

2023 Undergraduate Summer Research Awards

Faculty Investigator(s)	College	Title of Proposal
Boerner, Valentin	A & S	Programmed Protein Degradation during Meiosis
Dean, Jeffrey	A & S	Acuity of the lateral line system of African clawed frogs as two wave sources near one another
Gnanapragasam, Merlin Nithya	A & S	Studying the upstream of Pumilio1 (PUM1) expression in erythropoiesis
Grunert, Brice	A & S	Improving predictions of coastal water quality from aquatic optical properties across diverse ecosystems
Li, Bibo	A & S	Regulation of the RNaseH1 protein level by TbrAP1
Mueller, Kevin; Grunert, Brice; Griffith, Daniel	A & S/Wesleyan	Leaves of many colors: decoding ecological and physiological signals in electromagnetic radiation reflected by leaves of diverse tree species
Walton, B. Michael	A & S	Effects of Climate Change upon Microhabitat Selection and Species Interactions on the Forest Floor
Weyman, Crystal	A & S	Identification/Characterization of a MyoD mutant capable of inducing myoblast differentiation in the absence of myoblast death
Sun, Xue-Long	A & S	Profiling and Modulating Cell Surface Sialylation
Zhou, Aimin	A & S	Investigating the role of Auranofoin in inhibiting cancer cell growth
Slankard, Cigdem	A & S	The Waiting Room: A Short Documentary on Lead Poisoning in Cleveland
Galetto, Federico	A & S	Finite group actions on free resolutions
Lopez, Hiram	A & S	Multiplying huge matrices and storing massive data sets
Bickel, Jessica	A & S	Reconstruction Driven Polymer Crystallization
Fodor, Petru; Kothapalli, Chandrasekhar	A & S/ENG	Development of Micromixing Systems Using Extensional Flows
Heus, Thijs	A & S	Evaluating the mixing and precipitation of clouds as a function of size
Sensale Rodriguez, Sebastian	A & S	Reverse-Engineering Nanoscale Interactions among Grafted Nanoparticles using Molecular Dynamics Simulations
Streletzky, Kiril	A & S	Probing rotational and translational Diffusion of bare and polymer grafted nanorods using Depolarized Dynamic Light Scattering
Streletzky, Kiril	A & S	Deducing structure and density distribution of microgels by combining Small Angle X-ray Scattering and Light Scattering techniques
Naser, Shereen	A & S	Understanding the Experiences of First Generation Arab Youth in U.S. Schools
Smith, Albert	A & S	Color-Word Contingency Learning: Effects of Stimulus Familiarity
Mills, Paul; Morgan, Todd	BUS	Bridging A Digital Divide: The Marketing Consequences of Big Data for Small Business
Gatica, Jorge	ENG	Sustainable Solutions for Waste Management - Gasification of Household Recyclables
Holland, Nolan	ENG	Design and Synthesis of Protein-Based Nanoparticles with Targeting Peptides
Yang, Shaowei	ENG	2D Functional Materials for Facile Low-Concentration Lead Detection
Jenkins, Jacqueline	ENG	Take a Break from Driving
Owusu-Danquah, Josiah	ENG	Quantifying the deterioration effect of Freeze and Thaw Cycles Structural Wood Used in Northeast Ohio
Kumar, Sathish	ENG	Quantum Neural Network for Cancer Detection
Kumar, Sathish	ENG	Performance Analysis of a Redundant Controller in a Load Balanced Software Defined Networking Environment
Kumar, Sathish	ENG	Federated Learning to Improve the Performance of Pre-Trained Encoders for Microscopy Image Tasks
Ning, Liqun	ENG	3D Bioprinting of Biomimetic Models for Glioblastoma Study
Rahmati, Mehdi	ENG	Underwater Video Transmission Using Optical Communications
Wang, Haodong	ENG	GPU-assisted Zero-Knowledge Proof for Blockchain Applications
Yau, Siu-Tung	ENG	Validation of Rapid MRSA Screening Analyzer with Clinical Samples
Zhao, Wenbing	ENG	Develop a Virtual Environment for Learning Community-Based Cybersecurity Training
Zhu, Ye	ENG	Security of Drone-Based Networking
Borkar, Tushar	ENG	Studying the Structure-Property-Processing relationship for AISI M2 High Speed Tool Steel fabricated via Additive Manufacturing Processes
Goudarzi, Navid	ENG	Powering Electric Vehicle Charging Stations by Hybrid Renewable Energy Systems in Cleveland
Borkar, Tushar; Kothapalli, Chandrasekhar	ENG	Optimizing Hexagonal Boron Nitride (h-BN) Composition and Spark Plasma Sintering Process for High-performance Ti-h-BN metal matrix composites
Crawley, Manuela; DeMarco, Jodi; Kubec, Gina	Health	Investigation on DEI best practices in Healthcare training, practice, and curriculum
Lammers, Andrew	Health	Behavioral and neurological adjustments to adding mass to the limbs or tail of lab rats ( <i>Rattus norvegicus</i> )
Hammonds, Michael; Sahley, Tony	Health	Collection and measurement of circadian minimum stress hormones in nocturnal mice to create baseline concentrations
Su, Anne; DeMarco, Jodi	Health	Designing a new curriculum program for Clinical Research Professionals
Layman, Deborah; Lundeen-Smith, Lori	Health	The Application of a New Collaborative Training and Treatment Model in Treating Children with Communication Disorders
Espy, Debbie; Su, Anne	Health	Developing an Instrumented Measure of Balance Intensity
Liu, Xiongyi	PA & EDU	Artificial Intelligence Enabled Interventions in Special Education: A Systematic Review and Action Research
Clonan-Roy, Katie; Goncy, Elizabeth	PA & EDU/A & S	Conducting and Connecting Community-Based Research to Practice with Sexual and Gender Diverse Youth in Northeast Ohio
Fuller, Kimberly; Naser, Shereen	Health/A & S	
Huang, Grace; Lam, Eddie T.C.	PA & EDU/BUS	Parenting Practices of the Newly US Resettled Families: A Follow-up Study

A & S = College of Arts and Sciences

Health = College of Health

ENG = Washkewicz College of Engineering

PA & EDU = Levin College of Public Affairs and Education

BUS = Monte Ahuja College of Business