

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

Alphabetical by Institution

Steven R. Cockerell	Cell Biology/Biochemistry	Appalachian State University	Norspermidine-based signaling system in <i>Vibrio cholerae</i> responsible for modulating intracellular c-di-GMP and biofilm formation
Darcy G. Gordon	Systematics/Evolutionary Biology	Boston University	Transcriptomic analysis of brain and caste evolution in Pheidole ants
Shannon Waters	Behavioral Ecology	California State University-Sacramento	Do Salton Sea Tilapia ( <i>Oreochromis</i> sp.) Sacrifice Reproduction When Exposed to High Salinity?
Sumit S. Goenka	Engineering	Carnegie Mellon University	Development and characterization of elastomeric nanocomposite films and fibrous scaffolds
Aaron E. Watkins	Physics/Astronomy	Case Western Reserve University	Deep Imaging of the Extended Regions of Nearby Disk Galaxies
Carli R. Gurholt	Conservation Biology	Central Michigan University	Great Lakes coastal wetland seed banks: Purgatory, not a graveyard. What drives compositional change?
Gregory J. Barord	Conservation Biology	City University of New York-Brooklyn College	Population assessments of Nautilus in the Indo-Pacific
Amanpreet Kaur	Physics/Astronomy	Clemson University	Spectral transformation studies of novae in M31 and their connection with Supernova-Ia progenitors
Courtney L. Turrin	Conservation Biology	College of William and Mary	Negative Feedback Effects of Population Saturation in Bald Eagles in the Chesapeake Bay
Jannah L. Durham	Physiology/Functional Morphology	Columbia University	End-Stage Hip Disease in the Very Young Patient
Tung-Lin T. Yang	Engineering	Columbia University	A Single-Path STED Microscope Implemented by a Periodic Focusing Nanostructure
Frida Johannesdottir	Physiology/Functional Morphology	Cornell University	Morphological trait variation in the American Red Squirrel ( <i>Tamiasciurus hudsonicus</i> ) in relation to tolerance of extreme temperatures

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Jenny Jing	Cell Biology/Biochemistry	Duke University	All-Trans Retinoic Acid (ATRA) can specifically drive an OTX2 promoter.
Kyle K. Phua	Engineering	Duke University	Red Blood Cell As RNA Vaccine Carrier for Melanoma Cancer Immunotherapy
Ning Shen	Systematics/Evolutionary Biology	Duke University	Understanding the binding competition between transcription factors c-Myc and Mad2
Christopher R. Poythress	Tectonics/Geophysics	East Carolina University	Evaluating the Geometry of a Concealed Mesozoic Rift Basin via Geophysics, Bertie County, North Carolina
Erik D. Thornton	Tectonics/Geophysics	East Carolina University	Constraining the emplacement history and flow mechanics of a sill/dike network on the southern margin of Mount Hillers, Utah.
Kristina P. Pourtabib	Petrology/Geochemistry	Eastern Illinois University	The Road Less Travelled: Explosive Primitive Flank Eruptions
Christopher A. Dorval Dion	Engineering	École Polytechnique de Montréal	Functionalization of nanoparticles by means of photo-initiated chemical vapor deposition (PICVD)
Robert Y. Fidler	Conservation Biology	Florida Institute of Technology	Variation in age-at-size of fishes between Philippine MPAs and fished reefs: implications for the evolution of maladaptive traits
Lorian E. Schweikert	Physiology/Functional Morphology	Florida Institute of Technology	Adaptive Plasticity of the Retina in Response to Environmental Cues
Estefania Fierro	Physiology/Functional Morphology	Florida International University	Stroboscopic Training Improves Cognitive Functioning and Performance
Vanesa Mendez	Chemistry	Florida International University	Development of Macular Pigment in Rhesus Monkey Retinas
Kristina A. Rolph	Physics/Astronomy	Franklin and Marshall College	Low-frequency PUPPI Search for Pulsars and Transients in M33

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Parviz L. Bozzelli	Psychology	George Mason University	Does zinc supplementation alter protein levels of synaptic transporters?
Katherine E. Schroer	Anthropology	George Washington University	Ecological character displacement and speciation in the early hominins of Koobi Fora, East Africa
David J. Barton	Physiology/Functional Morphology	Georgetown University	Traumatic brain injury: targeting blood-brain barrier damage
Lillian D. Power	Behavioral Ecology	Georgetown University	Comparing Learning Rates in Wild and Laboratory Populations of the Cabbage White Butterfly, <i>Pieris Rapae</i>
Alicia M. Reigel	Ecology	Georgia Southern University	Using genetic analysis to assess the role of artificial offshore structures in the range expansion of <i>Megabalanus coccopoma</i> in Georgia, USA
Tessa K. Solomon-Lane	Behavioral Ecology	Georgia State University	Lifetime fitness consequences of early-life social experience
Jennifer G. Winters	Physics/Astronomy	Georgia State University	Red Dwarf Multiplicity in the Solar Neighborhood
Lei Zhong	Cell Biology/Biochemistry	Georgia State University	Expression Cloning of Anion-Selective Nicotinic Acetylcholine Receptor Subunits
Yonathan T. Ararso	Cell Biology/Biochemistry	Hampden-Sydney College	An shRNA-mediated RNA Silencing Approach to Understand the Role of Melanoma-derived Factors in the Suppression of Dendritic Cell Maturation and Activation
Brittany M. McCabe	Behavioral Ecology	Hartwick College	Prey Selection by <i>Octopus vulgaris</i> at San Salvador Bahamas: Do individuals specialize?
Jooa J. Lee	Psychology	Harvard University	A Neuro-endocrinological Study of Dishonesty
Zachary R. Lewis	Systematics/Evolutionary Biology	Harvard University	The developmental genetic basis of lung loss in lungless salamanders

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Patrick J. Gunn	Paleontology/Sedimentation	Hobart and William Smith Colleges	Calibrating stable isotopic paleoclimate indicators through a high-resolution investigation of modern sedimentation in Seneca Lake, New York, USA.
Jeanette B. Moss	Ecology	Hood College	Population genetics of <i>Rhinoptera bonasus</i> , the Cownose ray, in the Chesapeake Bay
Kay Hiranaka	Physics/Astronomy	Hunter College of The City University of New York	Improving the Cloud Model of Young Brown Dwarfs and Giant Exoplanets
Rachael A. Van Essen	Conservation Biology	Illinois State University	Using Stable Hydrogen Isotopes and GIS Tools to Estimate Geographic Extents of Source Populations of Hoary and Eastern Red Bats Killed at a Central Illinois Wind Farm
Robert J. Arndt	Behavioral Ecology	Indiana State University	Does Moonlight Affect the Movement and Foraging Behavior of Bats in Midwestern Flyways?
Anita J. Krause	Cell Biology/Biochemistry	Iowa State University	Functional divergence? Comparing opsin expression in extra-ocular tissues and eyes of the scallop ( <i>Pectinidae</i> ).
Robert Literman	Cell Biology/Biochemistry	Iowa State University	Molecular Mechanisms Underlying Temperature-Dependent Sex Determination: Can temperature-dependent chromatin remodeling determine vertebrate sex?
Srihari Radhakrishnan	Systematics/Evolutionary Biology	Iowa State University	Composition and regulation of gonadal genes in turtles with genotypic and temperature-dependent sex determination
Amy M. Worthington	Behavioral Ecology	Iowa State University	Why females mate multiply: Are mating-derived fecundity and immune benefits transferred in the ejaculates of male crickets?
Joanna Gardiner	Physiology/Functional Morphology	James Madison University	Using Accelerometry to Study Leaping in Primates

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Laura Lorenz	Systematics/Evolutionary Biology	James Madison University	Determining the predictive power of custom Mycobacteriophage cluster microarray cassettes
Nina K. Jarrah	Chemistry	Lehigh University	Interfacial Matrix Stabilization Spectroscopy (IMSS) studies of catalyzed carbon monoxide oxidation over supported gold nanoparticles using a copper integrating sphere for enhanced sensitivity
Ryan M. Ludwig	Chemistry	Lehigh University	Matrix isolation FTIR study of CO oxidation catalyzed by gold clusters
Anthony J. Rietl	Ecology	Louisiana State University-Baton Rouge	Littoraria irrorata grazing in a Spartina alterniflora marsh: Can mollusk herbivory affect methane dynamics in a salt marsh?
Tedros Berhane	Hydrology/Geomorphology	Miami University Ohio	Fate (sorption and desorption) and Transport of Carbamazepine (CMZ) and Sulfamethoxazol (SMX) in a Palygorskite-Montmorillonite (PM) Filter Medium
Aminata P. Coulibaly	Cell Biology/Biochemistry	Miami University Ohio	Characterizing oligodendrocytes in close apposition to motor neurons in the adult spinal cord.
Patrick Mineo	Physiology/Functional Morphology	Miami University Ohio	Molecular mechanisms underlying thermal acclimation in the Eastern newt ( <i>Notophthalmus viridescens</i> ).
Rachel E. Pritchard	Cell Biology/Biochemistry	Miami University Ohio	Differential regulation of virulence-associated genes in response to oxygen availability by <i>Mycoplasma iowae</i>
Minqian Shen	Cell Biology/Biochemistry	Miami University Ohio	Estrogen acts as an antagonist for oncogenic leptin in hepatocellular carcinogenesis

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Rachel Skipper	Psychology	Miami University Ohio	A Role for Corticosterone in the Effects of Early-Life Stress on Adult Fear Conditioning
Mei San Tang	Cell Biology/Biochemistry	Monash University Malaysia	Correlating mucosal immunity with human intestinal bacterial flora in the pathogenesis of inflammatory bowel diseases
James R. Junker	Ecology	Montana State University-Bozeman	Effects of climate-induced changes in temperature and flow regime on carbon, nitrogen, and phosphorus storage in stream ecosystems
Cheng-Kai ChiuHuang	Engineering	North Carolina State University	Interactions of mechanics, diffusion and phase transformation for high rate-capacity lithium-ion batteries
Sean F. Gallen	Hydrology/Geomorphology	North Carolina State University	Did the Minoans do it? Testing Natural versus Anthropogenic Controls on Holocene Valley-Bottom Aggradation in the Messara Plain, Crete, Greece
Nathan J. Lyons	Hydrology/Geomorphology	North Carolina State University	Genetic markers of landscape change: Cutthroat trout ( <i>Oncorhynchus clarkii</i> ) populations above migrating waterfalls
Bianca K. Montero	Systematics/Evolutionary Biology	North Dakota State University	Population Genetic Structure of a Highly Specialized Leaf Roosting Bat
Anthony L. Hessel	Physiology/Functional Morphology	Northern Arizona University	EMG Analysis of the Plethodontidae Swimming, Walking and Jumping Mechanics
Kurt T. Kinslow	Chemistry	Northern Michigan University	Kinetic Resolution of Terminal Epoxides by Macrocyclic Oligomeric Cr(III)-salen Complexes

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Matthew K. Rhodes	Ecology	Northwestern University	Exploring the relative importance of functionally distinct pollinators in the reproductive ecology of a rare evening primrose
Clara Cooper-Mullin	Physiology/Functional Morphology	Ohio State University	Oxygen consumption and stress resistance in cultured skeletal muscle of Coturnix quail selected for 4-week body size
Joshua L. Downing	Psychology	Ohio University	Experimental deployment of a Variable Perspective Optical Device (VPOD) for the study of vision and perceptual adaptation in humans
Rachel E. Eguren	Ecology	Oklahoma State University	Community Structure, Population Demographics, and Biomarkers in Chiroptera from a Superfund site
Megan Drinnan	Petrology/Geochemistry	Oregon State University	Textures associated with the Glass to Altered-Glass transition in Seamount Basalts: Implications for Microbial Alteration of the Ocean Crust
Daniel S. Gruss	Physics/Astronomy	Oregon State University	Entanglement and correlations in transport: From nanoscale electronics to cold atoms
Christophe Snoeck	Anthropology	Oxford University	Structural and Isotopic Studies of Calcined Bone
Samuel P. Halverson	Physics/Astronomy	Pennsylvania State University	Development of a New, Precise Near-infrared Doppler Wavelength Reference: A Fiber Fabry-Perot Interferometer
Robert J. Norgard	Cell Biology/Biochemistry	Pennsylvania State University	The Interaction between Breast Cancer Cells and a Native Decellularized Osteoblast Matrix
Elizabeth J. Young	Physics/Astronomy	Princeton University	Integrated manufacture and design of shaped pupil coronagraphs for the direct imaging of exoplanets

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Stephanie Schroeder	Ecology	Rochester Institute of Technology	The Impact of Fruit Quality on the Physiological Condition of Songbirds during Migration Stopover
James M. Folberth	Physics/Astronomy	Rose-Hulman Institute of Technology	Improved flat field frame capturing, image reduction, and installation of an instrument rotator.
Rachel E. Dorfman	Physiology/Functional Morphology	San Francisco State University	Physiological and Molecular Responses of the Cocolithophore <i>Calcidiscus leptoporus</i> to Ocean Acidification and Increased Temperature
Allison R. Nelson	Conservation Biology	San Francisco State University	The Geographic Structuring of <i>Catharus</i> Thrushes and their Hemosporidian Parasites
Erfan Eilati	Cell Biology/Biochemistry	Southern Illinois University-Carbondale	The role of cyclooxygenase 1 and 2 in ovarian cancer in the domestic hen
Katherine E. South	Anthropology	Southern Illinois University-Carbondale	Macroscopic and Compositional Analytical Approaches to Assessing Value of Maya Middle Preclassic Pottery in the Peten Lakes Region of Guatemala
Yuki Tanaka	Anthropology	Southern Illinois University-Carbondale	Evaluation of the degree of regional variations between Belizean and Guatemalan Mopan
Zachary Steele	Behavioral Ecology	St. Edward's University	Effects of social dominance on male preference for female size in the guppy ( <i>Poecilia reticulata</i> )
Nathan Wong	Cell Biology/Biochemistry	St. Mary's College of Maryland	Contribution of a membrane binding <i>Pseudomonas aeruginosa</i> protease to bacterial keratitis
Michelle A. Berry	Ecology	Stanford University	Influence of host phylogeny on gut microbial community composition and function in Costa Rican butterflies
Rory K. Clisby	Petrology/Geochemistry	Swansea University	Is there a CO <sub>2</sub> fertilisation effect in high elevation bristlecone pines?



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John C. Blong	Anthropology	Texas A&M University- College Station	Paleoenvironmental Reconstruction in the Central Alaska Range
Carolyn M. Bauer	Behavioral Ecology	Tufts University	Does plural breeding with communal care help buffer post-natal stress in the degu ( <i>Octodon degus</i> )?
Casey M. Diederich	Ecology	Tufts University	The tradeoff between desiccation and aerial respiration as a factor controlling the distribution of an important invasive species
Mark J. Garcia	Systematics/Evolutionary Biology	University of Alabama at Tuscaloosa	The Integrated Phenotype: Physiological Underpinnings and Its Impact on Phenotypic Diversity and Evolution
Stephanie L. Robinson	Behavioral Ecology	University of Alabama at Tuscaloosa	Phenotypic plasticity and integration: hormonal, morphological, and behavioral responses to salinity in a self-fertilizing, hermaphroditic fish ( <i>Kryptolebias marmoratus</i> )
Eric Armstrong	Physiology/Functional Morphology	University of California- Berkeley	Physiological and Transcriptomic Response of a Giant Clam ( <i>Tridacna squamosa</i> ) to Increased Temperature and Variable pH
Dori L. Contreras	Paleontology/Sedimentation	University of California- Berkeley	Investigating the early evolution of angiosperm dominated tropical rain forests: a functional analysis of the Cretaceous Fort Harker Assemblage
Darko D. Cotoras	Systematics/Evolutionary Biology	University of California- Berkeley	Early stages of adaptive radiation: Insights from spiders in the Hawaiian archipelago
Eve Robinson	Ecology	University of California- Berkeley	How turbulent and wavy flow impacts suspension feeding by an intertidal sea anemone
Joel A. Trushinski	Engineering	University of California- Irvine	Microfluidic Poly-Antibody Cell Capture Device

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Mark A. Phuong	Systematics/Evolutionary Biology	University of California-Los Angeles	Evolution of color patterns in chromodorid sea slugs in the Indo-West Pacific
Alexandria Mueller	Cell Biology/Biochemistry	University of California-Riverside	The extent of SNS ganglionic blockade in prevention of systolic BP response to hyperosmotic stress in PBDE exposed rats
Kurt A. Spurgin	Physiology/Functional Morphology	University of California-Riverside	PACAP involvement in elevated excitatory drive in the PVN.
Shawnt Tosonian	Cell Biology/Biochemistry	University of California-Riverside	Characterizing the roles of cGMP and CNG channels in central VP release
Joe Valdez	Cell Biology/Biochemistry	University of California-Riverside	Glial Control of Physiological Responses: Glial-Neuronal Interactions within the Supraoptic Nucleus
Catherine G. Barcheck	Hydrology/Geomorphology	University of California-Santa Cruz	Investigation of subglacial hydrological seismic signals, Breidamerkurjokull Glacier, Iceland
Kimberly T. Goetz	Ecology	University of California-Santa Cruz	Using stable isotopes to examine the foraging ecology of Weddell seals in the Ross Sea, Antarctica
Adelaide L. Baker	Physics/Astronomy	University of Central Florida	Do Bounce-Back Systems Tilt, Wobble, & Precess?
Joseph C. Waddell	Ecology	University of Central Florida	Sexual signaling energetics and life history in Peruvian Brachyhyppomus, a genus of Neotropical electric fishes.
Ekaterina A. Khramtsova	Cell Biology/Biochemistry	University of Chicago	Phosphorylation-dependent occludin and zonula occludens-1 interactions: A novel mechanism of tight junction barrier regulation
Natasha A. Urban	Ecology	University of Cincinnati	A comparison of Null, Neutral, and Mechanistic Models to Explain and Predict the Abundance and Diversity of Organisms in Island-mainland Systems

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Leah R. Brooks	Cell Biology/Biochemistry	University of Colorado at Boulder	A developmentally compromised serotonergic system results in an altered behavioral stress response: the role of fibroblast growth factor 8
Ye Sun	Physiology/Functional Morphology	University of Connecticut	Characterization of the Ependymal Layer in the Human Brain
Senia I. Smoot	Engineering	University of Dayton	A Pilot Study of the Effect of an Acute Vestibular Therapy on Postural Stability, Gait Variability, and Gaze Patterns of Children with Autism Spectrum Disorder
Mallika Pathania	Cell Biology/Biochemistry	University of Delaware	The Role of Fibronectin in Posterior Capsule Opacification
Richard L. Pearson	Physics/Astronomy	University of Denver	Identifying thermal dust properties in binary star systems by radiative transfer modeling
Joseph B. Pfaller	Systematics/Evolutionary Biology	University of Florida	Genetic homogeneity across spatial, taxonomic and ecological boundaries
Rebeca G. deJesus-Crespo	Ecology	University of Georgia	The role of shade trees on watershed conservation in coffee agro-forestry landscapes.
Kaitlin J. Farrell	Ecology	University of Georgia	Effects of consumer community composition and feeding strategy on ecosystem-level processes: an in-depth comparison of grassland and mountainous streams in temperate biomes within the SCALER project
Jennifer M. Kanine	Conservation Biology	University of Georgia	Extracting Nuclear DNA from Allegheny Woodrats ( <i>Neotoma magister</i> ) Museum Specimens
Kimberly Kellett	Ecology	University of Georgia	Well-seasoned demography: Are seasons important to fitness of a Neotropical perennial?

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Cynthia A. Page-Karjian	Conservation Biology	University of Georgia	Evaluating latency and cryptic infection of chelonid fibropapilloma-associated herpesvirus in green sea turtles
Jason Jacoby	Cell Biology/Biochemistry	University of Illinois at Chicago	Activity-dependent pH dynamics observed through synapse-specific fluorescent probes in the outer transgenic zebrafish retina
Rachael F. Lane	Chemistry	University of Kansas	The fate of BPA and BADGE leached from epoxy coatings into drinking water
Jacqueline R. Dillard	Behavioral Ecology	University of Kentucky	Disentangling the direct and indirect benefits of delayed dispersal in a social beetle (Coleoptera: Passalidae)
Olivia P. Woodruff	Chemistry	University of Kentucky	Compound Specific Stable Isotope Source Characterization of Polycyclic Aromatic Hydrocarbons in Recent Gulf of Mexico Sediments
Noor D. White	Systematics/Evolutionary Biology	University of Maryland, College Park	Unraveling the Adaptive Evolutionary History of Nocturnal Vision in Birds
Suzanne M. Cox	Systematics/Evolutionary Biology	University of Massachusetts Amherst	Cavitation Control in the Mantis Shrimp
Yi-Fen Lin	Physiology/Functional Morphology	University of Massachusetts Amherst	Burrowing performance in three American moles
Jacob S. Howell	Ecology	University of Mississippi	Do coral reef fish stay close to home?
Mark McCauley	Ecology	University of Mississippi	Studying the Synergistic Effects of Temperature and UV on Caribbean Octocorals
Christine C. Rega	Ecology	University of Missouri-Columbia	Are Unmanaged Vacant Lots Unsuitable Habitats for Urban Birds?
Gideon A. Erkenwick	Ecology	University of Missouri-St. Louis	Patterns of parasitic infection in a wild population of non-human primates in southeast Peru
Leticia Soares	Ecology	University of Missouri-St. Louis	Avian malaria parasites in the Lesser Antilles: using past distributions to understand the dynamics of host-parasite communities

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Jacob Boswell	Systematics/Evolutionary Biology	University of Montana	Predator-Induced Multicellularity in <i>Chlamydomonas reinhardtii</i>
Michelle C. Biodrowski	Conservation Biology	University of Nebraska at Omaha	The Effects of Patch Burn Grazing on Breeding Grassland Birds
Abigail R. D'Ambrosia	Paleontology/Sedimentation	University of New Hampshire	Understanding climatic and ecological change across the ETM2 and H2 hyperthermal events
Daniel Cooper	Cell Biology/Biochemistry	University of North Carolina at Chapel Hill	Identifying how the lack of GPAT4 prevents diet-induced obesity
Bushra Khan	Ecology	University of North Carolina at Charlotte	The effects of hypercapnic hypoxia on metal bioavailability in eastern oysters, <i>Crassostrea virginica</i> and ribbed mussels, <i>Geukensia demissa</i>
Steven W. Thornton	Physiology/Functional Morphology	University of North Carolina at Wilmington	Functional morphology of dorsal acoustic structures in pygmy ( <i>Kogia breviceps</i> ) sperm whales
Maria C. White	Cell Biology/Biochemistry	University of North Carolina at Wilmington	Quantifying entry of oncolytic equine herpesvirus type 1 in human glioma cells after treatment with valproic acid
Jacob J. Teffs	Physics/Astronomy	University of North Dakota	Collection and Analysis of Spectra of Time-Dependent Astronomical Events: Spectroscopic Binaries, Comets, Supernovae and GRBs
Sean F. Ryan	Ecology	University of Notre Dame	Assessing the impacts of recent warming on the functional genetics of a butterfly hybrid zone
Michael Kistenmacher	Behavioral Ecology	University of Oklahoma	Oviposition Behavior of <i>S. mortua</i> on Heterocarpic <i>Capitula</i> and its Effects on Larval Performance
Michael Chacko	Physics/Astronomy	University Of Oklahoma Health Sciences Center	Improved Heat Control Management for Neonatal MRI

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Zhengqing J. Qi	Physics/Astronomy	University of Pennsylvania	Correlating the sub-angstrom physical and electrical properties of graphene nanoribbons
Rui Peng	Chemistry	University of South Dakota	Photocatalytic Hydrogen Evolution over CdS Incorporated TiO <sub>2</sub> -MCM-48 Mesoporous Materials under Visible Light Illumination
Amber J. Brace	Ecology	University of South Florida	Resource allocation strategies across the introduced range of <i>Anolis sagrei</i>
Holly Kilvitis	Behavioral Ecology	University of South Florida	The Effects of Ontogenic Immune Challenge and Hormone Exposure on Adult Sickness Behavior: A Phenomenon Mediated by Methylation?
Heather Guzik	Anthropology	University of Southern Mississippi	Fractal Analysis of Entheses in Human Populations
Vasaant Krishnan	Physics/Astronomy	University of Tasmania	Maser Astrometry
Jessica N. Welch	Conservation Biology	University of Tennessee-Knoxville	Effects of invasion on an endemic bat population in the Northern Mariana Islands
Jaime Mata-Miguez	Anthropology	University of Texas at Austin	The genetic effects of Aztec imperialism: An ancient DNA test at Xaltocan, Mexico
Ricky W. Smith	Anthropology	University of Texas at Austin	Detecting epigenetic markers of famine during the collapse of the ancient Moche Civilization.
Azar Kordbacheh	Systematics/Evolutionary Biology	University of Texas at El Paso	Cryptic Speciation in Some Cosmopolitan Species of Phylum Rotifera
Rachael L. Beaton	Physics/Astronomy	University of Virginia	Investigation of New Open Cluster Candidates in the Milky Way
Rosemary L. Malfi	Ecology	University of Virginia	The impact of phenology and floral resource availability on the growth and reproductive success of bumblebee colonies

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Kimberly R. Sokal	Physics/Astronomy	University of Virginia	Optical studies of Extragalactic Super Star Clusters and understanding the Wolf-Rayet Emission Line
David G. Whelan	Physics/Astronomy	University of Virginia	Supporting Undergraduate Women Researchers in Astronomical Research
Corlett W. Wood	Systematics/Evolutionary Biology	University of Virginia	Selection on a male combat trait in a heterogeneous environment
Vanessa L. Ehlers	Psychology	University of Wisconsin-Milwaukee	Effect of Oral Administration of Apoaequorin on Cell Death following Ischemia.
Enrique I. Gracian	Psychology	University of Wisconsin-Milwaukee	Eye-tracking may capture differences in memory deficits associated with normal aging and age-related neurodegenerative disease.
Matthew R. Jones	Systematics/Evolutionary Biology	University of Wyoming	Immunogenetic adaptation and reproductive isolation along altitudinal gradients
Hiram J. Conley	Physics/Astronomy	Vanderbilt University	Measuring the Casimir effect with Graphene Resonators
Alexander J. Krejci	Physics/Astronomy	Vanderbilt University	Do Magnetic Dipolar Interactions Give Rise to Ordering in Nanoparticle Monolayers?
Sarah K. Baillie	Behavioral Ecology	Villanova University	Boldness in Response to Predatory Threat and its Correlation with Paternity in Carolina Chickadees ( <i>Poecile carolinensis</i> )
Ashveen Bains	Behavioral Ecology	Villanova University	GENETIC VARIATION IN A DOPAMINE RECEPTOR GENE In PURE CAROLINA AND BLACK CAPPED CHICKADEES AND THEIR HYBRIDS
Jonathan D. Rumley	Cell Biology/Biochemistry	Villanova University	Development of a transgenic line of zebrafish ( <i>Danio rerio</i> ) in which the inducible CNS-specific overexpression of <i>brd2a</i> can be achieved.

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Shane H. Abinette	Ecology	Virginia Commonwealth University	Urbanization's Effects on the Salamanders and Mosquitos of Vernal Pools
Tin Chi Solomon Chak	Systematics/Evolutionary Biology	Virginia Institute of Marine Sciences, College of William and Mary	Sponges, shrimps, and symbionts: Testing how sponge symbiotic bacteria mediate host use patterns of snapping shrimp ( <i>Synalpheus</i> )
Asia Murphy	Ecology	Virginia Polytechnic Institute and State University	Carnivore ecology in Makira National Park, Madagascar, with an emphasis on fossa ( <i>Cryptoprocta ferax</i> )
Jacob J. Herman	Ecology	Wesleyan University, Connecticut	Epigenetics and Transgenerational Plasticity: Does Parental Drought Influence DNA Methylation in <i>Polygonum persicaria</i> ?
Anna L. Holtvoigt	Ecology	Wright State University	Habitat Preferences of Pileated Woodpeckers ( <i>Dryocopus pileatus</i> )