

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

Grant Recipient	Research Field	Institution	Study Title
Matthew W. Green	Ecology	Appalachian State University	Rearing <i>Ephemera invaria</i> (Ephemeroptera: Ephemerellidae) to understand how the invasive algae <i>Didymosphenia geminata</i> influences the life history and nutritional ecology of aquatic insects in tailwater river sections
John A. Jones	Behavioral Ecology	Appalachian State University	Behavioral and ecological consequences of species sympatry between golden-winged and chestnut-sided warblers of the southern Appalachians
Carer W. Daniels	Psychology	Arizona State University	Hippocampus and Habit Formation in Interval Timing
Steven R. Boomhower	Psychology	Auburn University	Effects of methylmercury exposure during adolescence on impulsive choice in mice
Chloe C. Josefson	Physiology/Functional Morphology	Auburn University	Characterization of sub-seasonal fluctuations in the innate immune system of Eastern Bluebirds (<i>Sialia sialis</i>)
Austin K. Dixon	Behavioral Ecology	Ben-Gurion University of the Negev	Diet, harvest rates, and adaptive foraging strategies of the bulb-tipped sea anemone, <i>Entacmaea quadricolor</i> , in the northern Red Sea
Martha M. Parsons	Tectonics/Geophysics	Boston College	Pinpointing the Timing and Kinematics of the Accretion of the Avalon Terrane in Eastern Massachusetts
Amanda M. Browne	Behavioral Ecology	Bowling Green State University	The threat of cleaning up the problem: how polluted habitats and increasing proportions of invasive crayfish are impacting ecosystem structuring

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

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Jennifer A. Palermo	Paleontology/Sedimentation	California State University-Fullerton	Reconstructing a 3,000 year history of precipitation variability in Southern California using sediments from Crystal Lake
Parker H. House	Ecology	California State University-Northridge	Fishing impacts on the trophic structure of kelp forest fishes in southern California
Rachel S. Rhymer	Behavioral Ecology	California State University-Northridge	Testing the Roles of Maternal Care in an Argentinean Lizard
Clint D. Pogue	Conservation Biology	Central Michigan University	Life history, behavior, and habitat requirements for Poweshiek skipperling (<i>Oarisma poweshiek</i>): informing habitat conservation and potential reintroduction
Diego Buenaventura	Cell Biology/Biochemistry	City University of New York-City College	Transcriptome differential expression analysis of rod retinal progenitor cells
Lev Starikov	Cell Biology/Biochemistry	City University of New York-City College	Motor Neurons as Morphogenic Signaling Centers in the Adult Spinal Cord
Sandy M. Kawano	Physiology/Functional Morphology	Clemson University	One small step by tetrapods, one giant leap for vertebrate evolution: how limbs contributed to the invasion of land
Kylie M. Smith	Ecology	Clemson University	Assessing the Effects of Parrotfish Grazing and Macroalgal Competition on Coral Cover
Jill C. Gerberich	Systematics/Evolutionary Biology	Colorado State University	Assessing the Effects of Adaptively Divergent Immigrants on Population Size and Genetic Diversity in Recipient Populations
Wenyng Liao	Ecology	Columbia University	Biological Nitrogen Fixation Rate of Robinia in Temperate Forest Ecosystems

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Samuel R. Phelps	Paleontology/Sedimentation	Columbia University	A Novel Calibration of the Alkenone-pCO ₂ Proxy: Constraining Biological Influences
Megan Lee	Cell Biology/Biochemistry	Cornell University	Utilizing Differentiated Macrophage Phenotypes to Promote Schwann Cell Mediated Nerve Regeneration
Stephen C. Marcott	Cell Biology/Biochemistry	Cornell University	A Novel 3-D Mineralized Tumor Model to Study Breast Cancer Bone Metastasis and Mechanical Loading
Michael A. Pardo	Behavioral Ecology	Cornell University	Combinatorial Communication in Asian Elephants (<i>Elephas maximus</i>)
Glenn F. Stamps	Behavioral Ecology	Cornell University	Rapid divergence of multiple signaling channels in Hawaiian crickets
Jacob A. Tyrell	Ecology	Cornell University	Estimating Effective Distance Between Cities for Rat-Borne Diseases
Aspen Reese	Ecology	Duke University	Identifying how herbivory and nutrient limitation interact to drive succession
Erik K. Anderson	Petrology/Geochemistry	East Carolina University	Investigation of the origin of the ~2.5 billion year old (Ga) Valentines Iron Formation from Uruguay as insight to the redox conditions of early Earth oceans
Richard W. Burns	Tectonics/Geophysics	East Carolina University	Testing for possible Cenozoic reactivation of ancient faults, eastern North Carolina
Kimberly J. Cook	Ecology	Eastern Washington University	Effects of Fire and Pocket Gopher Burrowing on Annual Grass Invasion in a Mima Mound Prairie

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Donya Farhanian	Engineering	École Polytechnique de Montréal	Synthesis of Controlled Nano and Micro Scale Multifunctional Surfaces using Photo-Initiated Chemical Vapor Deposition for Diagnostic and Therapeutic Application
Camden J. MacDowell	Physiology/Functional Morphology	Emory University	Using Trends in Post-spinal Cord Injury Physiological Signs to Predict the Onset and Severity of Neuropathic Pain
Kathryn E. Gallman	Physiology/Functional Morphology	Florida Institute of Technology	Retinal Architecture and Projections to the Brain in the Brahminy Blindsnake
Nicholas O. Schulte	Ecology	Florida International University	Predicting sea-level rise effects on carbon turnover: autotrophic and heterotrophic microbial responses to chronic, low-level phosphorus enrichment
Miranda G. Thompson	Cell Biology/Biochemistry	Gannon University	The Role of a SCAMP3 in Regulating the Transport from the TGN to the Lysosomes
Alicia M. Reigel	Conservation Biology	Georgia Southern University	The role of artificial structures in facilitating range expansion of the invasive barnacle, <i>Megabalanus coccopoma</i> , in the southeastern U.S.
Daniel S. Jones	Anthropology	Georgia State University	Use of biogeochemistry and patterns of phenotypic inheritance to model prehistoric migration and residential origins of Middle Woodland trophy heads from the Elizabeth site in the Lower Illinois River Valley.
Arianna Tamvacakis	Systematics/Evolutionary Biology	Georgia State University	Investigating serotonin receptor expression underlying independently evolved swimming behaviors in <i>Nudipleura</i> sea slugs.

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March 15, 2014 Grant Cycle

Alphabetical by Institution

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Jennifer G. Winters	Physics/Astronomy	Georgia State University	Red Dwarf Multiplicity in the Solar Neighborhood
Matthew J. Dean	Physiology/Functional Morphology	Idaho State University	Is the Glycogenic Effect of Estrogen on Uterine Epithelia Mediated By IGF1?
Nino Pochkhidze	Physiology/Functional Morphology	Iliia State University	The effect of toluene chronic exposure on the structure of hippocampal pyramidal neurons and memory
Emily A. Stulik	Ecology	Indiana University-Purdue University, Fort Wayne	Amphibian Occupancy, Habitat Use, and Reproductive Success in a Restored Wetland
Tara M. Gallagher	Cell Biology/Biochemistry	James Madison University	Antibacterial Activity of Novel Cationic Amphiphiles
Evan Koufos	Engineering	Lehigh University	Engineering Toxin-derived Cholesterol-binding Peptides to Prevent Bacterial Pathogenesis
Jonathan M. Labadie-Bartz	Physics/Astronomy	Lehigh University	Stellar Parameters for Pulsating B Star Candidates in the Kepler Field
Scott T. Allen	Hydrology/Geomorphology	Louisiana State University-Baton Rouge	Moisture Recycling in a Forested Wetland
Warwick J. Allen	Ecology	Louisiana State University-Baton Rouge	Latitudinal gradients in tritrophic interactions associated with <i>Phragmites australis</i> : implications for invasion success
Julie M. Butler	Physiology/Functional Morphology	Louisiana State University-Baton Rouge	The role of CRF signaling as a protective mechanism against noise-induced hearing loss in fish
Valerie R. Feathers	Anthropology	Louisiana State University-Baton Rouge	The Application of Sediment and Isotopic Analysis at an Inundated Maya Salt Work
Rachel M. Watson	Anthropology	Louisiana State University-Baton Rouge	Soil Chemistry to Evaluate Ancient Activities at a Maya Salt Work, Belize.
Joshua M. Johnson	Conservation Biology	Louisiana Tech University	Overwinter Survival of Henslow's Sparrows
Cristina Mottillo	Chemistry	McGill University	Environmentally-friendly mechanochemical synthesis of magnetic iron oxide nanoparticles

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

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Aurelia C. Kucera	Physiology/Functional Morphology	North Dakota State University	Transgenerational effects of paternal stress exposure on offspring telomere dynamics
Kristin M. Jacob	Cell Biology/Biochemistry	Northern Michigan University	The Effects of Siderophore Production on the Pathogenicity of the Entomopathogenic Bacteria <i>Pseudomonas entomophila</i>
Selina R. Cole	Paleontology/Sedimentation	Ohio State University	Static or dynamic? Exploring the complexities of taxonomic longevity using diplobathrid crinoids
Puneet Sodhi	Physiology/Functional Morphology	Ohio State University	Muscarinic Acetylcholine-Mediated Light-Independent Stimulation of Ganglion Cell Photoreceptors
Natasha D. Hagemeyer	Behavioral Ecology	Old Dominion University	Fitness benefits of coalition-based dispersal in the cooperatively breeding Acorn Woodpecker (<i>Melanerpes formicivorus</i>)
Cassandra E. Benkwitt	Ecology	Oregon State University	Effect of an invasive predator on settlement choice of native coral-reef fish
Reuben G. Biel	Ecology	Oregon State University	Climate change impacts on invasive dune grass, dune shape, and coastal protection in the Pacific Northwest
Camerron Crowder	Cell Biology/Biochemistry	Oregon State University	Solving the mystery of anthozoan reproductive physiology: investigating patterns in gene expression using the model anthozoan <i>Nematostella vectensis</i>
Sheila A. Kitchen	Cell Biology/Biochemistry	Oregon State University	Consequences of Hyperthermal Stress on Coral Larvae Undergoing Symbiont Colonization
Kyle N. Burks	Physiology/Functional Morphology	Pennsylvania State University	Novel sting structure has implications for robotic microsurgery and evolutionary advances

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Michael P. Donovan	Paleontology/Sedimentation	Pennsylvania State University	First comparison of latest Cretaceous and early Paleocene insect damage in the??Southern Hemisphere: evidence for a Patagonian biodiversity refugium after mass extinction??
Ryan C. Terrien	Physics/Astronomy	Pennsylvania State University	WarmIR: Calibrating a near-infrared array and taking critical steps toward lowering the cost of operation of a near-infrared spectrograph
Christine M. Kendrick	Chemistry	Portland State University	Aerosols in the Urban Roadside Environment
Preeya Bhavsar	Conservation Biology	Rice University	An environmental DNA (eDNA) approach to characterizing Chlamydomphila pneumoniae in wild amphibian populations
Cathy Cheng	Conservation Biology	Rice University	The Prevalence and Origin of Chlamydomphila pneumoniae in Harris County Amphibian Populations
Michelle E. Sneek	Ecology	Rice University	Does gene flow disrupt host/symbiont mutualism? A study with wild rye (Elymus sp.) and their fungal endophytes (Neotyphodium and Epichloe)
Jeana L. Drake	Cell Biology/Biochemistry	Rutgers University-Graduate School Newark	Elucidating the role of Coral Acid Rich Protein-4 (CARP4) from the stony coral, Stylophora pistillata, in aragonite precipitation
Alessandra M. Araujo	Physiology/Functional Morphology	Southern Illinois University-Carbondale	Examining the Impacts of Long-term Exposure to TDCPP in Amphibians
Adrienne R. Gemberling	Ecology	Southwest Missouri State University	Interactions among invasive species in lakes: a mesocosm experiment
Utsav Gyawali	Psychology	St Mary's College of Maryland	Reversal of compulsive cocaine seeking in NVHL model of schizophrenia

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Hillary P. Evans	Behavioral Ecology	St. Edward's University	Effects of male body size and competitor size on male fitness in two species of livebearing fishes
Janaee A. Wallace	Conservation Biology	St. Edward's University	Syngnathid fishes as indicators of coastal ecological health on Texas coast
Natalie S. Willard	Behavioral Ecology	St. Edward's University	Interacting effects of male harassment and female competition on cannibalistic behavior in the livebearing western mosquitofish
Cong Dinh	Engineering	Stanford University	Design of Polypeptide-based Bio-Ink for Neural Tissue Models and Therapeutics
Hilary Duke	Anthropology	State University of New York at Stony Brook	A Landscape of Learning: Investigating Early Hominin Culture with Stone Tools from Kokiselei 6 (West Turkana, Kenya)
Hae Yeong Ryu	Ecology	State University of New York at Stony Brook	Measures of Dispersal in Ecology and Evolution - Identifying the causes of disparity between direct (i.e. demographic) and indirect (i.e. genetic) estimates of dispersal rates
Jonas J. Oppenheimer	Physiology/Functional Morphology	Swarthmore College	Hydrodynamics of keeled turtle shells: do they enhance performance?
Haley J. Plasman	Systematics/Evolutionary Biology	Syracuse University	Evaluating specialization in North American <i>Aphidius ervi</i> wasp populations
Noura J. Randle	Paleontology/Sedimentation	Texas A&M University-College Station	Variability in the range of the Intertropical Convergence Zone in the Eastern Equatorial Pacific affecting the nutrient profile and recorded in paired TEX86H and Mg/Ca foraminiferal temperature reconstructions.

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Leah M. Thornton	Physiology/Functional Morphology	Texas Christian University	Illuminating the influences of sex-steroid hormones on immune function in the sheepshead minnow
Laura M. Darnieder	Psychology	Tufts University	Is the GABAA α 2-subunit necessary for Adolescent Binge-like Drinking?
David M. Delaney	Behavioral Ecology	University of Alabama at Birmingham	Do Adults Drive Variation in Juvenile Habitat Use in a Territorial Lizard?
Kenan Matterson	Systematics/Evolutionary Biology	University of Alabama at Birmingham	Assessing the stability of sponge-cyanobacterial associations using next-generation amplicon sequencing
William C. Cornelius	Physiology/Functional Morphology	University of Alabama at Tuscaloosa	Using Genomics to Understand the Cause of Male Development in the Mangrove Rivulus
Adam B. Fuller	Behavioral Ecology	University of Alabama at Tuscaloosa	The selective effects of eavesdropping mutualists on sexual signals.
Andrew Holowiecki	Cell Biology/Biochemistry	University of Alabama at Tuscaloosa	Novel Roles for Heme Oxygenase 1 in Zebrafish (<i>Danio rerio</i>) Eye Development
Elizabeth A. Lee	Ecology	University of Alabama at Tuscaloosa	Elucidating mechanisms of bioaccumulation and phenotypic response in mangrove rivulus exposed to endocrine disrupting compounds
Monica S. Myers	Behavioral Ecology	University of Calgary	Estrogenic plant consumption in white-faced capuchins (<i>Cebus capucinus</i>)
Gabrielle F. Boisrame	Hydrology/Geomorphology	University of California-Berkeley	Effects of a changing fire regime on the hydrology of a mountain watershed
Jennifer K. Hofmeister	Behavioral Ecology	University of California-Berkeley	Environmental choice in a top invertebrate predator: understanding how behavior and ecology drive organism response to ecosystem change

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Helen M. Kurkjian	Ecology	University of California-Berkeley	How does the spatial structure of a bacterial metapopulation affect its recovery from disturbance?
Mary A. Stegner	Ecology	University of California-Berkeley	Assessing small mammal response to Holocene climate and land use change on the Colorado Plateau
Ashley Royston	Psychology	University of California-Davis	Is space ""special""? Examining spatial and featural attention in human vision
Erica C. Heinrich	Physiology/Functional Morphology	University of California-Irvine	The effect of respiratory pattern on oxidative damage in insects.
William K. Petry	Ecology	University of California-Irvine	Demographic consequences of sexually dimorphic responses to climate change
Gwendolyn M. Gonzalez	Cell Biology/Biochemistry	University of California-Riverside	In search of an astrocytic origin of the NMDA receptor transmitter D-serine
Ketki Sood	Cell Biology/Biochemistry	University of California-Riverside	Impact of High Linoleic Acid Dietary Content in Eliciting Aggressive Social Behavior
Diego M. Cortes	Anthropology	University of California-San Diego	Indigenous Media and the Politics of Resistance in Cauca, Colombia: The Cases of the Misak Communication Program and the Communication Quilt of the ACIN
Jeffrey K. Bailey	Cell Biology/Biochemistry	University of California-Santa Barbara	Protein methylation enzymes as regulators of cytokinesis
Deborah A. Barany	Psychology	University of California-Santa Barbara	Representations of Goal and Direction in Goal-Directed Movements
Britney O. Pennington	Cell Biology/Biochemistry	University of California-Santa Barbara	Cryopreservation and directed differentiation of retinal pigmented epithelial cells derived from human embryonic stem cells maintained on a novel, xeno-free substrate

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Andrew Swafford	Systematics/Evolutionary Biology	University of California-Santa Barbara	Phototactic behavior in zoospores across Kingdom Fungi
Olivia A. Vogel	Cell Biology/Biochemistry	University of Central Arkansas	The Creation of a Fluorescent Fusion Protein to Better Study Mitochondrial Dynamics
Hollis A. Dahn	Systematics/Evolutionary Biology	University of Central Florida	Examining Specific and Subspecific Diversity within Two Monotypic Snake Genera
Yuguang Liu	Engineering	University of Cincinnati	Combining Digital and Continuous Functionalities in Microfluidics for Neonatal Disease Diagnostics
Stella G. Mosher	Ecology	University of Cincinnati	Using Strontium and Sulfur Isotopes to Characterize Local Modern Environments on Tenerife Island
Brent M. Stoffer	Behavioral Ecology	University of Cincinnati	The role of biogenic amines in male courtship and female receptivity of a wolf spider
Alexander L. Sweger	Behavioral Ecology	University of Cincinnati	The potential for airborne sound production in spiders
Sarah E. Crump	Hydrology/Geomorphology	University of Colorado at Boulder	Glacial records of Holocene climate change from Baffin Island, Arctic Canada
Sierra M. Love Stowell	Conservation Biology	University of Colorado at Boulder	Assessing the potential for genetic rescue in native cutthroat trout using inbreeding genomics
Cera R. Fisher	Systematics/Evolutionary Biology	University of Connecticut	Characterizing the Evolution of Novelty in Treehoppers (Hemiptera: Membracidae) through a Comparative Tissue Transcriptome
Vishnu Mohanan	Cell Biology/Biochemistry	University of Delaware	A proposal to investigate the role of Hsp70 in rescuing Crohn's-associated Nod2 variants' ability to secrete anti-inflammatory cytokine.

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Gordon Kersten	Ecology	University of Denver	Willows' Uptake of Heavy Metals from Outwashes and Tailings of Abandoned Mines in Colorado
Manisha Shrestha	Physics/Astronomy	University of Denver	Relating core collapse supernovae to its progenitors
Daniel Becker	Ecology	University of Georgia	Livestock expansion, vampire bat behavior, and rabies dynamics in Belize
Keri A. Lydon	Ecology	University of Georgia	Triclosan pollution impacts on intrinsically resistant Vibrios: Understanding risk in shellfish populations
Ashley N. Schulz	Ecology	University of Georgia	Monitoring the Dieback of Eastern White Pine (Pinus strobus) in the Southern Appalachian Mountains
Chenyi Ling	Physiology/Functional Morphology	University of Illinois at Chicago	Shear stress-mediated changes in the C-Reactive Protein-induced effects on endothelial cells
Margaret A. Malone	Systematics/Evolutionary Biology	University of Illinois at Chicago	The developmental origin of wrasse diversity in form and function
Allison M. Gardner	Ecology	University of Illinois at Urbana-Champaign	Modeling the effect of an exotic, invasive plant on risk of mosquito-borne disease exposure
Maria Stager	Physiology/Functional Morphology	University of Illinois at Urbana-Champaign	Molecular mechanisms of seasonal, metabolic flexibility in a backyard bird
Laura A. Bankers	Systematics/Evolutionary Biology	University of Iowa	The influences of polyploidy and asexuality on genome-wide patterns of adaptive molecular evolution
Shelby S. Putt	Anthropology	University of Iowa	The effect of language on cortical activity during bifacial stone tool reduction: An fNIRS study
Jon D. Faughn	Cell Biology/Biochemistry	University of Louisville	Functional impacts of N-terminal protein methylation

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Huan Cui	Petrology/Geochemistry	University of Maryland, College Park	The H ⁺ ttenberg Excursion: carbon and sulfur isotopic clues to the onset of Cryogenian glaciation?
Anna Patnaik	Cell Biology/Biochemistry	University of Maryland, College Park	Exploring Pathophysiological Factors and Potential Protection Regarding Repeated Concussions
Christina R. Winkler	Psychology	University of Maryland, College Park	Behavioral Parent Training Computer Game
Joseph N. Burchett	Physics/Astronomy	University of Massachusetts Amherst	A Deep Search For Faint Galaxies Associated With Very Low-redshift C IV Absorbers
Denita M. Weeks	Conservation Biology	University of Memphis	Potential Mitigation of Amphibian Disease with Biopesticides: A natural, unexplored strategy
Piyush Joshi	Cell Biology/Biochemistry	University of Miami	Cdx4 activates spinal cord neurogenesis.
Rachael M. Roettenbacher	Physics/Astronomy	University of Michigan-Ann Arbor	Detecting the faint main-sequence companions of the spotted giants of RS CVn systems
Jessica H. Kissel	Physics/Astronomy	University of Minnesota, Twin Cities	Atomic-Scale Visualization of Paraffin Melting and Crystallization with Ultrafast Transmission Electron Microscopy
Matthew J. Abbott	Ecology	University of Mississippi	A new explanation for the rarity of carnivorous plants in habitats with nutrient-rich substrates
Devin M. O'Brien	Systematics/Evolutionary Biology	University of Montana	The Evolution and Development of Exaggerated Weapons: A Cost Benefit Analysis of Sexually Selected Weapons in the Frog Legged Leaf Beetle, <i>Sagra femorata</i> .
Wesley M. Sarmento	Behavioral Ecology	University of Montana	Climate Change, Coat Shedding, and an Alpine Obligate

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Scott M. McLeay	Ecology	University of Nebraska at Lincoln	Are the ecological consequences of invasive species context dependent? Comparing the effects of an invasive snail in forest and pasture streams in Brazil.
Jade E. Keehn	Ecology	University of Nevada, Reno	Impact of wind turbines on a desert reptile community: do changing abiotic and biotic conditions influence animal behavior, population demography, and species composition?
Kiran R. Mathew	Cell Biology/Biochemistry	University of Nevada-Las Vegas	A Novel High-Throughput Technology That Reveals Functional Relations Required For Mechanistic Cell-Based Processes
Christie A. Sukhdeo	Systematics/Evolutionary Biology	University of New Orleans	The Cameroonian Highlands Dung Beetle (Coleoptera: Scarabaeidae) Fauna and Montane Areas as Centers for Speciation
Liam Baglivo	Ecology	University of North Carolina at Asheville	The effects of fungal species in Common Mycorrhizal networks on oak seedling survival and the amelioration of seedling overstory competition
Janelle E. Bauer	Petrology/Geochemistry	University of North Carolina at Chapel Hill	Using tiny crystals to understand giant bodies of magma: trace element profiles across zoned crystals from the Half Dome Granodiorite, central Sierra Nevada, California
Nicholas O. Moore	Petrology/Geochemistry	University of North Carolina at Wilmington	Mesozoic Basin Evolution in the Blue Mountains Province, Eastern Oregon and Western Idaho: Sedimentary Provenance of the Coon Hollow Formation, Pittsburg Landing, Hells Canyon

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Heidi Connahs	Systematics/Evolutionary Biology	University of North Dakota	Epigenetic regulation of temperature-induced eyespot plasticity in the painted lady butterfly, <i>Vanessa cardui</i> .
Stephanie D. Snyder	Cell Biology/Biochemistry	University of North Dakota	What makes a brain?: Vascular endothelial growth factor (Vegf) regulation of neural stem cell fate choice in developing cortex
Jeffrey A. Mabe	Conservation Biology	University of North Texas	Occurrence, Distribution, and Abundance of Endangered Freshwater Mussels in Southeast Texas and Environmental Impacts on the Population Genetic Structure of <i>Quadrula aurea</i> (Bivalvia: Unionidae)
Arial J. Shogren	Ecology	University of Notre Dame	Using Notre Dame Linked Ecosystem Experimental Facility to quantify the dispersal and transport of environmental DNA
Michael J. Chips	Ecology	University of Pittsburgh	Is salvage logging inimical to biodiversity recovery in overbrowsed forests? Using models of forest succession to provide insight
Matthew A. Birk	Physiology/Functional Morphology	University of Rhode Island	How much do cephalopod chromatophores cost? A metabolic analysis
Melissa K. Burger	Ecology	University of Rhode Island	Bigger isn't always better: Small genomes are advantageous in time-limited environments
Scott A. Ishler	Paleontology/Sedimentation	University of South Florida	Characterizing freshwater influx from the western shoreline of the early Maastrichtian WIS: Insights from unionids
Cameron Hughes	Tectonics/Geophysics	University of Tennessee-Knoxville	Deformation temperatures of the Cordillera Blanca shear zone: Titanite thermometry of quartzofeldspathic mylonites

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Kenna E. Rewcastle	Ecology	University of Tennessee-Knoxville	Direct and indirect impacts of climate change on carbon sequestration in mountains: Experimental manipulations across an elevation gradient
Craig T. Connolly	Ecology	University of Texas at Austin	The effects of permafrost thaw on carbon turnover in a northeast Siberian watershed.
Shauna A. Hill	Cell Biology/Biochemistry	University of Texas Health Science Center at Houston	The Role for Lon Protease in Mitochondrial Homeostasis
Ariel L. Firebaugh	Ecology	University of Virginia	Illuminating the effects of artificial light pollution on firefly assemblages
Leander D. Anderegg	Ecology	University of Washington	Testing the limits: Using functional traits to understand tree range boundaries
Rebecca B. Harris	Systematics/Evolutionary Biology	University of Washington	Speciation in wagtails (Aves: Motacilla): investigating the roles of migration, plumage, and glaciers.
Shevan E. Wilkin	Anthropology	University of West Florida	The Bioarchaeology Domestic Violence in Prehistory
Nicolas L. Rehberg-Besler	Behavioral Ecology	University of Windsor	Does temporal color change function as a sex-recognition cue for male frogs?
Michelle A. Chiu	Physiology/Functional Morphology	University of Wisconsin-Madison	Uncovering Oxytocin Signaling in a Single Cell
Yi-Cheng Wang	Engineering	University of Wisconsin-Madison	A green synthesized gold nanoparticle/graphene nanocomposite based electrochemical immunodevice for sensitive and selective detection of E. coli
Jacob J. Kay	Psychology	University of Wisconsin-Milwaukee	Exercise, Learning, and the Expression of HIF-1a in the Hippocampus of the Adult Rat

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Quin A. Lenz	Petrology/Geochemistry	University of Wisconsin-Oshkosh	USING OXYGEN ISOTOPES TO CHARACTERIZE MANTLE PROCESSES BENEATH THE SOUTHERN CASCADES
Kyle T. Ashley	Petrology/Geochemistry	Virginia Polytechnic Institute and State University	Experimental growth of inclusion-rich garnet to improve pressure estimation by mineral inclusion Raman thermobarometry
Andrew D. Hawkins	Paleontology/Sedimentation	Virginia Polytechnic Institute and State University	Acritarch biostratigraphy: A vital tool for integrating chemostratigraphic and fossil records to understand the rise of morphologically complex eukaryotes in the Ediacaran Period.
Anthony D. Muscente	Paleontology/Sedimentation	Virginia Polytechnic Institute and State University	Sulfur isotope geochemistry of Burgess Shale-type assemblages in Guizhou Province, China
Laura Schoenle	Ecology	Virginia Polytechnic Institute and State University	Moving resources to all the right places: the role of corticosterone in disease management
Osama K. Zahid	Physics/Astronomy	Wake Forest University School of Medicine	Solid-State Nanopore Sensors: Elucidating the translocation mechanism of biomolecules
Brandan M. Cook	Chemistry	Washington State University	Development of Efficient Exosome Isolation Strategy using Engineered Peptides for Disease Biomarker Discovery
Elijah C. White	Ecology	Western Carolina University	Influence of environmental factors on the evolution and maintenance of pedomorphosis in the mole salamander (<i>Ambystoma talpoideum</i>) at high elevations

Grants-in-Aid of Research Awards
March 15, 2014 Grant Cycle

Alphabetical by Institution

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Clayton D. Pilbro	Anthropology	Western Michigan University	A Comparison of Analogous, Extant Species to Understand the Paleocology, Diet, and Morphology of Plesiadapiformes (Stem-Primates)
Eve M. Wiggins	Psychology	Willamette University	The Effects of 24-Hour Total Sleep Deprivation on the Neural Mechanisms of Selective Attention