

2024 Undergraduate Summer Research Awards

Faculty Investigator(s)	College	Title of Proposal
Bhattacharya, Ruchi	A & S	Land to lake: Linking episodic events and anthropogenic disturbance with dissolved organic matter cycling and formation of hypoxic events in Lake Erie
Dean, Jeffrey	A & S	Lateral line system of <i>Xenopus laevis</i> : Two-point discrimination by separation and distance
Grunert, Brice	A & S	Characterizing Variability of Backscattering in Coastal Aquatic Systems
Krebs, Robert	A & S	Assessment of Habitat and the Restoration of Native Freshwater Mussel Beds in the Cuyahoga River at CUVA
Li, Bibo	A & S	Determine the interaction interface between TbRAP1 and Cactir
Lin, Zihan	A & S	Differential effects of urban street greenness on gun violence in Cleveland, OH
Rauschert, Emily	A & S	Restoration of ecosystem function in meadows
Yuan, Fasong	A & S	Understanding Evaporative Enrichment of Dissolved Inorganic Carbon-13 in Natural Waters from the Lake Erie Watershed
Sun, Xue-Long	A & S	Profiling Sialidase Translocation and Secretion from Macrophages upon LPS Stimulation
Zhou, Aimin	A & S	The role of RNase L in EGF homeostasis
Joyce, James	A & S	Postproduction Supervisor: Managing the Digital Chaos
Slankard, Cigdem	A & S	Migrant Women: Exploration of Local and Global Community Building on Social Media
Bickel, Jessica	A & S	Reconstruction Driven Organic Molecule Crystallization
Heus, Thijs	A & S	Evaluating the mixing and precipitation of clouds as a function of size
Sensale Rodriguez, Sebastian	A & S	Enhancing AAV/EV Production Quality through Innovative iDEP Technologies for Real-Time Nanocarrier Characterization
Streletzky, Kiril	A & S	Using Depolarized Dynamic Light Scattering to Study Rotational and Translational Diffusion of Bare and Polymer Grafted Nanorods of Various Aspect Ratios
Vitali, Jacqueline	A & S	Crystallization of Complexes of <i>M. jannaschii</i> Dihydroorotase with Substrate and Product Analogs
Horvath, Michael	A & S	Smart Surveys: Unleashing AI to Transform Organizational Assessments
Naser, Shereen	A & S	Understanding the Experiences of Arab American School Age Youth
Yaroslavsky, Ilya	A & S	Does Ketamine Potentiate Emotion Regulation?
Wanyerka, Phil	A & S	Archaeological Investigations at the Fort Hill Earthwork Complex, Cleveland Metroparks, Rocky River Reservation
Munther, Daniel; Ryan, Shawn	A & S	Experimentally Validated Mathematical Models for Pathogen Control in Food Industry
Gatica, Jorge	ENG	Sustainable Solutions for Waste Management - Catalytic Gasification of Household Recyclables
Holland, Nolan	ENG	Design and Synthesis of Thermally Responsive Nanoparticles
Yang, Shaowei	ENG	2D Functional Materials for Carbon Dioxide Capture from Air
Chi, Zicheng	ENG	Backscatter Hardware Platform Development
Mal-Sarkar, Sanchita	ENG	Side-Channel Attacks and Countermeasures
Zhang, Jingru	ENG	Covering k uncertain points on a line
Zhu, Ye	ENG	Protecting Security of Communication Between IoT Devices
Yau, Siu-Tung	ENG	A Pilot Study on Near Real-Time MRSA Screening with Clinical Samples
Zhao, Wenbing	ENG	Develop a Digital Twin Demonstration System for Parcel Sortation
Borkar, Tushar	ENG	An In-depth Analysis of Stainless Steel 316H: Unraveling the Structure-Property-Processing relationship via Spark Plasma Sintering, Binder Jetting, and Selective Laser Melting
Borkar, Tushar	ENG	Design and Development of Low-Density High-Entropy Alloy for Energy-Saving Applications using a Phase Formation Rule
Borkar, Tushar	ENG	Microstructure, Mechanical and Tribological Behaviors of Multi-walled Carbon Nanotubes (MW-CNT) Reinforced Inconel 718 Composites
Borkar, Tushar	ENG	Spark Plasma Sintering of Ti-BNNT Metal Matrix Composites for Biomedical Applications
Goudarzi, Navid	ENG	Electric Vehicles Charging Stations Powered by Hybrid Wind-Solar Systems in Cleveland
Ning, Liqun	ENG	Bioprinting of Gradient Tissue Scaffolds for Enhanced Peripheral Nerve Regeneration.
Ao, Geyou	ENG	Assemblies of Photonic Cholesteric Liquid Crystal Shells
Volk, Melissa	Health	Neuro Sparks Camp
Layman, Deborah; Lundeen-Smith, Lori	Health	The Feasibility of Group Music Therapy in Addressing Mental Health Needs of Unhoused Persons
Hammonds, Michael; Sahley, Tony; Anderson, David	Health/A & S	Pro-inflammatory Dynorphin B measurement in brainstem-stimulated or control mice from cochlear fluid
Liu, Xiongyi	PA & EDU	Opportunities and challenges: An explorative study of the use of generative AI in the K-12 settings and its related ethics and limitations
Huang, Grace; Coleman Gallagher, Vickie	PA & EDU/BUS	Educating Students from Refugee Backgrounds (SRBs): Teacher Preparedness and Support Services in K-12 Schools
Clonan-Roy, Katie; Fuller, Kim	PA & EDU/Health	
Naser, Shereen; Goncy, Elizabeth	A & S	Conducting and Connecting Community-Based Research to Practice with Sexual and Gender Diverse Youth in Northeast Ohio