



BIO5 RESEARCH & INNOVATION SHOWCASE

2024 POSTER GUIDE

Health & Wellness

Nishita Karikatti: Coping Strategies For Opioid Use Disorders During Week 1 of Postpartum

Kaitlyn Ammann: Plasma Osmolarity as a Determinant of Platelet Morphology and Function in Heart Failure

Nell Maltman: Social Satisfaction and Health-Related Quality of Life Among Individuals with the FMR1 Premutation

J. Ray Runyon: Characterizing steroids in sweat using direct analysis in real time mass spectrometry

Cancer, Infectious Disease & Viruses

Rebekah Mokry: Glucose-independent human cytomegalovirus replication is supported by glutamine feeding lipid synthesis

Zuzana Adams: Development of a 1.0mm Multiphoton Microendoscope System for the Early Detection of Pancreatic Cancer

Randy Chou: Exercise-mobilized lymphocytes have enhanced cytotoxicity against multiple myeloma in combination with monoclonal antibodies, lenalidomide and dexamethasone

Sarita Bugalia: A mathematical model at the wildlife-livestock-human interface to predict the implications of measures to control bovine tuberculosis

Brain, Aging, and Pharmacy

Aneta Kielar: Language therapy combined with electrical brain stimulation can improve outcomes in the Primary Progressive Aphasia

Troy Smith: Glycopeptide Drugs: CNS Drugs from Endogenous Neurotransmitters

Lesley Guareña: Cardiometabolic risk mediates the association between perceived stress and episodic memory similarly among Hispanic/Latino and non-Hispanic White individuals

John Hortareas: Understanding the Mechanism of Lasmiditan-Induced Recovery in Acute Kidney Injury

Genetics, Educational Outreach

Aruna Sreenivasan: Generation of CRISPR/Cas9-mediated transgenic strains in *Toxoplasma gondii*

Nathan Fielder : Use of hPrep for Gluten Degradation in Those with Celiac Disease

Kyle Cook: Comparing Sources for Vocal Cord Dysfunction Patient Education Material

Barbara Fransway: Arizona Genetics Core Services

Linda Restifo: Pilot Study suggests Future Physicians welcome use of Polygenic Risk Score for Coronary Artery Disease Primary Prevention

Rabia Unver: Comparative Analysis of Student-Written vs. ChatGPT-Generated Genetic Disease Papers in an Upper Division Genetics Course

Agriculture & Environment

Alba Filella: Polyphosphate cycling across planktonic Mediterranean communities

Oona Snoeyenbos-West: Some Like it Hot: Isolation & Enrichment of Ammonia-Oxidising Archaea from Sonoran Desert Soils - Implications for Dryland Biogeochemical Cycling.

Sophie Shomper: Are Plants Listening to Each Other? A Study of Corn and Green Leaf Volatiles

Malcolm Barrios: A Data Dashboard For the Campus Living Lab

Biology & Life Sciences

Mallory O'Brien: Investigating Nrf1 Activation from Nutrient Deprivation

Sara Sheikhlary: Platelet Exposure to Exogenous Lipids Reduces Shear-Mediated Platelet Activation

Jaden Todd-Nelson: Characterizing the role of Ctr2 in *Toxoplasma gondii* differentiation

Angie Greenman: The effects of fast skeletal myosin-binding protein-C on myosin energy states

Oona Snoeyenbos-West: Dose the Dose make the Poison? Arsenic tolerance & biotransformation in the mouse gut microbiome.

Pouria Mostafizi: A Large Animal Model of Persistent Atrial Fibrillation

Fox Bravo: A Novel Approach to Utilize Neurostimulators to Induce Atrial Fibrillation in a Porcine Model

Chelsea Doll: Ceramide synthases are involved in myristate-induced ER stress in intestinal epithelial cells

Ariel Heinrich: The Role of Flagellar Motility in Bacterial-Fungal Endosymbiosis

Technology, Data Sciences, Engineering

Noor Gad: Remote Monitoring of Motion And Neuromuscular Function in Renal Patients via a Seven-Part Telehealth Motion Exam

Technology, Data Sciences, Engineering

Zachary Hansen: Comparative Analysis of Large Language Models' Susceptibility to Medical Misinformation: Evaluating Accuracy and Reliability Across Multiple AI Platforms

Ziyuan Wang: An Iterative Approach to Polish the Nanopore Sequencing Basecalling for Therapeutic RNA Quality Control

Luis De Anda: Comparative Analysis of On-Body and Around-Body Motion Detection for Quantitation of Movement Abnormalities Across Excursion Length Ranges with Applicability to Renal Disease

Luis De Anda: The Reliability of AI Large Language Models to Affirm Truth in Information: Susceptibility to Misinformation with Repetitive Engagement

Luis De Anda: "Digital Hoodwinking"?: The Effect of Increasing Argumentation Intensity on Persuasion Susceptibility of AI Large Language Models

Luis De Anda: The Motion Envelope: A New Digital Biomarker for Assessing the Range of Human Motion Using Wearable Sensors

Aman Bhatia: Biosymbiotic Haptic Feedback: Redefining Long-Term Wearable Technology

BIO5 Flinn Scholars Research Experience

Carol Chen: Exploring the Relationship Between APOE, BDNF, and Repetitive Transcranial Magnetic Stimulation

Elizabeth Gharthey: Selecting the puromycin resistance gene in M418 neuroblastoma cells

Matthew Gibson: The Implementation of Prop 207 by Law Enforcement Agencies in Arizona

Makayla Johnson: Advancing Early Detection of Ovarian Cancer Through Cell-Acquiring Fallopian Endoscope Development and OCT Imaging

Sriya Ramisetty: Relationship between sPLA2-X Ligand and Non-small Cell Lung Cancer Proliferation

Taylor Raney: Understanding the Molecular Mechanisms of Endothelial Cells

North Zhang: Cloning Pescified CD4