

Grants-in-Aid of Research Awards March, 2016 Grant Cycle

Alphabetical by Recipient's Name

Grant Recipient	Research Field	Institution	Study Title
Cheyenne Acevedo	Behavioral Ecology	Nevada: University of Nevada, Reno	Is "consistency the hobgoblin of little minds"? Body size and floral constancy in bumblebees.
Warwick James Allen	Ecology	Louisiana: Louisiana State University-Baton Rouge	Genotypic variation in the fungi community of <i>Phragmites australis</i> : implications for invasion success
Nathan Anderson	Tectonics/Geophysics	Idaho: Idaho State University	Utilizing U/Pb zircon analysis to distinguish or correlate spatially distinct bodies of gneiss
Frederick Arnold	Cell Biology/ Biochemistry	Pennsylvania: Thomas Jefferson University	The role of nuclear export of polyglutamine-expanded androgen receptor in the pathogenesis of Spinal and Bulbar Muscular Atrophy
Maria Arpa	Petrology/Geochemistry	New Zealand: Massey University	Melt generation, storage and ascent below Tongariro Volcanic Complex, Southern Taupo Volcanic Zone
Alex Ayoub	Chemistry	Minnesota: University Of Minnesota, Twin Cities	The optimization of a fluorescence-based assay to quantify protein-ligand interactions
Sebastian Martinez Palomera Baez	Conservation Biology	Florida: Florida Institute of Technology	Impacts of urbanization on anuran species richness
Phillip Belzeski	Cell Biology/Biochemistry	Idaho: Boise State University	Characterization of ssDNA molecules by translocation through lysenin nanopores

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Amrita Bhattacharya	Ecology	Indiana: Indiana University-Bloomington	The role of within-host competition in the evolution of bacteriocin resistance: implications for combating antimicrobial resistance
Carissa Bishop	Ecology	Texas: Southwestern University	Infection Detection: molecular detection of <i>Angiostrongylus cantonensis</i> in Uruguayan and northern Brazilian apple snails
Annelise Blanchette	Behavioral Ecology	Ohio: John Carroll University	Does aposematism in the poison frog <i>Dendrobates auratus</i> encourage bold behavior?
Arianne Boileau	Anthropology	Florida: University of Florida	Identifying Maya Animal Trade through Strontium and Oxygen Isotope Analysis at Lamanai, Belize
Loren Brown	Chemistry	Virginia: Virginia Polytechnic Institute and State University	Synthesis of Lactones Using Modified Cyclopentadienyl Iridium and Rhodium Chloro-bridged Dimers
Gina Calabrese	Behavioral Ecology	North Carolina: University of North Carolina at Chapel Hill	The evolutionary process of adaptation to variable habitat in a range expansion
James Campbell	Anthropology	Massachusetts: Harvard University	A Petrographic Study of Jemez Black-on-white Ceramics in the Dinetsah Region, New Mexico
Johanna Cantillo P	Ecology	Washington: University of Washington	Canopy hydraulic redistribution “Water uptake by trees via canopy roots in epiphytic bryophyte mats
John Capano	Physiology/Functional Morphology	Rhode Island: Brown University	The biomechanics of breathing in snakes: Functioning without key components

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Sarah Carey	Systematics/Evolutionary Biology	Florida: University of Central Florida	Sexual conflict in the placenta of the moss <i>Ceratodon purpureus</i>
Josh Carter	Ecology	Texas: Texas A&M University-Galveston	Genetic Assessment of Habitat Specificity and Character Displacement within the Gulf of Mexico Suture Zone
William Cary	Hydrology/Geomorphology	Washington: Western Washington University	Testing ¹⁰ Be Exposure Dating of Holocene Cirque Moraines using Glacio-lacustrine Sediments in the Sierra Nevada, California
Donald Cerio	Paleontology/Sedimentation	Ohio: Ohio University	The visual apparatus of extinct dinosaurs and modern-day diapsids: CT-scanning, dissection, and anatomical correlates
Nydia Chang	Cell Biology/Biochemistry	New Jersey: Rutgers, The State University of New Jersey	Neuropathology and Encephalopathy following Traumatic Brain Injury
Anlu Chen	Cell Biology/Biochemistry	Ohio: Case Western Reserve University	Discover the genetic causes of cataracts
Kevin Chung	Cell Biology/Biochemistry	Illinois: University of Illinois at Chicago	The Molecular Mechanisms Underlying PDLIM5 Mediated Lung Cancer Cell Proliferation and Invasion
David R. Cordie	Paleontology/Sedimentation	Wisconsin: University Of Wisconsin-Milwaukee	Microbial-Archaeocyathan Reef Evolution and Extinction in the Early Cambrian of the Western Basin and Range

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Diptadip Dattaroy	Cell Biology/Biochemistry	South Carolina: University of South Carolina	Mechanistic study of Sparstolonin B (SsnB) induced attenuation of stellate proliferation and liver fibrogenesis in nonalcoholic steatohepatitis
Danielle Davis	Psychology	Florida: University of Florida	The Impact of Negative Old-Age Stereotypes on Older Adults' Tip-of-the-Tongue States
Payman Dehghanian	Engineering	Texas: Texas A&M University-College Station	Weather-Driven Modeling of Critical Electric Infrastructure for More Resilient Operation of the Electricity Grid
Karen Doersch	Cell Biology/Biochemistry	Texas: Texas A&M University-College Station	Defective Interleukin-2 Signaling in Systemic Lupus Erythematosus Impairs Wound Healing
Colin Dubreuil	Anthropology	Canada: University of Calgary	Vervet Monkey Vocal Signals: Structure, Response, and Development
Laurence Dumouchel	Anthropology	Washington, DC: George Washington University	What the world looked like when we started walking upright: the environments of the earliest Australopithecus
Sara Farwell	Cell Biology/Biochemistry	Pennsylvania: Lehigh University	Elucidating a Role for Transmembrane Protein 184A During Angiogenesis in the Zebrafish
Michelle Fearon	Ecology	Michigan: University of Michigan-Ann Arbor	Changing Perspectives: How Pollinator Communities Influence Honey Bee Virus Prevalence

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Isabel Fendley	Paleontology/Sedimentation	California: University of California-Berkeley	Mercury and its isotopic composition as an indicator of Deccan volcanism near the end-Cretaceous mass extinction in sediments from the Hell Creek region, Montana
Bennett Hardy	Conservation Biology	Wisconsin: University Of Wisconsin-Milwaukee	Harnessing the power of genomics to conserve Cascades frogs (<i>Rana cascadae</i>) at the southern edge of their range
Emi Hayashi	Physiology/Functional Morphology	Illinois: Southern Illinois University-Carbondale	The effects of tumor necrosis factor (TNF) inhibition on cognitive and neuropathological changes in a model of repeated mild traumatic brain injury
Julie Herman	Ecology	California: University of California-Santa Cruz	Elucidating the footprint of selection from a plant-herbivore arms race
Katherine Hovanes	Ecology	Louisiana: Louisiana State University-Baton Rouge	Spatial pattern formation in dominant bunchgrasses in pine savannas (<i>Aristida stricta</i>)
Jiun Yiing Hu	Cell Biology/Biochemistry	Germany: Charite Universitaesmedizin	Exploring the use of independent component analysis of resting-state fMRI data for assessing cerebral hemodynamics in acute stroke
Ana Ibanez	Systematics/Evolutionary Biology	Argentina: Universidad Nacional de Cordoba	The role of pollinators in the diversification of the South American genus <i>Salpichroa</i> (Solanaceae)

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Maureen Kahn	Tectonics/Geophysics	Wisconsin: University of Wisconsin-Madison	Consistent tectonic histories across lithologies: Evaluating the use of crystallographic vorticity axis analysis in polymineralic rocks
Macy Kailing	Ecology	Kentucky: Murray State University	Indirect effects of white-nose syndrome on the bat community in Land Between the Lakes National Recreation Area, KY
Patrick Kelly	Systematics/Evolutionary Biology	North Carolina: University of North Carolina at Chapel Hill	Evolution of Resource Polymorphism: Causes and Consequences
Keri Kemp	Ecology	Georgia: University of Georgia	Dysbiosis and disease in corals: new strategies for studying pathogenesis in complex host commensal-systems
Siddharth Shivkumar Kesharwani	Chemistry	South Dakota: South Dakota State University	Multifunctional Molecular Engineered and Site Specific Complexes of Curcumin with Eudragit® S100 for Sepsis, Inflammatory Bowel Disease and Colon Cancer
Ann Laffey	Anthropology	Florida: University of Florida	An examination of foodways and economic strategy in the manifestation of the Wari State
Connor Lambert	Behavioral Ecology	Ohio: Medical College of Ohio, Toledo	The ecological relevance of estrogen receptor alpha to male prairie vole social behavior
James Lau	Cell Biology/Biochemistry	Virginia: Hampden-Sydney College	Investigating the Role of Melanoma-Associated FOXC2 in Tumor Progression

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Jacob Lee	Petrology/Geochemistry	Georgia: University of Georgia	Investigating the Mantle Source of the Lunar Crater Volcanic Field, Nevada
Samantha Leigh	Physiology/Functional Morphology	California: University of California-Irvine	The Resource Acquisition Strategies of Seagrass-eating Bonnethead Sharks
Susan E Liao	Cell Biology/Biochemistry	Maryland: John Hopkins University School of Medicine	Identifying catalytic residues required for human Dicer DNase activity
Rungmai Limvorapitux	Chemistry	Illinois: Northwestern University	Developing tandem catalysts for hydrogen peroxide generation and alkene oxidation
Po An Lin	Behavioral Ecology	Pennsylvania: Pennsylvania State University	Table manner of caterpillars: the evolution of feeding behavior in Lepidoptera
Yukie Lloyd	Cell Biology/Biochemistry	Hawaii: University of Hawaii at Manoa	Immunity to <i>P. falciparum</i> during Pregnancy: Identifying the Regions of VAR2CSA for Long-lasting Antibody Response
Adam Lundquist-Baz	Conservation Biology	Oregon: Portland State University	Habitat Use and Minimum Area Requirements of Woodpeckers in an Urban Landscape
Erin Lynch	Cell Biology/Biochemistry	Colorado: Colorado State University	Establishing the link that couples transcription and translation in Archaea
Shannon Lynch	Ecology	California: University of California-Santa Cruz	From microbiomes to landscapes – host distribution, traits, and fungal interactions driving distributions of invasive plant pathogens and their insect vectors

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Michael Mahon	Ecology	Ohio: Miami University Ohio	Mechanisms of nonconsumptive effects of white-tailed deer (<i>Odocoileus virginianus</i>) on exotic earthworms
Nathaniel Marshall	Ecology	Ohio: University of Toledo	Ground-Truthing of a High-Throughput Sequencing Assay for the Detection and Population Monitoring of Invasive <i>Dreissena</i>
Rebecca Miller	Ecology	Pennsylvania: Pennsylvania State University	Impacts of Additional Food Resources on Migratory Behaviors of African Honey Bees
Susan Miller	Social and Learning Science	California: University of California-San Francisco	Segregation and Integration in Healthcare: How Hospital Organizational Boundaries Matter
Jennifer Moore	Ecology	Florida: University of Florida	The creatures of the dark: quantifying richness and distribution of the nocturnal mammalian community of Nyungwe National Park, Rwanda
Erica Morelli	Petrology/Geochemistry	Alabama: University of Alabama at Tuscaloosa	Evaluation of barium sources in barites and temperature of carbonate deposition using barium isotopes and clumped δ^{47} mass abundance on hydrocarbon seep deposits, Gulf of Mexico
Amanda Nazario	Psychology	Wisconsin: University Of Wisconsin- Milwaukee	Dexamethasone and Cerebellar Stunting: A Rodent Model of ADHD
Erika Neave	Ecology	Florida: Florida Institute of Technology	Effects of El Nino on the Toxicity of Florida Red Tide

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Enquye Negash	Anthropology	Washington, DC: George Washington University	New insights into past eastern African environments from isotopic variability in modern Ethiopian landscapes; implications for human evolution
David Obada	Engineering	Nigeria: Ahmadu Bello University	Low-cost non-noble metal based catalyst for diesel engine emission control
Kevin Wafula Opondo	Conservation Biology	Kenya: University of Nairobi	Spatio-Temporal Mortality Patterns and Habitat Utilization Model of Black Rhino (<i>diceros bicornis michaeli</i>) at Ngulia Sanctuary and Intensive Protection Zone (IPZ)- Tsavo West National Park; Kenya
Inoka Peiris	Hydrology/Geomorphology	Texas: University of Texas at Dallas	Monitoring temporal variation of groundwater heavy metals (specially As/Cd) levels in Anuradhapuradistrict, North Central Province, Sri Lanka
Kendra Peterson	Physiology/Functional Morphology	Ohio: Medical College of Ohio, Toledo	Effects of an organic commercially-available soil amendment containing humic acids on growth parameters and productivity of pepper and kidney bean plants
Ashley N Petrillo	Anthropology	Connecticut: University of Connecticut	The Development of Dairying and Social Complexity in the Southern Levant
Devon Picklum	Behavioral Ecology	Nevada: University of Nevada, Reno	Bee behavior and anther color signaling in model heterantherous flowers

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Alex Pilote	Ecology	Georgia: University of Georgia	Has domestication produced novel trait combinations in <i>Helianthus annuus</i> ?
Blake Rasor	Cell Biology/Biochemistry	Ohio: Miami University Ohio	A high-throughput in vitro assay for neural retina regeneration from retina pigmented epithelium
Austin Ray	Conservation Biology	Alabama : University of South Alabama	Identification of Genetic Units for Conservation in the Endangered Alabama Red-bellied Turtle, <i>Pseudemys alabamensis</i>
Sergio Redondo	Ecology	California: Stanford University	Evolutionary, Ecological and Developmental Impacts of Mercury on the Bat Fauna of Peru
Karly Regan	Ecology	Pennsylvania: Pennsylvania State University	Hunter and Hunted: Conserving Predator-Prey Interactions in Disturbed Habitats
Zach Richard	Paleontology/Sedimentation	Pennsylvania: Pennsylvania State University	Permian-Triassic Paleoclimate Reconstructions using Paleosol Siderite
Michael Benjamin C Rivera	Anthropology	United Kingdom: Cambridge University	Exploring diachronic changes in human activity, diet and health in the prehistoric Baltic context
Ruth Rivkin	Ecology	Canada: University of Toronto	The role of herbivory on the evolution of males in plants
Enrique Hernandez Rodriguez	Ecology	Mexico: Intsituto de Investigaciones sobre los Recursos Naturales	Effect of forest management on two contrasting groups: mosses and medium and large mammals, Sierra Juarez, Oaxaca, Mexico
Elizabeth Rowen	Ecology	Pennsylvania: Pennsylvania State University	Plant probiotics: Do microbiomes affect plant-insect interactions?

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Lauren Rudie	Systematics/Evolutionary Biology	Texas: Sam Houston State University	The prevalence of Wormian Bones in Amphisbaenids
John Russell	Petrology/Geochemistry	North Carolina: University of North Carolina at Charlotte	Assessing provenance of the Blue Mountains Province, eastern Oregon, using U-Pb age and eHf isotopic composition
Katherine E. Schaefer	Conservation Biology	Kentucky: Morehead State University	Tri-colored Bat (<i>Perimyotis subflavus</i>) Habitat Use Characterization and Modeling in Western Kentucky Following White-nose Syndrome
Katelin Schneider	Physiology/Functional Morphology	Ohio: University of Cincinnati	Characterization of a Corticosterone Stress Hormone Response Gene in <i>Xenopus tropicalis</i>
Cody Scholtens	Psychology	Illinois: Illinois State University	Mesolimbic Dopamine and its Role in Social Behavior
Whittaker Schroder	Anthropology	Pennsylvania : University of Pennsylvania	Collapse, Crisis, and Resilience: Household Resettlement in the Upper Usumacinta Landscape
James Sears	Cell Biology/Biochemistry	North Carolina: Wake Forest University School of Medicine	Selective silver nanoparticle mediated multimodal therapy for triple-negative breast cancer
Jess Senjem	Anthropology	Wisconsin: University of Wisconsin-Madison	New methodological approach for faunal analysis of Swartkrans Cave, South Africa

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Samantha Sharpe	Ecology	Kansas: Kansas State University	Rapid adaptation in a contaminated environment: Evolutionary adaptive response of old field grass <i>Andropogon virginicus</i> to heavy metals in abandoned Lead and Zinc mines
Leena Shewade	Physiology/Functional Morphology	Ohio: University of Cincinnati	Dissecting the role of glucocorticoid hormones in regulating the effects of early life stress
Lauren Sibley	Systematics/Evolutionary Biology	North Carolina: Duke University	What makes a mouth?: Evaluating developmental homology of the deuterostome mouth
Tyson Smith	Tectonics/Geophysics	Texas: University of Houston	The Ancestral Rocky Mountains: Linking source to sink
William Sparks	Ecology	Wisconsin: University of Wisconsin-Madison	Solving the Bladderwort Paradox - a critical test of the economic model for plant carnivory
Levi Storks	Behavioral Ecology	Missouri: University of Missouri-Columbia	Cold-blooded Cognition: Behavioral flexibility of a neotropical lizard across an urban-forest gradient
John Swenson	Systematics/Evolutionary Biology	California: San Francisco State University	How the Devil Ray Got Its Horns: the Evolution and Development of Cephalic Lobes
Paul Sylvester	Cell Biology/Biochemistry	Missouri: Saint Louis University	Lymphotoxin Beta Receptor Expression in Neonatal Mice
Larry Taylor	Paleontology/Sedimentation	California : University of California-Berkeley	Isotopic analysis of fossil coronulid barnacle shells to reconstruct Plio-Pleistocene whale migrations

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Austin Thomas	Ecology	North Carolina: Appalachian State University	Goldenrod Stem Gall Fly Induction of Terpenes in <i>Solidago altissima</i> and the Colonization Preference of Specialist Aphids in the Genus <i>Uroleucon</i>
Mark Tingey	Cell Biology/Biochemistry	Pennsylvania: Saint Joseph's University	Yeast Npl3 may regulate TERRA production in telomerase mutants
Vijay Tiwari	Cell Biology/Biochemistry	Tennessee: East Tennessee State University	Identification and characterization of fatty acid amide hydrolase in tomato
David Trannam	Physiology/Functional Morphology	California: University of California-Riverside	The effects of PBDEs by epigenetic changes on DNA methylation of <i>Avp</i> .
Paula Tribulo	Physiology/Functional Morphology	Florida: University of Florida	Effect of embryokines on embryonic competence to establish pregnancy and offspring performance
Charles van Rees	Conservation Biology	Massachusetts: Tufts University	Using automated telemetry to investigate the movement ecology of a cryptic endangered bird
Rebecca Vaught	Systematics/Evolutionary Biology	Australia: Monash University	The Impact of "Mother's Curse" on Mito-nuclear Mismatch and Implications for Male Harm
Erika Vitale	Psychology	Michigan: Michigan State University	The effects of serotonin-specific lesions to the midbrain dorsal raphe on postpartum caregiving and anxiety
Dhaval Vyas	Behavioral Ecology	Colorado: Colorado State University	The role of relaxed selection in the competitive interactions of two parasitoid wasps

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Brian Waldron	Ecology	Ohio: John Carroll University	Genetic analysis of glacial lineages of <i>Plethodon cinereus</i> at a secondary contact zone in northeastern Ohio
Breanna Walsh	Cell Biology/Biochemistry	Washington DC: Georgetown University	Genetic analysis of glacial lineages of <i>Plethodon cinereus</i> at a secondary contact zone in northeastern Ohio
Talia Weiss	Physics/Astronomy	Virginia: Virginia Polytechnic Institute and State University	Skipping on the water surface: kinematics of skittering in the frog <i>Euphylyctis cyanophlyctis</i>
Jacqueline Welch	Ecology	Minnesota: University of Minnesota at Duluth	Characterization and comparison of <i>Eurosta solidaginis</i> microbiota in two host races originating from forest and prairie biomes of Minnesota
Chris Weston	Physiology/Functional Morphology	Illinois: Southern Illinois University-Carbondale	Dietary Flaxseed Modulates the Oxidative Stress Response in Ovaries of the Laying Hen
Megan Catharine Wurtz	Behavioral Ecology	Michigan: Eastern Michigan University	The relationship between social learning and elevated corticosterone in male red crossbills (<i>Loxia curvirostra</i>)
Xinhui Zhang	Systematics/Evolutionary Biology	California: University of California-Los Angeles	Expression of Usher Syndrome Related Genes in Jellyfish <i>Aurelia</i> sp.1
Liyang Zhao	Cell Biology/Biochemistry	North Carolina: University of North Carolina at Chapel Hill	How does reduced fatty acid β -oxidation cause muscle myopathy?