

Grants in Aid of Research Awards - March 15, 2022 Grant Cycle

Grant Recipients by State

Alabama			
Name	Education Status	Institution	Study Title
Regina Bedgood	Masters Student	University of Alabama at Birmingham	Identifying the Role of JAGN1 in Plants
Mohammad Aminul Hoque	Doctoral Student	University of Alabama at Birmingham	A Framework for Detecting LiDAR Spoofing Attacks on Autonomous Vehicles Using Cooperative Perception
Anne Elizabeth Thaxton	Undergraduate Student	University of South Alabama	Testing the Timing of Gene Expression during Venom Replenishment for Three Scorpion Genera
Yanqi Zhang	Doctoral Student	The University of Alabama	Using Advanced Lutein Delivery Method for Inhibiting Retinopathy of Prematurity – A Preclinical Study in Sprague-Dawley Rats

Arizona			
Name	Education Status	Institution	Study Title
Matthew Moelling	Masters Student	University of Arizona	Adapting to an increasingly variable climate: Selection dynamics on breeding date in a passerine bird
Samantha Scott	Doctoral Student	Arizona State University-Tempe	Serotonin 1B receptor mRNA expression in response to cocaine self-administration

California			
Name	Education Status	Institution	Study Title
Victoria Cassady	Doctoral Student	University of Southern California	An Investigation into the Effect of Microbial Metabolism on Calcium Carbonate Precipitation in Incipient Shrub Microbialites
Ashley Dickinson	Doctoral Student	Humboldt State University	Assessment of the genetic population structure and rate of clonality in a rare serpentine endemic, <i>Lathyrus biflorus</i> , using ddRADseq
Luisa Genes	Doctoral Student	Stanford University	Regeneration of tropical secondary forests: why is species composition recovery so slow?
Stephen Gergeni	Masters Student	California State University-Sacramento	Identifying Critical Habitat and Potential Pathogens within a California Wetland to Improve Conservation Management for the Threatened Giant Gartersnake (<i>Thamnophis gigas</i>)
Elena Kozlova	Masters Student	University of California-Riverside	Effects of Maternal Thyroid Supplementation on Cortical Neurodevelopment in C57Bl/6J Mice Offspring after Maternal Transfer of Indoor Flame Retardant Toxicants
Parker Lund	Masters Student	Humboldt State University	Invasive Anemones Buffer Host-Associated Microbiota Against Thermal Stress
Margaret Mackinlay	Masters Student	California Polytechnic State University-San Luis Obispo	Eye catching light pollution: Anthropogenic light pollution and its evolutionary influence on the avian eye
Tricia Nguyen	Doctoral Student	California Polytechnic State University-San Luis Obispo	Coyote and non-target wildlife responses to livestock guarding dogs at sheep grazing sites
Serey Nouth	Doctoral Student	University of California-Berkeley	Are there sex differences in the core cloacal microbiome composition of Aegean wall lizards, <i>Podarcis erhardii</i> ?
Maya Samuels-Fair	Doctoral Student	University of California-Berkeley	Cretaceous to Neogene life history trends in Cheilostome Bryozoa
Mackenzie Scurka	Masters Student	University of California-Los Angeles	The Heritability of Fear: Decomposing Sources of Variation in Marmot Flight Initiation Distance
Kirsten Sheehy	Masters Student	University of California-Davis	Why are individuals so different? An empirical study of evolutionary bet hedging using a naturally clonal vertebrate.
Jake Vargas	Undergraduate Student	Humboldt State University	Species Identification of <i>Magallana gigas</i> , and <i>Magallana sikamea</i> as it relates to Aquaculture Methods in Humboldt Bay
Savannah Weaver	Undergraduate Student	California Polytechnic State University-San Luis Obispo	Seeking the source of acclimatory changes in lizard osmoregulation
Janelle Talavera	Doctoral Student	New York Binghamton University	Prezygotic isolation and speciation in a Neotropical lizard through a sensory drive lens

Colorado			
Name	Education Status	Institution	Study Title
Wyatt Reis	Masters Student	Colorado State University-Fort Collins	Integrating in situ, and model observations to evaluate wildfire impacts on snowpack processes

Connecticut			
Name	Education Status	Institution	Study Title
Amanda Pastore	Doctoral Student	University of Connecticut	Connecting plasticity to gene expression and its associated fitness in <i>Daphnia magna</i>

Florida			
Name	Education Status	Institution	Study Title
Joshua Benjamin	Doctoral Student	University of Florida	The influence of land use and land cover changes on aquatic biodiversity and trace element distribution in the Mara River Basin
Tiffany Shemwell	Doctoral Student	University of South Florida -Main	Examining mechanistic reasoning and student understanding of the core concept structure and function in biology
Wei Zhang	Doctoral Student	University of Miami	Influence of Chiral Essential Amino acids Mediated Carbon Dots on Immune Response

Georgia			
Name	Education Status	Institution	Study Title
Anecia Gentles	Doctoral Student	University of Georgia	termining the role of cross - species overlap as a driver of henipavirus persistence in bats
Raymond Kidder	Masters Student	Georgia Southern University	Assessment of at - risk barrier island freshwater habitats using Aquatic Macroinvertebrate bioindicators
Michelle Lowery	Masters Student	Georgia Southern University	Algae Turf Scrubber Efficiency in Controlling Nutrient Concentrations and algae Dynamics of an Aquaponic System
Renee Nowicki	Masters Student	Georgia Southern University	Cuticular hydrocarbon analysis of social parasitism in Southeastern cone ants

Idaho			
Name	Education Status	Institution	Study Title
Elyce Gosselin	Doctoral Student	University of Idaho	Ecology and Genetics of the Galapagos Bats

Illinois			
Name	Education Status	Institution	Study Title
Gracious Donkor	Masters Student	Illinois State University	Investigating the synergistic effect of a novel antimicrobial in aminoglycoside - mediated killing of Pseudomonas aeruginosa
Samantha Gartner	Doctoral Student	University of Chicago	Evolutionary Biomechanics and the Mechanical Properties of Cranial Ligaments in the Wrasses and Parrotfishes (Family Labridae)
Elsa Godtfredsen	Doctoral Student	Northwestern University	Earlier Snowmelt, Earlier Flowering, and Increased Drought: New Realities of Subalpine Plant Reproduction under Climate change

Indiana			
Name	Education Status	Institution	Study Title
Kavitha Anbarasu	Doctoral Student	Indiana University-Purdue University-Indianapolis	TBK1 as a therapeutic target for Retinal Ganglion Cell neuroprotection in optic neuropathies
Andrew Mularo	Doctoral Student	Purdue University-Main Campus	Population genomics and dispersal abilities of micropredators: Implications for disease transmission in vertebrates
Emily Selland	Doctoral Student	University of Notre Dame	Agricultural nutrient inputs influence biodiversity - disease relationship of Schistosoma parasites

Maryland			
Name	Education Status	Institution	Study Title
Lauren Jonas	Doctoral Student	University of Maryland-College Park	Biological scrubbing and sequestration of CO2 from powerplant smokestack emissions

Massachusetts			
Name	Education Status	Institution	Study Title
Benjamin Geyman	Doctoral Student	Harvard University	Biogeochemical controls on sedimentary mercury fluxes in the tropical Atlantic Ocean and changes during early diagenesis
Alice Teele	Undergraduate Student	Westfield State University	Historic Evidence of Introgression in Two Ursid Species, the Polar Bear and Grizzly Bear
Tianzhu Xiong	Doctoral Student	Harvard University	The Genetic Basis of Haldane's Rule in Hybrid Butterflies

Michigan			
Name	Education Status	Institution	Study Title
Mary Gibson	Masters Students	Central Michigan University	MGibson + Grant Proposal
Chani Kohtz	Undergraduate Student	University of Michigan-Ann Arbor	Sleeping in a social context: the effect of huddling and its neuronal mechanism in group-living mice

Minnesota			
Name	Education Status	Institution	Study Title
Morgan Mellum	Undergraduate Student	Gustavus Adolphus College	Impacts of carbon cycling on paleoecosystems prior to the K-Pg mass extinction

Nebraska			
Name	Education Status	Institution	Study Title
Bailey McNichol	Doctoral Student	University of Nebraska-Lincoln	Importance of ecophysiological plasticity in the responses of forests to climate change

New Jersey			
Name	Education Status	Institution	Study Title
Gabriel Benson	Masters Student	University of Central Florida	Refining the Restoration Protocol for a Foundation Species of Seagrass
Jordan Lam	Undergraduate Student	Lafayette College	Dominant and Subordinate Foraging Behaviors of House Sparrows as Revealed Through an Automatic Behavior Data Collection System

New York			
Name	Education Status	Institution	Study Title
Dave Colucci	Doctoral Student	Binghamton University	Does urbanization affect the population structure of American crows?
Helbert Garcia - Delgado	Doctoral Student	Syracuse University	Impact of climate and tectonics on sediment flux in low-latitude active orogens: a case study in the Colombian Andes
Amanda Johnston	Doctoral Student	Columbia University in the City of New York	Assessing the impact of habitat loss on genetic diversity of endangered golden monkeys (<i>Cercopithecus mitis kandti</i>) in Rwanda
Kimberly Lato	Doctoral Student	Stony Brook University	Effects of urban habitat use on the trophic ecology of gulls
Vanessa Lau	Masters Student	Columbia University in the City of New York	Biological Nitrogen Fixation Across a Nutrient Gradient in the Arctic Tundra
Benjamin Guerrero - Lewin	Doctoral Student	Syracuse University	Resolving the timing and style of mountain growth in the south-Central Andes (32°–35°S) using low-temperature thermochronology
Catherine Hagearty - Mattern	Undergraduate Student	SUNY Polytechnic Institute	Ultrasound-assisted disulfide bond formation: a powerful tool for cyclization of fluorogenic peptide
Sarah Pangburn	Doctoral Student	CUNY Graduate School and University Center	Evolution of Hemoglobin Digestion Genes Prompted by Parasite Niche Expansion

North Carolina			
Name	Education Status	Institution	Study Title
Julia Bingham	Doctoral Student	Duke University	Knowledge and Power in West Coast Vancouver Island Salmon Fisheries
Nina Ferreri	Doctoral Student	North Carolina State University	Age Cohort Differences in Technology Adoption and Responses to Technology Failures
Hunter Hughes	Doctoral Student	University of North Carolina at Chapel Hill	SMITE: A Novel Method for Estimating Sea Surface Temperatures Using Scleractinian Corals
Matthew Johnson	Masters Student	Appalachian State University	Viral Spillover from Honeybee Apiaries in Native Solitary Bee Populations
Alayna Mackiewicz	Doctoral Student	University of North Carolina Chapel Hill	Magnetoreception in Fishes: An Unsolved Mystery
Rosemary Ronca	Masters Student	Appalachian State University	Comparison of Dietary Niches between two High Elevation Specialist Species, <i>Plethodon welleri</i> and <i>Desmognathus organi</i>
Ami Ward	Doctoral Student	University of North Carolina Chapel Hill	Granite as a metamorphic rock: Investigating autometamorphism within plutons

North Dakota			
Name	Education Status	Institution	Study Title
Holland Galante	Doctoral Student	North Dakota State University-Main Campus	Are melanistic plumage characteristics an honest signal of individual oxidative balance in the male house sparrow (<i>Passer domesticus</i>)?

Ohio			
Name	Education Status	Institution	Study Title
Brittany Multer	Masters Student	Ohio State University-Main Campus	Carbon Sequestration via Concrete Weathering

Oklahoma			
Name	Education Status	Institution	Study Title
Fares Alrefai	Doctoral Student	University of Oklahoma-Health Sciences Center	Unraveling the Mechanism of Polarized Apolipoprotein E Secretion in Retinal Pigment Epithelium

Pennsylvania			
Name	Education Status	Institution	Study Title
Casey Cruse	Masters Student	Pennsylvania State University-Main Campus	The power of smell: olfactory mechanisms underlying resource location in insects
Jennifer Anne Patron	Undergraduate Student	Villanova University	Defining T cell inhibitory role of BTN2A2 protein expressed by Lipid Droplets
Sahil Pawar	Doctoral Student	Pennsylvania State University-Main Campus	Do insects silence plant cries for help?
Laura Perez	Doctoral Student	Pennsylvania State University-Main Campus	Determinants of Diabetes in the Ecological Context of Rural Bangladesh
Alissa Tressler	Undergraduate Student	East Stroudsburg University of Pennsylvania	Predicting Compassion Fatigue in Healthcare Professionals with the Compassion of Others' Lives Short Form

Rhode Island			
Name	Education Status	Institution	Study Title
Meghan Gonsalves	Doctoral Student	Brown University	Repetitive Transcranial Magnetic Stimulation for Major Depression: Effects on Neocortical Metabolites

South Carolina			
Name	Education Status	Institution	Study Title
Timothy Cronin	Doctoral Student	Clemson University	A formal test of sexual conflict in protandric simultaneous hermaphrodites and the effect of sociobiology
James Dockery Jr	Undergraduate Student	College of Charleston	Investigating the Impact of Episodic Stellar Activity on Planet Evolution
Tori Huey	Masters Student	Clemson University	Effect of Immunosuppression in the Remodeling Intervertebral Disc

South Dakota			
Name	Education Status	Institution	Study Title
Anthony Restaino	Doctoral Student	University of South Dakota	Over-expression of miR-15b-5p in HNSCC tumors promotes tumor innervation by the stabilization of neuronal growth cone

Texas			
Name	Education Status	Institution	Study Title
Paul Adefiranye	Undergraduate Student	Texas A & M University-College Station	Development of a Thermal Runaway Initiation System for Lithium-Ion Battery Failure Experiments
Daniel Asgari	Doctoral Student	University of Houston	Identification of transcription factors responsible for constitutive expression of lysozyme genes in <i>D. melanogaster</i> gut
Omar Johnson	Doctoral Student	The University of Texas Medical Branch	Uncovering the effects of genetic variation on gene expression during hyperglycemic stress in induced pluripotent stem cell derived cardiomyocytes
Patrick Lewis	Masters Student	Georgia Southern University	Investigating Fish Community Diversity Longitudinally Across Georgia Southeastern Plain Streams
David Miller	Undergraduate Student	Texas A & M University-College Station	Analysis of Vent Gasses Produced during Thermal Runaway of Lithium-Ion Batteries

Texas (cont.)			
Name	Education Status	Institution	Study Title
Nicholas Molina	Doctoral Student	The University of Texas at Austin	Tribological properties of self-lubricating coatings for machining tools
German Rodriguez Ortiz	Doctoral Student	The University of Texas at El Paso	Experimental investigation of photovoltaic soiling losses inside the laboratory
Hannah Rempel	Doctoral Student	The University of Texas at Austin	Quantifying the critical role of herbivorous coral reef fishes across an environmental gradient
Sydney Rodman	Undergraduate Student	Rice University	Microbiome Comparison Between Endemic Anchialine Shrimp Found Across Cenotes in the Yucatan Peninsula
Ritu Sampige	Undergraduate Student	University of Houston	The Role of Antibiotic-Induced Dysbiosis on Corneal Nerve Regeneration

Utah			
Name	Education Status	Institution	Study Title
Kathryn Sokolowski	Masters Student	University of Utah	Resolving Pleistocene herbivore dietary ecology in the fynbos biome (Western Cape Province, South Africa)

Virginia			
Name	Education Status	Institution	Study Title
Rysa Thomas	Masters Student	James Madison University	Characterization of glucocorticoid and mineralocorticoid receptor expression across a major seasonal life history transition in <i>Thamnophis sirtalis parietalis</i>

Washington			
Name	Education Status	Institution	Study Title
Kira Ashton	Doctoral Student	American University	The impact of early language exposure on visual object representation
Madison Hillegas	Masters Student	George Washington University	Dental evidence of stress events in wild mountain gorillas and chimpanzees

Wisconsin			
Name	Education Status	Institution	Study Title
Michael Rosenthal	Doctoral Student	University of Wisconsin-Madison	Spectroscopic Redshifts of Distant Dusty Star-forming Galaxies

International Grant Recipients By Country

Argentina			
Name	Education Status	Institution	Study Title
Delfina Sotorres	Doctoral Student	Universidad de Buenos Aires	Generating baseline data and building conservation strategies for threatened prey species in the fragmented Atlantic Forest of central-southern Misiones, Argentina

Brazil			
Name	Education Status	Institution	Study Title
Paola Cunha	Undergraduate Student	Universidade Federal do Rio de Janeiro	Simulation of potentially habitable environments on the surface of exoplanets

Canada			
Name	Education Status	Institution	Study Title
Lily Hou	Doctoral Student	University of Waterloo	The impact of sub-lethal effects of white-nose syndrome on gestation progress
Bianca Marcellino	Masters Student	University of Toronto at Mississauga	Effects of climate change-induced reductions of male dragonfly melanin ornamentation on mating success

Ghana			
Name	Education Status	Institution	Study Title
Carolyne Naana Yanney	Undergraduate Student	Kwame Nkrumah University of Science and Technology	CLINICAL AND MICROBIOLOGICAL PROFILE OF FUNGAL ISOLATES IN EXTERNAL OCULAR INFECTIONS AND ANTIFUNGAL SUSCEPTIBILITY

United Kingdom			
Name	Education Status	Institution	Study Title
Aavika Dhanda	Doctoral Student	Oxford University	Evaluating the impacts of land-use land-cover changes on birds of eastern Indian Himalaya, a global biodiversity hotspot