

Summer Student Research Showcase

**Thursday, September 3, 2026
4:00-5:00 PM**

Guerrieri Academic Commons, Assembly Hall



Program

4:00-4:10 PM – Welcome and Opening Remarks

Dr. Clifton Griffin, *Dean of Graduate Studies and Research*

4:10-5:00 PM – Poster Session

Poster Presentations

1. *Fairer Farm Rankings: A Bayesian Approach to Benchmarking Broiler Performance*

Kahlan Carrier

Faculty Mentors: Deepak Bastola, Junyi Tu, Sophie Wang

2. *Long-Term Preservation of an Endogenous Retroviral Gag Gene in Caniformia*

Maggie Malone

Faculty Mentor: Guney Boso

3. *Looking Into the Futures: WTI Crude Oil Price Prediction with a Fine-Tuned TinyTimeMixer*

Pax Garcia

Faculty Mentor: Deepak Bastola

4. *Medusa: Apotropaic Representation in the Everyday Object*

Sunny Krause

Faculty Mentor: Marie N. Pareja

5. *Effects of Tirzepatide, a Dual GLP-1/GIP Agonist, on DU145 Cell Proliferation and Migration*

Kaitlyn Borden

Faculty Mentor: Philip Anderson

6. *Love Is In The Air: Hormonal Induction of Estrus in Flying Squirrels*

Amanda Berends

Faculty Mentor: Angela Freeman

7. *Identification and Characterization of Co-opted Truncated Retroviral Env Genes in Even-Toed Ungulates*

Rehan Arif

Faculty Mentor: Guney Boso

8. *Effects of UV filters on Vibrio fischeri Motility*

Kate Kroncke, Kirsten Guckes

Faculty Mentor: Kirsten Guckes

9. *Effects of Same-Sex and Mixed-Sex Pairings on Social Behavior in Southern Flying Squirrels (Glaucomys volans)*

Saylor Allam

Faculty Mentor: Angela Freeman

10. *Hyperglycemia-Induced Changes in Caudal Fin Regeneration Rates in Zebrafish Larvae*

Phyo Min Khant

Faculty Mentor: Jessica Clark

11. *From Song to the Social Brain: Vocal Complexity and Nucleus Taeniae Size Across Songbirds*
Sara Alessandrini, Madalynne Hicks
Faculty Mentor: Jeremy Corfield
12. *Navigating Diagnostic Uncertainty: Mind-Body Interactions in Complex Medical Cases*
Sara Noojin
Faculty Mentor: Ryan Weaver
13. *Investigating the Predatory Impacts of Invasive Blue Catfish (*Ictalurus furcatus*) on Species of Concern in the Upper Chesapeake Bay*
Julianna Jett
Faculty Mentor: Noah Bressman
14. *Effects of Bilingualism on Executive Function: An EEG Investigation Using Stroop and Flanker Tasks*
Derin Su Guzey
Faculty Mentor: Echo Leaver
15. *Leptin as a Metabolic Link Between Reproductive Development and Energy Stores in Blue Catfish*
Claudia Engel
Faculty Mentor: Angela Freeman
16. *Effects of Endocrine-Disrupting Chemicals on Estrogen Response Element Stability and Estrogen Receptor Binding*
Emily Kirchner
Faculty Mentor: Joshua Sokoloski
17. *Conserved Toxicity of the Type VI Secretion System Toxin VasX Across Diverse *Vibrio fischeri* strains*
Bryce Greenlee
Faculty Mentor: Kirsten Guckes
18. *Community-Driven Solutions for Coastal Resilience: Overcoming Barriers on the Lower Eastern Shore*
Briana Spradlin
Faculty Mentor: Shane Hall
19. *Neural-Guided Decision Tree Induction via Global Split Ranking*
Daniel Lugasi
Faculty Mentor: Junyi Tu
20. *Edge Classifier for Parking Lot Occupancy Detection*
Rich Sylvestri
Faculty Mentor: Shuangquan Wang
21. *An Automated Pipeline for Reliable, Repeatable, HESTO Portfolio Reporting*
Shaun Hoffmann
Faculty Mentor: Scott Schaire
22. *From Overt Racism to Neutral Rhetoric: How Newspaper Discourse Reframed Literacy Tests and Voter Suppression in North Carolina, 1890-1963*
Makenna Watson
Faculty Mentor: Junyi Tu

23. *Schedule Optimization for Seasonal Boat Operations*
Corixa Villanueva
Faculty Mentors: Peter Wang, Sophie Wang
24. *Analysis on the Behavior of Small Businesses Reliant on Tourism*
Zophia Horvath, Cori Villanueva
Faculty Mentors: Peter Wang, Sophie Wang
25. *Roll-Isolated IMU Calibration Evaluation*
Julia Zappacosta
Faculty Mentor: Mike Southward
26. *How Elementary ELA Educators Experience and Navigate Policies Shaping Literacy Instruction for Multilingual Learners*
Carly Evans
Faculty Mentor: Koomi Kim
27. *From Talk to Practice: Content-Area Literacy Through Teacher Discussions*
Denise Gregorius
Faculty Mentors: Koomi Kim, Courtney Harned, Heather Porter
28. *The Songbird Housing Crisis: Evaluating House Wren Nesting Preferences to Optimize Nest Site Availability*
Emily Paslick
Faculty Mentor: Jeremy Corfield
29. *Ocean Acidification Effects on *Berghia stephanieae* Feeding Behavior*
Ella Carr
Faculty Mentors: Noah Bressman, Christina Bradley
30. *The Value of City Parks in Urban Areas Regarding Bird Biodiversity: Case Study Southern Delmarva Peninsula*
Bridget Shulman
Faculty Mentor: Xuan Chen
31. *Nailing the Scale Cast: Visualizing Hair Cuticle Patterns*
Hailey Justice, Peri Nelson, Jonathan Wallace
Faculty Mentor: Jocelyn Bunting
32. *Development of Antimicrobial mRNA Therapeutics to Combat *Staphylococcus aureus* Infection in Human Cell Lines*
Peri Nelson
Faculty Mentors: Yoann Le Breton, Elizabeth Emmert
33. *Inside Out: Building Versatile Digital Twin Workflow with Drones & 360° Cameras*
Rustin Newbold
Faculty Mentors: Wataru Morioka, Daniel Harris
34. *Temporal Analysis of Surface and Skew-T Convection-Related Indices for Wallops Island, 1997-2024*
Ellis Waak
Faculty Mentor: Christopher Elcik

35. *Effects of Hyperglycemia Induced by Chemical-Genetic β -Cell Ablation on Vertebral Development and Mineralization in Danio rerio*
Emily Trout
Faculty Mentor: Jessica Clark
36. *The Wolf Within: Shapeshifting and Otherness in Transylvanian Folklore*
Mikayla Wiseman
Faculty Mentor: Ryan Habermeyer
37. *Building a Python Based Data Reduction Pipeline for ARCES Eschelle Spectrographs*
Sean Ohlandt
Faculty Mentor: Nicholas Troup
38. *Two-Probe Positivity Determines the Quantum Cohomology of OG(2, 9)*
Ian Abrego
Faculty Mentor: Ryan Shifler
39. *Rock On: An Out-of-this-World Experience*
Ryan Schultz, Lucas Baldwin
Faculty Mentor: Michael Bardzell
40. *Building Belonging: Friendship Among Racial Minority and LGBTQ+ College Students*
Jenny Timbane
Faculty Mentor: Rachel Steele
41. *The Soundtrack of Your Life: How Influential is Music on Identity Formation?*
Julliana Timbane
Faculty Mentor: Lance Garmon
42. *The Life-Altering Effects on Mothers with Children Who Become Incarcerated*
Lilly Williams, Kilee DiCintio, Addison Crowder
Faculty Mentor: Michele Schlehofer
43. *Are Hostile Traits Associated with Health Behaviors in Emerging Adults?*
Josie D'Aquila
Faculty Mentor: Mark Walter
44. *Analysis of Null-Bounded LFCA Reversibility Using Generalized Toeplitz Systems*
Sean Shockley Jr
Faculty Mentor: Michael Bardzell