (IMINT) in Mexico from 2018 to 2024.**  
Michael Migliozi, Jadah Tolbert, Nigel Slaughter, Sean Grande, Parker Daniels  
Faculty Mentor: Brian Polkinghorn, Conflict Analysis and Dispute Resolution
- 41. The Best Plasma-Facing Materials for Commercial Fusion: A Comprehensive Evaluation of Performance and Long-Term Sustainability**  
Sophia Reister  
Faculty Mentor: Brian Polkinghorn, Conflict Analysis and Dispute Resolution

- 42. Compassion Fatigue and Burnout in Mental Health Professionals: Examining Risks, Coping Strategies, and Systemic Interventions**  
Abrianna Watts  
Faculty Mentor: Brian Polkinghorn, Conflict Analysis and Dispute Resolution
- 43. Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future**  
Claudio Garcia, Darby Trout, Zachary Harris, Joe Enfinger, Lance White  
Faculty Mentor: Ying Wu, Economics
- 44. Navigating Learning Patterns and Financial Challenges: Academic Performance and Retention of First-Generation and Minoritized Students of Color at Salisbury University**  
Peter Jabal, James Fox  
Faculty Mentor: James Fox, Education Leadership
- 45. Where Land Meets Water: The Influence of Soil and Water Quality on Spotted Turtles**  
Hannah Hagan, Joseph Grenagle, Sam DenHerder  
Faculty Mentor: Tami Ransom, Environmental Studies
- 46. Cardiovascular Responses to Single vs. Multi-Chambered Blood Flow Restriction Cuffs**  
Lucas Kuriawa  
Faculty Mentor: Tim Werner, Exercise Science
- 47. 10-Week Lifestyle Intervention of First Responders on the Delmarva Peninsula**  
Rebecca Orr  
Faculty Mentor: Tim Werner, Exercise Science
- 48. Performance and Perceptual Responses to Different Chambered Blood Flow Restriction Cuffs**  
Mark Weedon  
Faculty Mentor: Tim Werner, Exercise Science
- 49. Impact of Blood Flow Restriction Cuff Design on Upper Body Exercise: A Randomized Crossover Trial in Resistance-Trained Adults**  
Campbell Ruffhead  
Faculty Mentor: Tim Werner, Exercise Science
- 50. Salisbury Maryland Downtown Parking**  
Koran Jackson  
Faculty Mentor: Catherine Jackson, Fulton School of Liberal Arts
- 51. Spatio-temporal Analysis of Soccer Players' Movement in a Game Using GIS**  
Jackson Edwards  
Faculty Mentor: Wataru Morioka, Geography and Geosciences
- 52. Mapping Gentrification Risk: A Spatial Analysis of Montgomery County, MD**  
Maxwell Gundling  
Faculty Mentor: Wataru Morioka, Geography and Geosciences
- 53. Sports Relocation: What Is It, Why Is It Done, And How To Predict Where Teams Will Move Next**  
Ryan Hall  
Faculty Mentor: Mark James de Socio, Geography and Geosciences

- 54. Examining the Relationship Between Human Activity and Sediment Size at Assateague Island National Seashore, Worcester County, Maryland, USA**  
Rachel Keim  
Faculty Mentor: Thomas Cawthern, Geography and Geosciences
- 55. Visualizing the Associations of Vehicle Ownership on Air Pollution with Human Health in Major U.S. Cities**  
Connor Lewandowski  
Faculty Mentor: Wataru Morioka, Geography and Geosciences
- 56. Gender Differences in Sleep Recovery from Sauna Therapy in Athletes: A Literature Review**  
Sara Garzon, Tre Holsey  
Faculty Mentor: Leslie Swift, Health Science
- 57. The Role of High-Intensity Interval Training in Enhancing Beta Cell Function in Type 1 Diabetes Mellitus**  
David Mejía-Buenaño, Karlie Dixon  
Faculty Mentor: Leslie Swift, Health Science
- 58. The Rise of Horse Racing During the Tudor Stuart Era in England.**  
Joseph Carozza  
Faculty Mentor: Kristen Walton, History
- 59. A Comparative History of Witchcraft In England Under Elizabeth I and James I**  
Abbie Zuravsky  
Faculty Mentor: Kristen Walton, History
- 60. Community Strengths Survey**  
Jody Kieffer, Lauryn Dennis, Jahnaiya Sutherland, Michael Ogbonna, Tyler Hummer, Neila Henrice, Dagmawit Kebede, Zainab Jabeen, Ashley Marcum  
Faculty Mentor: Ryan Weaver, Interdisciplinary Studies
- 61. Light Street Beautification Mural**  
Mauren Krauser, Kailah Caliskan, Julia Dyer, Zoe Clarke, Miranda Surrect  
Faculty Mentor: Ryan Weaver, Interdisciplinary Studies
- 62. Wicomico County Roadside Litter Survey**  
Malinda Williams, Allison Yeager, Elizabeth Coonts, Emily Hoard, Erin Record, Riley Barr, Adam Burke  
Faculty Mentor: Ryan Weaver, Interdisciplinary Studies
- 63. Wicomico County Roadside Litter & Recycling Survey**  
Allison Yeager, Riley Barr, Adam Burke, Lizzie Coonts, Emily Hoard, Erin Record, Malinda Williams  
Faculty Mentors: Ryan Weaver, Interdisciplinary Studies; Lauren Hill, Clarke Honors College
- 64. Analysis of Collision & Contact Sports Classifications**  
Dustin Obrien, Kyle Tranfaglia, Dylan Johnson  
Faculty Mentor: Kyle Teller, Mathematics; Echo Leaver, Psychology
- 65. Thyroid Nodule Study**  
Ashlyn Orr  
Faculty Mentor: Veera Holdai, Mathematics

- 66. Designing the Most Effective Volleyball Practice Plan**  
Leah Osmon  
Faculty Mentor: Veera Holdai, Mathematics
- 67. Periodic Behavior in Finite Linear Cellular Automata**  
Abigail Pierson  
Faculty Mentor: Michael Bardzell, Mathematics
- 68. Deep Learning for Derivatives: Using LSTMs to Refine Option Pricing Models**  
Eli Prushansky  
Faculty Mentor: Deepak Bastola, Mathematics
- 69. Analyzing Costs Related to Fires in Salisbury, MD**  
Cameron Vinson, Joseph Sanchez, Jackson Griffin, An Nguyen  
Faculty Mentor: Kyle Teller, Mathematics
- 70. Salisbury DSP**  
Diego Zane, Aiden Levy  
Faculty Mentor: Randall E. Cone, Mathematics
- 71. Bumps in the Streets: Pregnant While Homeless**  
Kelly Gorman, Sadie Golden, Kaleigh Titz  
Faculty Mentor: Kristen Hammerer, Nursing
- 72. Equal Care for Every Birth: Reducing Maternity Disparities in Women of Color**  
Mikayla Guenther, Molly Geary, Jillian Dawson  
Faculty Mentor: Katelynn Cabrera, Nursing
- 73. Burnout Among Special Education Teachers: Impact of Social Support and Stressor Domains**  
Allison Yeager, Anna Saghirian  
Faculty Mentor: Heidi Fritz, Psychology
- 74. A Meta-Analytic Review of Age-Related Changes in Episodic Memory: Mechanisms and Neural Correlates**  
Delaney Bartosz  
Faculty Mentor: Echo Leaver, Psychology
- 75. The impact of Unexpected Learning Events on Children's Metacognition**  
Kaley Hardman, Anna McCallister  
Faculty Mentor: Rhyannon Bemis, Psychology
- 76. Halmark Christmas Magic: Why LGBTQ+ Representation During the Holidays Is Important**  
Julie Mace  
Faculty Mentor: Lance Garmon, Psychology
- 77. Activism, Advocacy, and Public Policy Engagement: Current Relevance from the Other Lives of Deceased Psychologists**  
Kayla Martin, Kate Gerlus, LaNya Johnson, Makenzie Mull, Johana Constantino, Emma Carey, Hannah Thompson, Madilyn Drury, Coale Lenox, Morgan Pilla, Katherine Bretz  
Faculty Mentor: Thomas Tomcho, Psychology

- 78. College Women's Sexual Minority Status Predicts Sexual Victimization Experience and Assault Acknowledgment**  
Colleen McCann  
Faculty Mentor: Karl Maier, Psychology
- 79. Behavioral Therapy vs. School Psychology: Navigating Global and Internal Challenges in Psychological Associations through Presidential Messages**  
Hannah Thompson  
Faculty Mentor: Thomas Tomcho, Psychology
- 80. Marijuana: Time for Replication**  
Veronica Velarde  
Faculty Mentor: Cecilia Acocella, Psychology
- 81. Developing an Adaptive Robotics System with Sports Equipment for Individuals with Severe Disabilities**  
Ujjit Chakraborty  
Faculty Mentors: Dean Ravizza, Secondary and Physical Education; Giulia Franchi, Computer Science
- 82. A Wicomico School Store**  
Piper Hagenrater-Gooding  
Faculty Mentor: Aimee Bergonia, Secondary and Physical Education
- 83. ASL Design**  
Fallon Chernoff  
Faculty Mentor: Catherine Jackson, Fulton School of Liberal Arts

#### ***IV. Outstanding Research Mentor Award***

The Salisbury University Student Research Conference Committee is pleased to announce the Outstanding Research Mentor Award at the poster session to be held from 6:00-7:30pm in Academic Commons (4th Floor Assembly Hall). This award celebrates faculty mentors who have proven excellent supervisors of student research or creative work.

**The 2025 Outstanding Research Mentor Award Nominees are:**

*Dr. Viktoria Basham, Clarke Honors College*  
*Dr. Gina Bloodsworth, Geography and Geosciences*  
*Dr. Melissa Bugdal, English*  
*Dr. James Fox, Educational Leadership*  
*Dr. Jacques Koko, Conflict Analysis and Dispute Resolution*  
*Dr. Scott Mazzetti, Exercise Science*  
*Dr. Tami Ransom, Biological Sciences*  
*Dr. Kristen Walton, History*  
*Ryan Weaver, Interdisciplinary Studies*  
*Dr. Tim Werner, Exercise Science*  
*Dr. Ying Wu, Economics*



## ***V. Outstanding Student Research***

Salisbury University's commitment to student research is evident in both the number and quality of the presentations at our annual student research conference. However, many of our students are being recognized for their work in off-campus settings. The following are highlights from Salisbury University students during the last year.

### **Student Publications:**

Connor Bean published "On the Quantum Parameter in the Quantum Cohomology of a Family of Odd Symplectic Partial Flag Varieties" in the Journal of Algebra and Its Applications

Philip Becnel submitted "Scarab Biodiversity in Urban Ecosystems of the Mid-Atlantic United States" in the Coleopterists Bulletin

Lauren Hatch-Pokhrel published "The Power of Language through Discourse Community Analysis" in S. Turner, C. Lane, & K. Rieger (Eds.), Write Things Worth Reading.

Lauren Hatch-Pokhrel published "GenAI: The Impetus for Linguistic Justice Once and for All" in Literacy in Composition Studies.

Colleen McCann submitted to a peer-reviewed journal the empirical report (under review): "Sexual Identity, Victimization Experience and Acknowledgment Predicting College Women's Rape Victim Empathy"

Caleb Shank published "On the Quantum Parameter in the Quantum Cohomology of a Family of Odd Symplectic Partial Flag Varieties" in the Journal of Algebra and Its Applications

Chelsea Taylor published "Energy and Magic: Using drama to Inspire Joy in ELA" in English Journal.

### **Student Publications in *Laridae*:**

Gibelle Beaujon published "Corporate Social Responsibility in Latin America and the Caribbean: Motivation for Implementation" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Makayla Bounds published "Vigilant" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Jasmine N. Bowie published "Microplastics, Nanoplastics, and Their Known Health Implications: Potential Solutions to Implement in the United States" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Delaney Cinnamon published "451 in K-12" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Paige L. Cohen published "The Evolution of Education: How Environmental Education Has Evolved in Maryland Public School Systems and Suggestions for Improvement" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Sophie Detorie published "Folklore of the Fallen Woman: Private Storytelling in Victorian Dramatic Poetry" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Catherine Egan published "Storytelling for Success: The Effects of Preserving Campus Lore on Salisbury University's Admission and Retention Rates" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Ashley Gernert published "Secrets of the Squirrels in the Sky: How the Moon Shapes Flying Squirrels' Behavior" in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Allison Griffin published “Language Assistance and How Language Barriers Affect the Quality of Healthcare of People Who Do Not Speak English as Their Primary Language” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Lydia Loftus published “Cats, Witches, and Demons: The Role of the Animal Familiar in the English Witch Trials” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Ruby Muzanila published “Sadaka ni Ibada Tosha” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Willow Nyland published “Is Inspiration Ethical? An Exploration of Cultural Appropriation in Art and Media” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Abigail Potter, Lian Peach, and Maggie Atherton published “Period Power: Addressing Period Poverty in Wicomico County Public Middle Schools” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Bradley Powers published “The Puzzle” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Daijah Richardson published “The Burden of Time” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Kade Richardson published “The Princess Paradox: Addressing Misrepresentation of Native American Women in Media” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Momina Waheed published “Patience” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Nicole Washington published “Unmasking the Pandemic: A Groupthink Analysis of Vaccine Hesitancy During COVID-19” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Samantha Watson published “Evaluating the Need for a Comprehensive Battery of Assessments to Track Concussion Recovery in the Subacute Period” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Bee Watts published “Eating Disorders in Transgender and Gender Non-Conforming Communities” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Ellie Welsh published “Evaluating the Impacts of Near-Shore Land Usage on Aquatic Nutrient Profiles” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Mackenzie L. Wheelock published “Postural Orthostatic Tachycardia Syndrome in Universities: The Importance of Improving Accessibility to Accommodations” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

Allison Yeager published “Preventing K-12 School Shootings: Training Educators to Recognize Warning Signs in Students” in *Laridae*, 6<sup>th</sup> Edition, Fall 2024

## **Student Presentations at the National Conference on Undergraduate Research**

Catie Egan presented “*Storytelling for Success: The Effects of Preserving Campus Lore on Salisbury University’s Admission and Retention Rates*” at the National Conference on Undergraduate Research, April 2025

Tessah Good presented “*Picture-Perfect Pain: Educating Tattoo Artists about the Overlaps between Self-Harm and Tattooing among Women*” at the National Conference on Undergraduate Research, April 2025

Andersen Herman presented “*Developing Ribonucleic Acid (RNA) Thermometers and Fluorescence Spectroscopy for Enzymatic Reactions in Plasmodium falciparum*” at the National Conference on Undergraduate Research, April 2025

Min Thway Khant presented “*Targeting Cancer-associated Proteins and Click Chemistry Labeling of Probes for Tumor Imaging and Ablation*” at the National Conference on Undergraduate Research, April 2025

Cole Ledger presented “*Understanding Multiple Sclerosis (MS): Exploring the Etiology and Progressive Impacts of an Unpredictable Autoimmune Disease*” at the National Conference on Undergraduate Research, April 2025

Cole Ledger presented “*Preventing Acute Malnutrition: The Role of Energy Expenditure and Postnatal Nutrition Among Infants*” at the National Conference on Undergraduate Research, April 2025

Lydia Loftus presented “*Cats, Witches, and Demons: The Role of the Animal Familiar in the English Witch Trials*” at the National Conference on Undergraduate Research, April 2025

Cleo McLaughlin presented “*Determining Charge Limits on Particles using Electrostatic Energy Analysis in Electrospray Ionization Mass Spectrometry*” at the National Conference on Undergraduate Research, April 2025

Charles Reigle presented “*Fear of the People: The Undemocratic Origins of the U.S. Constitution*” at the National Conference on Undergraduate Research, April 2025

Sophia Reister presented “*Human and Artificial Intelligence Communication: Strengths and Weaknesses of Conversing with AI for Coding Mathematical Models*” at the National Conference on Undergraduate Research, April 2025

Campbell Ruffhead presented “*Effects of Blood Flow Restriction Cuff Chamber Design on Acute Cardiovascular Responses*” at the National Conference on Undergraduate Research, April 2025

Kaylee Shaw presented “*Sound Waves and Helping Hands: The Dynamic Duo of Sonography and Occupational Therapy*” at the National Conference on Undergraduate Research, April 2025

Samantha Watson presented “*Effects of Different Blood Flow Restriction Cuffs on Performance and Perceptual Responses*” at the National Conference on Undergraduate Research, April 2025

### **Student Presentations at Posters on the Bay:**

Stephora Cesar Alberi, Jordan Pinckney, and Jorge Armando Verduzco Zavala presented “Real-Time Recall App” at the Eighth Annual Posters on the Bay, February 2025

Morgan Burnett presented “Changing the Gain: Teaching the Art of Sound in Technical Theatre B.A. Programs” at the Eighth Annual Posters on the Bay, February 2025

Urjit Chakraborty presented “Empowering Solar and Soil: A Suitability Analysis for Agrivoltaic Systems in Maryland” at the Eighth Annual Posters on the Bay, February 2025

Josie D’Aquila and Argeroula Halkia presented “Conceptions of Adulthood in India” at the Eighth Annual Posters on the Bay, February 2025

Jacob Griffin presented “Be a Man: How Hegemonic Masculinity Presents a Violent and Prevalent Message in America's School-Age Boys” at the Eighth Annual Posters on the Bay, February 2025

Tessah Good presented “Picture-Perfect Pain: Educating Tattoo Artists about the Overlaps between Self-Harm and Tattooing among Women” at the Eighth Annual Posters on the Bay, February 2025

Tabatha Hayes, Madelynne Mattare, Delaney Fairley, Sophia Broyles, Odette Pierre, and Sam Simmons presented “Living Beyond Your Means: The Psychological Impact of Housing Unaffordability” at the Eighth Annual Posters on the Bay, February 2025

Andersen Herman presented “Developing RNA Thermometers and Fluorescence Spectroscopy for Enzymatic Reactions in *Plasmodium falciparum*” at the Eighth Annual Posters on the Bay, February 2025

Dagmawit Kebede, Lauryn Dennis, Jody Kieffer, Jahnaiya Sutherland, Michael Ogbonna, Tyler Hummer, Neila Henrice, Zainab Jabeen, and Ashley Marcum presented “Community Strengths Survey” at the Eighth Annual Posters on the Bay, February 2025

Min Thway Khant and HsiangKun Shih presented “Targeting Cancer-associated Proteins and Click Chemistry Labeling of Probes for Tumor Imaging and Ablation” at the Eighth Annual Posters on the Bay, February 2025

Mauren Krauser, Kailah Caliskan, Zoe Clarke, Julia Dyer, and Miranda Surret presented “Newton Street Mural” at the Eighth Annual Posters on the Bay, February 2025

Logan Krebs presented “Who Will Lead Tomorrow?: An Extended Literature Review Exploring the Importance of Leadership Education in Higher Education Institutions” at the Eighth Annual Posters on the Bay, February 2025

Lucas Kuriawa presented “Impact of Blood Flow Restriction Cuff Design on Upper Body Exercise: A Randomized Crossover Trial in Resistance-Trained Adults” at the Eighth Annual Posters on the Bay, February 2025

Cole Ledger presented “Preventing Acute Malnutrition: The Role of Energy Expenditure and Postnatal Nutrition Among Infants” at the Eighth Annual Posters on the Bay, February 2025

Kyla Linz presented “Discovering Worlds of Literature: Increasing Recreational Reading Rates in University Students Through Use of Social Media and University Community Members” at the Eighth Annual Posters on the Bay, February 2025

Jude Maggitti, Noah Webb, Ashley Gerbes, Connor Sullivan, and Will Weber presented “Prairie Patrol” at the Eighth Annual Posters on the Bay, February 2025

MJ Marshall presented “Hear Me Out: Improving Deaf Accessibility in Educational Theater” at the Eighth Annual Posters on the Bay, February 2025

Andrew Mehall, Walter Euceda-Mendoza, and Oscar Spiers presented “AI Sport Swing Analysis Application” at the Eighth Annual Posters on the Bay, February 2025

Cleo McLaughlin presented “Determining Charge Limits on Scaled Geometrical Surfaces Using Electrostatic Energy Analysis in Electrospray Ionization Mass Spectrometry” at the Eighth Annual Posters on the Bay, February 2025

Joyce Montero presented “Enforcing Sustainability: The Role of Law and Green Information Systems in Transforming Supply Chains and Logistics” at the Eighth Annual Posters on the Bay, February 2025

Ariene Ohimor presented “Assessment of the Physical Activity Environment in Rural Community Parks: An Audit of Maryland's Eastern Shore” at the Eighth Annual Posters on the Bay, February 2025

Sophia Reister presented “Human and Artificial Intelligence Communication: Strengths and Weaknesses of Conversing with AI for Coding Mathematical Models” at the Eighth Annual Posters on the Bay, February 2025

Charis Rose presented “Monitoring Salinity in Assateague Island's Freshwater Ponds at the Spring and Neap Tides” at the Eighth Annual Posters on the Bay, February 2025

Elysha Ross, Delaney Fairley, De’Asia Douglas, Andrew Black, and Vic Androcy presented “The Push and Pull for LGBTQIA+ Rights in an Evolving Society” at the Eighth Annual Posters on the Bay, February 2025

Mark Weedon presented “Performance and Perceptual Responses to Different Chambered Blood Flow Restriction Cuffs” at the Eighth Annual Posters on the Bay, February 2025

Grace Wincovitch presented “One Post Away from Diversity: The Way Instagram Can Market Study Abroad Opportunities to Black and African American Students at Salisbury University” at the Eighth Annual Posters on the Bay, February 2025

Josey Zeunges presented “The Evolution of Literary Magazines and Creative Writing at Salisbury University” at the Eighth Annual Posters on the Bay, February 2025

Sean Zupnik presented “Cardiovascular Responses to Single vs Multi-Chambered Blood Flow Restriction Cuffs” at the Eighth Annual Posters on the Bay, February 2025

### **Student Presentations at the Summer Student Research Showcase:**

Sara Alessandrini presented “Beyond the Melody: Exploring the Correlation Between the Size of the Nucleus Taeniae and Social Behavior in Songbirds” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Nikki Amarasinghe presented “The Impact of the VasX Effector on Interbacterial Competition in the Symbiotic Bacterium *Vibrio fischeri*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Reagan Angle presented “Comparing Embryonic Brain Development Between Specialized and Unspecialized Bird Species” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Hope Barber presented “Genetic and Cellular Characterization of Co-isolated Bacterial Symbionts” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Emma Barthelmess presented “*Exploring Qualitative and Racial Research and Literature*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Delaney Bartosz, Joyce Zhang, and Catherine Milligan presented “Associative Recognition in Aging” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Maia Burger presented “Characterizing the Moribund State in Zebrafish Embryos” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Jasmine Bowie presented “Water Quality in the Chesapeake Bay Watershed” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Michael Caldarola presented “*Túngara Frog (Engystomops pustulosus) Movement Ecology: Male Tracking and Female Mate Choice*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Marissa Carey presented “The Sound of Attraction: Acoustic Decision-Making in Female Mate Choice” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Haley Cristea presented “Understanding the Multimodal Literacies of Faculty in Disciplinary Postsecondary Classrooms” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Malone Dampier and Jenna Luka presented “The Deception of House Wrens: How Cuteness Hides Destruction” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Alexis Davis presented “Delving into Qualitative Research: Exploring Racial Knowledge and Unmasking Inequities” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Alexis Dawson presented “A Comparison of the Mummichog Escape Response to Different Types of Predator Stimuli” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Jeff Dean presented “Reverse Mapping for Disposition: University Writing Center workshops for First Year Seminar” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Brianna Esker presented “Diving in: Does Hyperglycemia Affect Cartilage Development in *Danio rerio*?” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Joshua Essandoh, Michael Straus, and Nikolai Vukov presented “Visual Identification of Oysters with Machine Learning” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Allison Dincau presented “Developing a Directorial Process” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Katie Ekholm and Kelly Mitzel presented “Interactions Between Ants (Hymenoptera: Formicidae) and Plants on the Salisbury University Campus” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Maya Feick presented “Interactions Between Ants (Hymenoptera: Formicidae) and Plants on the Salisbury University Campus” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Kenny Fraker presented “Nesting Towers for the Salisbury Zoo” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Olivia Gaines presented “The Effects of Restaurant-Like Conditions on DNA Aptamer Binding to the Gluten Protein” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Isabella Garrison presented “Effect of Urbanization on Eastern Shore Ant Populations in Salisbury, Maryland” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Kirstin Gibson presented “Building Culturally Responsive Literacy Teachers: How Principals Can Use Inquiry Groups to Develop Teachers” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Natasha Herlinger and Kate Riley presented “Forensic Entomology: When One Story Ends, Another Begins” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Andersen Herman presented “Developing RNA Thermometers and Fluorescence Spectroscopy for Temperature, pH, Urea, and Salt-Dependent Enzymatic Reactions in *Plasmodium falciparum*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Olivia Ingrao presented “How Soil Characteristics Affect Antibiotic Production” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Peter Jabal presented “Barriers to Implementing the Standards Based Curriculum in the Bono East Region of Ghana and its Impact on Equitable Education” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Hayden Johnston presented “Microscopy-based Art” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Rachel Keim presented “*Examining the Relationship between Human Activity, Sediment Size, and Sand Budget at Assateague Island National Seashore*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Lauren Kellam, Jim Kunz, and LY Maysonet presented “Extending Restrictions on Conversion Therapy in Maryland: Exploring Legislative Options” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Min Thway Khant presented “Identifying DNA and RNA sequences that bind tightly to Copper ions for Click Chemistry Labeling of Probes for Tumor Imaging and Ablation” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Lauren Knapp presented “I Can See You, Can You See Me?; Male Vocal Sac Size and the Affect on Female Mate Choice” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Aysan Kolahdouzipour presented “Bridging the Gap: AI's Role in Supporting International Students' Academic Voice in the U.S.” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Kaliyah Little presented “Taking a Microscopic Look into Racial Disparities and Qualitative Research” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Justin Malloy and Susan Velasquez-Perez presented “Astrophotography: Bridging the Gap” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Gabriela Maroto presented “Getting to the Point: Assessing Dietary Signal From Tooth Sharpness in the Postcanine Dentition of Primates ” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Kavina McDonald presented “COVID-19 and Socioemotional Selectivity Theory: Do the Socioemotional Impacts of a Long-term Pandemic Reflect Changes Typically Associated with Aging?” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Jess McInerney presented “A Focus on Learning Content: Teacher and Student Roles in Text-Based Discussion in Secondary Social Studies Classrooms” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Timothy McKirgan, Cole Barbes, and Urjit Chakraborty presented “Flood Detection using UAVSAR” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Nicolina Mondo presented “Sleep and Cognitive Health in Sports” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Lilly Ngo presented “Investigations of Fractal Dimensions in Group-Generated Cellular Automata” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Dustin O’Brien presented “Identifying Water Usage Clients' Wants via LLMs” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Ariene Ohimor presented “Assessment of the Physical Activity Environment in Rural Community Parks: An Audit of Maryland's Eastern Shore” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Amy Palmer presented “The Co-Design of Inquiry-Based Writing Professional Learning” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Vincent Pham presented “Detection and Visualization of Abnormal Salinity Values in One-Dimensional Time-Series Data” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Abigail Pierson presented “*Periodic Behavior in Finite Linear Cellular Automata*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Lauren Hatch Pokhrel presented “Practitioner Researchers' Contributions in Literacy” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Spencer Presley presented “Exploring the Potential of the Quantized Bitnet b1.58 Large Language Model for Edge Devices: Implications for Privacy, Climate Change, and Technology ” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Anna Randall presented “Literary Canon and Pedagogy in Higher Education” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Luis Enrique Rangel-Mora presented “*Earthships vs. Residential Construction: A Comparative Study of Building Materials, Costs, and Energy*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Gabrielle Remington presented “Exploring Reader Identities and Engagement: Adolescent Male Students in Reading Intervention and the Role of a Reading Specialist in Fostering” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Korbin Reynolds presented “*The Túngara Frog's: Dry Land Decisiveness vs. Poolside Panic*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Mahrukh Rizwan presented “*The Effect of the Crosslinker Length on the Swelling Ratio of Synthetic Hydrogels*” at the Annual Salisbury University Summer Student Research Showcase, September 2024



Daniel Robinson presented “The Odyssey and Homecoming” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Charis Sophia Rose presented “Monitoring Salinity Variations in Assateague Island's Freshwater Ponds at the Spring and Neap Tides” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Lucia G Fuentes Scott presented “Descubriendo a Sor Juana: abriendo libros a la educación, la identidad y el poder de la mujer” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Sydney Shannon and Emma Barthelmess presented “Club Sports and Cognition” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Mx Sage Simone presented “CHHS College Climate, and LGBTQ+ Student population” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Oscar Spiers presented “*Optimizing Pose Detection for Golf Swing Analysis*” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Jennifer Spivey presented “Creating Spaces for Kindergarten Writers Through Collaborative Inquiry” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Jessica Stevens presented “Birds in the City: How Green Spaces in Urbanized Areas Affect the Biodiversity of Local Birds” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Connor Sullivan presented “Moving Matters Mobile App Project” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Faith Thompson presented “You have to start somewhere”: Writing Center Tutors & Their Understandings of Linguistic Justice” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Tierney Waters presented “Exploring Racism: Perspective From Literature and Society” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Mariamawit Yohannes presented “High-Accuracy Walking Surface Classification through Heel Strike Detection” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Grant Zemanek presented “Túngara Frog (*Engystomops pustulosus*) Behavior; Evaluating Predatory Responses in Different Environments” at the Annual Salisbury University Summer Student Research Showcase, September 2024

Josey Zeunges presented “The Evolution of Literary Magazines and Creative Writing at Salisbury University” at the Annual Salisbury University Summer Student Research Showcase, September 2024

### **Student Fellowships:**

Sam Dickerson received the Gilman Scholarship to study in Estonia

Kim Arriaga Gonzalez received the Foreign Language and Area Studies Fellowship

Kaley Hardman received the DAAD-RISE to intern in Germany

Andersen Herman received the Gilman Scholarship to study in Estonia

Andersen Herman received the Critical Language Scholarship to study Swahili in Tanzania

Lydia Loftus is an alternate for the DAAD-RISE to intern in Germany

Cailin Snyder received the Goldwater Scholarship

Megan Stoll received the Critical Language Scholarship, SPARK to study Arabic

Miranda Surret is an alternate for the Critical Language Scholarship to study Swahili in Tanzania

### **Student Presentations and Performances:**

Janelle Armstrong presented "Silver Lining for Soft Landing in the Clouds of Uncertainty" at the 2024 National College Fed Challenge Competition

Janelle Armstrong presented "Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future" at the 2025 Southern Delmarva Economic Forecast, Eastern Shore Delegation Luncheon

Phillip Becnel presented the cover of the upcoming *Scarab Literary Magazine* at Honors Research Night, Fall 2024

Francis Chile-Lopez presented "Terrestrial Friction-Reducing Properties of Mucus and Scale Anisotropy in the Amphibious Northern Snakehead (*Channa argus*)" at Integrative and Comparative Biology

Alexis Dawson presented "A comparison of the Mummichog Escape responses to different types of predator stimuli," at the Society for Integrative and Comparative Biology, January 2025, Atlanta, GA

Joe Enfinger presented "Silver Lining for Soft Landing in the Clouds of Uncertainty" at the 2024 National College Fed Challenge Competition

Joe Enfinger presented "Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future" at the 2025 Southern Delmarva Economic Forecast, Eastern Shore Delegation Luncheon

Claudio Garcia presented "Silver Lining for Soft Landing in the Clouds of Uncertainty" at the 2024 National College Fed Challenge Competition

Claudio Garcia presented "Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future" at the 2025 Southern Delmarva Economic Forecast, Eastern Shore Delegation Luncheon

Kaley Hardman presented "The Impact of Unexpected Learning Events on Children's Metacognition" at the Annual Meeting of the Eastern Psychological Association, March 2025

Zachary Harris presented "Silver Lining for Soft Landing in the Clouds of Uncertainty" at the 2024 National College Fed Challenge Competition

Zachary Harris presented “Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future” at the 2025 Southern Delmarva Economic Forecast, Eastern Shore Delegation Luncheon

Lauren Hatch-Pokhrel presented “The Rise of AI: The Rise of Linguistic Justice, Too?” at the 2025 Conference on College Composition and Communication conference in Baltimore, MD.

Lauren Hatch-Pokhrel co-presented “Writing a New Song for Composition: An Engaged Musical Learning Experience” at the 2025 Conference on College Composition and Communication conference in Baltimore, MD.

Lauren Hatch-Pokhrel presented with faculty mentor “Practitioner Researchers' Contributions to Literacy” at the European Conference on Literacy & Panhellenic Literacy Conference in Crete, Greece

Anna McCallister presented “The Impact of Unexpected Learning Events on Children’s Metacognition” at the Annual Meeting of the Eastern Psychological Association, March 2025

Colleen McCann presented “College Women’s Sexual Minority Status Predicts Sexual Victimization Experience and Assault Acknowledgment” at the Annual Meeting of the Eastern Psychological Association, March 2025

Cleo McLaughlin presented “Probing Charge State Limits and Spatial Distribution on ESI-MS Analytes” at the American Society for Mass Spectrometry's annual conference

Willow Nyland presented “The Impact of Unexpected Learning Events on Children’s Metacognition” at the Annual Meeting of the Eastern Psychological Association, March 2025

Caleb Shank presented " On the Quantum Parameter in the Quantum Cohomology of a Family of Odd Symplectic Partial Flag Varieties " at the Mathematical Association of America MD-DC-VA Section Meeting held at George Mason University, April 12, 2025

Chelsea Taylor presented with faculty member “Using Drama in the Secondary ELA Classroom to Inspire Heart and Humanity” at National Council of English Teachers conference in Boston, MA.

Darby Trout presented "Silver Lining for Soft Landing in the Clouds of Uncertainty" at the 2024 National College Fed Challenge Competition

Darby Trout presented “Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future” at the 2025 Southern Delmarva Economic Forecast, Eastern Shore Delegation Luncheon

Leah Voigt presented “The Impact of Unexpected Learning Events on Children’s Metacognition” at the Annual Meeting of the Eastern Psychological Association, March 2025

Lance White presented "Silver Lining for Soft Landing in the Clouds of Uncertainty" at the 2024 National College Fed Challenge Competition

Lance White presented “Addressing the Tri-Factor Growth Cycle for a Sustainable and Thriving Future” at the 2025 Southern Delmarva Economic Forecast, Eastern Shore Delegation Luncheon

## Student Awards, Honors, and Other Activities of Distinction:

James Benedict received 2nd Place from the Kennedy Center American College Theatre Festival Region 2 Conference for his presentation of his exceptional work as the lighting designer for the production TOWN HALL, produced by SU's Theatre Program

Grey Reynolds received 2nd Place from the Kennedy Center American College Theatre Festival Region 2 Conference for their exceptional work as a stage manager for the production TOWN HALL, produced by SU's Theatre Program. They also received a special honor for their work creating an equitable rehearsal room and production space.

Grey Reynolds received a special honor from the Kennedy Center American College Theatre Festival Region 2 for their work creating an equitable rehearsal room and production space

## VI. Acknowledgements

### ▪ 2025 SUSRC Graphics & Program Cover:

- Aden Walters (Winner 2025 SUSRC Poster Contest)
  - Special Thanks
    - Allison Seth, Associate Professor, Art Department
  - Recognizing Other Student Poster Designers:
    - Becca Bibeau
    - Soph Galetovic
    - Maggie Gray
    - Ted Jocelyn
    - Ryan Rush
    - Kyle St. Peter
    - Allie Williams

### ▪ Office of Graduate Studies and Research:

Dr. Clifton Griffin, *Dean of Graduate Studies & Research*  
Vanessa Collins, *Research Account & Compliance Specialist*  
Elizabeth Geiger, *Specialist Graduate Enrollment*  
Teri Herberger, *Director of Sponsored Research Programs*  
Donna Knopf, *Executive Administrative Assistant*  
Nichole Morton, *Contract & Grants Specialist*  
Jessica Scott, *Graduate Program Manager*

### ▪ Office of Undergraduate Research and Creative Activities:

Rhyannon Bemis, *Director*  
Sherry Maykrantz, *Associate Director*

**OURCA Website:** <https://www.salisbury.edu/ourca>

### ▪ 2024-2025 OURCA Undergraduate Research Fellows:

Allison Dincau, *Political Science and Theatre Performance*  
Andersen Herman, *Americorps*  
Sean Zupnik, *Exercise Science*

▪ **SU Student Research Conference Committee:**

Rhyannon Bemis, *Psychology*  
Hoon Cha, *Information Systems and Operations Management*  
Mou Chakraborty, *SU Library*  
Sherry Maykrantz (chair), *Public Health*  
Zac Townsend, *Exercise Science*  
Tim Werner, *Exercise Science*

▪ **Administration Support:**

Dr. Carolyn Ringer Lepre, *President*  
Dr. Laurie Couch, *Provost and Vice President of Academic Affairs*  
Mr. Jason Curtin, *Vice President of Advancement and Alumni Relations*  
Ms. Aurora Edenhart-Pepe, *Vice President of Administration and Finance*  
Mr. Zebadiah Hall, *Vice President of Inclusion, Access, and Belonging*  
Dr. Dane Foust, *Vice President of Student Affairs and Auxiliary Services*  
Mr. Eli Modlin, *Chief of Staff/Vice President of Public Affairs and Strategic Initiatives*  
Dr. Melissa Granger, *Associate Vice President of Academic Affairs*  
Ms. Karen Treber, *General Counsel*  
Dr. Kara Raab, *Associate Vice President for Planning & Assessment*  
Dr. Jessica Clark, *Associate Provost, Academic Affairs*  
Ms. Tara Smith, *Director of Academic Affairs Administrative Operations*  
Dr. Clifton Griffin, *Dean of Graduate Studies and Research*  
Dr. Michael Scott, *Dean of the Richard A. Perdue School of Science and Technology*  
Dr. Christy Weer, *Dean of the Franklin P. Perdue School of Business*  
Dr. Maarten Pereboom, *Dean of the Charles R. and Martha N. Fulton School of Liberal Arts*  
Dr. Matt Laurent, *Dean of the College of Health and Human Services*  
Dr. Laurie Henry, *Dean of the Samuel W. and Marilyn C. Seidel School of Education*  
Dr. Andrew Martino, *Dean of Honors College*  
Ms. Joan Ruelle, *Dean of Libraries and Instructional Resources*

▪ **Technical Support:**

Donna Knopf, Scott Garrison, Todd Smith

***Thank you to all our presenters, mentors, volunteers, support folks, and committee members! See you at the 24<sup>th</sup> Annual Salisbury University Student Research Conference in April 2026!!!***



## Where will undergraduate research take you?

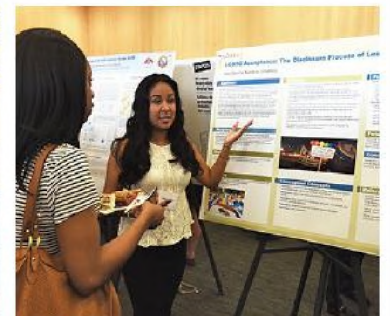
**OURCA offers you exciting undergraduate research experiences at every step of your college career.**

From incoming freshmen to graduating seniors, OURCA supports SU students to:

- Generate innovative projects
- Conduct independent research
- Collaborate with expert faculty mentors
- Earn scholarships and research funds
- Present projects and posters at student conferences
- Travel with other students and faculty
- Build your resume and graduate school applications
- Enhance your academic experience

### CONTACT US TO LEARN MORE ABOUT:

- Funding Opportunities
- Compliance (Human and Animal Research)
- Salisbury University Student Research Conference (SUSRC)
- National Conference on Undergraduate Research (NCUR)
- National Honors Conference (NHC)



### CONTACT INFORMATION

Guerrieri Academic Commons 233  
410-546-1674  
[OURCA@salisbury.edu](mailto:OURCA@salisbury.edu)

#### DIRECTOR:

**Rhyannon Bemis**

Associate Professor, Psychology  
410-543-6372  
[rbemis@salisbury.edu](mailto:rbemis@salisbury.edu)



SU is an Equal Opportunity/AA/Title IX university and provides reasonable accommodation given sufficient notice to the University office or staff sponsoring the event or program. For more information regarding SU's policies and procedures, please visit [www.salisbury.edu/equity](http://www.salisbury.edu/equity).

[www.salisbury.edu/ourca](http://www.salisbury.edu/ourca)

SALISBURY



# CALL FOR SUBMISSIONS

-