

Grants-in-Aid of Research Awards
March 15, 2003 Grant Cycle

Alphabetical by Recipient's Name

Grant Recipient	Research Field	Institution	Study Title
Linah N. Ababneh	Ecology	University of Arizona	Effects of Abiotic Factors in Bristlecone Pine Radial Growth in the Great Basin, Western United States
Betsy Abroe	Behavioral Ecology	University of Wisconsin-Milwaukee	Do More Attractive Males Produce More Sons in the Common Yellowthroat (<i>Geothlypis trichas</i>) ?
Tracy T. Adkins	Ecology	University of San Diego	An Ecological approach to foraging strategies of Manta birostris in the Pacific Ocean
Leah J. Akins	Ecology	University of California-Davis	Decoupling between larval supply and onshore settlement: The importance of larval behavior to settlement patterns across large spatial scales
George M. Aldridge	Systematics/Evolutionary Biology	University of California-Irvine	Comparing prezygotic isolating mechanisms in unimodal and bimodal plant hybrid zones
Georgia M. Alexander	Physiology/Functional Morphology	Wake Forest University School of Medicine	Metabotropic Glutamate Receptors Modulate Cortical Influence on Lateral Geniculate Nucleus Cells
Jason P. Andras	Ecology	Cornell University	The effect of host population genetic structure on patterns of disease in the Gorgonia ventalina-Aspergillus sydowii pathosystem
Marcelo L. Ardon Sayao	Ecology	University of Georgia	Effects of litter chemistry on microbial processing of leaf litter in a neotropical stream
Amanda W. Ash	Ecology	University of Michigan-Ann Arbor	Tree ring biogeochemistry: Calcium cycling and nutrient depletion in base-poor forest ecosystems
Muhammad Asim	Hydrology/Geomorphology	Kent State University	numerical simulation of groundwater movement in a basin under compressional tectonics in NW Himalayas

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Matthew J. Badiali	Paleontology/Sedimentation	University of North Carolina at Chapel Hill	Strontium Isotope Chronostratigraphy of the Middle Atlantic Coastal Plain
Lindsay R. Barclay	Cell Biology/Biochemistry	Albertson College of Idaho	The Effects of Cadmium on Apoptosis in Cultured Rainbow Trout Gill Cells
Felipe S. Barreto	Systematics/Evolutionary Biology	University of North Carolina at Wilmington	The role of assortative mating as a gene flow barrier between incipient marine fish species
Michelle M. Barthet	Systematics/Evolutionary Biology	Virginia Polytechnic Institute and State University	Expression and Function of the Putative Plastid-encoded Maturase, matK
Joseph E. Barton	Engineering	University of California-Berkeley	A Human-Driver Model of Car Following
David J. Bauer	Physiology/Functional Morphology	University of Wisconsin-Milwaukee	Behavioral Deficits following Bilateral Dentate Nuclei Lesions
Tiffany A. Baxter	Tectonics/Geophysics	University of Wisconsin-Milwaukee	Eclogite-facies metamorphism and deep-crustal seismicity: evidence from paleo-earthquake fault rocks from the Lofoten Islands of northern Norway
Kellis M. Bayless	Physiology/Functional Morphology	University of Kansas	Stress & Organic Acid Accumulations During CAM Photosynthesis
Andrea C. Bazos	Cell Biology/Biochemistry	Fairfield University	Prevention of Apoptosis in Articular Chondrocytes by Metallothionein
Carla D. Beals	Ecology	University of Florida	Clearance Rates and Feeding Selectivity of <i>Crassostrea virginica</i> and <i>Mercenaria mercenaria</i> ; Implications of Increased Eutrophication in the Suwannee River Estuary
Tracy A. Becker	Cell Biology/Biochemistry	Idaho State University	Effects of Lipoic Acid on Insulin Stimulated Glucose Transport in Primary Adult Human Skeletal Muscle Cells
Abir Biswas	Petrology/Geochemistry	University of Michigan-Ann Arbor	The contribution of high production coal deposits to environmental mercury

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Derrick C. Blackmon	Ecology	University of South Alabama	Role of invertebrate dispersal in the trophic dynamics of coral reef and nearby seagrass communities: Implications for marine reserve management in the Florida Keys
April M. Blakeslee	Ecology	University of New Hampshire	Investigations into Littorina littorea's introduction to the northwest Atlantic coast
Jeremy M. Bono	Behavioral Ecology	Colorado State University	The impact of obligate (<i>Polyergus breviceps</i>) and facultative (<i>Formica sanguinea</i>) slave-making ants on their <i>Formica fusca</i> host
Matthew R. Bourke	Tectonics/Geophysics	University of California-Los Angeles	Constraining the tectonic history of the Lunpola basin in central Tibet through magnetostratigraphy and basin analysis
Ben F. Brammell	Physiology/Functional Morphology	University of Kentucky	Effects of Pollution Resistance on Polychlorinated Biphenyl Mediated Endocrine Disruption
Mary Elizabeth F. Brice	Systematics/Evolutionary Biology	University of Georgia	Isolation of Novel Fe(III) Reducing and Saccharolytic/Peptidolytic Bacteria from Deep Sea Sediments
Patricia B. Brown	Cell Biology/Biochemistry	California State University-Chico	Characterization of Microbial Eukaryotes in Hydrothermal Environments from Lassen Volcanic National Park
Katherine A. Brutlag	Physics/Astronomy	Middlebury College	Probing Shocks in the SN 1006 Supernova Remnant
Katherine V. Bulinski	Paleontology/Sedimentation	University of Cincinnati	Biodiversity, Sample Volume and Population Structure: The Cincinnati as a Microcosm for Assessments of Global Marine Diversity

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John A. Bunce	Anthropology	University of California-Davis	The Frequency of Trichromatic Color Vision in a Wild Population of <i>Callicebus moloch</i> , a New World Monkey
Anna M. Burke	Ecology	University of Illinois at Chicago	Prey foraging responses to varying levels of coyote predation in a desert system
James G. Burns	Behavioral Ecology	University of Toronto	The adaptive significance of between-individual variation in problem-solving ability of bumblebees
Patrick M. Burton	Cell Biology/Biochemistry	Bowie State University	Functional Analysis of Hox Genes in Cnidaria: Diced vs Large dsRNA
Tara N. Businski	Ecology	Memorial University of Newfoundland	Terrestrial- and marine-based food sources for zooplankton on the Beaufort Sea Shelf
Evans O. Changamu	Chemistry	Kenyatta University	Synthesis and characterization of vanadium-iron-sulphur complexes as possible models for nitrogenase
Gunnels W. Charles	Behavioral Ecology	University of Florida	Evaluation of Reproductive Skew in a Primitively Eusocial Paper Wasp, <i>Mischocyttarus mexicanus</i>
Mei-Er Chen	Physiology/Functional Morphology	Texas A&M University-College Station	Regulation of the vitellogenin receptor during fire ant <i>Solenopsis invicta</i> Buren oogenesis
Alexander G. Cheroske	Systematics/Evolutionary Biology	University of Maryland, Baltimore County	Evolution of adaptive color vision in three species of Caribbean mantis shrimp within the genus <i>Neogonodactylus</i> (Stomatopoda, Gonodactyloidea)
Jonathan D. Coop	Ecology	University of Wisconsin-Madison	Environmental determinants of subalpine forest-grassland ecotones in the southern Rocky Mountains

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Christopher L. Cooper	Cell Biology/Biochemistry	Illinois State University	Kinetic Evaluation of Coproporphyrinogen Oxidase Using an Isomer of the Natural Substrate
Ammon Corl	Systematics/Evolutionary Biology	University of California-Santa Cruz	Investigating a Novel Mechanism of Speciation in the Side-Blotched Lizard
Jaime A. Costales	Cell Biology/Biochemistry	Ohio University	Immunolocalization of the binding site of the release-inhibiting antibodies in Trypanosoma cruzi infected cells
Kathryn A. Coulombe	Cell Biology/Biochemistry	North Carolina State University	Bridging the Gap: Could Connexins Be the Key to Rapid Sex Change in a Coral Reef Fish?
Brian A. Counterman	Systematics/Evolutionary Biology	Louisiana State University-Baton Rouge	Testing the Faster X Theory in Lepidoptera
Elizabeth J. Cozzie	Cell Biology/Biochemistry	Rose-Hulman Institute of Technology	Annexin 4 Distribution: A Comparison of Healthy and Alzheimer's Diseased Human Brain Tissue
Dean A. Croshaw	Behavioral Ecology	University of New Orleans	Examining the fitness benefits of polyandry in marbled salamanders
Stacey M. Curry	Anthropology	University of Southern Mississippi	Otolemur garnettii Variation: The Use of Anthropometrics and DNA for Subspecies Identification
Antonia J. D'Amore	Ecology	University of California-Santa Cruz	Conservation and Community Structure - Invasive Cats on Gulf of California Islands
Brian J. Darby	Ecology	University of Toledo	Stable isotopes in nematodes: A novel technique for discerning feeding habits
Andy Dattel	Psychology	Texas Tech University	Increasing Situation Awareness for Aircraft Pilots
Carrie L. DeBlecourt	Cell Biology/Biochemistry	Northern Illinois University	Characterization of Antizyme-1 in Mammalian Cells
Casey P. Deen	Physics/Astronomy	Texas A&M University-College Station	Light Pollution: A detailed study

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Elizabeth P. Derryberry	Behavioral Ecology	Duke University	Inferring patterns of cultural evolution from patterns of song dialects in mountain white-crowned sparrows (<i>Zonotrichia leucophrys oriantha</i>)
Jeff M. Diez	Ecology	University of Georgia	Genetic structure of a symbiosis and the distribution of a terrestrial orchid
Brion A. Dolan	Tectonics/Geophysics	Texas A&M University-Corpus Christi	Soil Radon Exhalation within the Context of a Decommissioned Uranium Mine
Edward R. Donovan	Physiology/Functional Morphology	University of Colorado at Boulder	Metabolic patterns of recovery from activity in reptiles
Renee A. Duckworth	Behavioral Ecology	Duke University	Avian nest defense at high elevation: life history trade-offs and energetic constraints
Dennis M. Duval	Anthropology	University of South Carolina	A Functional Ceramic Analysis of An Abandonment Phase Southwestern Pueblo
Kimberly L. Eaton	Psychology	North Carolina State University	Emotion and Self Concept Influence Children's Reports of A Salient Experience
Sara E. Edison	Chemistry	University of Cincinnati	Mechanistic Investigation of an Unusual Ni(II)/O ₂ Reaction
Gwynn A. Erica	Ecology	University of Florida	Within-lake variation of cyanobacteria toxin and its effects on respiratory biology of the African cichlid <i>Astatoreochromis alluaudi</i>
Elizabeth K. Erickson	Paleontology/Sedimentation	State University of New York at Albany	The Lower-Middle Ordovician transition on the east Laurentian margin: the first stratigraphic synthesis of the Providence Island Formation (New York, Vermont, Quebec)

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Kevin M. Esvelt	Cell Biology/Biochemistry	Harvey Mudd College	Identification of Proteases Responsible for Processing of the Sperm Surface Protein Fertilin Beta
Stella R. Evans	Cell Biology/Biochemistry	Thomas Jefferson University	Calcium-activated Chloride Channels in the Retina
Elaine C. Fernandez	Psychology	Oklahoma State University	Bilingualism and the Tip-of-the-Tongue Experience
Stephenie R. Fleegle	Physiology/Functional Morphology	Immaculata University	Lung protective ventilatory strategies and antioxidative therapy to reduce lung matrix and surfactant dysfunction in the neonatal lung
Alyson K. Fletcher	Engineering	University of California-Berkeley	Iterative Signal Estimation with Complex Wavelets
Joseph J. Fontaine	Behavioral Ecology	University of Montana	Nest Predation Risk and Parental Care: Do birds behave safely?
Kristy L. Forsgren	Physiology/Functional Morphology	California State University-Long Beach	Growth rates of the weedy sea dragon, <i>Phyllopteryx taeniolatus</i>
Eric Fossett	Tectonics/Geophysics	University of Nevada-Las Vegas	Evidence and implications of Holocene faulting along the Black Hills fault, southern Nevada
Megan E. Frederickson	Ecology	Stanford University	Ecology and demography of Amazonian ant-plants
Anthony R. Friscia	Paleontology/Sedimentation	University of California-Los Angeles	An Ecomorphological Analysis of Small Bodied Modern Mammalian Carnivorans and Implications for the Paleocology of Early Tertiary Carnivores
Andrea B. Gager	Ecology	Princeton University	Temporal community dynamics of blood parasites (<i>Plasmodium</i> spp) in a tropical passerine population: Clay-colored robin (<i>Turdus grayi</i>)
Kenman D. Gan	Physiology/Functional Morphology	University of Alberta	Quantifying Predictors of Outcomes in Retinal Artery Occlusion Patients

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Kamal J. Gandhi	Ecology	University of Minnesota, Twin Cities	Immediate Responses of Pyrophilous Ground Beetle (Coleoptera: Carabidae) Assemblages to Wildfires and Prescribed Fires in Minnesota
Michael L. Gatz	Cell Biology/Biochemistry	Baylor College of Medicine	Effects of HTLV-I Tax on cellular mutation frequency and tumorigenesis in vivo
Evan B. Goldstein	Petrology/Geochemistry	Colgate University	Mafic Intrusions of the Dinkey Creek Granodiorite, Sierra Nevada, California
Meagen D. Gonzalez	Paleontology/Sedimentation	University of South Florida	Interpreting Stable Isotopes from Inoceramids to determine if their shells secreted in equilibrium with ambient seawaters
Eben B. Goodale	Behavioral Ecology	University of Massachusetts Amherst	The adaptive benefits to vocal mimicry in a tropical mixed-species flocking bird
Alejandra B. Gorostizaga	Cell Biology/Biochemistry	Universidad de Buenos Aires	Effect of luteinizing hormone (LH) and of stress conditions on MAP kinase phosphatase (MKP)-1 expression in MA-10 Leydig cells
Tyler W. Green	Chemistry	University of Cincinnati	Platinum(II) Diimine Complexes with Potentially Facially-Coordinating Ligands for Two-Electron Transfer
Patrick-Jean Guay	Behavioral Ecology	University of Melbourne	Sexual selection in the extreme size-dimorphic Musk Duck, <i>Biziura lobata</i>
Loraine F. Hale	Physiology/Functional Morphology	California State University-Long Beach	Age and growth of the round stingray, <i>Urolophus halleri</i> at Seal Beach, California
Megan C. Hall	Systematics/Evolutionary Biology	Duke University	Genetics of adaptation in <i>Mimulus guttatus</i>
Scott L. Hamilton	Ecology	University of California-Santa Barbara	The effects of nearshore vs offshore dispersal on growth and condition in a coral reef fish, <i>Thalassoma bifasciatum</i>

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Hyakubun Harada	Ecology	University of South Alabama	Effects of UV radiation and oxidative stress on the production of methylated sulfur compounds by marine phytoplankton
Jessica L. Hardesty	Ecology	Duke University	Stable isotope analysis of avian diet
Brian A. Hare	Psychology	Harvard University	Is dog social cognition a product of selection for cognition or an accidental byproduct of domestication?
Richard L. Herndon	Anthropology	Southern Illinois University-Carbondale	Assessing the Role of Ramey Incised Ceramic Vessels in the Development of Chiefly Power in the American Bottom
Travis M. Hinkelman	Behavioral Ecology	Clemson University	Effect of stand-level manipulations of woody debris on daytime refuge selection by cotton mice
Jerald C. Hinn	Behavioral Ecology	University of Cincinnati	Tradeoffs between parasite resistance and female fecundity in <i>Drosophila nigrospiracula</i>
John M. Hora	Petrology/Geochemistry	University of Wisconsin-Madison	Variability of magma provenance and crustal residence timescales over the history of a continental arc volcano: Paríacota Volcano, Chile
Jessica H. Hunt	Anthropology	Yale University	A test of morphological integration: its possible application to the fossil record
Jorge L. Hurtado	Behavioral Ecology	University of Missouri-St. Louis	Why do some females engage in multiple mating in Andean cock-of-the-rock lek system?
Kelly A. Hyndman	Physiology/Functional Morphology	University of Florida	Gill endothelin receptor localization in the killifish (<i>Fundulus heteroclitus</i>)
Alexander E. Ide	Cell Biology/Biochemistry	Boise State University	OSM-Induced Endothelial Cell Tube Formation

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Sarah E. Jackson	Anthropology	Harvard University	Deciphering Ancient Maya Political Hierarchy: an Integrated Study of the Non-Royal Elite
Jill E. Jankowski	Ecology	Purdue University-West Lafayette	Beta Diversity and Endemism: Implications for Tropical Reserve Design
Jason E. Jannot	Ecology	Purdue University-West Lafayette	Testing a model of developmental thresholds in a caddisfly
Christopher N. Janousek	Ecology	University of California-San Diego	The effects of functional group richness on productivity in constructed microphytobenthic assemblages
Juan J. Jimenez	Systematics/Evolutionary Biology	Universidad Nacional de Colombia	Contribution For the Taxonomical Recognition and Geographical Distribution of Tarantulas from the Family Theraphosidae (Aranae: Mygalomorphae) in Colombia
Virginia L. Jin	Ecology	University of Georgia	Determining the Effects of Soil Inorganic Nitrogen Availability on Plant Organic Nitrogen Uptake
Lisa K. Johnson	Cell Biology/Biochemistry	University of North Carolina at Wilmington	The effects of cell size on metabolism during recovery from fatigue in the blue crab, <i>Callinectes sapidus</i>
Kimberly K. Johnson	Physiology/Functional Morphology	California State University-Long Beach	Standard and Routine Metabolism of the kelp bass (<i>Paralabrax clathratus</i>)
Carrie V. Kappel	Ecology	Stanford University	Causes of rarity in Bahamian corals and implications for conservation
Remmy W. Kasili	Cell Biology/Biochemistry	Louisiana State University-Baton Rouge	Isolation and Characterization of Phenotypic Modifiers of Siamese
Kate Keller	Petrology/Geochemistry	University of Michigan-Ann Arbor	Effects of climate change on mineral weathering patterns in permafrost regions

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kerry j. kelley	Systematics/Evolutionary Biology	University of Massachusetts Amherst	Genetic Variability and Sexual Reproductive System of an
Andrew B. Kenst	Hydrology/Geomorphology	University of Tennessee-Knoxville	Virus Transport in the Memphis Sand Aquifer Under Unsaturated, Transient Flow Conditions
Michelle Kinder	Cell Biology/Biochemistry	Pennsylvania State University	MCP-1 in Breast Cancer Bone Metastasis
Espen Klausen	Psychology	University of Wisconsin-Milwaukee	Children's imaginary playmates: What roles do they serve?
Jessica L. Koederitz	Systematics/Evolutionary Biology	University of Wisconsin-Milwaukee	The evolution of avian sexual dichromatism: an unbiased assessment in the ultraviolet and visible wavelengths
Maria A. Korstanje	Anthropology	Universidad Nacional de Tucum�n	Archaeobotany in Coctaca, a northwestern Argentina ancient agricultural site
Karl L. Kosciuch	Behavioral Ecology	Kansas State University	Factors Affecting Nest Desertion by Bell�s Vireos In Response to Brood Parasitism
David M. Krayesky	Cell Biology/Biochemistry	University of Louisiana at Lafayette	Proteins of Red Algal Pit Plugs
Ryan M. Kroutil	Ecology	University of South Alabama	Investigating the role of habitat quality in determining reef fish community structure using coral replicas
Shannon L. LaDeau	Ecology	Duke University	Forest Tree Fecundity: Community diversity and response to global change
Lesley T. Lancaster	Behavioral Ecology	University of California-Santa Cruz	Maternal-Effect Solutions to Intense Correlational, Density-Dependent, and Frequency-Dependent Selection on Diverse Traits in the North American Side-Blotched Lizard (<i>Uta Stansburiana</i>)

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Daniel R. Lasco	Petrology/Geochemistry	University of Missouri-Rolla	Mineral Chemical Stratigraphy: A Record of Changing Conditions within a Crystallizing Magma Chamber
Karen M. Layou	Paleontology/Sedimentation	University of Georgia	Biotic recovery from a regional extinction event: An example from the Late Ordovician of the Appalachian Basin of the eastern United States
Kimberly N. Le	Tectonics/Geophysics	Central Washington University	Geologic Evidence for Distributed Slip across the Owens Valley, California
Daniel J. Lebbin	Ecology	Cornell University	Bamboo Specialization Among Amazonian Birds
Kathryn C. Lester	Ecology	Purdue University-West Lafayette	Population Dynamics of Birds and Amphibians Over Time in Large-Scale Prescribed Burns
Jamie S. Levine	Tectonics/Geophysics	University of Texas at Austin	Structural analysis and zircon provenance in the western Llano Uplift: Implications for a southern collider
Michelle N. Lewis	Ecology	Drake University	The effects of habitat quantity and quality on the abundance of savanna remnant-dependent lepidoptera
Chun-I Li	Psychology	University of Hawaii at Manoa	The role of medial amygdala CRF2 receptor in innate fear
James C. Liao	Physiology/Functional Morphology	Harvard University	The effect of turbulence on natural fish distributions: exploring mechanisms of energy economy
Junghwa Lim	Cell Biology/Biochemistry	Virginia Polytechnic Institute and State University	Microarray analysis of human malarial parasite Plasmodium falciparum gene expression during sexual development
Noel C. Liner	Tectonics/Geophysics	Western Washington University	Paleolatitude Determination of Upper Cretaceous Units Gold Beach Terrane Southwest Coastal Oregon

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Lee H. Liow	Systematics/Evolutionary Biology	University of Chicago	Slowly evolving and persistent crustaceans - do they have shared distinctive properties?
Min Liu	Cell Biology/Biochemistry	University of Louisiana at Lafayette	The Effect of Lanthanum on Corn Root Growth
Wei Liu	Physiology/Functional Morphology	Iowa State University	Does DNA oxidative damage increase with age in birds?
Paulo E. Llambias	Behavioral Ecology	Cornell University	Causes and consequences of divorce in Swallows
Kimberly A. Luke	Cell Biology/Biochemistry	University of Wisconsin-Madison	Influenza Virus Upregulates p53 in Human Lung Cells
Mary M. Lyons	Ecology	University of Connecticut	Linking pathogens to suspension-feeding bivalves: the ecological role of marine aggregates
Robin T. Macaluso	Chemistry	Louisiana State University-Baton Rouge	Understanding Structure-Property Relationships of Heavy-Fermions
Jean V. MacKenzie	Systematics/Evolutionary Biology	Wayne State University	The Role of Connexin 26 in the Molecular Evolution of Primate Hearing Ability
Cynthia K. Maddox	Ecology	Central Michigan University	Genetic Analysis of Black-Footed Ferret for Reintroduction Purposes
Andrew S. Madof	Paleontology/Sedimentation	University of Kansas	High Resolution Sequence Stratigraphy of Shallow Marine Sandstones: Mount Garfield Formation, western Colorado
Luis A. Madrid	Ecology	Russian Peoples' Friendship University	Avifauna of Northwest Manabi
Scott A. Mangan	Ecology	Indiana University - Bloomington	Ecological and evolutionary implications of rodent-mediated spore dispersal of arbuscular mycorrhizal fungi
Russell W. Mapes	Tectonics/Geophysics	University of North Carolina at Chapel Hill	A battle of crustal abbreviations: testing tectonic reconstructions using detrital zircon geochronology and Hafnium isotope geochemistry, Mojave province, Southern California

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DeRose B. Margie	Paleontology/Sedimentation	California State University-Fullerton	An Initial Multi-Proxy Study of Paleoprecipitation and Drainage Basin Dynamics (Crystal Lake, Southern California)
Silvana Marten-Rodriguez	Systematics/Evolutionary Biology	University of Maryland, College Park	Predicting the pollinators: an evaluation of the ôpollination syndromeö concept on six species of Caribbean Gesneriads (Family Gesneriaceae, Tribe Gesnerieae)
Michael P. Masters	Anthropology	Ohio State University	Evolutionary Association of Hominid Crania and Eye Orbits
Lance M. Maynard	Physiology/Functional Morphology	Miami University Ohio	Mechanisms Regulating Tyrosine Hydroxylase Expression in Rat Sympathetic Neurons
Emily B. McCarthy	Physics/Astronomy	Michigan Technological University	Multispectral Analysis of the August 2000 eruption clouds of Miyakejima, Japan
Julia B. McCausland Gaines	Anthropology	State University of New York at Binghamton	Early Modern Humans and the Problem of Diagnosing Homo sapiens
Siobhan R. McConnell	Petrology/Geochemistry	Northern Arizona University	An analytical approach to the interpretation of complex dome evolution: Cerro Pizarro, Mexico
Kiley S. McGlauchlen	Cell Biology/Biochemistry	Illinois State University	The effects of aging on memory B cells
Joel W. McGlothlin	Behavioral Ecology	Indiana University - Bloomington	Sexual Selection and the Good Parent Process
Glen C. McGugan	Cell Biology/Biochemistry	Clemson University	The Role of EhRab11 in the Protozoan Parasite, Entamoeba histolytica
Madhava P. Meegaskumbura	Systematics/Evolutionary Biology	Bowie State University	Vocalization Analysis of the Sri Lankan Radiation of Direct-Developing Rhacophorid Frogs
Claudia Mengelt	Ecology	University of California-Santa Barbara	Do organic nutrients from anthropogenic sources increase the potential for toxic Pseudo-nitzschia blooms?

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Robyn R. Mercer	Cell Biology/Biochemistry	Pennsylvania State University	Adding a Twist to Breast Cancer Skeletal Metastasis
Justin W. Merry	Systematics/Evolutionary Biology	Arizona State University	Size-dependent selection on vision in insects
Margaret R. Metz	Ecology	University of California-Berkeley	Seedling Dynamics and Forest Diversity in Yasunφ National Park, Ecuador
Jason S. Meyer	Physiology/Functional Morphology	University of Missouri-Columbia	Development of Retinal Stem Cells for Use in Retinal Degeneration Studies
Susan A. Mickiewicz	Petrology/Geochemistry	University of Wisconsin-Oshkosh	Understanding magmatic processes using phenocryst and glass compositions in the Bishop Tuff, Eastern California: An electron microprobe study
Devin G. Millions	Ecology	Central Michigan University	Genetic analysis of Michigan's bobcat populations
Shahnewaz Mohammad	Petrology/Geochemistry	Auburn University	Biogeochemistry of Naturally Occurring Arsenic in the Groundwater from Alluvial Aquifers in Kansas City, Missouri, USA
Laura M. Monti	Systematics/Evolutionary Biology	University of Maryland, College Park	A Comparison of the Genetic Effects of Two Captive Breeding Strategies
Briana E. Mordick	Petrology/Geochemistry	University of North Carolina at Chapel Hill	Pyroxene thermobarometry of basalts from the Coso and Big Pine volcanic fields, California
Nathan I. Morehouse	Behavioral Ecology	Arizona State University	Visual Evaluation of Male Age and Female Choice in the Sulphur Butterfly, <i>Colias eurytheme</i>
Elaine J. Moyer	Ecology	East Stroudsburg University of Pennsylvania	Identification and Quantification of the Macroalgal epiphytes of the seagrass <i>Zostera marini</i> in the Chincoteague Bay Virginia
Karen L. Mummy	Ecology	Miami University Ohio	Genetic Characterization of Polycyclic Aromatic Hydrocarbon Degradation

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Timothy S. Myers	Paleontology/Sedimentation	University of Cincinnati	Taphonomy of the Mother's Day Site and its implications for sauropod herding behavior
Kristen J. Navara	Physiology/Functional Morphology	Auburn University	Differential Allocation of Yolk Content in Birds: Do Females Play Favorites?
John A. Navaratnam	Ecology	West Virginia University	Microbial Community Composition Associated with Phosphorus Retention and Transformation in Forested Floodplains of the Southeastern United States
Jennifer L. Nemitz	Hydrology/Geomorphology	Pennsylvania State University	Occurance, Fate, and Transport of Pharmaceuticals at Penn State's Living Filter Project
Alexander J. Nevglowski	Anthropology	State University of New York at Binghamton	Intrapopulation Variation among the Hominins of the Plio-Pleistocene site of Dmanisi
John D. Norris	Psychology	Texas Tech University	Long-Term Working Memory and Expertise
Tye Numelin	Tectonics/Geophysics	Pennsylvania State University	Active Normal Faulting in the Searles Valley: Contributions to Late Quaternary displacement within the Eastern California Shear Zone
Jennifer L. Oas	Cell Biology/Biochemistry	University of North Carolina at Greensboro	The Effect of Prolactin Hormone on Osteogenesis and Adipogenesis in Primary Rat Bone Marrow Stromal Cell Culture
Jason Ortega	Physiology/Functional Morphology	Cornell University	Envenoming, digestion, and nutrition in captive pitvipers
Michael P. Owen	Physics/Astronomy	North Carolina State University	Vertical Modes in Accretion Disks in Close Binary Stars
Mildred P. Oyugi	Chemistry	Kenyatta University	Bioavailability of beta-carotene from solar-dehydrated dark green leafy vegetables among preschool children

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Niv Palgi	Ecology	Ben-Gurion University of the Negev	Nutritional Ecology of the Fat Sand Rat (<i>Psammomys obesus</i>): dealing with oxalate
Lucy M. Palmer	Physiology/Functional Morphology	University of Minnesota Duluth	Activity of the anterior lateral line during swimming in the Oyster Toadfish, <i>Opsanus tau</i>
Catherine A. Palmer	Systematics/Evolutionary Biology	Oregon State University	The Role of Chemical Signaling in the Evolution of Sexual Isolation in Terrestrial Salamanders
Stephanie E. Park	Tectonics/Geophysics	Auburn University	Assessing geophysical methods to track electrochemical changes catalyzed by sulfate-reducing bacteria
Ira Pasternack	Petrology/Geochemistry	Colorado School of Mines	Petroleum System of the Upper Cretaceous Lewis Shale, Eastern Greater Green River Basin, Wyoming and Colorado
Amy B. Pedersen	Ecology	University of Virginia	The Role of Intestinal Parasites and Acorn Masts on Population Dynamics and Regulation of <i>Peromyscus</i>
Tina M. Peterson	Cell Biology/Biochemistry	Virginia Polytechnic Institute and State University	Establishing the Link between Mosquito Nitric Oxide Synthase, Reactive Nitrogen Intermediates, and Malaria Parasite Inhibition
Shannon E. Petrisor	Petrology/Geochemistry	Western Washington University	Fluid-flow mediated, heat-supply limited crystallization of andalusite porphyroblasts in the Riconada Formation, Picuris Mountains, New Mexico
Jennifer J. Piro	Anthropology	New York University	Pastoral Economies in Early Cities and States: Analysis of Faunal Assemblages from Transcaucasia

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Grant Recipient	Research Field	Institution	Study Title
Dimitra Pirperis	Cell Biology/Biochemistry	Simmons College	Can Alzheimer's peptide inhibit transmitter release from purified cultures of ciliary ganglion neuron? Effects of Alzheimer's Disease?
Matthew J. Pizzo	Psychology	University of Georgia	Identifying the transition between circadian and interval timing
Emily C. Pollina	Physiology/Functional Morphology	Swarthmore College	An Investigation of the role of Silicon in Preventing Parasitism of Plants by Dodder
Jessica Poulin	Ecology	University of California-Irvine	Genetic Factors Affecting the Invasiveness of Fountain Grass in Arizona, California and Hawaii
Sarah J. Price	Cell Biology/Biochemistry	Marshall University	Involvement of the Mouse Bicci Gene In Body Plan Asymmetry
Juliet R. Pulliam	Ecology	Princeton University	Population Dynamics of Hendra Virus in Australian Fruit Bats
Janaki Rangarajan	Cell Biology/Biochemistry	Miami University Ohio	Role of antisense RNA in control of Drosophila 4f-rnp expression
Michael S. Reichert	Behavioral Ecology	University of North Carolina at Chapel Hill	The effects of social interactions and body condition on calling behavior in male gray treefrogs
Matthew J. Reilly	Ecology	University of Georgia	Impacts of a landscape-scale wildfire on community distribution and beta diversity in the old-growth forests of Linville Gorge Wilderness, NC
Melissa A. Reisland	Behavioral Ecology	College of Wooster	Behaviors associated with contact calls in white-faced capuchin monkeys (<i>Cebus capucinus</i>) and mantled howler monkeys (<i>Alouatta palliata</i>)
Analpha G. Ricci	Cell Biology/Biochemistry	Universidad de Buenos Aires	Expression of functional leptin and leptin receptors during ovulatory process

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Amber M. Rice	Systematics/Evolutionary Biology	University of North Carolina at Chapel Hill	A Phylogeographic Investigation of Character Divergence
Trevor J. Rivers	Behavioral Ecology	Cornell University	Sexual selection of marine bioluminescence ostracods
Travis R. Robbins	Behavioral Ecology	University of South Florida	Environmental influences on life history tactics and fitness in two lizard species
Jeanne M. Robertson	Ecology	Cornell University	Testing species distribution patterns: comparative population genetic structure of Costa Rican glass frogs
Austin J. Roelofs	Petrology/Geochemistry	University of North Carolina at Chapel Hill	Origins of Cenozoic Volcanism of the Central Sierra Nevada, CA: Delamination, Subduction, or Hot Spot?
Tyrone O. Rooney	Hydrology/Geomorphology	Pennsylvania State University	Refining complex spatial distribution of Hydrogeologic variables by the integration of engineering site investigation and construction data
Melissa D. Ross	Cell Biology/Biochemistry	Texas A&M University-Corpus Christi	Kinetics of Macrophage Cell Death after Encounter with <i>Neisseria meningitidis</i>
Charlotte L. Roy Nielsen	Behavioral Ecology	University of Missouri-St. Louis	Intraspecific nest parasitism in wood ducks: host-parasite relatedness and kin selection
Tapasree Roy Sarkar	Cell Biology/Biochemistry	East Tennessee State University	Cloning, Expression and Characterization of a putative Glucosyltransferase from Grapefruit leaves(<i>Petunia hybrida</i>)
James F. Russell	Engineering	University of Colorado at Boulder	Development of a Non-invasive Biosensor to Enumerate In-vitro Mammalian Cell Viability Fraction
Gregory R. Ruthig	Behavioral Ecology	University of Virginia	The Influence of Infectious Disease on Amphibian Mating Behavior

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Mason J. Ryan	Behavioral Ecology	Southern Illinois University-Carbondale	Reproductive Ecology of a Stream Dwelling Eleutherodactylus Frog in Central Panama
Melissa Ann E. Sakaley	Ecology	Central Washington University	An estimate of the contribution of anaerobic bacteria to the secondary productivity in haloalkaline, Soap Lake (WA)
Daniel M. Scheiman	Ecology	Purdue University-West Lafayette	Effects of field quality on dispersal rates of Bobolinks: A metapopulation approach
Rachel T. Schelble	Hydrology/Geomorphology	University of Southern California	Understanding the Formation Mechanisms of Rock Varnish: A Comparative Study
William E. Schmidt	Cell Biology/Biochemistry	University of Louisiana at Lafayette	The Cytoskeleton of Rhodophyta
Patrick J. Schuneman	Paleontology/Sedimentation	University of Tennessee-Knoxville	Compound-specific C-, H-, and O-isotopic analyses of pyrogenic polynuclear aromatic hydrocarbons: observations, experimental tests, and implications for paleoatmospheric oxygen levels
Sunny K. Scobell	Behavioral Ecology	University of Oklahoma	Hormonal Mediation of Female Aggression in the Sex-Role Reversed Gulf Pipefish, <i>Syngnathus scovelli</i>
Kimberly A. Selkoe	Ecology	University of California-Santa Barbara	Linking temporal genetic structure and dispersal in Kelp Bass around the Channel Islands, CA
Jessica V. Sewald	Psychology	James Madison University	The effects of social housing and environmental enrichment on the development of stereotypies in laboratory housed deer mice, <i>Peromyscus maniculatus</i>

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John R. Shackleton	Tectonics/Geophysics	University of Massachusetts Amherst	A new approach to understanding fractures associated with folding: field studies and mechanical modeling of growth folding at Sant Llorenç de Morunys, SE Spanish Pyrenees
Justin J. Shew	Ecology	Southwest Missouri State University	Spatial Ecology and Habitat Use of the Western Fox Snake (<i>Elaphe vulpina vulpina</i>) at Squaw Creek National Wildlife Refuge
Ilan Shrira	Psychology	University of Georgia	The Cerebral Hemisphere as a Framework for Understanding Learned Helplessness
Bryan J. Sigel	Ecology	Tulane University	Bird community changes in a lowland tropical rainforest
Michelle D. Sivilich	Anthropology	Indiana State University	Determining Familial Relationships Using Ancient DNA from Urban and Rural Historic Burials
Jason M. South	Behavioral Ecology	University of Maryland, College Park	Behavioral Responses of Bornean Treeshrews to Selective Logging and Variation in Resource Abundance
Jason R. Spence	Cell Biology/Biochemistry	Miami University Ohio	Retina Regeneration at the Molecular Level
Brian J. Stewart	Systematics/Evolutionary Biology	Cornell University	Phylogeography of the Marbled Salamander (<i>Ambystoma opacum</i>): Testing Hypotheses about the Origin of Central Highlands Fauna
Joel N. Strong	Ecology	State University of New York College of Environmental Science and Forestry	Seed dispersal and the ecological implications of harvesting <i>Geochelone carbonaria</i> and <i>Geochelone denticulata</i> in northwestern Brazil
Regina J. Strug	Chemistry	Purdue University-Calumet	Synthesis of Organic Compounds for Nanocircuitry

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Nathan G. Swenson	Systematics/Evolutionary Biology	New Mexico State University	Ecotones or Refugia: A GIS and stress measurement approach to determine historical processes from current geographic locations of hybrid zones
Mizuki Takahashi	Ecology	University of Memphis	A test of ecological features promoting life history divergence among subspecies of the eastern newt
Nicole A. Taylor	Behavioral Ecology	Boise State University	Sex ratio variation: a confirmatory test of the Trivers and Willard hypothesis
Jennifer A. Taylor	Physiology/Functional Morphology	University of North Carolina at Chapel Hill	Skeletal Support in Soft-Shellled Crustacea: A Comparison of Crabs from Terrestrial and Aquatic Environments
Brad W. Taylor	Ecology	University of Wyoming	Consequences of losing a single species to ecosystem function in the tropics
Smilja Teodorovic	Cell Biology/Biochemistry	Georgetown University	Investigation of sterile transcripts in <i>Giardia lamblia</i>
Tara L. Thomas	Psychology	University of Wisconsin-Milwaukee	Neural activation related to task difficulty during differential fear conditioning
Brett D. Thombs	Psychology	Fordham University	Measurement Equivalence of the Childhood Trauma Questionnaire: An Application of Confirmatory Factor Analysis and Item Response Theory Methods
Christopher R. Tincher	Tectonics/Geophysics	University of Kansas	Cenozoic Volcanism and Tectonics in the Queen Valley Area, Mineral and Esmeralda Counties, Western Nevada
Alexandru M. Tomescu	Paleontology/Sedimentation	Ohio University	Environments of the early terrestrial biota in the Massanutten Sandstone (Early Silurian, Virginia)

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Cecilia Torres	Ecology	University of Georgia	The influence of diseases on the survival of coral reefs in the Florida Keys
Laurie S. Twardzik	Cell Biology/Biochemistry	University of Maryland, College Park	Using Real-Time PCR in the Identification of Foodborne Pathogens
Joji Uchikawa	Paleontology/Sedimentation	University of Hawaii at Manoa	Investigation of climatic signatures in sediment cores recovered from a tropical coastal pond in Hawai'i
Amy C. Utt	Behavioral Ecology	Loma Linda University	Adult Mentoring of Captive-Reared California Condor Fledglings, <i>Gymnogyps californianus</i> , Scheduled for Release into the Wild
Elizabeth P. Valaas	Petrology/Geochemistry	University of Wisconsin-Madison	Quartz-Magnetite 18-O / 16-O Thermometry of the Biwabik Formation in the Contact Aureole of the Duluth Complex, Northern Minnesota: Calibration of the Fe Isotope Fractionation
M. U. Valdez	Ecology	University of Washington	Mechanisms of coexistence of two species of Forest-falcons (<i>Micrastur ruficollis</i> and <i>M. gilvicollis</i>) in Amazonian rainforest
James U. Van Dyke	Physiology/Functional Morphology	Florida Institute of Technology	Temperature Differential as a Detector of Thermal Contrast in the Infrared Imaging of Crotaline Snakes
Danush V. Viswanathan	Ecology	University of Toronto	Specificity of induced plant responses and priority effects on herbivore population growth rate
Michael M. Waits	Ecology	Wheaton College, Massachusetts	Assessing the Effects of the Hydroid <i>Cordylophora</i> sp on Larval Settlement in the Zebra Mussel, <i>Dreissena polymorpha</i>
Jennifer R. Weist	Behavioral Ecology	California State University-Northridge	Is Diurnal Aggregation Socially Mediated in Nocturnal Lizards?

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Oliver Wendt	Psychology	Purdue University-West Lafayette	The Effectiveness of Augmentative and Alternative Communication (AAC) for Children with Autism: A Meta-Analysis of Intervention Outcomes
Steven M. Whitfield	Behavioral Ecology	Florida International University	Costs and Benefits of Male and Female Parental Investment in <i>Eleutherodactylus johnstonei</i> , a Frog with Amphisexual Parental Behavior
Shawn M. Wilder	Behavioral Ecology	Miami University Ohio	Condition-Dependent and Delayed Reproductive Benefits of Sexual Cannibalism
Elliot B. Wilkinson	Ecology	University of Utah	Effects of habitat architectural complexity on top-down forces structuring ant communities
Jordan N. Wilson	Petrology/Geochemistry	University of Wisconsin-Oshkosh	Detailed Field Mapping and Laboratory Analysis Of ~27 Billion Year Old Peperite Deposits, Northeastern Minnesota
Christopher T. Winne	Physiology/Functional Morphology	University of Georgia	Developmental Plasticity and Genetic Tradeoffs of Thermal Performance Traits in Northern water snakes, <i>Nerodia sipedon</i>
Barbara L. Wolff	Anthropology	Catholic University of America	Potters and Prestige in the Early Middle Horizon: Craft Specialization during the Emergence of the Huari Empire as Seen from Conchopata, Ayacucho, Peru
Irene P. Wong	Chemistry	University of California-Berkeley	A Novel Approach to Synthetic Vaccine for HIV-1 Involving a Hairpin Peptide Having Fluoroaromatic Amino Acids
Louie H. Yang	Ecology	University of California-Davis	The ecological effects of resource pulses in natural communities

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Lihong Yin	Cell Biology/Biochemistry	State University of New York at Stony Brook	Dynamics of cell-matrix adhesions in cultured cardiac myocyte on 3D elastic scaffold
Tamara J. Zelikova	Ecology	University of Colorado at Boulder	The role ants play in the regeneration of tropical dry forests in Costa Rica: are ants seed dispersers or seed predators?
Ann C. Zumwalt	Physiology/Functional Morphology	Johns Hopkins University	The effect of exercise on the morphology of muscle attachment sites