8th Annual Undergraduate Research Conference
Awards Winners

Oral Session Awards

Engineering Oral Session:

3rd Place – Timothy Collard – Prediction of Dual-Mode Spacecraft Propellant Performance of Binary and Ternary Ionic Liquid Mixtures – Research Advisor, Dr. Joshua Rovey / Mechanical & Aerospace Engineering

2nd Place – Anan Takroori – Experimental Study of Flow Mixing of Two Air Streams with Dissimilar Temperatures Using Flow Fabbles – Research Advisor, Dr. Fathi Finaish / Mechanical & Aerospace Engineering

1st Place – Samuel Pomeroy – Electromagnetism Surrounding Plasmoid Formation in an FRC Test Article – Research Advisor, Dr. Joshua Rovey / Mechanical & Aerospace Engineering

Sciences Oral Session:

3rd Place – Casey Burton – A Novel Enzymatic Technique for Determination of Sarcosine in Urine Samples – Research Advisor, Dr. Yinfa Ma / Chemistry

2nd Place – Matthew Willmering – Template-Free Electrodeposition of Freestanding MnO2 Nanowires and Their Pseudo-Capacitive Properties, Dr. Jay Switzer / Chemistry

1st Place – Kristin Kelly – Computational identification and analysis of the PLA2 gene family in Glycine max – Research Advisor, Dr. Ronald Frank / Biological Sciences

Social Sciences Oral Session:

1st Place – Amanda Foster and Erica Shannon – The Effect of Education on the Public Opinion of Synthetic Biology – Research Advisor, Dr. David Westenberg / Biological Sciences

Arts and Humanities Oral Session:

3rd Place – Thomas Insall – Misfires: A Look at SMS Conversations and Clarity – Research Advisor, Dr. Eric Bryan / History & Political Science


**Poster Session Awards**

**Sciences Poster Session:**

3rd Place – Marissa Spencer – If Rocks Could Talk, Oh What Tales Tekeze Could Tell - Research Advisor, Dr. Mohamed Abdelsalam / Geological Sciences & Engineering

2nd Place – Krista Rybacki – Analysis of Flood Sediment Deposits Following the Taum Sauk Reservoir Failure, Reynolds County, Missouri - Research Advisor, Dr. David Wronkiewicz / Geological Sciences & Engineering

1st Place – Tiffany Edwards – The Therapeutic Effects of the Novel Thiol Antioxidant, N-acetylcysteine Amide (NACA), on Treating Rats with Grade I and Grade II Cataracts - Research Advisor, Dr. Nuran Ercal / Chemistry

**Research Proposal Poster Session:**

3rd Place – Heather Branstetter – Lactic Acid Bacteria from Sourdough and Impact on Gluten Sensitivity - Research Advisor, Dr. David Westenberg / Biological Sciences

2nd Place – David Pohlman – Synthetic Biology Approach to Create a Hybrid Extracellular Supramolecular Machine to Breakdown Free Mycolic Fatty Acids and a Feedback System to Produce a TB Inhibitory Peptide - Research Advisor, Dr. David Westenberg / Biological Sciences

1st Place – Tavia Hall – Exploring Asaia: Prevention of Malaria – Research Advisor, Dr. David Westenberg / Biological Sciences

**Engineering Poster Session:**

3rd Place – Husain Shekhani – The Effect of a Localized Mass Non-Uniformity on a Longitudinally Vibrating Piezoelectric Rod – Research Advisor, Dr. Daniel Stutts / Mechanical & Aerospace Engineering

2nd Place – Annelise Smith with Lucas Laughery, Gerald Holt and Sean Klover – Climate-Responsive Adaptive Control for Natural Ventilation - Research Advisor, Dr. Joon-Ho Choi / Civil, Architectural & Environmental Engineering

1st Place – Amanda Holmes – Seasonal Variation of Contaminant Concentrations In Planta - Research Advisor, Dr. Dr. Joel Burken / Civil, Architectural & Environmental Engineering

**Social Sciences Poster Session:**

2nd Place – Montana Puckett and Lee Voth-Gaeddert – PulaCloud Research - Research Advisor, Dr. Dan Oerther / Civil, Architectural & Environmental Engineering

1st Place – Amber Julien – S&T Male and Female STEM majors: Experiences with Discrimination and Adjustment - Research Advisor, Dr. Dee Haemmerlie Montgomery / Psychology
1. Clayton Buback and Patrick McCarver – Assembly of Polymeric Nanoparticles into Fibers versus Clusters: Experiment and Simulation - Dr. Nicholas Leventis and Dr. Chariklia Sotiriou-Leventis/Chemistry, Physics and Chemical Engineering, Research Advisors