

2026 Undergraduate Summer Research Awards

Faculty Investigator(s)	College	Title of Proposal
Rutherford, Sarah	A & S	How Do We Teach Now? book illustrations
Bhattacharya, Ruchi	A & S	Tracking the sources, transformation, and fluxes of labile organic phosphorus in agroecosystems
Boerner, G Valentin	A & S	Role in Heat Tolerance of Meiosis of an Evolutionarily Conserved Protein Kinase
Gnanapragasam, Merlin Nithya	A & S	Investigating the functions of Pumilio homolog 2 (PUM2) in hemoglobin switching and erythropoiesis
Grunert, Brice	A & S	Assessing water quality patterns in Sandusky Bay through satellite-observed sediment dynamics
Gulshan, Kailash	A & S	Generation of a novel transgenic mouse model for the enhancement of cardiovascular-protective signaling lipid in the plasma and liver
Gulshan, Kailash	A & S	Repurposing FDA-approved antidepressant drugs for countering inflammation (the root cause of metabolic diseases)
Li, Bibo	A & S	Making various targeting constructs to establish T. brucei strains with a floxed TbTIF2 allele
Li, Bibo	A & S	Construction of Exo1 tagging, deleting, RNAi, and inducible ectopic expression plasmids to establish T. brucei strains for characterizing Exo1's function in telomere end processing
Rauschert, Emily	A & S	Green Islands in the Rust Belt: Examining the mycorrhizal inoculum potential of urban soils to improve tree restoration outcomes
Severson, Aaron F	A & S	Determining whether a putative phosphosite plays a conserved role in DNA break-induced sister chromatid cohesion during C. elegans oogenesis and yeast mitosis.
Yan, Jingqi	A & S	Create mesenchymal stem cells stably over-expressing TFR1, RVG and CD47 proteins
Yuan, Fasong	A & S	Influence of Suspended Particulate Matter on Hypolimnetic Oxygen Isotope Dynamics in Lake Erie
Su, Bin	A & S	AR degraders for Prostate Cancer
Sun, Xue-Long	A & S	Profiling and Modulating Sialidase Expression and Activity in Macrophages
Zhou, Aimin	A & S	The role of RNase L in insulin function
Joyce, James	A & S	Authorial Voice: The Beginning and End of Filmmaking
Nicholas Morr	A & S	"Parlay" a short film
Slankard, Cigdem; Mark Slankard	A & S	Documenting the Rainey Institute: History, Community, and Arts Education in Cleveland
Rose, Shelley	A & S	Step into History: Digitizing the Cleveland Museum of Art Education Art Collection
Daniel Munther; Ryan, Shawn; Kothapalli, Chandra	A & S/ENG	Inactivation of Salmonella During Poultry Scalding: efficacy of pH and temperature under simulated commercial conditions
Daniel Munther; Ryan, Shawn; Kothapalli, Chandra	A & S/ENG	Reducing pathogen cross-contamination during poultry processing: modeling and analysis
Bickel, Jessica	A & S	Reconstruction Driven Organic Molecule Crystallization
Heus, Thijs	A & S	Evaluating Cloud Size over the Bankhead National Forest
Resnick, Andrew	A & S	Characterizing Mechanical Properties of Primary Cilia Using Optical Trapping
Streletzky, Kiril	A & S	Developing DDLS Capabilities for Studying Wavelength Dependent Anisotropic Light Scattering
Vitali, Jacqueline	A & S	Crystallization of Complexes of M. jannaschii Dihydroorotase with Ligands
Horvath, Michael	A & S	Called to Work or Called Elsewhere?
Horvath, Michael	A & S	Called to Work or Called Elsewhere? (Part 2)
Smith, Albert F	A & S	Color-Word Contingency Learning: Extending Investigating the Effects of Item Frequency
Wanyerka, Phil	A & S	Archaeological & Geophysical Investigations at the Fort Hill Earthwork Complex, Cleveland
Gallagher, Vickie Coleman; Huang, Grace	BUS; PA & EDU	Refugee Community Center Wellbeing, Satisfaction, and Unmet Needs
Ao, Geyou	ENG	Manufacturing Mechanically Robust Photonic Liquid Crystal Shells
Gatica, Jorge E	ENG	CATALYTIC GASIFICATION AS A WASTE MANAGEMENT ALTERNATIVE IN SPACE EXPLORATION
Holland, Nolan B	ENG	Removal of Gadolinium from Wastewater Using a Thermally Responsive Recombinant Protein
Holland, Nolan B	ENG	Determining the Rheological Properties of Elastin-like Polypeptide Hydrogel Bio-inks
Holland, Nolan B	ENG	Modeling and Design Optimization of a Continuous Flow Maple Syrup Evaporator Pan
Monty-Bromer, Chelsea	ENG	Development and Characterization of 3D-Printed PLA-Conductive Carbon Electrodes for Monitoring Soil and Sediment Microbial Activities
Owusu-Danquah, Josiah S.	ENG	Coating Adhesion on Corroded Surfaces: Influence of Corrosion Severity, Coating Type, and Surface Treatment
Kidando, Emmanuel	ENG	Developing a Large Language Agentic AI for Analyzing Unstructured Crash Data
Zhu, Ye	ENG	On Securing Communication between Resource Constrained Devices
Zhao, Wenbing	ENG	Enhancing STEM Pedagogy through RAG-Enabled LLM Agents
Goudarzi, Navid	ENG	Integrated Machine Learning and Microgrid Modeling for Wind-Solar EV Charging Systems
Goudarzi, Navid	ENG	Experimental Evaluation of Solar PV and Tracking Systems for EV Charging Applications
Ning, Liqun	ENG	Bioprinting of Tissue Scaffolds for Enhanced Peripheral Nerve Regeneration
Ning, Liqun	ENG	Developing novel microgels for microbes encapsulation and delivery
Hammonds, Michael	Health	Assay and Analysis of Serum for Inflammatory Cytokine IL-1 beta
Hammonds, Michael	Health	Mouse Neurosurgical Training of an Undergraduate Student Over the Course of One Summer
Layman, Deborah		
Olszewski, Carol	Health	Beyond Background Sound: Practitioner-Driven Uses of Music in Body-Based Healthcare
Clonan-Roy, Katie; Naser,Shereen; Goncy, Elizabeth; Fuller, Kimberly	PA & EDU; A & S; Health	Exploring the Experiences of Queer Youth Researchers in Northeast Ohio
Huang, Grace H. C.	PA & EDU	Navigating U.S. Schools: Newly Resettled Refugee Parents' Experiences with Their Children's Schooling
Wukich, R. Clayton	PA & EDU	Scaling Civil Discourse in Higher Education: Faculty Training and Institutional Models