

Grants in Aid of Research Awards -October 1, 2020 Grant Cycle
Grant Recipients by State

Alabama			
Name	Education Status	Institution	Study Title
Garfield Grimmett	Doctoral Candidate	Alabama: Tuskegee University	Ezrin's role in nephrogenesis
Iwo Gross	Doctoral Candidate	Alabama: Auburn University	Sexy sons and darling daughters: Overcoming sexual conflict in a polyandrous reptile through temperature-dependent sex determination
Joe Jansen	Undergraduate	Alabama: University of Alabama at Tuscaloosa	Bcl-xL regulation of mitochondrial trafficking and energy retention in neurites of hippocampal neurons
Shelly McCain	Doctoral Candidate	Alabama: University of Alabama at Tuscaloosa	Age-dependent responses to an extreme salinity gradient in a euryhaline fish, the mangrove rivulus (<i>Kryptolebias marmoratus</i>)
Brandon McCormick	Doctoral Candidate	Alabama: University of Alabama at Tuscaloosa	Examining the Effects of Mild Traumatic Brain Injury on Youth Mental Health
Haylee Quertermous	Masters Student	Alabama: University of Alabama at Tuscaloosa	Initiation of sex change to male in socially subordinate mangrove rivulus hermaphrodites (<i>Kryptolebias marmoratus</i>)

Arizona			
Name	Education Status	Institution	Study Title
Christian Pluchar	Doctoral Candidate	Arizona: University of Arizona	Multi-Mode Feedback Cooling with an Open Source FPGA

California			
Name	Education Status	Institution	Study Title
Amanda Chiachi	Masters Student	California: California State University-Northridge	Determining response and recovery of red abalone, <i>Haliotis rufescens</i> , to marine heatwaves
Reena Debray	Doctoral Candidate	California: University of California-Berkeley	Predicting the Evolutionary Outcomes of Bacteriophage Resistance
Jacob Ewald	Masters Student	California: California State University-Chico	The Mystery of Species Boundaries in Two Northern California Monkeyflowers
Sean Farmer	Masters Student	California: California State University-Northridge	Demystifying the Paradoxical Rarity of the Common Garter Snake (<i>Thamnophis sirtalis</i>) in Southern California
Diler Haji	Doctoral Candidate	California: University of California-Berkeley	Testing ecological speciation in the fire-adapted toxic star lilies of California (<i>Toxicoscordion spp.</i>)
Luke McClintock	Doctoral Candidate	California: University of California-Davis	Exciton Transport in 2D and 3D Halide Perovskite Materials
James Muller	Doctoral Candidate	California: Scripps Institution of Oceanography	Hot or not? Testing the hotspot model for volcanism along the Fierberling-Guadalupe Seamount Trail, north Pacific Ocean

California (cont.)			
Katherine Riordan	Masters Student	California: California Polytechnic State University San Luis Obispo	Are Sea Otter Pups More Vulnerable to the Effects of Oiling?
Daniel Shaykevich	Doctoral Candidate	California: Stanford University	Toads in Space: Homing behavior in invasive cane toads
Regina Spranger	Doctoral Candidate	California: University of California-Santa Cruz	Thermal Acclimation Potential of Midwestern Salamanders: An Extinction Risk Assessment under Climate Change

Connecticut			
Name	Education Status	Institution	Study Title
Madeleine Meadows-McDonnell	Doctoral Candidate	Connecticut: University of Connecticut	How do salt marsh carbon legacies of tidal restriction affect soil organic matter?

Delaware			
Name	Education Status	Institution	Study Title
Sachin Gavali	Doctoral Candidate	Delaware: University of Delaware	Predictive novel kinase-substrate interactions using graph representation learning
Rachel Keown	Masters Student	Delaware: University of Delaware	Replication Modules predict viroplankton phenotypes in the Oligotrophic Ocean

Florida			
Name	Education Status	Institution	Study Title
Abdullah Afridi	Undergraduate	Florida: University of Florida	Spectroscopic Characterization of a Novel Polymer-Protein Hydrogel for Peripheral Nerve Regeneration
Blaire Kleiman	Masters Student	Florida: Florida International University	How weeds affect insects in mango cultivation of South Florida.
Morgan Slevin	Doctoral Candidate	Florida: Florida Atlantic University	An experimental test of the microbiota-gut-HPA axis in a wild songbird

Georgia			
Name	Education Status	Institution	Study Title
Lauren Moniz	Masters Student	Georgia: Georgia Southern University	Investigating ontogenetic dietary shifts in butterfly rays (<i>Gymnura lessae</i>) using stable isotope analysis and stomach content analysis
Laura Fackrell	Doctoral Candidate	Georgia: University of Georgia	Martian regolith as an in-situ resource: The challenge of growing plants on Mars

Idaho			
Name	Education Status	Institution	Study Title
Tana Gazdik	Doctoral Candidate	Idaho: Boise State University	Measuring binding affinity of Notch Intracellular domain homo- and heterodimers
Manuel Santiago	Doctoral Candidate	Idaho: University of Idaho	Assessing genetic diversity and gene flow for Neotropical otter (<i>Lontra longicaudis</i>) in Costa Rica.

Illinois			
Name	Education Status	Institution	Study Title
Matt Jamnik	Doctoral Candidate	Illinois: Southern Illinois University-Carbondale	A Behavioral Genetic Investigation of Preschoolers' Activity Levels and Health Outcomes in Middle Childhood
Rita Mormando	Undergraduate	Illinois: Loyola University Chicago	Polyomavirus JC and its Role in the Urinary Tract
Daniel Principe	Doctoral Candidate	Illinois: University of Illinois at Chicago	Gemcitabine Resistance in Pancreatic Cancer Requires the Sustained Uptake of Calcium via L-Type Channels and is Reversed by High Dose Amlodipine

Indiana			
Name	Education Status	Institution	Study Title
Amanda Burt	Doctoral Candidate	Indiana: Indiana University - Bloomington	A multimethod approach to investigating the diets of dogs from Angel Mounds, Indiana
Parisa Ebrahimbabaie	Doctoral Candidate	Indiana: Ball State University	Two Aspects of Light-Activated Nanoparticles: Decomposition of TCE and PCE, and Assessment of Fate in the Environment

Iowa			
Name	Education Status	Institution	Study Title
Soumya Varma	Doctoral Candidate	Iowa: Iowa State University	Unique Microstructure and Nanomechanical Properties of Enamel in the Grinding Dentition of the Hadrosaurid Dinosaur: A bio-inspired vision for High-Performance, Multi-Functional Materials

Kansas			
Name	Education Status	Institution	Study Title
Cathryn Haas	Undergraduate	Kansas: Kansas State University	Identifying the brain structures active during a time-based intervention

Louisiana			
Name	Education Status	Institution	Study Title
Caroline Rinderle	Masters Student	Louisiana: Louisiana Tech University	The Role of MED12 in Adipogenesis

Maryland			
Name	Education Status	Institution	Study Title
Kathryn Burcham	Undergraduate	Maryland: St. Mary's College of Maryland	Effects of <i>Odocoileus virginianus</i> Management on Sapling Growth in a Mid-Atlantic Forest
Isabel Sullivan	Masters Student	Maryland: University of Maryland, College Park	Life by the numbers: Evaluating the effect of hibernation on DNA methylation in the big brown (<i>Eptesicus fuscus</i>)

Massachusetts			
Name	Education Status	Institution	Study Title
Sabrina Bouchard	Undergraduate	Massachusetts: University of Massachusetts Boston	Identification and verification of candidate novel Hippo tumor suppressor pathway regulators in <i>Drosophila</i>
Lauren DiNicola	Doctoral Candidate	Massachusetts: Harvard University	Examining Component Processes of Parallel Network Functions
Xin Yao Lin	Doctoral Candidate	Massachusetts: Brandeis University	Social Exergame Intervention to Promote Physical Activity, Social Support, and Well-Being in Sedentary Midlife and Older Adults
Kassia Love	Undergraduate	Massachusetts: Harvard University	Building an eyeball robot mechanism that can simulate eye movements with an eccentric preferred retinal locus in people with macular degeneration
Peteneinu Rulu	Doctoral Candidate	Massachusetts: University of Massachusetts Amherst	Sociocultural and familial factors associated with symptom experience at midlife.
Tenley Spataro	Undergraduate	Massachusetts: University of Massachusetts Boston	Development of a nanotechnology-based approach for targeted drug delivery to the eye

Minnesota			
Name	Education Status	Institution	Study Title
Paulina Eberts	Doctoral Candidate	Minnesota: University of Minnesota, Twin Cities	Deciphering the role of ApoE4 in blood-brain barrier dysfunction in late-onset Alzheimer's disease using human induced pluripotent stem cells
Luz Milbeth Cumba Garcia	Doctoral Candidate	Minnesota: Mayo Graduate School	Extracellular Vesicle Metabolism in Glioma: A Link to Depression?
Tanner Mierow	Undergraduate	Minnesota: University of Minnesota, Twin Cities	Visual Specializations for Prey Size Selection in Belostomatid Insects
Emily Pavlovic	Masters Student	Minnesota: University of Minnesota Duluth	Determining natal origins and migratory patterns of raptors using stable isotope analysis ($\delta^2\text{H}$)

Mississippi			
Name	Education Status	Institution	Study Title
Savannah Draud	Doctoral Candidate	Mississippi: University of Mississippi	Do Octocoral Algal-Symbionts Affect Host Form and/or Microbiome?

Missouri			
Name	Education Status	Institution	Study Title
Austin Lawrence	Doctoral Candidate	Missouri: University of Missouri-Columbia	Effect of hip joint orientation and pelvic morphology on human locomotor biomechanics
Sage Rohrer	Doctoral Candidate	Missouri: University of Missouri-St. Louis	MHC Diversity Maintained to Modulate the Gut Microbiome in Wild Birds
Trang Tran	Masters Student	Missouri: Missouri State University	Metal leaching in decomposing sycamore leaf in Big River, Missouri
Hannah Whaley	Masters Student	Missouri: Missouri State University	Macrophyte abundance in spring-fed ponds and how it changes with varying spatial factors

Nebraska			
Name	Education Status	Institution	Study Title
Thilini Ekanayaka	Doctoral Candidate	Nebraska: University of Nebraska at Lincoln	Lower resistance higher temperature molecular multiferroic systems

Nevada			
Name	Education Status	Institution	Study Title
Haley Moniz	Doctoral Candidate	Nevada: University of Nevada, Reno	Unveiling selective pressures of dietary specialization and adaptive toxin resistance in garter snakes (<i>Thamnophis</i>)

New Hampshire			
Name	Education Status	Institution	Study Title
Calen Rubin	Masters Student	New Hampshire: University of New Hampshire	Cosmogenic ¹⁰ Be dating of terminal moraines in the Beartooth Mountains to evaluate glacier responses in greater Yellowstone during the last two glaciations

New Jersey			
Name	Education Status	Institution	Study Title
Emma Dougherty	Undergraduate	New Jersey: Fairleigh Dickinson University	Effect of Artificial Light on the Roosting Habits of the Chimney Swift

New Mexico			
Name	Education Status	Institution	Study Title
Antonia Androski	Doctoral Candidate	New Mexico: University of New Mexico	Testing Pleistocene Drivers of Diversification: Phylogenomics of Shrews Reveals Evolutionary Dynamics of North American Fauna
Cory Cascalheira	Doctoral Candidate	New Mexico: New Mexico State University	Beliefs and Coping with COVID-19
Kyle Helms	Undergraduate	New Mexico: New Mexico State University	The Tsh transcription factor and the transcriptional co-regulator CtBP interact in <i>Drosophila melanogaster</i> eye development

New York			
Name	Education Status	Institution	Study Title
Lamyaa Almeahmadi	Doctoral Candidate	New York: University at Albany	Detection of Proteins-small Molecule Adducts at the Single-Molecule Level using Surface Enhanced Raman Spectroscopy (SERS)
Katarina Evans	Doctoral Candidate	New York: CUNY Graduate Center/NYCEP	Evolution of the coercive pair bond in hamadryas baboons
Georgia Mraz	Undergraduate	New York: Union College	Remote Observing of NASA Exoplanet Candidates
Ritika Nath	Masters Student	New York: City University of New York-Queens College	A survey of mammalian diversity along the Bronx River

North Carolina			
Name	Education Status	Institution	Study Title
Danae Diaz	Doctoral Candidate	North Carolina: Duke University	The relationship between melanin coloration and cognitive performance in swamp sparrows (<i>Melospiza georgiana</i>)
Kerry Martin	Doctoral Candidate	North Carolina: University of North Carolina at Greensboro	Effects of exercise on levels of KEAP1 and NRF2 pathways and downstream antioxidant production.
Ruben Palacio	Doctoral Candidate	North Carolina: Duke University	Understanding local dynamics from regional processes as input for conservation actions.
Savannah Ryburn	Masters Student	North Carolina: University of North Carolina at Chapel Hill	Using DNA from fecal swabs as a new method to quantify the diet of sharks
Skye-Anne Tschoepe	Undergraduate	North Carolina: Appalachian State University	An Assessment of the Impact of Stormwater Management Practices on Stream Salt Ion Concentration in the South Fork New River Watershed

Ohio			
Name	Education Status	Institution	Study Title
Chathumadavi Ediriweera	Doctoral Candidate	Ohio: University of Akron	Sex chromosome evolution in <i>Eulimnadia texana</i>
Sanjay Prasher	Doctoral Candidate	Ohio: University of Cincinnati	Effects of foraging success on social network centrality in bobwhite quail
Nirmalya Thakur	Doctoral Candidate	Ohio: University of Cincinnati	A Sensible and Intelligent Assistant (SIA) to the Visually Impaired

Oklahoma			
Name	Education Status	Institution	Study Title
Kellen Lawson	Doctoral Candidate	Oklahoma: University of Oklahoma	GPU Acceleration for High Contrast Imaging of Exoplanets and Disks

Oregon			
Name	Education Status	Institution	Study Title
Robyn Dove	Doctoral Candidate	Oregon: Portland State University	The root-nodule microbiome: Implications for invasive legume management
Cheng Shi	Doctoral Candidate	Oregon: Oregon State University	Identifying the dominant mechanisms of antimicrobial resistance propagation in soil through wastewater irrigation

Pennsylvania			
Name	Education Status	Institution	Study Title
Stephen Coscia	Doctoral Candidate	Pennsylvania: University of Pennsylvania	Investigating the Role of Myosin 19 in Mitochondrial Fission
Jonathan Hayes	Undergraduate	Pennsylvania: Bucknell University	Genetic diversity & connectivity of <i>Chasmanthium latifolium</i> (<i>Poaceae</i>) in Pennsylvania & the effect on conservation status
Daniel Moriarity	Doctoral Candidate	Pennsylvania: Temple University	A Test of the Immunocognitive Model Using a Reward-Salient Stress Task
April Stabbins	Doctoral Candidate	Pennsylvania: Temple University	Characterizing microbially mediated carbon usage in a newly discovered deep-sea coral inhabiting methane seeps
Amber Stanley	Doctoral Candidate	Pennsylvania: University of Pittsburgh	"Floral Morphology and Pollination Success of Herbarium Specimens"

South Carolina			
Name	Education Status	Institution	Study Title
Kara Noonan	Masters Student	South Carolina: Clemson University	The Influence of Butterflyfish and Coral Genome on the Progression and Transmission Success of Coral Disease

Texas			
Name	Education Status	Institution	Study Title
Kiran Adhikari	Doctoral Candidate	Texas: University of Houston	Understanding the effect of host genotype-by-temperature interactions on the microbiome
Prince Akowuah	Doctoral Candidate	Texas: University of Houston	Therapeutic Utility of Diet Reversal for Improving Corneal Wound Healing in Obesity
Joshua Lerner	Doctoral Candidate	Texas: Texas A&M University-College Station	Putting their best eye forward: how does retinal morphology influence behavior?
Augstine Nti	Doctoral Candidate	Texas: University of Houston	Modeling the optical and visual effects of myopia control contact lenses
Sarah Owen	Masters Student	Texas: Sam Houston State University	Colorado Tick Fever Virus Mediated Apoptosis in Human Endothelial Cells

Utah			
Name	Education Status	Institution	Study Title
Molly Blakowski	Doctoral Candidate	Utah: Utah State University	Geochemical fingerprinting of dust sources around the shrinking Great Salt Lake to estimate human health risks

Virginia			
Name	Education Status	Institution	Study Title
William Archer	Doctoral Candidate	Virginia: Virginia Polytechnic Institute and State University	Measuring Solvent Isotope Effects to Quantify the Connection Between Polymer Structure and Rare-Earth-Element Chelation
Kristy Bell	Undergraduate	Virginia: University of Virginia	Evaluation of electronically captured patient reported outcome (ePRO) data to measure and predict real-time health-related quality of life changes in SLE patients
Marissa Langager	Doctoral Candidate	Virginia: Virginia Polytechnic Institute and State University	Effects of early life nutritional stress on songbird disease response
Erin-Darby McClain	Ecology	Virginia: College of William and Mary	The role of larval cloning in recruitment
Karin Pedemonte	Doctoral Candidate	Virginia: George Mason University	The effects of blood plasma transfusion on older htau mice modeling Alzheimer's disease

Virginia (cont.)			
Nicholas Surdel	Masters Student	Virginia: College of William and Mary	Cognition and Psychological Processing

Washington			
Name	Education Status	Institution	Study Title
Grace Curtis	Doctoral Candidate	Washington: Washington State University	Transcriptional analysis of leptin administration during <i>Xenopus laevis</i> limb regeneration

Wisconsin			
Name	Education Status	Institution	Study Title
Andrew Nine	Doctoral Candidate	Wisconsin: University of Wisconsin-Madison	Searching for the Abundance Signatures of Mass Transfer

International Grant Recipients by Country

Canada			
Name	Education Status	Institution	Study Title
Sophie Breitbart	Doctoral Candidate	Ontario: University of Toronto at Mississauga	Testing for Adaptation to Urbanization in a Native Plant of Conservation Importance
Heinz Otchere	Doctoral Candidate	Ontario: University of Waterloo	Ocular Effects of Scleral Lens Wear on Dry Eye Patients
Melody Petersen	Masters Student	Alberta: University of Calgary	Nutritional Ecology of <i>Varecia variegata</i> in Forest Fragments.
Nikhil Saini	Undergraduate	Ontario: McMaster University	The use of nanoparticles in creating an antiviral surface for COVID-19 virus particles
Jawad Sakarchi	Masters Student	British Columbia: University of British Columbia	Extinction or evolution? How resource use evolves under invasion
David Schlachter	Masters Student	Quebec: École Polytechnique de Montréal	Development of ecological, high-performance polymeric binders for additive manufacturing of metals through binderjetting three-dimensional printing

Spain			
Name	Education Status	Institution	Study Title
Ane Rodriguez	Doctoral Candidate	Spain: Achucarro Basque Center for Neuroscience	Role of dendritic spines in epileptogenesis