

Grants-in-Aid of Research Awards
October 15, 2004 Grant Cycle

Alphabetical by Recipient's Name

Grant Recipient	Research Field	Institution	Study Title
Ali M. Alaouie	Chemistry	North Carolina State University	Lipid Nanotube Arrays-an Impedance Spectroscopy Study
Melissa A. Albers	Systematics/Evolutionary Biology	University of California-Irvine	Evolution of saline-tolerance in mosquito larvae
Kimberly H. Anderson	Psychology	University of Florida	The Contingent Negative Variation in Adolescents with Attention-Deficit/Hyperactivity Disorder: An Investigation of the Maturational Lag Hypothesis
Brian B. Andres	Paleontology/Sedimentation	Yale University	The origins of flight in reptiles: Evidence from epidermal appendages
Catalina Aristizabal	Ecology	University of Miami	Do arbuscular mycorrhizal fungi enhance host nitrogen acquisition from decomposing leaves of different quality?
William M. Balco	Anthropology	Northern Illinois University	A Comparative Analysis of 3rd to 8th Century BC Loomweights Recovered in Sicily
Jesse A. Ballenger	Anthropology	University of Arizona	Geochronology and Late Pleistocene Occupation of the San Pedro River Valley, Southeastern Arizona, USA
Nancy L. Barrickman	Anthropology	Duke University	The ontogeny of cranial volume and dental development: a comparison of growth patterns in primates
Heather I. Bergschneider	Physiology/Functional Morphology	Western Washington University	Seasonal variation in the nutritional contribution of two algal symbionts to the temperate sea anemone <i>Anthopleura elegantissima</i>
Edward S. Biffin	Systematics/Evolutionary Biology	Australian National University	Evolutionary relationships in <i>Syzygium</i> and allied genera (Myrtaceae)
Tara M. Blank	Physiology/Functional Morphology	University of North Texas	Mild Hypoxia May Accelerate Development of Air-Breathing in Gourami (<i>Trichogaster trichopterus</i>) Larvae

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Ryan H. Bogdan	Psychology	Harvard University	The influence of stress and serotonin transporter genotype on reward responsiveness
Gregory M. Bonito	Ecology	Duke University	Microbial Community Diversity and Succession During Composting Municipal Organic Wastes
Bethany S. Bostrom	Ecology	Eastern Illinois University	The Effectiveness of Artificial Riffles in Illinois Streams
Michelle L. Boudreaux	Ecology	University of Central Florida	Native and invasive competitors of the intertidal Eastern Oyster, <i>Crassostrea virginica</i> , in Indian River Lagoon, Florida
Joshua Boyd	Computer Science/Mathematics	University of New England, Australia	Simulating Arterial Plaque Progression Using the Lattice Boltzmann Model
Chaffin M. Brandon	Engineering	Boise State University	Boimechanics of Heading a Soccer Ball
Stacy D. Brendtro	Cell Biology/Biochemistry	Middlebury College	The Effects of Organophosphate Pesticides on Neuroligin-Mediated Synaptogenesis
Andrea A. Brock	Engineering	Saint Louis University	Addition of Laminin to Synthetic Hydrogels Increases Neurite Extension
Zachary W. Brown	Cell Biology/Biochemistry	Kansas State University	Mechanisms of entry of albumin into the lens
Christine R. Buckley	Ecology	Tulane University	Examining the persistence of phenotypic incubation effects in the western fence lizard, <i>Sceloporus occidentalis</i>
Sara M. Cabrera	Psychology	California State University-San Bernardino	NBM lesions and behavioral perseveration
Allison D. Call	Cell Biology/Biochemistry	East Carolina University	The Expression of ELR+ CXC chemokines in developing tumors: mechanistic implications for endothelial cell localization

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Johel Chaves	Behavioral Ecology	Purdue University-West Lafayette	The Effect of Mutual Collaboration of Food Finding on Family Formation of Ocellated Antbirds
Hong Chen	Physics/Astronomy	Wesleyan University, Connecticut	Influence of Superexcited States On the Near-Threshold Dissociative Ionization Behavior of Molecular Sodium
Xiaoren N. Chen	Cell Biology/Biochemistry	University of Delaware	Role of TADA2L-Prox1 interaction in lens fiber cell specific gene expression
Jessica L. Claxton	Cell Biology/Biochemistry	University of Central Missouri	Determination of Novel Oral Microbes Via 16S rDNA Isolation and Sequencing
Barry G. Cordero	Cell Biology/Biochemistry	University of California-San Diego	shRNA as a treatment for reactive gliosis
Justin R. Crepp	Physics/Astronomy	University of Florida	Direct Imaging of Extrasolar Planets Using Notch Filter Image Masks
Andres M. Cuervo	Ecology	Universidad de Puerto Rico en San Juan	Does landscape fragmentation influence the phenotype? Testing the variation in bilateral asymmetry, morphology, and feather growth rates of Tropical Andean birds
Bjorn F. Dahlen	Ecology	University of North Dakota	Predictive Distributional Modeling of Malaria in the Kinabatangan River Basin, Sabah, Malaysia
Nicole J. Davies	Engineering	University of Bristol	Robotic dinosaur leg pair
Casey M. de Deugd	Physics/Astronomy	North Carolina State University	Controlling the Torsional Potential of Molecular Rotors via Thin Film Growth
Samuel L. Diaz Munoz	Behavioral Ecology	University of California-Berkeley	Reevaluating Kin Selection in Cooperative Societies
Andrew T. Dufresne	Cell Biology/Biochemistry	Duke University	Poliomyelitis Caused by Non-Polio Enteroviruses from Species Human Enterovirus-C
Jacqueline M. Dunn	Physics/Astronomy	Texas Christian University	Investigating the Young and Old Stellar Populations of Dwarf Irregular Galaxies

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Kevin Fiest	Physics/Astronomy	Unknown Institution	Characterizing Bars Using the Two-Micron All Sky Survey
Kurt L. Frankel	Tectonics/Geophysics	University of Southern California	Tectonic Controls on Erosion Rates
Daniel T. Freas	Physics/Astronomy	Old Dominion University	Asteroid Family Rotational Lightcurves
Kenneth G. Frey	Cell Biology/Biochemistry	Wright State University	Organotypic Culture Model of HSV-1 Corneal Infection
Peter M. Frinchaboy	Physics/Astronomy	University of Virginia	Open Cluster Tracer Metallicity Calibrations: Calcium II
Benjamin A. Garcia	Chemistry	University of Virginia	Proteomic Investigation of Human Articular Cartilage for Potential Biomarkers of Osteoarthritis
Angelica M. Giraldo	Cell Biology/Biochemistry	Louisiana State University-Baton Rouge	Histone Phosphorylation Patterns and Chromosomal Stability of Cultured Bovine Fibroblasts
Matthew J. Gittinger	Cell Biology/Biochemistry	Miami University Ohio	The Effect of Corticosterone on IL-10 Production and Macrophage Activation
Jennifer M. Gregory	Ecology	Central Michigan University	Microsatellite Analysis of Genetic Variation within Michigan River Otters (<i>Lontra canadensis</i>)
Laura M. Hamm	Chemistry	Appalachian State University	Synthesis of a Taxane Diterpene via a Palladium pi-Allyl Complex
Scott W. Hammerstedt	Anthropology	Pennsylvania State University	Origins and Significance of Cahokia-Style Pottery in Western Kentucky
Gregory R. Handrigan	Systematics/Evolutionary Biology	Dalhousie University	A genetic basis for vertebral column truncation in frogs and toads (<i>Anura</i>)
Jennifer M. Hanson	Chemistry	Merrimack College	Development of a New Method to Quantify the Amount of Antibiotics in Waters from Natural and Treated Systems
Chanoane A. Hartt	Ecology	University of Idaho	The Effects of 70 years of Flow Regulation on Floodplain Vegetation

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Kimberly A. Hays	Ecology	Oklahoma State University	Effects of heavy metal contamination on red-eared sliders (<i>Trachemys scripta elegans</i>) from the Tar Creek Superfund Site, Ottawa Co, Oklahoma
Emily E. Hazel	Psychology	George Fox University	An ERP Comparison of Color-Word and Color Block Stroop Interference
John W. Hein	Ecology	California State University-Chico	Impacts of plant defense on rhizosphere microbiota
Sonia M. Hernandez-Divers	Ecology	University of Georgia	The relationship of disease of Wild birds and land use types in Ecuador
Holly M. Hoffman	Cell Biology/Biochemistry	Calvin College	Potassium Ion Transport in Lacrimal Gland Duct Cells
Jeremy D. Holman	Cell Biology/Biochemistry	Louisiana State University-Baton Rouge	Hypoxia and Anoxia Tolerance in Marine Invertebrates
Peter M. Homyak	Ecology	State University of New York College of Environmental Science and Forestry	Nitrogen Immobilization by Woodchip Application: Introduction of a Best Management Practice to Protect Water Quality in a Northern Hardwood Forest
Bin Hong	Engineering	University of Louisville	Fluorescence Enhancement of Indocyanine Green by Nanogold Particles for Safe and Effective Breast Cancer Contrast Agent for Optical Mammography
Michael A. Hood	Physics/Astronomy	University of California-Irvine	Chemical Abundances and Kinematics of the Stellar Populations of M33
Patrick J. Hudson	Paleontology/Sedimentation	University of Nebraska at Omaha	A reduced aquatic fossil plant from the Late Cretaceous of New Mexico
Jessica J. Huening	Physiology/Functional Morphology	North Carolina State University	Does excessive axon sprouting cause terminal disruption in rat motoneurons?
Natalie A. Hutnick	Cell Biology/Biochemistry	Pennsylvania State University	IL-7 and the recovery of T lymphocytes following chemotherapy
Stacy M. Jackson	Cell Biology/Biochemistry	Kansas State University	Analysis of Aggregate Protein in the Cataract Lens

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Nathan D. Jackson	Systematics/Evolutionary Biology	Louisiana State University-Baton Rouge	Symatric Intraspecific Morphological Polymorphisms in an Appalachian Salamander (genus <i>Desmognathus</i>): Testing Alternate Hypotheses
JaNae Joyner	Physiology/Functional Morphology	Wake Forest University	Novel role of Ang-(1-7) in volume regulation in pregnancy
Ryan R. Kerney	Cell Biology/Biochemistry	Harvard University	Translational silencing of a novel runx2 isoform in <i>Xenopus</i>
Aruna Kilaru	Cell Biology/Biochemistry	University of Louisiana at Lafayette	What makes some chocolate trees resistant to witches' broom disease?
Daria Koscinski	Systematics/Evolutionary Biology	University of Western Ontario	Comparative Phylogeography of Andean Frogs
Kingstone O. Krinenge	Chemistry	Kenyatta University	Isolation and Characterization for Ant-Malarial and Ant-Trypanosomal From Kenyan <i>Croton Sylvaticus</i> Plant
Crystal N. LeCrone	Physics/Astronomy	Rose-Hulman Institute of Technology	Asteroid Photometry: An Undergraduate Research Project in Astronomy
Elizabeth M. Lehman	Ecology	Indiana University - Bloomington	The effects of tetrodotoxin, a potent neurotoxin, on the predator-prey relationship between caddisfly larvae and newt eggs
Jennifer S. Lewis	Behavioral Ecology	Florida International University	Forces driving habitat use patterns: Investigation of leadership in the bottlenose dolphin (<i>Tursiops truncatus</i>)
Kirsten T. Li	Psychology	University of Wisconsin-Milwaukee	Look this way: An examination of gaze behavior in children with Williams syndrome
Zarija Lukic	Physics/Astronomy	University of Illinois at Urbana-Champaign	Non Gravitational Physics in Clusters of Galaxies
Jodi L. Lukkes	Physiology/Functional Morphology	University of South Dakota	Interactions Between Stress Hormones and Dopamine Activity

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David M. Malaspina	Hydrology/Geomorphology	Purdue University-West Lafayette	Microgravity Investigations of Water Flow in Soil Models
Nicholas M. Malone	Anthropology	University of Oregon	Behavioral and Ecological Responses of Silvery Gibbons (<i>Hylobates moloch</i>) to Severe Habitat Degradation in West Java, Indonesia
Michael T. Maloney	Cell Biology/Biochemistry	Colorado State University	Disruption of APP transport leads to elevated A-beta deposition in cultured hippocampal neurons
Christopher T. Martine	Systematics/Evolutionary Biology	University of Connecticut	The evolution of separate sexes: using chloroplast DNA to unravel dioecy in flowering plants
Heather Maughan	Systematics/Evolutionary Biology	University of Arizona	The influence of complexity on genomic change during evolution
Jennie R. McLaren	Ecology	University of Northern British Columbia	Effects of plant functional group identity on vegetation dynamics and ecosystem function
Sarah G. McMahon	Physiology/Functional Morphology	Florida Institute of Technology	Determining the existence of a direct retino-hypothalamic tract in snakes
Emily A. McMains	Physiology/Functional Morphology	Louisiana State University-Baton Rouge	Calcium-induced calcium release and synaptic transmission in retinal amacrine cells
Chad M. McWhinnie	Psychology	McGill University	Fostering the Development of Strengths and Values in Youth
Howells E. Michaela	Anthropology	Iowa State University	Humans, Chimpanzees and Parasites: Sympatry in SE Senegal
Brooke L. Miller	Behavioral Ecology	University of California-Santa Cruz	Sexual Conflict and Partner Manipulation in Banana slugs, <i>Ariolimax dolichophallus</i>
Madana M. Moragudivenkata	Chemistry	University of Missouri-Columbia	Biogenesis of Vanillin using Ferulic acid derived from Corn stalks

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Jorge O. Moreno	Physiology/Functional Morphology	Columbia University	Ghrelin-Induced Feeding Stimulation in Leptin-Resistant Obese Rats
Blake F. Morton	Ecology	North Carolina State University	Seed Dispersal by Lowland Gorillas in Cameroon
Serena M. Moseman	Ecology	University of California-San Diego	Introduction of an animal (<i>Musculista senhousia</i>) to plant-microbe interactions
Jessica L. Naff	Chemistry	Appalachian State University	Determining the Relative Age of Ballpoint Pen Inks on Documents Using High Performance Capillary Electrophoresis
Marko Nardini	Psychology	University College London	Interactions between visual landmarks and self-motion cues for navigation at ages three to five years
Jamie R. Oaks	Ecology	Louisiana State University-Baton Rouge	Geographic variation of multiple paternity in the American alligator (<i>Alligator mississippiensis</i>): does selection rescue genetic diversity?
Janine L. Oliver	Cell Biology/Biochemistry	University of Virginia	Osteoprotegerin (OPG) production by human melanomas: implications for anti-tumor immunity
Eric V. Olsen	Engineering	Auburn University	Phage-coupled piezoelectric biosensor for Salmonella detection
Pinkesh K. Patel	Physics/Astronomy	Drexel University	Simulation of Dark Matter interaction with electrons via Compton scattering of Gamma rays
Michael W. Perry	Systematics/Evolutionary Biology	University of Florida	Comparative Developmental Evolution of Butterfly Eyespots
Angela M. Picco	Ecology	Arizona State University	Emerging infectious diseases associated with amphibian declines: a study of multiple pathogens in Costa Rica
Leon C. Posada	Behavioral Ecology	Florida International University	Effects of Aerial Predation on Diving Behaviour of Red-eared Sliders (<i>Trachemys scripta elegans</i>)

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Sapna Prasad	Psychology	Rutgers, The State University of New Jersey	The Perceptual Development of Self Awareness in Children
Jennifer S. Pressley	Cell Biology/Biochemistry	Virginia Polytechnic Institute and State University	Misdirected Immune Responses Radiate from the Tumor Microenvironment: Kinetic Evaluation of T Cell Responses
Amy L. Pyle	Cell Biology/Biochemistry	Vanderbilt University	Determination of the Role of SPRR3 in Atherosclerosis
Hong Qian	Chemistry	University of North Carolina at Greensboro	Chloride Determination in Photosystem II
Muthuramanan Rameswaran	Physiology/Functional Morphology	Widener University	The Effect of Acidification on the Immune Response of Axolotls
Anne M. Readel	Ecology	University of Illinois at Urbana-Champaign	Effect of habitat degradation on the health and conservation of painted turtles (<i>Chrysemys picta</i>)
Karen M. Reagan	Ecology	University of Washington	Why have toxic fruit? The exploration of the effects of capsaicin on seed consuming fungus
Jeanine M. Refsnider	Ecology	University of Minnesota, Twin Cities	Conservation Genetics of Blanding's Turtles in Minnesota
Matthew W. Reudink	Behavioral Ecology	Queens University	Molting latitude, winter habitat, plumage quality, and mate choice in the American Redstart
Frank E. Rheindt	Systematics/Evolutionary Biology	University of Melbourne	Evolutionary dynamics in Neotropical Elaenia flycatchers
Amanda B. Rostkowski	Physiology/Functional Morphology	Rosalind Franklin University of Medicine and Science	Sex-Specific Differences in Stress-Induced Expression of NPY
Kimberly A. Rosvall	Behavioral Ecology	Duke University	Is female territorial aggression a source of maternal effects in nestling tree swallows (<i>Tachycineta bicolor</i>)?
Sean Saladin	Physics/Astronomy	Unknown Institution	A Search for Rotation Periods of Stars in NCG 6934

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Hemang J. Shah	Computer Science/Mathematics	Drexel University	3D Modeling of Liquid Crystals for biophotonic applications
Kristen L. Shapiro	Physics/Astronomy	University of California-Berkeley	The Dynamical History of Spiral Galaxies
Meagan L. Shutty	Psychology	St Mary's College of Maryland	The Effect of Muscimol, a GABA Agonist, on the Acquisition of Learning Set in Male Long-Evans Rats
Pfa Simonetti	Behavioral Ecology	Universidad de Buenos Aires	Paternity and male parental care in a Neotropical Swallow
Robert C. Smith	Engineering	University of Cincinnati	Bio-Augmentation From Treatment of Ammonia-Enriched Municipal WWTP Recycle Streams to Create Biodiversity and Reduce Solids Retention Time for Nitrification in Activated Sludge
Susan B. Smith	Physiology/Functional Morphology	University of Rhode Island	Nutritional ecology and fuel utilization of fall migratory landbirds at a coastal New England stopover site
Jason Smucny	Cell Biology/Biochemistry	Yale University	Role of Arc in Amygdala-Dependent Fear Conditioning
Zuzana Sroostlik	Physics/Astronomy	University of Vermont	Plasma Emission Dynamics of B1237+25 and Other Related Multi-Component Pulsars
Caroline Stahala	Ecology	North Carolina State University	Post - Hurricane assessment of the Bahama Parrot population on Abaco Island
Jennifer R. Stallo	Chemistry	University of Cincinnati	Investigating the Mechanism of Vapochromic Platinum (II) Salts
James R. Starrett	Systematics/Evolutionary Biology	San Diego State University	Heat Shock Protein Regulation in a Thermotolerant Spider

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Richard L. Suplita	Psychology	University of Georgia	The Effects of Altering Endocannabinoid Bioavailability in the Basolateral Nucleus of the Amygdala on Non-Opioid Stress Analgesia and Extinction of Conditioned Fear Responding
Colby J. Tanner	Behavioral Ecology	University of Utah	How Can Two Mutualists Coexist Sharing One Partner?
Liang Tao	Cell Biology/Biochemistry	University of Manitoba	Role of connexin genes in zebrafish (<i>Danio rerio</i>) eye development
Leslie E. Taylor	Ecology	James Madison University	Exploring the roles of Brook Trout and Mottled Sculpin in stream communities
Erin E. Thornton	Anthropology	University of Florida	Identifying Regional Patterns of Pre-Hispanic Maya Animal Use and Exchange
Daniel L. Vaughn	Chemistry	Southern Illinois University-Carbondale	Characterization of PBDE congeners and associated compounds using GC-mi FTIR-MS
Ayush Verma	Chemistry	University of Massachusetts Amherst	Combining the Quantum-Size-Related Properties of Nanoparticles with Functional Properties of Proteins: Generation of a Biomaterial with Tunable Electronic Properties
Fei Wang	Physiology/Functional Morphology	University of Florida	Study of the effect of chlordecone, an organochlorine pesticide on macrophage clearance of apoptotic cells
Lisa R. Warner	Cell Biology/Biochemistry	Boise State University	Mechanistic details of the role of collagen type XI and heparan sulfate proteoglycans in the maintenance of vitreous humor structure
Rosaline V. Waworuntu	Cell Biology/Biochemistry	Indiana State University	The Role of Polyphosphate and Polyphosphate Kinase in Acid-Survival of <i>Helicobacter pylori</i>

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William C. Wayne	Cell Biology/Biochemistry	University of California-Santa Barbara	Investigation of the role of Fibulin-5 in Age-related Macular Degeneration
Mathew J. Wedel	Physiology/Functional Morphology	University of California-Berkeley	Exploring skeletal pneumatization in birds using micro CT
Crow White	Ecology	University of California-Santa Barbara	Mapping Larval Dispersal Trajectories and Marine Population Connectivity along the Western North American Coastline with Unprecedented Accuracy
Jocelyn S. Williams	Anthropology	University of Calgary	Diet at Puruchuco-Huaquerones: Investigating dietary change using the stable isotopes of carbon and nitrogen in mummified tissues from central Peru
Wyatt I. Williams	Behavioral Ecology	Boise State University	Host Selection Behavior in Douglas-fir Bark Beetles
Marilyn M. Williams	Chemistry	University of South Florida	Flux of Polycyclic Aromatic Hydrocarbons to Tampa Bay-A Pilot Study
Nicole A. Wilson	Engineering	Illinois Institute of Technology	An in vivo analysis of the material properties of the tendons surrounding the knee in patellofemoral pain using ultrasound
David J. Winfield	Engineering	Iowa State University	Improvement of Low-Vision Assistive Technology
Gary L. Yarbrough	Psychology	University of Louisville	The role of Acetaldehyde in Alcohol Related Neurodevelopmental Disorders
Lindsay A. Zemba	Behavioral Ecology	Villanova University	Male dominance rank and its relation to extra pair copulations in an expanding hybrid zone between Black-capped (Poecile atricapillus) and Carolina chickadees (Poecile carolinensis) in southeast PA
Jingyang Zhao	Petrology/Geochemistry	Queens University	Argon Mobility in Metamorphic Micas near Verona, Ontario, Canada

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Jonathan K. Zoller	Cell Biology/Biochemistry	Tulane University	The Effects of 7-Nitroindazole on c-Fos Regulation in the Auditory Pathway