

28th Annual Undergraduate Research Symposium

In-Person Poster Presentations

April 25, 2025

3:15 PM – 4:15 PM Session

Gray-Little Hall, 2nd Floor Lobby

Presenters:

Connar Adams, “Prednisone's Activating Effect on Glycogen Phosphorylase b,”
Poster Presentation #1

Taiseer Al-Rajabi, “Sleepy Tea: The Interactions of Apigenin and Chamomile Tea with Glycogen Phosphorylase,” *Poster Presentation #2*

Jack Benton Brandy, “Effects of Magnesium Glycinate on Glycogen Phosphorylase,” *Poster Presentation #3*

Thomas Bernas, “Testing the holistic function of various compounds found in Matricaria chamomilla on Glycogen Phosphorylase b,” *Poster Presentation #4*

Ceres Botkin, “Modular Arithmetic with Quantum Fourier Transform,” *Poster Presentation #37*

Mattias Brohl, “Insecure Attachment and Ideal Self-Concept Malleability,” *Poster Presentation #53*

Molly Busenitz, “Using AI Object Recognition on the Jetson Nano to Control a Smart Door That Automatically Opens for People using Mobility Aids,” *Poster Presentation #42*

Zane Busick, “Task-Dependent Strength Adaptations: Comparing Isometric and Isotonic Responses to Maximal Voluntary Contraction,” *Poster Presentation #34*

Ashley Cruce, “Adderall as an Effector of Glycogen phosphorylase b,” *Poster Presentation #5*

Genea Dinnall, “Quantum Neural Networks,” *Poster Presentation #24*

Ella Dugan, “Examining the Relationship Between Concurrent Alcohol Consumption with Daily Alternative Activities and Alcohol Demand,” *Poster Presentation #52*

Cheyenne Eckstein, “Memory Tag Project,” *Poster Presentation #57*

Molly Feighny, Ava Norberg, & Agustina Ramirez, “Evaluating Human Relationships with Artificial Intelligence: The Impact of Task and Alleged Partner,” *Poster Presentation #33*

Gabrielle Fistette, “Sudafed as an Effector of Glycogen Phosphorylase b,” *Poster Presentation #6*

Carly Gagnon, “N-Acetylcysteine Has Opposing Effects on Glycogen Phosphorylase Activity Depending on Adenosine Monophosphate Concentration,” *Poster Presentation #7*

Nicholas Georgiou, “High-Frequency RPM Data Logging for SUAS in Fire Plume Interactions,” *Poster Presentation #41*

Cara Goodnight, “Evolution of Hypoxia-inducible Factor Pathway in Lungless Salamanders,” *Poster Presentation #30*

Bhavya Gupta, “Can We Plug Antibiotic Efflux?” *Poster Presentation #31*

Joseph Hand, “Applying Quaternary Neural Networks to the CIFAR-10 Image Classification Dataset,” *Poster Presentation #40*

Kiersten Harris, “The Impact of Storage Temperature on the Mechanical and Chemical Stability of Sodium Alginate Beads,” *Poster Presentation #20*

Lisa Hild, “PM&R,” *Poster Presentation #50*

Caroline Hybl, “L- Glutamine as an Activator of Glycogen Phosphorylase b,” *Poster Presentation #8*

Hani Ibrahimi, “Palmitoylation of the NLRP3 Inflammasome Complex,” *Poster Presentation #25*

Eddy Iverson, “Testing the Side Effects: Bupropion Increases the Activity of Glycogen Phosphorylase,” *Poster Presentation #9*

Anne Jordan, “The Effect of the Trunk being Held Back on Knee Mechanics During Landing,” *Poster Presentation #35*

Molly Kalthoff, “Depolymerization of Recycled Plastics Through Biocatalysis,” *Poster Presentation #43*

Tyson Karl, “Engineering Properties of Two-Dimensional Materials for Next-Generation Electronics,” *Poster Presentation #38*

Gabby LeDou, “Self-Assembled Flavoprotein Oxidase Engineered with a Metal-Binding Peptide Exhibits Extended Temperature and PH Stability: A Critical Step for Diagnostic Enzymes,” *Poster Presentation #21*

Jake Linderer, “Magnesium Glycinate as an Activator of Glycogen Phosphorylase b,” *Poster Presentation #10*

Nin Mai, “Expanding the Therapeutic Potential of Peptides with β - β -Carbocyclic Amino Acid Libraries,” *Poster Presentation #46*

Maryann Meledrez Cuadros, “Development and Characterization of a Nanoparticle-Based Oral Delivery System for Tumor-Associated Antigens (TAAs),” *Poster Presentation #22*

Kaden Miller, “Using Fluorescence Imaging and Machine Learning to Determine Coral Health in the Caribbean,” *Poster Presentation #26*

Pranshu Modi & Darsh Lad, “Skin MicroBioME Project,” *Poster Presentation #32*

Alisha Monga, Annie Fischer, & Angela Bartholet, “The Effects of Music on Heart Rate Variability in Academic Settings,” *Poster Presentation #54*

Annaliese Nguyen, “Population Genetic Analysis of the Monarch Butterfly W Chromosome,” *Poster Presentation #11*

Cac Nguyen, “Development of Peptidomimetics - Neurolysin Agonist for Ischemic Stroke,” *Poster Presentation #45*

Christine Nguyen, “The Effect of Glutinous Rice Flour on Catalytic Activity of Phosphorylase b,” *Poster Presentation #12*

Vanessa Nguyen, “Clusterin (CLU) as a Modulator of Excitatory/Inhibitory Balance and Neuroprotection in Alzheimer’s Disease,” *Poster Presentation #44*

Akunna Nwasoria, “Analyzing the Mean Firing Rate Vs Amplitude Change During Dynamic Training of The First Dorsal Interosseous Muscle with Female Subjects,” *Poster Presentation #36*

Abigail Peters, “Desorption of PFAS from Zeolites with Supercritical Carbon Dioxide,” *Poster Presentation #23*

Alicia Pham, “Age and Sex-Based Differences in Behavior, Movement, and Habitat use in the Toad-Headed Agama (*Phrynocephalus versicolor*),” *Poster Presentation #28*

Jasmine Place, David Phung, Ramanathan Ranganathan “Psychophysiological Effects of Mindfulness on Reducing Anxiety in College Students,” *Poster Presentation #55*

Alexandra Privat, Alhamza Hamza, & Madalyne Reid, “Optimizing Chemotherapy Safety: Implementing DPYD Pharmacogenomic Testing for 5-Fluorouracil Dosing,” *Poster Presentation #47*

Josef Roeder, “Exploring Sucrose as an Activator of the Glycogen Phosphorylase b,” *Poster Presentation #13*

Jackson Rogers, “Native Arbuscular Mycorrhizal Fungi (AMF) Significantly Improves the Health of Tallgrass Prairie Soils Through Aggregate Stabilization,” *Poster Presentation #27*

Joshua Salem, “Effects of Sudafed (Phenylephrine HCL) on Glycogen Phosphorylase,” *Poster Presentation #14*

Sandra Santos, “Attachment Styles and Bias in Non-Verbal Communication: Extension to Body Language Interpretation and Psychophysiological Measures,” *Poster Presentation #49*

Gauge Shea, “Patterns of Oral Nicotine Pouch Use, Adverse Effects, and Co-Use with Other Substances,” *Poster Presentation #56*

Addison Sloan, “A Functional Brain Imaging Study on the Role of the Anterior Insula in Drinking Moderation,” *Poster Presentation #51*

Kai Smith, “Influence of Lumanutrition Berberine Tablets on Glycogen Phosphorylase b,” *Poster Presentation #15*

Erin Smith, “The Impact of Tylenol on Glycogen Phosphorylase b Activity: A Spectroscopic Analysis of Glycogen Phosphorylase b Activity,” *Poster Presentation #16*

Skylar Spears, “Effects of Common Food Dye FD&C Red #40 on the Glycogen Phosphorylate Pathway,” *Poster Presentation #17*

Mia Stamos, “Antimicrobial Peptide Engineered for Targeted Collagen Assembly for Next-Generation Dental Restorations,” *Poster Presentation #18*

Laia Terencia Hernandez, “Metformin as an Inhibitor of Glycogen Phosphorylase b,” *Poster Presentation #19*

Lauren Thompson, “Additional Microfossils from the White River Formation of Colorado,” *Poster Presentation #29*

Tracey Tran & Olivia Ngo, “Increasing Amphotericin B Solubility using Cyclodextrins,” *Poster Presentation #48*

Zoe Zhou, “Enhancing Quantum Classifiers with Data-Reuploading,” *Poster Presentation #39*

Special Thanks to:

Andre Faucher (Office of Research) and Lindsey Roe (Chemistry), for the poster boards.

Victor Fadare and Mauricio Bahena Garcia (Medicinal Chemistry), for help in setting up the poster boards.

Dr. Maria Orive (CLAS), for the refreshments.

Dr. Roberto De Guzman (Molecular Biosciences) and Dr. Zarko Boskovic (Medicinal Chemistry) for help with the in-person poster session.