

Grants-in-Aid of Research Awards
October 15, 2012 Grant Cycle

Alphabetical by Subject

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|----------------------|--------------------|---|---|
| John C. Blong | Anthropology | Texas A&M University- College Station | Paleoenvironmental Reconstruction in the Central Alaska Range |
| Heather Guzik | Anthropology | University of Southern Mississippi | Fractal Analysis of Entheses in Human Populations |
| Jaime Mata-Miguez | Anthropology | University of Texas at Austin | The genetic effects of Aztec imperialism: An ancient DNA test at Xaltocan, Mexico |
| Katherine E. Schroer | Anthropology | George Washington University | Ecological character displacement and speciation in the early hominins of Koobi Fora, East Africa |
| Ricky W. Smith | Anthropology | University of Texas at Austin | Detecting epigenetic markers of famine during the collapse of the ancient Moche Civilization. |
| Christophe Snoeck | Anthropology | Oxford University | Structural and Isotopic Studies of Calcined Bone |
| Katherine E. South | Anthropology | Southern Illinois University- Carbondale | Macroscopic and Compositional Analytical Approaches to Assessing Value of Maya Middle Preclassic Pottery in the Peten Lakes Region of Guatemala |
| Yuki Tanaka | Anthropology | Southern Illinois University- Carbondale | Evaluation of the degree of regional variations between Belizean and Guatemalan Mopan |
| Robert J. Arndt | Behavioral Ecology | Indiana State University | Does Moonlight Affect the Movement and Foraging Behavior of Bats in Midwestern Flyways? |
| Sarah K. Baillie | Behavioral Ecology | Villanova University | Boldness in Response to Predatory Threat and its Correlation with Paternity in Carolina Chickadees (Poecile carolinensis) |
| Ashveen Bains | Behavioral Ecology | Villanova University | GENETIC VARIATION IN A DOPAMINE RECEPTOR GENE In PURE CAROLINA AND BLACK CAPPED CHICKADEES AND THEIR HYBRIDS |

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| Carolyn M. Bauer | Behavioral Ecology | Tufts University | Does plural breeding with communal care help buffer post-natal stress in the degu (<i>Octodon degus</i>)? |
| Jacqueline R. Dillard | Behavioral Ecology | University of Kentucky | Disentangling the direct and indirect benefits of delayed dispersal in a social beetle (Coleoptera: Passalidae) |
| Holly Kilvitis | Behavioral Ecology | University of South Florida | The Effects of Ontogenic Immune Challenge and Hormone Exposure on Adult Sickness Behavior: A Phenomenon Mediated by Methylation? |
| Michael Kistenmacher | Behavioral Ecology | University of Oklahoma | Oviposition Behavior of <i>S. mortua</i> on Heterocarpic Capitula and its Effects on Larval Performance |
| Brittany M. McCabe | Behavioral Ecology | Hartwick College | Prey Selection by <i>Octopus vulgaris</i> at San Salvador Bahamas: Do individuals specialize? |
| Lillian D. Power | Behavioral Ecology | Georgetown University | Comparing Learning Rates in Wild and Laboratory Populations of the Cabbage White Butterfly, <i>Pieris Rapae</i> |
| Stephanie L. Robinson | Behavioral Ecology | University of Alabama at Tuscaloosa | Phenotypic plasticity and integration: hormonal, morphological, and behavioral responses to salinity in a self-fertilizing, hermaphroditic fish (<i>Kryptolebias marmoratus</i>) |
| Tessa K. Solomon-Lane | Behavioral Ecology | Georgia State University | Lifetime fitness consequences of early-life social experience |
| Zachary Steele | Behavioral Ecology | St. Edward's University | Effects of social dominance on male preference for female size in the guppy (<i>Poecilia reticulata</i>) |
| Shannon Waters | Behavioral Ecology | California State University-Sacramento | Do Salton Sea Tilapia (<i>Oreochromis</i> sp.) Sacrifice Reproduction When Exposed to High Salinity? |

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| Amy M. Worthington | Behavioral Ecology | Iowa State University | Why females mate multiply: Are mating-derived fecundity and immune benefits transferred in the ejaculates of male crickets? |
| Yonathan T. Ararso | Cell Biology/Biochemistry | Hampden-Sydney College | An shRNA-mediated RNA Silencing Approach to Understand the Role of Melanoma-derived Factors in the Suppression of Dendritic Cell Maturation and Activation |
| Leah R. Brooks | Cell Biology/Biochemistry | University of Colorado at Boulder | A developmentally compromised serotonergic system results in an altered behavioral stress response: the role of fibroblast growth factor 8 |
| Steven R. Cockerell | Cell Biology/Biochemistry | Appalachian State University | Norspermidine-based signaling system in <i>Vibrio cholerae</i> responsible for modulating intracellular c-di-GMP and biofilm formation |
| Daniel Cooper | Cell Biology/Biochemistry | University of North Carolina at Chapel Hill | Identifying how the lack of GPAT4 prevents diet-induced obesity |
| Aminata P. Coulibaly | Cell Biology/Biochemistry | Miami University Ohio | Characterizing oligodendrocytes in close apposition to motor neurons in the adult spinal cord. |
| Erfan Eilati | Cell Biology/Biochemistry | Southern Illinois University-Carbondale | The role of cyclooxygenase 1 and 2 in ovarian cancer in the domestic hen |
| Jason Jacoby | Cell Biology/Biochemistry | University of Illinois at Chicago | Activity-dependent pH dynamics observed through synapse-specific fluorescent probes in the outer transgenic zebrafish retina |
| Jenny Jing | Cell Biology/Biochemistry | Duke University | All-Trans Retinoic Acid (ATRA) can specifically drive an OTX2 promoter. |
| Ekaterina A. Khramtsova | Cell Biology/Biochemistry | University of Chicago | Phosphorylation-dependent occludin and zonula occludens-1 interactions: A novel mechanism of tight junction barrier regulation |

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| Anita J. Krause | Cell Biology/Biochemistry | Iowa State University | Functional divergence? Comparing opsin expression in extra-ocular tissues and eyes of the scallop (Pectinidae). |
| Robert Literman | Cell Biology/Biochemistry | Iowa State University | Molecular Mechanisms Underlying Temperature- Dependent Sex Determination: Can temperature-dependent chromatin remodeling determine vertebrate sex? |
| Alexandria Mueller | Cell Biology/Biochemistry | University of California- Riverside | The extent of SNS ganglionic blockade in prevention of systolic BP response to hyperosmotic stress in PBDE exposed rats |
| Robert J. Norgard | Cell Biology/Biochemistry | Pennsylvania State University | The Interaction between Breast Cancer Cells and a Native Decellularized Osteoblast Matrix |
| Mallika Pathania | Cell Biology/Biochemistry | University of Delaware | The Role of Fibronectin in Posterior Capsule Opacification |
| Rachel E. Pritchard | Cell Biology/Biochemistry | Miami University Ohio | Differential regulation of virulence-associated genes in response to oxygen availability by Mycoplasma iowae |
| Jonathan D. Rumley | Cell Biology/Biochemistry | Villanova University | Development of a transgenic line of zebrafish (Danio rerio) in which the inducible CNS-specific overexpression of brd2a can be achieved. |
| Minqian Shen | Cell Biology/Biochemistry | Miami University Ohio | Estrogen acts as an antagonist for oncogenic leptin in hepatocellular carcinogenesis |
| Mei San Tang | Cell Biology/Biochemistry | Monash University Malaysia | Correlating mucosal immunity with human intestinal bacterial flora in the pathogenesis of inflammatory bowel diseases |
| Shawnt Tosonian | Cell Biology/Biochemistry | University of California- Riverside | Characterizing the roles of cGMP and CNG channels in central VP release |

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| Joe Valdez | Cell Biology/Biochemistry | University of California-Riverside | Glial Control of Physiological Responses: Glial-Neuronal Interactions within the Supraoptic Nucleus |
| Maria C. White | Cell Biology/Biochemistry | University of North Carolina at Wilmington | Quantifying entry of oncolytic equine herpesvirus type 1 in human glioma cells after treatment with valproic acid |
| Nathan Wong | Cell Biology/Biochemistry | St. Mary's College of Maryland | Contribution of a membrane binding <i>Pseudomonas aeruginosa</i> protease to bacterial keratitis |
| Lei Zhong | Cell Biology/Biochemistry | Georgia State University | Expression Cloning of Anion-Selective Nicotinic Acetylcholine Receptor Subunits |
| Nina K. Jarrah | Chemistry | Lehigh University | Interfacial Matrix Stabilization Spectroscopy (IMSS) studies of catalyzed carbon monoxide oxidation over supported gold nanoparticles using a copper integrating sphere for enhanced sensitivity |
| Kurt T. Kinslow | Chemistry | Northern Michigan University | Kinetic Resolution of Terminal Epoxides by Macrocyclic Oligomeric Cr(III)-salen Complexes |
| Rachael F. Lane | Chemistry | University of Kansas | The fate of BPA and BADGE leached from epoxy coatings into drinking water |
| Ryan M. Ludwig | Chemistry | Lehigh University | Matrix isolation FTIR study of CO oxidation catalyzed by gold clusters |
| Vanesa Mendez | Chemistry | Florida International University | Development of Macular Pigment in Rhesus Monkey Retinas |
| Rui Peng | Chemistry | University of South Dakota | Photocatalytic Hydrogen Evolution over CdS Incorporated TiO ₂ -MCM-48 Mesoporous Materials under Visible Light Illumination |

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| Olivia P. Woodruff | Chemistry | University of Kentucky | Compound Specific Stable Isotope Source Characterization of Polycyclic Aromatic Hydrocarbons in Recent Gulf of Mexico Sediments |
| Gregory J. Barord | Conservation Biology | City University of New York-Brooklyn College | Population assessments of Nautilus in the Indo-Pacific |
| Michelle C. Biodrowski | Conservation Biology | University of Nebraska at Omaha | The Effects of Patch Burn Grazing on Breeding Grassland Birds |
| Robert Y. Fidler | Conservation Biology | Florida Institute of Technology | Variation in age-at-size of fishes between Philippine MPAs and fished reefs: implications for the evolution of maladaptive traits |
| Carli R. Gurholt | Conservation Biology | Central Michigan University | Great Lakes coastal wetland seed banks: Purgatory, not a graveyard. What drives compositional change? |
| Jennifer M. Kanine | Conservation Biology | University of Georgia | Extracting Nuclear DNA from Allegheny Woodrats (Neotoma magister) Museum Specimens |
| Allison R. Nelson | Conservation Biology | San Francisco State University | The Geographic Structuring of Catharus Thrushes and their Hemosporidian Parasites |
| Cynthia A. Page-Karjian | Conservation Biology | University of Georgia | Evaluating latency and cryptic infection of chelonid fibropapilloma-associated herpesvirus in green sea turtles |
| Courtney L. Turrin | Conservation Biology | College of William and Mary | Negative Feedback Effects of Population Saturation in Bald Eagles in the Chesapeake Bay |
| Rachael A. Van Essen | Conservation Biology | Illinois State University | Using Stable Hydrogen Isotopes and GIS Tools to Estimate Geographic Extents of Source Populations of Hoary and Eastern Red Bats Killed at a Central Illinois Wind Farm |

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| Jessica N. Welch | Conservation Biology | University of Tennessee-Knoxville | Effects of invasion on an endemic bat population in the Northern Mariana Islands |
| Shane H. Abinette | Ecology | Virginia Commonwealth University | Urbanization's Effects on the Salamanders and Mosquitos of Vernal Pools |
| Michelle A. Berry | Ecology | Stanford University | Influence of host phylogeny on gut microbial community composition and function in Costa Rican butterflies |
| Amber J. Brace | Ecology | University of South Florida | Resource allocation strategies across the introduced range of <i>Anolis sagrei</i> |
| Rebeca G. deJesus-Crespo | Ecology | University of Georgia | The role of shade trees on watershed conservation in coffee agro-forestry landscapes. |
| Casey M. Diederich | Ecology | Tufts University | The tradeoff between desiccation and aerial respiration as a factor controlling the distribution of an important invasive species |
| Rachel E. Eguren | Ecology | Oklahoma State University | Community Structure, Population Demographics, and Biomarkers in Chiroptera from a Superfund site |
| Gideon A. Erkenwick | Ecology | University of Missouri-St. Louis | Patterns of parasitic infection in a wild population of non-human primates in southeast Peru |
| Kaitlin J. Farrell | Ecology | University of Georgia | Effects of consumer community composition and feeding strategy on ecosystem-level processes: an in-depth comparison of grassland and mountainous streams in temperate biomes within the SCALER project |
| Kimberly T. Goetz | Ecology | University of California-Santa Cruz | Using stable isotopes to examine the foraging ecology of Weddell seals in the Ross Sea, Antarctica |

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| Jacob J. Herman | Ecology | Wesleyan University, Connecticut | Epigenetics and Transgenerational Plasticity: Does Parental Drought Influence DNA Methylation in <i>Polygonum persicaria</i> ? |
| Anna L. Holtvoigt | Ecology | Wright State University | Habitat Preferences of Pileated Woodpeckers (<i>Dryocopus pileatus</i>) |
| Jacob S. Howell | Ecology | University of Mississippi | Do coral reef fish stay close to home? |
| James R. Junker | Ecology | Montana State University- Bozeman | Effects of climate-induced changes in temperature and flow regime on carbon, nitrogen, and phosphorus storage in stream ecosystems |
| Kimberly Kellett | Ecology | University of Georgia | Well-seasoned demography: Are seasons important to fitness of a Neotropical perennial? |
| Bushra Khan | Ecology | University of North Carolina at Charlotte | The effects of hypercapnic hypoxia on metal bioavailability in eastern oysters, <i>Crassostrea</i> <i>virginica</i> and ribbed mussels, <i>Geukensia demissa</i> |
| Rosemary L. Malfi | Ecology | University of Virginia | The impact of phenology and floral resource availability on the growth and reproductive success of bumblebee colonies |
| Mark McCauley | Ecology | University of Mississippi | Studying the Synergistic Effects of Temperature and UV on Caribbean Octocorals |
| Jeanette B. Moss | Ecology | Hood College | Population genetics of <i>Rhinoptera bonasus</i> , the Cownose ray, in the Chesapeake Bay |
| Asia Murphy | Ecology | Virginia Polytechnic Institute and State University | Carnivore ecology in Makira National Park, Madagascar, with an emphasis on fossa (<i>Cryptoprocta ferox</i>) |
| Christine C. Rega | Ecology | University of Missouri- Columbia | Are Unmanaged Vacant Lots Unsuitable Habitats for Urban Birds? |

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| Alicia M. Reigel | Ecology | Georgia Southern University | Using genetic analysis to assess the role of artificial offshore structures in the range expansion of <i>Megabalanus coccopoma</i> in Georgia, USA |
| Matthew K. Rhodes | Ecology | Northwestern University | Exploring the relative importance of functionally distinct pollinators in the reproductive ecology of a rare evening primrose |
| Anthony J. Rietl | Ecology | Louisiana State University-Baton Rouge | <i>Littoraria irrorata</i> grazing in a <i>Spartina alterniflora</i> marsh: Can mollusk herbivory affect methane dynamics in a salt marsh? |
| Eve Robinson | Ecology | University of California-Berkeley | How turbulent and wavy flow impacts suspension feeding by an intertidal sea anemone |
| Sean F. Ryan | Ecology | University of Notre Dame | Assessing the impacts of recent warming on the functional genetics of a butterfly hybrid zone |
| Stephanie Schroeder | Ecology | Rochester Institute of Technology | The Impact of Fruit Quality on the Physiological Condition of Songbirds during Migration Stopover |
| Leticia Soares | Ecology | University of Missouri-St. Louis | Avian malaria parasites in the Lesser Antilles: using past distributions to understand the dynamics of host-parasite communities |
| Natasha A. Urban | Ecology | University of Cincinnati | A comparison of Null, Neutral, and Mechanistic Models to Explain and Predict the Abundance and Diversity of Organisms in Island-mainland Systems |
| Joseph C. Waddell | Ecology | University of Central Florida | Sexual signaling energetics and life history in Peruvian <i>Brachyhypopomus</i> , a genus of Neotropical electric fishes. |

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| Cheng-Kai ChiuHuang | Engineering | North Carolina State University | Interactions of mechanics, diffusion and phase transformation for high rate-capacity lithium-ion batteries |
| Christopher A. Dorval Dion | Engineering | École Polytechnique de Montréal | Functionalization of nanoparticles by means of photo-initiated chemical vapor deposition (PICVD) |
| Sumit S. Goenka | Engineering | Carnegie Mellon University | Development and characterization of elastomeric nanocomposite films and fibrous scaffolds |
| Kyle K. Phua | Engineering | Duke University | Red Blood Cell As RNA Vaccine Carrier for Melanoma Cancer Immunotherapy |
| Senia I. Smoot | Engineering | University of Dayton | A Pilot Study of the Effect of an Acute Vestibular Therapy on Postural Stability, Gait Variability, and Gaze Patterns of Children with Autism Spectrum Disorder |
| Joel A. Trushinski | Engineering | University of California-Irvine | Microfluidic Poly-Antibody Cell Capture Device |
| Tung-Lin T. Yang | Engineering | Columbia University | A Single-Path STED Microscope Implemented by a Periodic Focusing Nanostructure |
| Catherine G. Barcheck | Hydrology/Geomorphology | University of California-Santa Cruz | Investigation of subglacial hydrological seismic signals, Breidamerkurjokull Glacier, Iceland |
| Tedros Berhane | Hydrology/Geomorphology | Miami University Ohio | Fate (sorption and desorption) and Transport of Carbamazepine (CMZ) and Sulfamethoxazol (SMX) in a Palygorskite-Montmorillonite (PM) Filter Medium |
| Sean F. Gallen | Hydrology/Geomorphology | North Carolina State University | Did the Minoans do it? Testing Natural versus Anthropogenic Controls on Holocene Valley-Bottom Aggradation in the Messara Plain, Crete, Greece |

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| Nathan J. Lyons | Hydrology/Geomorphology | North Carolina State University | Genetic markers of landscape change: Cutthroat trout (<i>Oncorhynchus clarkii</i>) populations above migrating waterfalls |
| Dori L. Contreras | Paleontology/Sedimentation | University of California-Berkeley | Investigating the early evolution of angiosperm dominated tropical rain forests: a functional analysis of the Cretaceous Fort Harker Assemblage |
| Abigail R. D'Ambrosia | Paleontology/Sedimentation | University of New Hampshire | Understanding climatic and ecological change across the ETM2 and H2 hyperthermal events |
| Patrick J. Gunn | Paleontology/Sedimentation | Hobart and William Smith Colleges | Calibrating stable isotopic paleoclimate indicators through a high-resolution investigation of modern sedimentation in Seneca Lake, New York, USA. |
| Rory K. Clisby | Petrology/Geochemistry | Swansea University | Is there a CO2 fertilisation effect in high elevation bristlecone pines? |
| Megan Drinnan | Petrology/Geochemistry | Oregon State University | Textures associated with the Glass to Altered-Glass transition in Seamount Basalts: Implications for Microbial Alteration of the Ocean Crust |
| Kristina P. Pourtabib | Petrology/Geochemistry | Eastern Illinois University | The Road Less Travelled: Explosive Primitive Flank Eruptions |
| Adelaide L. Baker | Physics/Astronomy | University of Central Florida | Do Bounce-Back Systems Tilt, Wobble, & Precess? |
| Rachael L. Beaton | Physics/Astronomy | University of Virginia | Investigation of New Open Cluster Candidates in the Milky Way |
| Michael Chacko | Physics/Astronomy | University Of Oklahoma Health Sciences Center | Improved Heat Control Management for Neonatal MRI |
| Hiram J. Conley | Physics/Astronomy | Vanderbilt University | Measuring the Casimir effect with Graphene Resonators |

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| James M. Folberth | Physics/Astronomy | Rose-Hulman Institute of Technology | Improved flat field frame capturing, image reduction, and installation of an instrument rotator. |
| Daniel S. Gruss | Physics/Astronomy | Oregon State University | Entanglement and correlations in transport: From nanoscale electronics to cold atoms |
| Samuel P. Halverson | Physics/Astronomy | Pennsylvania State University | Development of a New, Precise Near-infrared Doppler Wavelength Reference: A Fiber Fabry-Perot Interferometer |
| Kay Hiranaka | Physics/Astronomy | Hunter College of The City University of New York | Improving the Cloud Model of Young Brown Dwarfs and Giant Exoplanets |
| Amanpreet Kaur | Physics/Astronomy | Clemson University | Spectral transformation studies of novae in M31 and their connection with Supernova-Ia progenitors |
| Alexander J. Krejci | Physics/Astronomy | Vanderbilt University | Do Magnetic Dipolar Interactions Give Rise to Ordering in Nanoparticle Monolayers? |
| Vasaant Krishnan | Physics/Astronomy | University of Tasmania | Maser Astrometry |
| Richard L. Pearson | Physics/Astronomy | University of Denver | Identifying thermal dust properties in binary star systems by radiative transfer modeling |
| Zhengqing J. Qi | Physics/Astronomy | University of Pennsylvania | Correlating the sub-angstrom physical and electrical properties of graphene nanoribbons |
| Kristina A. Rolph | Physics/Astronomy | Franklin and Marshall College | Low-frequency PUPPI Search for Pulsars and Transients in M33 |
| Kimberly R. Sokal | Physics/Astronomy | University of Virginia | Optical studies of Extragalactic Super Star Clusters and understanding the Wolf-Rayet Emission Line |
| Jacob J. Teffs | Physics/Astronomy | University of North Dakota | Collection and Analysis of Spectra of Time-Dependent Astronomical Events: Spectroscopic Binaries, Comets, Supernovae and GRBs |

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| Aaron E. Watkins | Physics/Astronomy | Case Western Reserve University | Deep Imaging of the Extended Regions of Nearby Disk Galaxies |
| David G. Whelan | Physics/Astronomy | University of Virginia | Supporting Undergraduate Women Researchers in Astronomical Research |
| Jennifer G. Winters | Physics/Astronomy | Georgia State University | Red Dwarf Multiplicity in the Solar Neighborhood |
| Elizabeth J. Young | Physics/Astronomy | Princeton University | Integrated manufacture and design of shaped pupil coronagraphs for the direct imaging of exoplanets |
| Eric Armstrong | Physiology/Functional Morphology | University of California-Berkeley | Physiological and Transcriptomic Response of a Giant Clam (<i>Tridacna squamosa</i>) to Increased Temperature and Variable pH |
| David J. Barton | Physiology/Functional Morphology | Georgetown University | Traumatic brain injury: targeting blood-brain barrier damage |
| Clara Cooper-Mullin | Physiology/Functional Morphology | Ohio State University | Oxygen consumption and stress resistance in cultured skeletal muscle of Coturnix quail selected for 4-week body size |
| Rachel E. Dorfman | Physiology/Functional Morphology | San Francisco State University | Physiological and Molecular Responses of the Coccolithophore <i>Calcidiscus leptoporus</i> to Ocean Acidification and Increased Temperature |
| Jennah L. Durham | Physiology/Functional Morphology | Columbia University | End-Stage Hip Disease in the Very Young Patient |
| Estefania Fierro | Physiology/Functional Morphology | Florida International University | Stroboscopic Training Improves Cognitive Functioning and Performance |
| Joanna Gardiner | Physiology/Functional Morphology | James Madison University | Using Accelerometry to Study Leaping in Primates |
| Anthony L. Hessel | Physiology/Functional Morphology | Northern Arizona University | EMG Analysis of the Plethodontidae Swimming, Walking and Jumping Mechanics |

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| Frida Johannesdottir | Physiology/Functional Morphology | Cornell University | Morphological trait variation in the American Red Squirrel (<i>Tamiasciurus hudsonicus</i>) in relation to tolerance of extreme temperatures |
| Yi-Fen Lin | Physiology/Functional Morphology | University of Massachusetts Amherst | Burrowing performance in three American moles |
| Patrick Mineo | Physiology/Functional Morphology | Miami University Ohio | Molecular mechanisms underlying thermal acclimation in the Eastern newt (<i>Notophthalmus viridescens</i>). |
| Lorian E. Schweikert | Physiology/Functional Morphology | Florida Institute of Technology | Adaptive Plasticity of the Retina in Response to Environmental Cues |
| Kurt A. Spurgin | Physiology/Functional Morphology | University of California-Riverside | PACAP involvement in elevated excitatory drive in the PVN. |
| Ye Sun | Physiology/Functional Morphology | University of Connecticut | Characterization of the Ependymal Layer in the Human Brain |
| Steven W. Thornton | Physiology/Functional Morphology | University of North Carolina at Wilmington | Functional morphology of dorsal acoustic structures in pygmy (Kogia breviceps) sperm whales |
| Parviz L. Bozzelli | Psychology | George Mason University | Does zinc supplementation alter protein levels of synaptic transporters? |
| Joshua L. Downing | Psychology | Ohio University | Experimental deployment of a Variable Perspective Optical Device (VPOD) for the study of vision and perceptual adaptation in humans |
| Vanessa L. Ehlers | Psychology | University of Wisconsin-Milwaukee | Effect of Oral Administration of Apolipoprotein A on Cell Death following Ischemia. |
| Enrique I. Gracian | Psychology | University of Wisconsin-Milwaukee | Eye-tracking may capture differences in memory deficits associated with normal aging and age-related neurodegenerative disease. |
| Jooa J. Lee | Psychology | Harvard University | A Neuro-endocrinological Study of Dishonesty |

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| Rachel Skipper | Psychology | Miami University Ohio | A Role for Corticosterone in the Effects of Early-Life Stress on Adult Fear Conditioning |
| Jacob Boswell | Systematics/Evolutionary Biology | University of Montana | Predator-Induced Multicellularity in <i>Chlamydomonas reinhardtii</i> |
| Tin Chi Solomon Chak | Systematics/Evolutionary Biology | Virginia Institute of Marine Sciences, College of William and Mary | Sponges, shrimps, and symbionts: Testing how sponge symbiotic bacteria mediate host use patterns of snapping shrimp (<i>Synalpheus</i>) |
| Darko D. Cotoras | Systematics/Evolutionary Biology | University of California-Berkeley | Early stages of adaptive radiation: Insights from spiders in the Hawaiian archipelago |
| Suzanne M. Cox | Systematics/Evolutionary Biology | University of Massachusetts Amherst | Cavitation Control in the Mantis Shrimp |
| Mark J. Garcia | Systematics/Evolutionary Biology | University of Alabama at Tuscaloosa | The Integrated Phenotype: Physiological Underpinnings and Its Impact on Phenotypic Diversity and Evolution |
| Darcy G. Gordon | Systematics/Evolutionary Biology | Boston University | Transcriptomic analysis of brain and caste evolution in <i>Pheidole</i> ants |
| Matthew R. Jones | Systematics/Evolutionary Biology | University of Wyoming | Immunogenetic adaptation and reproductive isolation along altitudinal gradients |
| Azar Kordbacheh | Systematics/Evolutionary Biology | University of Texas at El Paso | Cryptic Speciation in Some Cosmopolitan Species of Phylum Rotifera |
| Zachary R. Lewis | Systematics/Evolutionary Biology | Harvard University | The developmental genetic basis of lung loss in lungless salamanders |
| Laura Lorenz | Systematics/Evolutionary Biology | James Madison University | Determining the predictive power of custom Mycobacteriophage cluster microarray cassettes |
| Bianca K. Montero | Systematics/Evolutionary Biology | North Dakota State University | Population Genetic Structure of a Highly Specialized Leaf Roosting Bat |
| Joseph B. Pfaller | Systematics/Evolutionary Biology | University of Florida | Genetic homogeneity across spatial, taxonomic and ecological boundaries |

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| Mark A. Phuong | Systematics/Evolutionary Biology | University of California-Los Angeles | Evolution of color patterns in chromodorid sea slugs in the Indo-West Pacific |
| Srihari Radhakrishnan | Systematics/Evolutionary Biology | Iowa State University | Composition and regulation of gonadal genes in turtles with genotypic and temperature-dependent sex determination |
| Ning Shen | Systematics/Evolutionary Biology | Duke University | Understanding the binding competition between transcription factors c-Myc and Mad2 |
| Noor D. White | Systematics/Evolutionary Biology | University of Maryland, College Park | Unraveling the Adaptive Evolutionary History of Nocturnal Vision in Birds |
| Corlett W. Wood | Systematics/Evolutionary Biology | University of Virginia | Selection on a male combat trait in a heterogeneous environment |
| Christopher R. Poythress | Tectonics/Geophysics | East Carolina University | Evaluating the Geometry of a Concealed Mesozoic Rift Basin via Geophysics, Bertie County, North Carolina |
| Erik D. Thornton | Tectonics/Geophysics | East Carolina University | Constraining the emplacement history and flow mechanics of a sill/dike network on the southern margin of Mount Hillers, Utah. |