

## GRANTS IN AID OF RESEARCH AWARDS (GIAR)

March 2023 Grant Cycle

### Grant Recipients by State/Country

Alabama					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Brandon	McCormick	Doctoral Student	The University of Alabama	Psychology	Examining the Effects of Mild Traumatic Brain Injury on Youth Mental Health
Loren	Sieg	Doctoral Student	The University of Alabama	Behavioral Ecology	Effects of habitat complexity during early development on spatial cognitive ability
Riley	Wood	Masters Student	The University of Alabama	Behavioral Ecology	Performance Variation in the Cold Across a Subtropical-Tropical Latitudinal Gradient

Arizona					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Jayde	Hirniak	Doctoral Student	Arizona State University-Tempe	Anthropology	Developing a robust tephrochronological framework for refined correlations and age estimates of environmental and archaeological deposits throughout South Africa

Arkansas					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Micah	Shaver	Masters Student	University of Arkansas at Little Rock	Chemistry	The Design of New and Environmentally Safe Herbicides Using AI and Molecular Modeling
Madeline	Sudnick	Masters Student	University of Arkansas	Ecology	Differences in the transmission of Mycoplasma gallisepticum between naïve and previously infected birds

California					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Trevor	Auldridge Reveles	Doctoral Student	University of California-Santa Barbara	Anthropology	California Dreaming: Coming of Age in America's Other Heartland
Seth	Frazer	Masters Student	University of California-Santa Barbara	Systematics/Evolutionary Biology	Harnessing machine learning to predict genotype-phenotype relationships in opsins
Garrett	Gimbel	Masters Student	California Polytechnic State University-San Luis Obispo	Conservation Biology	Population and distribution of potentially endangered Narrow-faced Kangaroo Rat ( <i>Dipodomys venustus</i> )
Christopher	Sayers	Doctoral Student	University of California-Los Angeles	Ecology	“The antthrush in the gold mine”: leveraging avian communities to understand how gold mining impacts tropical biodiversity

Colorado					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Peter	Nimlos	Doctoral Student	University of Denver	Systematics / Evolutionary Biology	Transcriptional differences in muscle fiber type in response to high altitude adaptation
Brooke	Shepard	Doctoral Student	University of Colorado Boulder	Cell Biology/Biochemistry	Searching for Solutions to Bone Weakness in Space through the Osteocyte Pericellular Matrix

Connecticut					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Maurice	Amees	Doctoral Student	University of Connecticut	Conservation Biology	Conservation of the Threatened Whitebark Pines Through Genomics Approaches to Identify Resistance Genes to White Pine Blister Rust Disease
Silvina	Slagter	Doctoral Student	Yale University	Geosciences	Testing the use of Ge/Si ratios as a proxy for the fossilization of Earth’s earliest animal ecosystems

Delaware					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Sadia	Islam	Doctoral Student	University of Delaware	Cell Biology/ Biochemistry	The role of non-muscle myosin IIA (NMIIA) in mouse lens epithelial to mesenchymal transition and anterior subcapsular cataract formation.

Florida					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Ana	Mansilla	Undergraduate Student	University of South Florida-Main Campus	Conservation Biology	Correlation in gene expression between non-destructive and destructive tissue sampling: implications for species of conservation concern.
Kailey	McCain	Doctoral Student	University of South Florida-Main Campus	Ecology	Immune Gene Expression Networks in House Sparrow Populations
Shea	Volkel	Doctoral Student	University of South Florida-Main Campus	Ecology	Diet preference of invasive lionfish and prey vulnerability: Implications for regal demoiselle invasion risk and impact
Lila	Xenakis	Undergraduate Student	Florida Institute of Technology	Conservation Biology	Collecting DNA from Sharks using Non-Invasive Skin Sampling
Jessica	Yates	Doctoral Student	University of Central Florida	Conservation Biology	Dietary Ecology of Native and Exotic Crocodilians (Reptilia: Crocodylia) in South Florida: Conservation Implications for the American Crocodile (Crocodylus acutus).

Georgia					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Samantha	Khatri	Doctoral Student	University of Georgia	Geosciences	The relationship of aggradation rate and fluvial architecture: a test in the Maastrichtian Hell Creek Formation of Montana and South Dakota
Jackson	Oakey	Masters Student	University of Georgia	Geosciences	Flow or blow? An in-situ, real-time investigation of magma foaming and its potential to generate obsidian flows versus explosive eruptive pumices
Maygan	Palacios	Masters Student	Georgia Southern University	Ecology	Determining Optimal Source Material of Spartina alterniflora for salt marsh restoration in Coastal GA
Alexandra	St Tellien	Masters Student	Georgia State University	Anthropology	The Role of Langaj in the Transmission and Preservation of Haitian Culture and Vodou Tradition

Idaho					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Jade	Anderson	Masters Student	Boise State University	Behavioral Ecology	Revealing the Mechanism of an Anti-Bat Sensory Illusion

Illinois					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Malia	Berg	Doctoral Student	University of Illinois at Urbana-Champaign	Cell Biology/Biochemistry	The regulation of glycogen in bovine uterine epithelial cells by progesterone
Jayavignesh	Ganesan	Undergraduate Student	Northwestern University	Engineering	Synthesis of a Biocompatible Scaffold for Mesenchymal Stem Cell Seeding

Iowa					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Manish	Kumar	Doctoral Student	Iowa State University	Engineering	Solder Joints Under Extreme Conditions of Temperature and High Strain-rate for In-Space Applications

Kentucky					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Elizabeth	Strasko	Masters Student	Western Kentucky University	Ecology	Measuring temporal variation in ephemeral pond amphibian communities using metabarcoding

Louisiana					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Annelise	Blanchette	Doctoral Student	Tulane University of Louisiana	Physiology/ Functional Morphology	The effect of lead exposure on endurance in the brown anole, Anolis sagrei

Maryland					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Carolyna	Yamamoto Alves Pinto	Doctoral Student	Johns Hopkins University	Computer Science/ Mathematics	Computational models of atrial fibrillation

Massachusetts					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Courtney	Aul	Doctoral Student	Boston University	Psychology	Visual Sustained Attention Fluctuations in Parkinson's Disease
Janice	Chung	Doctoral Student	Harvard University	Cell Biology/ Biochemistry	Transcriptomic Profiles of the Inner Ear in States of Glutamate-Analogue-Induced Synaptopathy and NT3-Mediated Regeneration: Investigating the Role of Gria2
Seth	Dornisch	Doctoral Student	University of Massachusetts- Amherst	Anthropology	Residential environments, personal belongings, and subjective well-being in senior care communities
Parag	Juvala	Doctoral Student	University of Massachusetts- Amherst	Cell Biology / Biochemistry	Investigating how GABAergic signaling assists early-life light exposure to stabilize visual acuity in adulthood.
Shravani	Kakarla	Doctoral Student	Northeastern University	Cell Biology / Biochemistry	Vascularisation of Cardiac Organoids
Codey	Smithson	Undergraduate Student	Williams College	Psychology	The Role of Oxycodone-Induced Neuroinflammation in Regulating Increased Motivation for Reward
Averie	St.Germaine	Doctoral Student	University of Massachusetts- Boston	Climate Science	Elevated Temperature and Drought on Mutualisms Involving Three Trophic Levels
Mark	Teh	Undergraduate Student	Northeastern University	Geosciences	Analysis of calcium carbonate fractions and polymorph mineralogy in sediment samples collected from the Western Atlantic continental shelf during NOAA's ECOA-3 research cruise in Summer 2022

Michigan					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Gene	Estrada	Doctoral Student	University of Michigan-Ann Arbor	Behavioral Ecology	Identifying the ecological influences on terrestrial behavior in a primate community
Frank Boateng	Osei	Doctoral Student	Oakland University	Chemistry	Using polycationic pillar[6]arenes for heparin sensing

Minnesota					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Xiaobo	Sun	Doctoral Student	Minnesota, Mayo Clinic College of Medicine and Science	Cell Biology / Biochemistry	Investigating regulatory mechanisms of ciliary polyglutamylation

Mississippi					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Laney	Nute	Doctoral Student	University of Mississippi	Behavioral Ecology	The influence of individual behavioral differences and recovery program rearing method on dispersal and survival of the Attwater’s Prairie Chicken

Missouri					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Mara	Fields	Doctoral Student	University of Missouri-Columbia	Anthropology	3D Biomechanics of Hallucal Grasping in Anthropoid Primates
Brock	Mashburn	Doctoral Student	Washington University in St Louis	Systematics/Evolutionary Biology	New perspectives on trans-oceanic dispersal, guided by a critically endangered group of tropical plants: Hibiscus sect. Lilibiscus

New Jersey					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Nicole	Firestone	Doctoral Student	New Jersey, Rutgers University-New Brunswick	Physics/Astronomy	One-hundred-square-degree DECam Imaging in Narrowbands Observations In Chile
Sirin	Zhang	Doctoral Student	New Jersey, Rutgers University-Newark	Physiology / Functional Morphology	Inhibitory Pedunculopontine Input to the Dopaminergic Midbrain Mediates Goal-Directed Action Selection



New Mexico					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Jorge	Rivero Monteagudo	Masters Student	New Mexico, New Mexico State University-Dona Ana	Physiology / Functional Morphology	Endocrine regulation and vaginal cytology of the Jamaican fruit-eating bat ( <i>Artibeus jamaicensis</i> ) in captive conditions

New York					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Isabella	Martinez	Undergraduate Student	Barnard College	Systematics/Evolutionary Biology	Investigating the Impact of Genetic Variation in Mating Duration on Male Reproductive Fitness in the fruit fly, <i>Drosophila melanogaster</i>
Alexandra	Martin	Doctoral Student	Binghamton University	Behavioral Ecology	Thermoregulatory behaviors following antipredator diving behavior in <i>Anolis aquaticus</i>
YiRan	Li	Masters Student	Columbia University in the City of New York	Engineering	Electrical and Metabolic Maturation of Engineered Cardiac Tissues for the In-Vitro Modeling of Cardiovascular Diseases
Julia	Gonzales	Doctoral Student	Columbia University in the City of New York	Geosciences	Measuring Rare Earth Element Distributions in CM Chondrites
Thomas	Quigley	Doctoral Student	CUNY Brooklyn College	Behavioral Ecology	Is Anthropogenic Noise a Selective Pressure in New York City Waters?
Michael	Rodriguez	Undergraduate Student	Fordham University	Climate Science	Measurement of Exposure to Particulate Matter Pollution And Its Effects on Stress
Sofia	Ahsanuddin	Doctoral Student	Icahn School of Medicine at Mount Sinai	Physiology / Functional Morphology	Elucidating the Transcriptional Landscape and Novel Pathophysiological Mechanisms of Thyroid Eye Disease.
Benjamin	Guerrero-Lewin	Doctoral Student	Syracuse University	Geosciences	Revealing the influence of climate on hillslope processes using the <sup>14</sup> C- <sup>10</sup> Be cosmogenic nuclide pair in the western Central Andes (30-36°S)

North Carolina					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Anjali	Boyd	Doctoral Student	Duke University	Ecology	Understanding How a Small Invertebrate Grazer Affects Fungal Infection in Panama Seagrass Meadows.
Markis'	Hamilton	Undergraduate Student	Fayetteville State University	Ecology	Prevalence of Antibiotic Resistant Bacteria in Nutrient Enriched Soil Environments
Brandon	Hays	Doctoral Student	Duke University	Ecology	Ecological Impacts of Elephant Reintroductions in Thai Forests
Alexis	Lopez	Doctoral Student	University of North Carolina at Chapel Hill	Geosciences	Paragenesis of the Buffalo Valley Mine, NV
Taylor	Mattioli	Masters Student	University of North Carolina Wilmington	Conservation Biology	How do invasive Phragmites australis vs. native Spartina alterniflora respond to sea level rise, salinity, and management in coastal North Carolina?
Mehnaz	Tarannum	Doctoral Student	University of North Carolina at Charlotte	Physics/Astronomy	Synthesis and Characterization of Vanadium Oxide-Based Insulator-to-Metal Transition Materials

Ohio					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Anuradha	Chimata	Doctoral Student	University of Dayton	Cell Biology / Biochemistry	Characterization of Defective proventriculus (Dve) function during Drosophila eye development
Hans	Naake	Masters Student	University of Cincinnati-Main Campus	Geosciences	Establishing the Influence of Diatom Community on a Paleoclimate Proxy

Ohio (continued)					
Yeaen	Park	Masters Student	Ohio State University- Main Campus	Physiology / Functional Morphology	The Effect of Ambient Temperature on the Sensitivity of a Noxious Chemical Receptor (TRPA1) in Mosquitoes
Katherine	Porras-Brenes	Masters Student	John Carroll University	Systematics/Evolu- tionary Biology	Examining the Relationship Between Antipredator Adaptations in the Green and Black Dendrobatid Poison Frog
jacob	weaver	Masters Student	Miami University- Oxford	Cell Biology / Biochemistry	Transcriptomic analysis of FOXE3 Knockouts; a transcription factor that is essential for lens development

Oregon					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
George	Anim	Masters Student	Portland State University	Geosciences	Shock Thermal Processing of Shergottites Using Evidence For Pressure, Temperature and Deformation Gradient
Elizabeth	McGuire	Doctoral Student	University of Oregon	Anthropology	Quantifying aridity in modern African environments with triple oxygen isotopes in mammal teeth: implications for human evolution

Pennsylvania					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Logan	Becker	Undergraduate Student	Gettysburg College	Ecology	Foraging and Diet Plasticity of Common and Arctic Terns Under Climate Change

Pennsylvania (continued)					
Chiadika	Eleh	Undergraduate Student	University of Pennsylvania	Engineering	Deep Learning Model for Mapping Ex Vivo Clinical Bone CT Scans to In Vivo Bone CT Scans to Recover Bone Microstructure
Veronica	Iriart	Doctoral Student	University of Pittsburgh-Pittsburgh Campus	Ecology	Will herbicide pollution cost plants their symbiosis with beneficial soil bacteria?
Benjamin	Langey	Masters Student	West Chester University of Pennsylvania	Ecology	Effects of Road Salt on the Vegetative Communities in a Large Southeastern Pennsylvania Marsh
Jordan	McCarthy	Undergraduate Student	Saint Joseph's University	Cell Biology / Biochemistry	Phospho-mimetic 4EBP2 expression can prevent hippocampal protein synthesis impairments caused by sleep deprivation in female mice
Alireza	Mohammadzadeh	Doctoral Student	University of Pittsburgh-Pittsburgh Campus	Engineering	Optimization of the Magnetoliposome Fabrication for Retinal Drug Delivery
Zizhong	Tian	Doctoral Student	Pennsylvania State University-College of Medicine	Computer Science / Mathematics	A New Interrater Agreement Measure under the Multiple-Rater Dichotomous-Response Case Based on the Multivariate Bernoulli Distribution

South Carolina					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Danielle	Adams	Doctoral Student	Clemson University	Physiology / Functional Morphology	Cetartiodactyla as a model for investigating the evolution of bone material properties across the skull and jaw
Alyssa	Baker	Masters Student	Clemson University	Systematics/Evolutionary Biology	A formal test of the historical biogeographic scenario proposed by George (2006) to explain diversification and geographic distribution of spiny lobsters in the genus Panulirus (Decapoda: Achelata)
Shinto	Francis	Doctoral Student	Clemson University	Physics/Astronomy	An EIS approach to study the electrochemical interactions at Graphene FET gate surface and its implementation in biosensing

Tennessee					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Jyoti	Behera	Doctoral Student	East Tennessee State University	Cell Biology / Biochemistry	Elucidation of the Mechanistic Role of Novel Avocado Oil Biosynthesis Regulator Protein WRINKLED2

Tennessee (continued)					
Lex	Caballero	Undergraduate Student	Christian Brothers University	Cell Biology / Biochemistry	Effect of Ceramide on Human Meibomian Gland Epithelial Cells
Catherine	Caterham	Masters Student	The University of Tennessee-Knoxville	Geosciences	Herringbone Carbonate Through Time and Its Linkages to Ocean Chemistry
Tara	Empson	Doctoral Student	The University of Tennessee-Knoxville	Behavioral Ecology	The effects of acute heat on signal reception

Texas					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Evelyn	Abbott	Doctoral Student	The University of Texas at Austin	Ecology	Algal adaptation: a novel method for population genetics research in a coral endosymbiont
Charles	Amankwa	Doctoral Student	University of North Texas Health Science Center	Cell Biology/Biochemistry	Understanding the Mitochondrial Metabolic Activity of Compound SA-2 in primary human Trabecular Meshwork cells.
Zoe	Griffin	Undergraduate Student	Rice University	Physiology / Functional Morphology	Skin Color Development and CRISPR Genome Editing in the Brown Anole Lizard (Anolis sagrei)
Ashmita	Khanal	Doctoral Student	Texas Tech University	Systematics/Evolutionary Biology	Unravelling the genetic basis of sex determination in black willows (Salix nigra; Salicaceae)
Nicole	Stevens	Doctoral Student	Texas A & M University-College Station	Conservation Biology	Integrating landscape and behavioral ecology to inform the repatriation of endemic island herpetofauna
Eric	Wuesthoff	Doctoral Student	Rice University	Conservation Biology	Exploring the Role of Tropical Forest Restoration in Movement, Seed Dispersal, & Conservation of Threatened Lemurs

Utah					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Savannah	Adkins	Doctoral Student	Utah State University	Climate Science	Deciphering a Biogeochemical Grey-Box: Does Acidification Result in Macronutrient Limitations and Altered Soil Carbon Cycling?

Vermont					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Dayna	Mieles	Undergraduate Student	Saint Michael's College	Cell Biology / Biochemistry	The generality of efflux pump-mediated gentamicin collateral sensitivity in Escherichia coli

Virginia					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Natalie	Bohmke	Doctoral Student	Virginia Commonwealth University	Physiology / Functional Morphology	Leveraging circadian rhythms to eradicate hypertension: the effects of chrononutrition
Lindsay	Somerville	Masters Student	University of Virginia-Main Campus	Cell Biology / Biochemistry	Type 2 inflammatory cytokine production as a driver of frequent exacerbations in cystic fibrosis
Krislyn	Sourivong	Doctoral Student	Virginia Polytechnic Institute and State University	Physics/Astronomy	Early-Types: Tests of Empirical and Theoretical Models of Molecule Formation

Washington					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Katherine	Gale	Doctoral Student	Washington State University	Ecology	Assessing atmospheric deposition in an urban landscape: Effects of Policy and Infrastructure in Portland, OR

Wisconsin					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Sarah	Beamish	Doctoral Student	Wisconsin, University of Wisconsin-Milwaukee	Psychology	Determining the extent to which 17β-estradiol regulates protein degradation in an activity-dependent manner to enhance hippocampal memory formation in ovariectomized female mice.

## International Grant Recipients By Country

Australia					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Cecilia	Barroso Medina	Doctoral Student	University of Wollongong	Anthropology	Modelling the effect of hominin hand morphology on the biomechanics of stone tool production

Canada					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Lisa	Cozma	Undergraduate Student	University of Calgary	Physiology / Functional Morphology	Measuring muscle energetics and the mechanical efficiency of the quadriceps (Q) vs the plantar flexor (PF) muscle-tendon units during knee and ankle isokinetic movements in vivo
Zira	MacFarlane	Doctoral Student	Ontario, University of Toronto at Mississauga	Ecology	Understanding the impacts of increasing salinity in freshwater ecosystems on calling anuran population dynamics and community composition.
Constantin	Mouzaaber	Masters Student	University of Alberta	Cell Biology / Biochemistry	Using a disease-in-a-dish model to explore the function of peroxisomes in the retina
Shae	Turner	Masters Student	British Columbia, Thompson Rivers University	Ecology	Examining the role of molt in carry-over effects from overwintering to migration for Neotropical migratory songbirds

Cameroon					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Fotsing	Kuetché	Doctoral Student	University of Ngaoundere	Engineering	Optimization of deep learning-based arrhythmias detection systems for m-Health

Italy					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Giulia	Fumagalli	Doctoral Student	Universita degli Studi di Milano	Physics/Astronomy	Eccentricity: the missing piece of the dynamics of precessing compact binaries

Nepal					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Prabin	Karki	Masters Student	Tribhuvan University	Anthropology	Successful ageing and associated factors among older adults of Kathmandu district, Nepal

Nigeria					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Jacob	Ager	Masters Student	Ahmadu Bello University	Engineering	Development of an Improved Charcoal-Fired Oven or Valorizing Biowastes

Portugal					
First Name	Last Name	Education Status	Institution	Field of Research	Study Title
Ana Margarida	Grego	Masters Student	Universidade do Porto	Cell Biology / Biochemistry	Study of proteins associated with sexual dimorphism in aortic valve stenosis.