

## Posters at the Georgia State Capitol 2026

James H. “Sloppy” Floyd Building | February 17<sup>th</sup>, 2026 | 1:00 – 3:00 PM

1. Sex-dependent alterations in protein expression of E/I proteins in a mouse model of Autism.  
*Lil Gehner, Rowan Schneider, Mentored by Dr. Jennifer Larimore | Agnes Scott College*
2. Investigating the Elusive Nature of Dark Matter Using Gamma-Ray Detectors  
*Jibek Ibraeva, Martinsen Piper, Mentored by Dr. Natalia Tapia Arellano | Agnes Scott College*
3. The Effect of Curved and Flat Treadmills on Muscle Activity and Ground Reaction Force During Exercise  
*Yousef Mohamed, Mentored by Dr. Andrew Craig-Jones | Augusta University*
4. Patients' and Physicians Perspectives on Polycystic Ovary Syndrome Treatment  
*Alexis Mazique, Mentored by Dr. Ellen LeMosy | Augusta University*
5. Understanding Emerging Water Policy Priorities Among Georgia's Regional Water Planning Councils  
*Jackson Beck, Mentored by Dr. Courtney Cooper | Berry College*
6. Speeding Cars and Traffic Lights: How Much Time Does Speeding Really Save?  
*Jadon Jones, Mentored by Dr. Garner Cochran | Berry College*
7. Building Bonds: How Toy Interlocking Blocks and Organic Chemistry Are More Alike Than You Think  
*Jacob Steenborg, Autumn Forsythe, Mentored by Dr. Kerri Taylor | Columbus State University*
8. Intelligent water level detection system  
*Jessica Alexandra Cegarra Arraiz, Mentored by Dr. Qi Zou | Columbus State University*
9. Aquatic Connectivity Project Aiding in Conservation Efforts for the Trispot Darter (*Etheostoma trisella*)  
*Abbey Dunfee, Chloe James, Mentored by Dr. John Lugthart | Dalton State College*
10. Anachnu Aflachim: Variations of Appalachian English in Jewish Communities  
*Rhys Brown, Mentored by Dr. Jenny Crisp | Dalton State College*
11. Analysis of Mental Health and Substance Use Disorders Among Hispanics in the U.S.: Variations Across Spanish, English, and Bilingual Speakers  
*Alison Wen, Mentored by Dr. Jennifer Ellis | Emory University*
12. Investigation on the antibiotic effect of superior-class traditional Chinese medicinal herbs on *Escherichia Coli*  
*Dominic Kassing, Mentored by Dr. Annette Neuman | Emory University*
13. Short Chain vs. Long Chain Per- and Polyfluoroalkyl Substances: Comparative Effects of PFAS on *Caenorhabditis elegans* Lifespan and Implications of Human Health Risk  
*Jayla Barkley, Mentored by Dr. Celia Dodd | Fort Valley State University*
14. Genome-Wide Association Studies for Stem and Yield-Related Traits in Sorghum Diversity Panels  
*Margarita Ramirez, Risha Nayak, Mentored by Dr. Punnuri Somashekhar | Fort Valley State University*
15. The Effect of County Law Enforcement Characteristics on Crime Rates in Georgia: Evidence Using a Pooled Cross-Sectional Time Series Regression Model  
*Emily Wright, Mentored by Dr. Min Kim | Georgia College & State University*
16. Enzymatics of Hydrogen Cyanide Secretion in *Cherokia georgiana*  
*Sarah Carter, Mentored by Dr. Arnab Sengupta | Georgia College & State University*
17. Mapping the Moon's Surface using Project DORA: Dynamic Objective-Reaching Autonomous Rovers  
*Shone Cherian, Ewura Ama Awere, Mentored by Dr. Sairam Tangirala & Dr. Tae Song Lee | Georgia Gwinnett College*
18. Advancing Experiential Learning and Critical Thinking in Honors Education  
*Brianna Wilson, William Hermel, Mentored by Dr. Karen Perell-Gerson | Georgia Gwinnett College*
19. Tactile Bats: Co-Designing Science Access with Blind and Low Vision Learners  
*Victoria Gamez, Mentored by Dr. Abigale Stangl | Georgia Institute of Technology*
20. Metabolic Characterization of Transcriptional Dynamics in *E. coli*-based Cell-Free Expression Systems  
*Raissa Almeida Miglioli, Mentored by Dr. Mark Styczynski | Georgia Institute of Technology*
21. Discretion in immigration enforcement: How non-federal officers navigate judgements surrounding children  
*Jeremiah Davallou, Mentored by Dr. Ashley Lockwood & Dr. Dylan Spencer | Georgia Southern University*
22. Evaluation of Therapist Modeling to Decrease Latency to Exercise Initiation  
*Darci Davis, Mentored by Dr. Kayla Randall | Georgia Southern University*
23. How can we reduce CAUTI rates in the Hospital?  
*Taylor Baptista, Trinity Johnson, Mentored by Dr. Rhonda Slocumb | Georgia Southwestern State University*
24. A simplified mathematical model for deposition in a filter with an electrostatic filter extension  
*Amy Sims, Mentored by Dr. Pejman Sanaei | Georgia State University*

25. Early resource scarcity alters neurovasculature in the medial prefrontal cortex of female but not male rats  
*Luwam Berhane, Mentored by Dr. Debra Bangasser | Georgia State University*
26. The Relationship Between Undergraduate Research Participation and Educational Outcomes  
*Audrey Beilharz, Amelia Baker, Mentored by Dr. Amy Buddie | Kennesaw State University*
27. Acute Metabolic and Perceptive Responses to a Multi-Ingredient Pre-Workout Supplement and CrossFit®-Style Exercise  
*Wil King, Mentored by Dr. Gerald Mangine | Kennesaw State University*
28. Would Medicaid Expansion Be A Cure All For A State's Health Care Quality, Access, Uninsured Rates and Obesity Rates?  
*Emma McCoy, Lucy McCoy, Mentored by Ryan Avin | LaGrange College*
29. The Role of Implicit Racial Bias in Mock Sentencing Decisions Made by College Students  
*Jenna Yeary, Mentored by Dr. Karen Walker | LaGrange College*
30. Quantitative time-based degradation model of U.S military coatings on 1008 steel and 2024 aluminum alloys  
*Samuel Norris, Mentored by Dr. Joseph Keene | Mercer University*
31. Food Restriction Results in Sex Differences for Palatable Food Seeking  
*Ujvali Patel, Mentored by Dr. Ali Gheidi | Mercer University*
32. Chester Davis: Touring One Man's Legacy  
*Melissa Fortune, Mentored by Dr. Susan Asbury | Middle Georgia State University*
33. Determination of rat lungworm hotspots in Georgia  
*Caley Chun, Mentored by Dr. Tyler Achatz | Middle Georgia State University*
34. Mattie Adams: The Untold Story  
*Khalil Harper-Arias, Mentored by Dr. Keith Hollingsworth | Morehouse College*
35. Exploring Education, Income, Ethnicity and Enterococci Levels within Metropolitan Atlanta, GA (USA) Watersheds  
*Bilal Ibrahim, Mentored by Dr. Ethell Vereen | Morehouse College*
36. RNAi amplification complex protein, mut-16, regulates chromatin through synergistic interactions with histone acetyl transferase inhibitor protein, spr-2  
*Zohra Jamil, Mentored by Dr. Karen Schmeichel | Oglethorpe University*
37. Transition metal doped TiO<sub>2</sub> nanoparticles for optimized drug delivery systems  
*Chloe White, Mentored by Dr. Milana Thomas | Oglethorpe University*
38. Does Apple Cider Vinegar Have an Effect on Streptococcus Bacteria?  
*Clara Welch, Mentored by Dr. Julia Schmitz | Piedmont University*
39. Using Common-Garden Experiments to Test the Effects of Infection by the Trematode *Metagonimoides oregonensis* on larval plethodontid salamanders (*Desmognathus amphileucus*) in Appalachian Streams  
*Elijah Marshall, Mentored by Dr. Carlos Camp | Piedmont University*
40. The Silent Side Effects: Examining the Long-Term Consequences of Hormonal Contraceptives  
*Kathryn Bedingfield, Mentored by Dr. Christopher Robinson | Reinhardt University*
41. A Double-Blind Crossover Study Comparing Postprandial Glucose Responses to Placebo and Black Rice Extract in Humans  
*Adonis Thomas II, Mentored by Dr. Imani Muhammad | Savannah State University*
42. Fish schooling behavior during the changing of the tides  
*Mark Fuchs, Mentored by Dr. Amanda Kaltenberg | Savannah State University*
43. Drug Discovery for Mucopolysaccharidosis Type IIIA  
*Niharika Saini, Mentored by Dr. Ryan Weiss | University of Georgia*
44. READINESS for an Economic Downturn: Building Legislative Crisis Management Capacity  
*Anna Rachwalski, Mentored by Dr. Yan Jin | University of Georgia*
45. Complex Analysis in Fluid Dynamics: Streamlining Flow Using Conformal Mappings  
*Micah Chandler, Mentored by Dr. Ryan Thompson | University of North Georgia*
46. Investigating the impact of subchronic exposure to e-cigarette vapor on occludin expression in the blood-CSF barrier of C57BL6/J mouse.  
*Emily Reedy, Stephanie Trinh, Mentored by Dr. Cathy Whiting | University of North Georgia*
47. A System Model of Real-Time AI-Driven Perception Tasks for IoT Devices  
*Liam Worthington, Mentored by Md Dr. Shirajum Munir | University of West Georgia*
48. Exploring Robotic Framework for Automated Navigation and Critical Visual Inspection  
*Matthew Shirley, Mentored by Dr. Md Shirajum Munir | University of West Georgia*
49. Steinbeck, Rudloe, Oysters, and Bryostatins: How Storytelling, Science, and the Gulf of Mexico Shaped Conservation and Medicine  
*Beth Sharpe, Mentored by Dr. Thomas Manning | Valdosta State University*
50. A Synergistic Compound; Converting an Antibiotic into a Highly Effective Cancer Medication  
*Pearce Persaud, Sienna Persaud, Mentored by Dr. Thomas Manning | Valdosta State University*