

Grants-in-Aid of Research Awards
March 15, 2006 Grant Cycle

Alphabetical by Institution

Grant Recipient	Research Field	Institution	Study Title
Caroline S. Fortunato	Ecology	American University	Assessing Biogeochemical Processes of A Freshwater Tidal Estuary through Microbial and Nutrient Composition
David A. Ballinger	Conservation Biology	Appalachian State University	Physical Variables and Community Structure of the White Rocks Cliff System, Cumberland Gap National Historical Park
Jorge L. Esquivel	Ecology	Appalachian State University	Chytrids vs Amphibians: Emerging Disease or History of Natural Selection?
Robert C. Thigpen	Conservation Biology	Appalachian State University	Stable Isotope Analysis of Commercially Important Marine Invertebrates from Belize
Kristi L. Lewton	Physiology/Functional Morphology	Arizona State University	Biomechanical Analysis of Strain in the Primate Pelvis
Melissa G. Meadows	Behavioral Ecology	Arizona State University	Iridescent structural coloration as a status signal in Anna's Hummingbird (<i>Calypte anna</i>)
Nathan I. Morehouse	Systematics/Evolutionary Biology	Arizona State University	Nitrogen Limitation and Sexually Dimorphic Pterin Pigmentation in a Pierid Butterfly
Caley M. Orr	Anthropology	Arizona State University	Three-dimensional Morphometrics and Kinematics of the Anthropoid Wrist and the Evolution of Knuckle-walking
Siddarth Venkatesh	Engineering	Auburn University	Biomimetic Therapeutic Contact Lenses For The Enhanced Loading And Extended Release Of Ocular Therapeutics
Niv Palgi	Physiology/Functional Morphology	Ben-Gurion University of the Negev	Is Digestion of Dietary Oxalate in Fat Sand Rat Guts by Symbiotic Bacteria Reduced by Increased Calcium Intake
Carlye D. Peterson	Paleontology/Sedimentation	California State University-Long Beach	Biogenic Silica as a Climatic Proxy for Monsoon Intensity in Vietnam Over the Last 1200 Years

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Candice M. Chavez	Psychology	California State University-San Bernardino	Top-down Modulation by Medical Prefrontal Cortex of Basal Forebrain Activation of Auditory Cortex During Learning
Erica K. Torner	Psychology	California State University-San Bernardino	Basal Forebrain Involvement in Pavlovian Conditioning: An Animal Model of Alzheimer's Disease
Craig S. Rudick	Physics/Astronomy	Case Western Reserve University	Multi-filter Photometric Imaging of the ICL in the Core of the Virgo Cluster
Joy M. O'Keefe	Conservation Biology	Clemson University	Multi-scale Foraging Habitat Selection by Bats in the Southern Appalachian Mountains
Britt Reichborn-Kjennerud	Physics/Astronomy	Columbia University	ACS Development to Map the Polarization of the Cosmic Microwave Background Using EBEX
Michael Stastny	Ecology	Cornell University	Local Community Structure of Related Plant Species via Direct and Indirect Ecological Interactions
Stephanie C. van Veen	Cell Biology/Biochemistry	Cornell University	Effects of High Progesterone on Avian Sex Chromosome Segregation During the Sex-determining Division of Meiosis
Kristen K. Cecala	Ecology	Davidson College	Eating Your Neighbor: The Role of Predation in Structuring Stream Salamander Guilds
Kishore K. Tenneti	Engineering	Drexel University	Phase Structures of Hierarchically Self Assembled Liquid Crystalline Rod-Coil Block Copolymers with Bent-Core Mesogens
Audrey S. Chang	Systematics/Evolutionary Biology	Duke University	The Role of Postcopulatory Sexual Selection in Driving the Evolution of Reproductive Proteins in <i>Drosophila</i>

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Kerry E. Jordan	Psychology	Duke University	Attentional Effects of Video Game Playing: Purely Visual or Multisensory Causes and Effects
Varun Swamy	Conservation Biology	Duke University	Examining the Insidious Effects of Hunting in Disrupting the Critical Role of Animals in the Perpetuation of Tropical Rainforests
Yi-Hsin E. Tsai	Systematics/Evolutionary Biology	Duke University	The Invasion and Population Dynamics of the Parasitic Plant, <i>Epifagus virginiana</i>
Jennifer J. Weber	Systematics/Evolutionary Biology	East Carolina University	Selfng-Induced Flower Senescence: An Unrecognized Mode of Pollen Discounting
Christie L. Wilcox	Ecology	Eckerd College	Effect of Fiddler Crabs on Mangrove Seedling Growth in Cockroach Bay, Florida
Jamie L. Gilley	Behavioral Ecology	Florida Institute of Technology	Habitat Alteration and Its Affect on Predator-Prey Interactions of the Invasive Pike Killifish and the Native Mosquitofish
Debra W. Woodall	Petrology/Geochemistry	Florida Institute of Technology	The Role of Mineral Suspended Solds in the Photochemical Cycling of Carbon Associated with CDOM
Teresa L. Micheli	Psychology	George Mason University	Hippocampal deficits due to elevated zinc consumption assessed by the trace fear conditioning task.
Karah E. Knope	Chemistry	George Washington University	Synthesis of Lanthanide Oxalates via In-Situ Ligand Formation: Decarboxylation, Organic Oxidation, and the Reductive Coupling of Adventitious Carbon Dioxide

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Meridith R. Mikulich	Physiology/Functional Morphology	Georgetown University	Pax3 and Pax7 Protein Expression and Localization in Skeletal Muscle after Injury to the Peripheral and Central Nervous System
Samuel J. Fasulo	Psychology	Georgia State University	Complex Trauma Exposure and Psychological Distress in Incarcerated Juvenile Offenders
Jodi L. Den Uyl	Behavioral Ecology	Grand Valley State University	Analysis of Microbial Assemblages in Mated Tree Swallows using Denaturing Gradient Gel Electrophoresis
Zarin P. Machanda	Anthropology	Harvard University	The Effect of Male Presence on Female Feeding Efficiency Among the Chimpanzees of the Budongo Forest, Uganda
Corin M. McLean	Anthropology	Harvard University	Why Red Colobus: Exploring Arboreal Behaviors in Colobines That May Impact Chimp Hunting Preferences
Maia Kiladze	Physiology/Functional Morphology	I. Beritashvili Institute of Physiology	The Morphologic Changes of Structural Elements of Rat Hippocampus Provoked by Experimental Temporal Lobe Epilepsy
Ryan T. Paitz	Physiology/Functional Morphology	Illinois State University	Putative role for the brain in temperature-dependent sex determination
Maria Thaker	Physiology/Functional Morphology	Indiana State University	Maternal Stress and Dynamics of Alternative Reproductive Tactics in Male Offspring
Jonathan W. Atwell	Behavioral Ecology	Indiana University - Bloomington	Hormones, Plasticity, and Evolution Following Colonization of a Novel, Anthropogenic Environment
Jeff D. Cummings	Physics/Astronomy	Indiana University - Bloomington	Lithium Abundance Of NGC 6253 - The Most Metal-Rich Open Cluster

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Stephaney S. Puchalski	Paleontology/Sedimentation	Indiana University - Bloomington	Investigation of the Ultrastructural Basis of Taphonomic Biases Against Preservation of Polyplacophorans
Weiguo Yao	Cell Biology/Biochemistry	Indiana University School of Medicine	The GH/IGF-I axis and postnatal growth of weaver mutant mice
Maria G. Palacios	Behavioral Ecology	Iowa State University	Effect of Age on the Trade- off between Reproductive Effort and Immune Function in Tree Swallows <i>Tachycineta Bicolor</i>
Daniel A. Lee	Cell Biology/Biochemistry	Johns Hopkins University School of Medicine	Molecular Basis of Cell Fate Specification in the Mammalian Hypothalamus
Frank J. Varriale	Paleontology/Sedimentation	Johns Hopkins University School of Medicine	Testing for Dinosaur- Angiosperm Coevolutionary Relationships with an Analysis of Marginocephalian Dental Microwear and Jaw Morphology
Laura E. Christianson	Engineering	Kansas State University	Assessing the Use of Poplars for Hydraulically Controlling a Groundwater Plume
Sadie K. Reed	Ecology	Kent State University	The Maintenance of Androdioecy via Metapopulation Dynamics in the Clam Shrimp <i>Eulimnadia feriensis</i>
Patrick W. Belmont	Hydrology/Geomorphology	Lehigh University	Long-term Erosion Rate Response to Fault Activity in the Lemhi Range, Eastern Idaho
Karl W. Wegmann	Tectonics/Geophysics	Lehigh University	Broadband Geodesy, Great Earthquakes, and Vertical Tectonics of the Hellenic Subduction Zone, Crete, Greece

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Anna Ploshnitsa	Conservation Biology	Lomonosov Moscow State University	Changes in the Genetic Diversity of the Endangered Mednyi Island Arctic Fox Population (<i>Alopex lagopus semenovi</i> Ognev 1931) Passed through a æBottleneckÆ
Alice B. Dennis	Ecology	Louisiana State University-Baton Rouge	Cold Tolerance and Cryptic Species in <i>Melampus bidentatus</i>
Ron I. Eytan	Systematics/Evolutionary Biology	Louisiana State University-Baton Rouge	Phylogenetic Analysis of Microhabitat Differentiation and Metabolic Rate in the Reef Fish Genus <i>Acanthemblemaria</i>
Claudia Leonardi	Computer Science/Mathematics	Louisiana State University-Baton Rouge	Evaluation of Mathematical Processes and Calibration Statistics on Diode Arrays Generated Data
Terrence A. McCloskey	Paleontology/Sedimentation	Louisiana State University-Baton Rouge	Proxy Hurricane Records for the Western and Southern Caribbean
Luciano N. Naka	Systematics/Evolutionary Biology	Louisiana State University-Baton Rouge	Diversification Processes Inferred from Avian Suture Zones and Areas of Contact in an Interfluvium in Northwestern Amazonia
Robert E. Singleton	Chemistry	Louisiana State University-Baton Rouge	Nanoparticle Synthesis
Michael C. Frank	Psychology	Massachusetts Institute of Technology	Learning Words to Talk about the World: linguistic Representations Underlying Word Segmentation and Word Learning
Birgit Ziesemann	Behavioral Ecology	Massey University	Social organisation and mating system of the North Island brown kiwi (<i>Apteryx mantelli</i>) in a high-density population
Chika C. Nwugo	Cell Biology/Biochemistry	Miami University Ohio	A Proteomic Study on the Molecular Roles of Silicon Nutrition in Cadmium Tolerance of Rice (<i>Oryza sativa</i> L.)
Erica C. Raber	Physics/Astronomy	Miami University Ohio	A Novel Cellular High Pressure Imaging Chamber

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Sarah R. Benson-Amram	Behavioral Ecology	Michigan State University	Social Complexity and Comparative General Intelligence in Mammalian Carnivores
Andrew M. Kramer	Ecology	Michigan State University	Limitations to Recovery of Hesperodiaptomus Shoshone after Exotic Fish Eradication: a Multi-lake Test of the Allee Effect
Kevin R. Theis	Behavioral Ecology	Michigan State University	A Bacterial Mechanism for Group-specific Odors in Mammals
Matthew L. Ellison	Physiology/Functional Morphology	Mississippi State University	Pseudomonas aeruginosa Outer Membrane Properties Associated with Intrinsic Triclosan Resistanc
Farhan Ali	Systematics/Evolutionary Biology	National University of Singapore	Using Non-Invasive Samples for the Study of Brain and Cognition Genes in Primate
Erin E. Schirtzinger	Systematics/Evolutionary Biology	New Mexico State University	Assessing Temporal Concordance of Parrot Radiations in the New World: A Species-level Phylogeny of Neotropical Psittaciformes
Timothy R. Dwyer	Ecology	Northeastern University	The Role of Genetic Diversity in Marine Community Resistance to Biological Invasions
Zachary M. Weil	Physiology/Functional Morphology	Ohio State University	Photoperiodic Regulation of Experimental Autoimmune Encephalomyelitis
Zhenyue Zhu	Physics/Astronomy	Oklahoma State University	Intrinsic Spin Hall Effect in Semiconductors with Spin Orbital Interaction
Julie M. Ray	Ecology	Old Dominion University	Effects of Amphibian Decline on the Trophic Ecology of Mollusk-Eating Snakes
Holly R. Barnard	Hydrology/Geomorphology	Oregon State University	Illuminating the Black Box: The Influence of Forest Transpiration on Stream Discharge in a Small Headwater Catchment
Peggy Chen	Psychology	Pennsylvania State University	Orienting Visual Attention in Space

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Charles S. Speal	Anthropology	Pennsylvania State University	The Biological Impacts of Expanding Cultural Systems: Roman Imperialism, Incipient Urbanism, and Skeletal Biology in Contexts of Increasing Social Complexity
Mark E. Laidre	Behavioral Ecology	Princeton University	Vulnerability and the Evolution of Honest Signaling
Jillian T. Detwiler	Ecology	Purdue University-West Lafayette	Population re-structuring in Complex Life Cycles: The Effects of Intermediate Host Specificity and Vagility on Parasite Transmission Dynamics
Kevin W. Cormier	Chemistry	Saint Louis University	Improved Catalysts for Alkene Hydroamination
Martha E. Sedabres	Chemistry	Saint Louis University	A Thermodynamic Study of Naturally Occurring 2x2 Loops in RNA
Adam J. Lowe	Cell Biology/Biochemistry	Salisbury University	Docosahexenoic Acid and the Metastatic Capacity of Murine Melanoma Cells
Suzanne E. Tank	Ecology	Simon Fraser University	The effect of landscape-level variation of dissolved organic carbon on food web structure in Mackenzie Delta lakes
Chihiro Shibata	Anthropology	Southern Illinois University-Carbondale	Male-Female Interactions in Captive Cotton-top Tamarins (<i>Saguinus oedipus</i>)
Megan L. Stallman	Behavioral Ecology	St Mary's College of Maryland	An Investigation of the Response of a Population of Red-winged Blackbirds (<i>Agelaius phoeniceus</i>) to Variable Songs from Foreign Populations
Amelia L. Fort	Behavioral Ecology	St. Mary's College of Maryland	The Function of Bioluminescence in the Ctenophore <i>Mnemiopsis leidyi</i> : a Test of the "burglar-alarm" Hypothesis

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Rebecca A. Urban	Ecology	State University of New York at Binghamton	Can the Presence of an Invasive Species Alter Lake Chemistry due to Suppression of a Native Macrophyte?
Chrissa A. Wright	Cell Biology/Biochemistry	State University of New York at Plattsburgh	Structural and Functional Analysis of the Hemoglobin Encoding Gene in <i>Paramecium tetraurelia</i>
Christian Holzner	Physics/Astronomy	State University of New York at Stony Brook	Confronting a Trio of Neutrino Puzzles
Jason J. Williams	Behavioral Ecology	State University of New York at Syracuse	Phototactic Swimming and Diel Horizontal Migration by Zooplankton
Erik R. Hosler	Chemistry	Susquehanna University	Synthesis and Evaluation of Heteroscorpionate Tungsten Complexes Separated by Bridging Ligands
Megan B. Nelson	Systematics/Evolutionary Biology	Swarthmore College	BMP7 and the Evolution of the Diastataxic Avian Wing
Adam C. Stein	Systematics/Evolutionary Biology	Syracuse University	Plumage Evolution in Bearded Manakins
Viola M. Meadors	Chemistry	Tennessee Technological University	Extraction of Cesium by Various Functionalized Calix[4]arene-Crown-6 Ethers
Leigh M. Fall	Paleontology/Sedimentation	Texas A&M University-College Station	The Role of Local and Regional Processes on Diversity of Fossil Communities
Quinn C. Emmering	Behavioral Ecology	Texas Tech University	Do Songbirds use Proximate Cues to Avoid Predators in Space?
Molly J. Dickens	Conservation Biology	Tufts University	Does Stress Compromise Translocation and Reintroduction Efforts?
Alana J. May	Physics/Astronomy	University of Alabama at Tuscaloosa	How Large is Too Large?: the Black Hole Upper Mass Limit
Michael M. McGlue	Paleontology/Sedimentation	University of Arizona	The Modern Sedimentology of Andean Foreland Basin Lakes: Keys to Understanding Lacustrine Deposits in Ancient Foreland Basins

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Alison M. Behie	Behavioral Ecology	University of Calgary	The interaction of Nutrition, Stress levels and Parasite Load in Determining Black Howler Monkey Population Density in Monkey River, Belize
Melanie C. Burger	Chemistry	University of Calgary	Design of Liposome Microarray Systems for High Throughput Protein-Lipid Membrane Interaction Studies
Stephanie L. Bush	Behavioral Ecology	University of California-Berkeley	Ink Release by Deep-Sea Squids: A Chemical Deterrent to Predation?
Samuel L. Diaz-Munoz	Behavioral Ecology	University of California-Berkeley	Genetic Test of Adaptive Benefits of Cooperative Male Parental Care in Tamarins
Stacy C. Kozakavich	Anthropology	University of California-Berkeley	Archaeology and History of Advance, Tent-Village of the Kaweah Co-operative Colony, ca. 1886-1892.
Andrew H. Lee	Systematics/Evolutionary Biology	University of California-Berkeley	Evolution of Quadrupedality in Dinosaurs and the Ontogenetic and Mechanical Implications on Limb Bone Histology
Becky L. Williams	Behavioral Ecology	University of California-Berkeley	Chemical Defense from Predation in Hatchlings of the Blue Ringed Octopus <i>Hapalochlaena lunulata</i>
Christy M. Bowles	Ecology	University of California-Davis	Do alternate Stable States Exist in Bodega Harbor Mudflats?
Susan M. Glover	Anthropology	University of California-Davis	Resource Extraction Economics of a Boom Town, Gothic Colorado 1878-1900.
Heidy L. Contreras	Physiology/Functional Morphology	University of California-Irvine	The Persistence of Discontinuous Respiration in the Genus <i>Gerris</i> : The role of Water Conservation on Respiratory Patterns
Brian C. Hart	Physics/Astronomy	University of California-Irvine	Cosmology Constraints from a Unified Picture of Galaxy Cluster Dynamical State and its Evolution

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Nelida B. Pohl	Behavioral Ecology	University of California-Irvine	Blue Opsin Gene-mediated Blue Color Vision in <i>Lycaena</i> Butterflies
Kimberly A. Dienes	Psychology	University of California-Los Angeles	The Stress Response of Depressed and At-Risk Individuals
Abbey S. Eisenhower	Psychology	University of California-Los Angeles	Building relationships at school: An intervention to improve early teacher-student relationships for children with externalizing behavior problems
Brittany L. Enzmann	Behavioral Ecology	University of California-Los Angeles	Queen Investment and Implications for Colony Founding Strategies in Harvester Ants (genus <i>Pogonomyrmex</i>)
Karen M. Kapheim	Behavioral Ecology	University of California-Los Angeles	The Evolution of Cooperation and Social Correlates of Individual Recognition
John E. McCormack	Behavioral Ecology	University of California-Los Angeles	Is Blue Egg Color a Sexually Selected Trait in Mexican Jays?
Andrew W. Froehle	Anthropology	University of California-San Diego	Energy Expenditure in Postmenopausal Forager Women: An Experimental Model Based on North American Women
Jian Shen	Chemistry	University of California-San Diego	Interfacial Bonding Structure and Kinetic Mechanism of the High-K on III-V Compound Semiconductor
Robin A. Pelc	Ecology	University of California-Santa Barbara	Production and Dispersal of a Harvested Mussel in South African Marine Reserves
Peter C. Lippert	Tectonics/Geophysics	University of California-Santa Cruz	Paleogene Elevation in North Central Tibet: Testing Models for Growth of the Tibetan Plateau

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Heather E. Mostman-Liwanag	Physiology/Functional Morphology	University of California-Santa Cruz	Thermal Limitations of Northern Fur Seals (<i>Callorhinus ursinus</i>): A Comparative Study with California Sea Lions (<i>Zalophus californianus</i>)
Christopher A. Howey	Ecology	University of Central Arkansas	Sex-based Differences in Habitat Selection in a Turtle Species that does not use Aerial Basking to Thermoregulate: Implications for Reproduction
Lis C. Nelis	Ecology	University of Chicago	Synergistic Interactions Between Invasive Species
Kara B. Nuss	Behavioral Ecology	University of Chicago	The Function of Introductory Copulations in Captive Goeldi's Monkeys
Maria G. Antoniou	Engineering	University of Cincinnati	Destruction of the Cyanobacterial Toxins Microcystin-LR and Cylindrospermopsin with Advanced Oxidation Technologies (AOTs)
Devin P. Buick	Paleontology/Sedimentation	University of Cincinnati	Exploring the Evolution of Morphological Disparity within and among Species of the Bivalve Genus <i>Cucullaea</i>
Anthony A. Kramer	Paleontology/Sedimentation	University of Cincinnati	Characterization of a New Cambrian Lagerstätte: a New Non-Uniformitarian Biofacies
Ana C. Londono	Hydrology/Geomorphology	University of Cincinnati	Erosion Evolution in Arid Environments Derived from the Study of Pre-Columbian Agricultural Terraces in Southern Peru
Krista D. Fish	Anthropology	University of Colorado at Boulder	The Community Ecology of Sympatric Nocturnal Primates and Bats: Understanding Dietary Niche Separation at the Blyde River Canyon Nature Reserve, South Africa

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Jessica D. Hedgepeth Balkin	Anthropology	University of Colorado at Boulder	The Late Classic Collapse at Rio Viejo, Oaxaca: Commoner Economic Response
Kevin Heng	Physics/Astronomy	University of Colorado at Boulder	The Vanishing Shock Emission in Supernova Remnant 1987A?
Ken M. Keefover-Ring	Ecology	University of Colorado at Boulder	The Interaction Between Herbivory and Pollination in <i>Monarda fistulosa</i>
Brian J. Poller	Physics/Astronomy	University of Colorado at Boulder	The Resolution of Sun Occluding Space Debris
Helene T. Hegaret	Ecology	University of Connecticut	Investigation of the Role of the Hemocytes in the Harmful Algae-bivalve Mollusc Trophic Interaction
Susan Z. Herrick	Behavioral Ecology	University of Connecticut	Behavioral Interactions Among Breeding Male Bullfrogs (<i>Rana catesbeiana</i>) and Green Frogs (<i>Rana clamitans</i>) at Different Spatial and Temporal Scales
Brian P. Danysh	Physiology/Functional Morphology	University of Delaware	Characterization of Diffusion Coefficients of Molecules in the Lens Capsule
Jo E. Halliday	Ecology	University of Edinburgh	Carnivores as sentinels of emerging and resurging human diseases in East Africa
Leslie S. Babonis	Physiology/Functional Morphology	University of Florida	To Drink or not to Drink: Behavioral Osmoregulation in an Estuarine Snake
David G. Buck	Hydrology/Geomorphology	University of Florida	Linking Land Use Patterns and Aquatic Ecosystem Function in the Temash Watershed, Belize
Jill E. Jankowski	Ecology	University of Florida	Interspecific Territoriality and Habitat Specialization as Potential Mechanisms for Avian Species Replacements along Tropical Altitudinal Gradients

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Sara J. Margolin	Psychology	University of Florida	Comprehension of Negation in Aging: An Assessment of Inhibition Difficulties
Melissa A. Toups	Systematics/Evolutionary Biology	University of Florida	Using Pthirus pubis as a Marker for Human Evolutionary History
Dunja L. Trunk	Psychology	University of Florida	Effects of Task Instructions on Off-Topic Verbosity in Young and Older Adults
Evelina Basenko	Cell Biology/Biochemistry	University of Georgia	Investigation of the Genetic Requirements for T-circle and T-loop Formation
Noha M. Mesbah	Cell Biology/Biochemistry	University of Georgia	Energy Conservation and Bioenergetic Parameters in a Novel Group of Extremophiles, the Halophilic Alkalithermophiles
Katharine L. Stuble	Ecology	University of Georgia	Impacts of Solenopsis invicta on seed dispersal in the longleaf pine ecosystem
Tammy Y. Watkins	Anthropology	University of Georgia	Children's Subsistence Contributions to Pastoral Households in the Drylands of East Africa
Joanne L. Birch	Systematics/Evolutionary Biology	University of Hawaii at Manoa	Lineage Diversification within Insular Flora: The Systematics and Biogeography of the Pacific Genus Astelia (Asteliaceae)
Paula I. Capece	Conservation Biology	University of Hawaii at Manoa	Estimating Jaguar Densities Using Capture-recapture Analysis: Comparison of a Protected Area and an Unprotected Area in Roraima, Northern Brazil
Stacey J. Dunn	Behavioral Ecology	University of Idaho	Inbreeding in the National Bison Range, Montana Pronghorn Population
Jeffrey A. Buechler	Anthropology	University of Illinois at Chicago	Classic Maya Socio-Political Interactions in Ancient Guatemala
Sara E. Emerson	Conservation Biology	University of Illinois at Chicago	Conservation and Habitat Requirements of the Sykes Monkey (Cercopithecus albogularis erythrarchus)

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Niraj J. Muni	Engineering	University of Illinois at Chicago	Light-regulated GABA _c receptors
Ambarish S. Pawar	Engineering	University of Illinois at Chicago	Retinal Signal Processing Studied by Ganglion Cell and Electroretinographic Recording
Mahadevabharath R. Somayaji	Engineering	University of Illinois at Chicago	Intracranial Dynamics and Drug Transport Mechanism in the Human Brain
Michael P. Carey	Ecology	University of Illinois at Urbana-Champaign	Exploring Fish Diversity as a Determinant of Ecosystem Properties in Aquatic Food Webs
Melissa L. Raguette-Schofield	Anthropology	University of Illinois at Urbana-Champaign	Feeding Behavior and the Evolution of Extended Juvenility in Primates
Emily J. Wisseman	Cell Biology/Biochemistry	University of Illinois at Urbana-Champaign	THE IMPACT OF ENVIRONMENTAL CHANGES ON MICROBIAL COMMUNITIES PRESENT IN CORAL REEFS.
Sandra A. Yi	Systematics/Evolutionary Biology	University of Illinois at Urbana-Champaign	Parasite-host Interactions Between Aquatic Mites (Acari: Hydrachnidia) and Mosquitoes (Diptera: Culicidae) in Urban and Rural Freshwater Habitats
Jesse T. Koch	Paleontology/Sedimentation	University of Iowa	Sequence Stratigraphy and Facies Analyses of the Lower Dakota Formation, Southeast Nebraska
Cheyenne M. Munson	Psychology	University of Iowa	Acoustic Cues for Anticipation in Speech Perception
Nicholas D. Levens	Systematics/Evolutionary Biology	University of Kansas	Systematics and Historical Biogeography of the Alternifolium Group of the Flowering Plant Genus Chrysosplenium (Saxifragaceae)
Julie B. Retrum	Petrology/Geochemistry	University of Kansas	A Paleoclimatic and Paleohydrologic Reconstruction of Pleistocene Fossil Lake, Oregon Using Faunal Assemblages and Stable Isotope Analyses

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Mario H. Weick	Psychology	University of Kent at Canterbury	The Effects of Power on Knowledge Accessibility within a Person x Situation Framework
Julie H. Oestreich	Physiology/Functional Morphology	University of Kentucky	The Effects of P2Y12 Polymorphisms on Platelet Receptor Density and Activation
Yoriko Saeki	Ecology	University of Kentucky	Brood Determination of the Polyembryonic Parasitoid, <i>Copidosoma bakeri</i> (Howard)
Roseline Devariste	Physiology/Functional Morphology	University of Louisiana at Lafayette	Are Elicitor Proteins Responsible for Necrosis and Lesions During Witches' Broom Disease?
Ali M. Rabatsky	Systematics/Evolutionary Biology	University of Louisiana at Lafayette	Evolutionary Vestigialization of Complex Features using a Rattlesnake Model
Gordon R. Bromley	Hydrology/Geomorphology	University of Maine, Orono	Reconstructing the Late-Quaternary Glacial History of Nevado Coropuna, Peru
Benjamin B. Harter	Ecology	University of Manitoba	Where's the Beef?: Effects of Global Warming and Arctic Pack Ice Retreat on the Breeding Success of a Marine Top Predator, the Black Guillemot (<i>Cephus grylle</i>)
Lynna M. Kiere	Behavioral Ecology	University of Maryland, Baltimore County	Exploring Female Coloration in Streak-Backed Orioles: Variation, Behavior, and Evolution
Genevieve R. Spanjer	Behavioral Ecology	University of Maryland, College Park	An Investigation of Social Learning & Decision-making while Foraging in the Short-tailed Fruit Bat, <i>Carollia perspicillata</i>
Ana M. Gabela	Ecology	University of Massachusetts Amherst	Site Fidelity and Human Impact on the Medium Ground Finch (<i>Geospiza foris</i>) on Santa Cruz, Galápagos Islands

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Michelle A. Rensel	Physiology/Functional Morphology	University of Memphis	Food Supplementation, Hatching Asynchrony, and Nutritional Status of Florida Scrub-Jay (<i>Aphelocoma coerulescens</i>) Nestling
Martha L. Carlson-Mazur	Ecology	University of Michigan-Ann Arbor	Evapotranspiration and Ground-Water Flow Systems in a Fresh-Water Coastal Ridge-and-Swale System
Lucia A. Luna-Wong	Systematics/Evolutionary Biology	University of Michigan-Ann Arbor	Why are the Andes so Diverse? Testing Models of Speciation and Morphological Diversity
Michael D. Dixon	Ecology	University of Minnesota Duluth	Potential Local Adaptation of a Tumbling Flower Beetle Across the Prairie/forest Boundary
Rebecca G. Deason	Psychology	University of Minnesota, Twin Cities	Examining early visual object priming with brain event-related potentials
Johannes Hubmayr	Physics/Astronomy	University of Minnesota, Twin Cities	Sensitivity of EBEX Detectors
Michael B. Milligan	Physics/Astronomy	University of Minnesota, Twin Cities	Broadband Millimeter Wavelength Anti-Reflection Technology for Observational Cosmology
Ravi Goyal	Physiology/Functional Morphology	University of Mississippi	Developmental Regulation of Serotonin Signaling in Ovine Pulmonary Arteries
Patrick C. Yamnik	Behavioral Ecology	University of Mississippi	Factors Affecting Natal Dispersal in Two Species of <i>Ambystoma</i>
Iris I. Levin	Ecology	University of Missouri-St. Louis	Effects of host sociality on parasite prevalence and intensity in Great Frigatebirds (<i>Fregata minor</i>) on Isla Genovesa, Galapagos
Cassandra M. Martin	Behavioral Ecology	University of Nebraska at Lincoln	Association Costs in the Female Field Cricket, <i>Gryllus lineaticeps</i>
Stuart C. Willis	Systematics/Evolutionary Biology	University of Nebraska at Lincoln	Historical Biogeography of Neotropical Fishes from the Orinoco and Essequibo River Basins

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Grant Recipient	Research Field	Institution	Study Title
Shahnewaz Mohammad	Petrology/Geochemistry	University of Nevada, Reno	Arsenic-sulfide Oxidation: Kinetics and Reaction Mechanism Using Mixed Flow Reactor and Surface Microscopic Experiments
Justin M. Ferrentino	Engineering	University of New Hampshire	Microalgal Oil Extraction and In-situ Transesterification
Jedediah D. Frechette	Hydrology/Geomorphology	University of New Mexico	Geomorphic Response to Fire and Climate Change in Ponderosa Pine Forests, Sacramento Mountains, NM
Benjamin J. Swanson	Hydrology/Geomorphology	University of New Mexico	Impact of Holocene Sediment Dynamics and Historical Dam Construction on the Rio Chama, New Mexico: Implications for River Management
Mukta Chakraborty	Behavioral Ecology	University of North Carolina at Chapel Hill	Neuro-endocrine Mechanisms of Female Receptive Behavior in Tungara Frogs (<i>Physalaemus pustulosus</i>)
Jesse W. Davis	Petrology/Geochemistry	University of North Carolina at Chapel Hill	Thermochronology and Cooling Histories of Cretaceous Plutons in the Sierra Nevada Batholith, California: Implications for Incremental Pluton Assembly
Matthew B. Fariss	Anthropology	University of North Carolina at Chapel Hill	Archaeological Survey of the Upper Moche Valley, Peru Phase 2: Upper Sinsicap River Corridor
Andrew C. Foster	Physics/Astronomy	University of North Carolina at Chapel Hill	The Rise of Skynet: UNC-Chapel Hill's Global Robotic Telescope Network
Joshua B. Haislip	Physics/Astronomy	University of North Carolina at Chapel Hill	Gamma Ray Bursts: Probing the Early Universe
Ashley G. Rivenbark	Cell Biology/Biochemistry	University of North Carolina at Chapel Hill	Characterization of DNA Sequence Elements That Direct CpG Methylation of Breast Cancer Tumor Suppressor Genes

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Ben M. Shields	Anthropology	University of North Carolina at Chapel Hill	Deconstructing Time-Progressive Models of Prehistoric Warfare in the Southeastern United States
Adam S. Trotter	Physics/Astronomy	University of North Carolina at Chapel Hill	Observations and Modeling of Gamma-Ray Burst Afterglows in the Blue
Amy K. Kilbarger	Cell Biology/Biochemistry	University of North Carolina at Greensboro	The Effect of Iron Excess on Osteoblast Phenotypic Development
Jeffrey D. Overton	Physiology/Functional Morphology	University of North Carolina at Wilmington	Diffusive Constraints on Aerobic Metabolic Flux in Muscle
Alyson G. Urian	Ecology	University of North Florida	Potential for Range Expansion of the Invasive Green Mussel, <i>Perna viridis</i> : Reproductive Cycle and Larval Dispersal from a Point Source in St. Augustine, FL
Sally A. Entrekin	Ecology	University of Notre Dame	Food Web Dynamics of Macroinvertebrate Communities in Historically Logged, Headwater Streams in the Upper Peninsula of Michigan
Ivan Mateo	Conservation Biology	University of Rhode Island	Assessing Connectivity and Essential Fish Habitat for Reef Fish in Mangrove and Seagrass Environments Using otolith Microchemistry
Binfeng Xia	Chemistry	University of South Carolina	Pharmacokinetics of a Novel Antihypertensive Agent MS23 i.v. in Rats
Paul K. Sanford	Paleontology/Sedimentation	University of South Florida	Age Estimation and Stratigraphic Resolution of Florida's Plio-Pleistocene Shell Beds Using Amino Acid Racemization Rates in Fossil Mollusks

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Kevin E. Burns	Tectonics/Geophysics	University of Tennessee-Knoxville	Developing Empirical Relationships Between Ground Penetrating Radar Reflection Amplitudes and Hydrologic Tracer Concentrations for Improving Characterization of Channelized Fluid Flow in Subhorizontal Bedrock Fractures
Martin A. Nuñez	Ecology	University of Tennessee-Knoxville	The Role of Mycorrhizal Fungi in Pinaceae Invasion on Isla Victoria, Nahuel Huapi National Park, Argentina
Joshua J. Adams	Physics/Astronomy	University of Texas at Austin	A Prototype Survey for Starforming High Redshift Galaxies
Bhart-Anjan S. Bhullar	Systematics/Evolutionary Biology	University of Texas at Austin	Morphology, ontogeny, and phylogeny of Recent and fossil members of the unusual lizard clade Xenosauridae.
Stephen H. Patterson	Systematics/Evolutionary Biology	University of Texas at Austin	Life-History Tradeoffs and the Evolution of the Acute Stress Response
Ian U. Roederer	Physics/Astronomy	University of Texas at Austin	Isotopic Abundances of Neutron-Capture Elements in Metal-Poor Stars
Naomi E. Levin	Paleontology/Sedimentation	University of Utah	An Isotopic Study of East African Paleoaridity in the Pliocene and Pleistocene
Jenica M. Allen	Ecology	University of Virginia	The Role of Enemy Release and the Evolution of Increased Competitive Ability in the Invasion of Pacific U.S. Estuaries by <i>Spartina alterniflora</i> Loisel
Ricardo A. Covarrubias	Physics/Astronomy	University of Washington	Does Metallicity Affect the Fate of Massive Stars?
David C. Haak	Systematics/Evolutionary Biology	University of Washington	Evolution of a Spice
Heather D. Heuser	Petrology/Geochemistry	University of Washington	Holocene Climatic Variability Based on the Isotopic Analysis of Diatoms in Lake Sediment from East Greenland

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Noelle J. Machnicki	Ecology	University of Washington	The Unseen Role of Fungal Pathogens in Driving Biodiversity
Jennifer Patterson	Engineering	University of Washington	Controlled Release of Osteoprotegerin from Hydrogel Scaffolds for Bone Regeneration
Rok Roskar	Physics/Astronomy	University of Washington	Supercomputing Simulations of Disk Galaxy Truncation
Kathryn E. Devine	Physics/Astronomy	University of Wisconsin-Madison	Ammonia and CCS Studies of GLIMPSE Infrared Dark Clouds
Penelope J. Lancaster	Petrology/Geochemistry	University of Wisconsin-Madison	Granitoid Genesis in the South-eastern Adirondack Highlands, New York
Siddharth S. Malu	Physics/Astronomy	University of Wisconsin-Madison	Characterizing Beam Patterns of Antennas in the 75-110 GHz Band for a Novel Interferometer - the MBI
Christopher A. Podlesnik	Psychology	Utah State University	The Effects of Naltrexone on the Resurgence of Alcohol Self-administration in Rats: A Novel Animal Model of Relapse
Jennifer L. Mortensen	Conservation Biology	Villanova University	Effects of habitat loss on social ecology and reproduction of the endangered White-breasted Thrasher (<i>Ramphocinclus brachyurus</i>)
Sheena A. Friend	Systematics/Evolutionary Biology	Virginia Polytechnic Institute and State University	Evolution of Major Peanut Allergen Arah2
Micah J. Jessup	Tectonics/Geophysics	Virginia Polytechnic Institute and State University	Detailed Thermobarometric Analysis of the Top of the Greater Himalayan Slab, Everest Massif, Nepal: Implications for Testing Channel Flow Models

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Amanda L. Malueg	Behavioral Ecology	Virginia Polytechnic Institute and State University	Investigation of Physiological Mechanisms for Reproductive Suppression of Helpers in a Cooperatively Breeding Species
Dawn M. Delo	Cell Biology/Biochemistry	Wake Forest University School of Medicine	Cardiac Tissue Regeneration using Amniotic Fluid Derived Stem Cell
Tiffany L. Fisher	Physiology/Functional Morphology	Wake Forest University School of Medicine	Thalamic Integration of Synaptic Input
JaNae Joyner	Physiology/Functional Morphology	Wake Forest University School of Medicine	Role of the Novel Angiotensin [Ang-(1-7)] in Volume Regulation in Pregnancy
Doris P. Molina	Cell Biology/Biochemistry	Wake Forest University School of Medicine	The Effect of Age and Growth Hormone/Insulin-like Growth Factor Axis on Glutamate Receptor Subunit Levels
James C. Mallen	Physiology/Functional Morphology	Wartburg College	Gender Differences in the Effects of Nicotine on Spatial Learning, Memory, and Neurogenesis in Aged Adult Rats
Sebastian F. Brandt	Physics/Astronomy	Washington University in St. Louis	Investigating the conduction velocity asymmetry in feedback loops of the avian visual system
Katherine M. Grillo	Anthropology	Washington University in St. Louis	A Report on the Ceramics from Guli Waabayo Subsistence, Mobility, and Material Culture in Prehistoric Southern Somalia
Brad J. Oberle	Systematics/Evolutionary Biology	Washington University in St. Louis	Inferring the History of Adaptation to Climate from the Diversity and Distribution of Dodecatheon (Primulaceae)
Thomas J. Sanger	Systematics/Evolutionary Biology	Washington University in St. Louis	Developmental Bases of Anolis Limb Length Variation

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Yun Wang	Physics/Astronomy	Washington University in St. Louis	Extraordinary Electroconductance in In-GaAs Metal-semiconductor Hybrid Structures
Noah C. Morgan	Cell Biology/Biochemistry	Wayne State University	Caldesmon Control of Microvascular Tone Following Traumatic Brain Injury
Zachary E. Papper	Systematics/Evolutionary Biology	Wayne State University	Evolution of primate regulatory regions: A comparative genomic analysis of LDHA and LDHB
Brandon M. Mijal	Hydrology/Geomorphology	Western Washington University	Holocene Glaciation in the Sawtooth Mountains, central Idaho
Mohit Sirohi	Cell Biology/Biochemistry	Widener University	Isolation and Characterization of Parvalbumin Isoforms in Sheepshead and Rainbow Trout
Kevin M. Dean	Chemistry	Willamette University	Understanding Solubility: The Equilibrium Phase Diagram for the Binary Liquid System 3-Butyn-2-one / Water.
Sara E. Carlson	Systematics/Evolutionary Biology	Yale University	Investigation of an Evolutionary Novelty: Epicalyx Evolution and the Adaptive Radiation of Dipsacaceae (Dipsacales) in the Mediterranean Basin
Shanil N. Virani	Physics/Astronomy	Yale University	Supermassive Black Holes at High Energy and High Redshift: Testing the AGN Unification Paradigm