

# DIMENSIONS *of* DISCOVERY

## Sponsored Program Awards

December 2017

### Abbott to Bullock

**Abbott, Angela R** and **Palmer, Laura A**; nutrition science, health and human sciences, from Pennsylvania State University, \$43,144, “Children, Youth, and Families at Risk (CYFAR) Coach.”

**Akridge, Jay T**; **Engel, Bernard A**; **Hartman, Nathan W**; **Plaut, Karen I**; **Shakouri, Ali** and **Sutherland, John W**; Office of the Provost, agricultural and biological engineering, computer graphics technology, agriculture – administration, electrical and computer engineering, environmental and ecological engineering, from North-central Central Indiana Community Partnership, \$5,035,559, “Creating a Prosperous Economic Ecosystem in the Wabash Heartland.” (a Discovery Park award – Birck Nanotechnology Center)

**Akridge, Jay T**; to record provost expenses, from Northcentral Central Indiana Comm Ptnshp, \$12,964,441, “Creating a Prosperous Economic Ecosystem in the Wabash Heartland.”

**Aliaga, Daniel G**; computer science, from Applied Research Associates, Inc, \$114,110, “The Lego System: Large-Scale Environment-Modeling Using Geometric Optimization.”

**Ambrose, Rose Prabin Kingsly**; agricultural and biological engineering, from Iowa State University, \$70,000, “Training to Prevent Grain Dust Explosions.”

**Baributsa, Dieudonne**; entomology, from Wenger, Brandon, \$250, “PICS Voluntary Support.”

**Basaran, Osman A**; chemical engineering, from Shell Oil Company, \$25,000, “Purdue Process Safety and Assurance Center(P2SAC).”

**Bean, Robert S**; nuclear engineering, from RGA Labs, Inc, \$132,939, “Dry Cask Thermal, Reactivity, and Shock Protection.”

**Behrens, Sandra R**; nursing, from Indiana University, \$82,400, “Northwest Indiana Area Health Center (Federal Funds) .”

**Benes, Bedrich**; computer graphics technology, from Arizona State University, \$80,817, “Solution for Predictive Physical Modeling in Cadmium Telluride (CdTe) and Other Thin-Film Photovoltaic (PV) Technologies; Amendment 2; Grant 108718.”

**Benjamin, Tamara J**; **Torres Bravo, Ariana P**; **Odonnell, Michael J** and **Turner, Maria H**; horticulture and landscape architecture, agricultural economics, field extension agents, from University of Minnesota, \$194,663, “Organic Transition and Certification: Supporting Indiana Grain Farmers Capacity to Meet Market Demand.”

**Bertino, Elisa**; computer science, from Electronics and Telecommunications Research Institute, \$2,983, “Study on Key Hiding and Software Integrity Verification for Unmanned Vehicle.”

**Bertino, Elisa**; computer science, from IBM, \$37,763, “IBM Distributed Analytics and Information Sciences (DAIS-ITA), Modification 3; Grant 108759.”

**Bhunia, Arun K**; food sciences, from Hemocleanse, Inc., \$2,000, “Shuttleworth North America.”

**Bigelow, Cale A**; horticulture and landscape architecture, from Sod Solutions Inc, \$2,500, “Putting Greens Research.”

**Bolin, Jeffrey T**; Executive Vice President for Research and Partnerships, from Purdue University, \$265,734, “FY2017-18 Purdue Research Foundation (PRF) Research Grant.”

**Bolin, Jeffrey T**; Executive Vice President for Research and Partnerships, from Purdue University, \$88,578, “FY2017-18 Purdue Research Foundation (PRF) Research Grant.”

**Boudouris, Bryan W** and **Franses, Elias I**; chemical engineering, from Pioneer Oil Company, \$110,000, “Development of Aqueous Surfactant-Polymer Enhanced Oil Recovery (EOR) Formulation for Low Temperature-Low Salinity Surfactant-Polymer Waterflood.”

**Braile, Lawrence W**; earth, atmospheric and planetary science, from Chevron Research Company, \$25,000, “Chevron Voluntary Support.”

**Braun, James E**; mechanical engineering, from Duke Energy Indiana, Inc., \$50,000, “Center for High Performance Building Consortium.”

**Braun, James E**; mechanical engineering, from Carrier Corporation, \$50,000, “Center for High Performance Building Consortium.”

**Braun, James E**; mechanical engineering, from Kawneer Company Inc, \$25,000, “Center for High Performance Building Consortium.”

**Braun, James E**; civil engineering, from National Renewable Energy Laboratory, \$100,000, “An Open, Cloud-Based Platform for Whole-Building Fault Detection and Diagnostics.”

**Braun, James E**; mechanical engineering, from Southern California Edison Co., \$50,000, “Center for High Performance Building Consortium.”

**Brouder, Sylvie M**; agronomy, from Dow Agro Sciences, \$50,000, “Dow DuPont.”

**Brown, Stacy A**; field extension agents, from Martin County Community Foundation, \$5,000, “Martin County Makers Workshops.”

**Buckmaster, Dennis** and **Krogmeier, James V**; agriculture – administration, electrical and computer engineering, from CNH Industrial, \$172,100, “Agricultural Machinery Systems Optimization ? Focus on Harvest Logistics.”

**Bullock, Darcy M**; civil engineering, from Indiana Department of Transportation, \$80,000, “SPR-4252 Forensic Investigations.”

## Caffee to Garner

**Caffee, Marc W;** physics and astronomy, from U.S. Geological Survey, \$7,025, "USGS – Earthquake Science Center (ESC) – Sacramento for Delong."

**Caffee, Marc W;** physics and astronomy, from U.S. Geological Survey, \$28,350, "USGS – Earthquake Science Center (ESC) – Sacramento for Scherer."

**Caffee, Marc W;** physics and astronomy, from U.S. Geological Survey, \$5,450, "USGS Geology, Minerals, Energy and Geophysics Science Center – Sacramento for Cyr."

**Cain, Steven A and Hostetler, Abby R;** agricultural communication service, from National Institute of Food and Agriculture, \$370,800, "Extension Disaster Education Network (EDEN) Security Initiative IX: EDENs Role in Homeland Security, Food and Ag Defense and All Hazard Education."

**Camberato, James J;** agronomy, from Agricultural Research Service, \$46,420, "Improving Phosphorus Fertility Recommendations for Improving Efficiency and Minimizing Environmental Impact."

**Campbell, Wayne W and Kim, Jung Eun;** nutrition science, from National Pork Board, \$75,000, "Effects of Consuming Red Meat on the Gut Microbiome in Young Adults."

**Chandrasekar, Srinivasan and Trumble, Kevin P;** industrial engineering, materials engineering, from Army Research Office, \$50,000, "Fluid-Like Flow, Surface Instabilities and Folding in Metal Plasticity and Wear."

**Chen, Zhihong;** electrical and computer engineering, from Semiconductor Research Corporation, \$95,000, "Integration of Cu/Graphene Hybrid Interconnects with Damascene Process; Amendment 2; (Grant 208852)."

**Choi, Jong Hyun and Mao, Chengde;** mechanical engineering, chemistry, from Office of Naval Research, \$9,000, "Toward Versatile Synthetic DNA Walkers."

**Christian, John A;** comparative pathobiology, from Western University of Health Sciences, \$13,195, "Cytology Resource Center."

**Cooks, Robert Graham;** chemistry, from AB SCIEX, \$500, "Pfizer Analytical Chem Fellowship."

**Cooks, Robert Graham;** chemistry, from U.S. Department of Energy, \$183,863, "High-Throughput Preparative Mass Spectrometry at Atmospheric Pressure for the Creation."

**Cooks, Robert Graham;** chemistry, from FLIR Systems Inc, \$106,455, "Fully MS/MS Capable Miniature Mass Spectrometer for Drug and CWA Analysis." (a Discovery Park award – Bindley Bioscience Center)

**Creek, Julie A;** Office of Multicultural Affairs, from Indiana Commission for Higher Education, \$2,000, "2017-2018 Scholarcorps AmeriCorps Program."

**Creswell, Tom C;** botany and plant pathology, from Michigan State University, \$49,500, "National Plant Diagnostic Network -North Central Region 2017-18."

**DeLaurentis, Daniel A; Lee, Seokcheon and Nof, Shimon Y;** aeronautics and astronautics, industrial engineering, from Naval Sea Systems Command Naval Surface Warfare Center (NAVSEA/NSWC) Crane, \$40,000, "For Research Maturation of Complex Systems/System-of-Systems Technologies for Architecting, Evolving and Rapid Response Research (RAPID) Decision-Making."

**Dyke, Shirley J and Ramirez, Julio Alfonso;** mechanical engineering, civil engineering, from Indiana Department of Transportation, \$375,000, "Seismic Evaluation of Indiana Bridge Network and Current Bridge Database for Asset Management."

**Ebert, David S;** electrical and computer engineering, from U.S. Department of Homeland Security, \$147,505, "Vaccine Tools for Plugfest." (a Discovery Park award – Discovery Park Administration)

**Edwards, Nancy E;** nursing, from North Central Health Services, \$734,383, "Enhancing Mental Health Care in Indiana through Implementation of a Psychiatric/Mental Health Nurse Practitioner Program."

**Egel, Daniel S;** botany and plant pathology, from Illiana Watermelon Association, \$6,000, "The Optimum Timing of Systemic Fungicides for the Management of Anthracnose of Watermelon What Entity."

**Eisenhauer, Mary Jane and Pratt, David M;** education, from Indiana Campus Compact, \$2,250, "Library Sprouts – Service Engagement and Family Literacy."

**Elwakil, Emad;** construction management technology, from Medxcel Facilities Management LLC, \$39,890, "Improve the Asset Management Process for Healthcare Facilities."

**Farkas, Brian E;** food sciences, from Vonderschmitt, Benjamin T, \$90, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E;** food sciences, from Koh Knox Inc, \$135, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E;** food sciences, from The Pines Farm Hops, LLC, \$220, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E;** food sciences, from Luvocado LLC, \$5,400, "Pilot Plant Multi-Sponsored Gift."

**Farkas, Brian E;** food sciences, from Applied Materials, \$2,500, "Pilot Plant Multi-Sponsored Gift."

**French, Richard Mark;** engineering technology, from Sinclair Community College, \$17,053, "The Science, Technology, Engineering and Mathematics (STEM) Guitar Project."

**Gabauer, Colleen L;** graduate school administration, from Purdue Doctoral Program, \$27,326, "Loperena-Medina, Sue Heidi."

**Garimella, Suresh V;** mechanical engineering, from DuPont Central Research and Development, \$15,000, "Cooling Technologies Research Center (CTRC) Membership – Memo Match for 106029."

**Garimella, Suresh V;** mechanical engineering, from DuPont Central Research and Development, \$7,500, "Cooling Technologies Research Center (CTRC) Membership – Memo Match for 106029."

**Garimella, Suresh V;** mechanical engineering, from DuPont Central Research and Development, \$7,500, "Cooling Technologies Research Center (CTRC) Membership – Memo Match for 106029."

**Garimella, Suresh V;** mechanical engineering, from National Aeronautics and Space Administration, \$8,972, "K. Nielsen – 2013 NASA Space Technology Research Fellowships (NSTRF) – Molecular Dynamic Simulation of High Thermal Conductivity Synthetic Spider Silk."

**Garner, Allen L and Zhang, Cankui;** nuclear engineering, agronomy, from Syngenta Biotechnology, Inc., \$49,999, "Assessment of Electromagnetic Fields on Microtubules."

## Gerber to Jacobs

**Gerber, Corey K;** agronomy, from Becks Superior Hybrids, Inc., \$2,250, "Crop Diagnostic Training and Research Center."

**Gillespie, Robert B;** biology, from Agricultural Research Service, \$31,716, "Effects of Nutrient-Pesticide Mixtures on Biota in Agricultural Headwater Streams in the Midwestern U.S."

**Gillespie, Robert B;** biology, from Agricultural Research Service, \$4,284, "Effects of Nutrient-Pesticide Mixtures on Biota in Agricultural Headwater Streams in the Midwestern United States."

**Ginzel, Matthew D;** entomology, from Xavier University, \$35,526, "The Biology of Asian Longhorned Beetle in Ohio."

**Gitau, Margaret W;** agricultural and biological engineering, from Russell O. Memorial Blosser Fellowship, \$1,500, "Mehan, Sushant."

**Gkritza, Konstantina;** agricultural and biological engineering, from Utah State University, \$87,470, "Feasibility Analysis of Electric Roadways through Localized Traffic, Cost, Adoption, and Environmental Impact Modeling."

**Goergen, Craig J;** biomedical engineering, from University of Texas at San Antonio, \$81,335, "Mechanistic Justification for Pentagalloyl Glucose Mediated Abdominal Aortic Aneurysm (AAA) Suppression."

**Gondhalekar, Ameya D;** entomology, from Syngenta Crop Protection Inc., \$13,500, "Defining Efficacious Rates in Cockroach Gel Bait Matrices."

**Gore, Jay P;** mechanical engineering, from John Zink Company, \$10,000, "Turbulent Combustion Lab."

**Goshorn, Allison J;** field extension educators, from Healthcare Foundation of La Porte, \$2,745, "Farm to Freezer to Table."

**Gounder, Rajamani P;** chemical engineering, from Korea University, \$5,000, "Kyu Yoon – Purdue University/Korea University BK Plus Exchange Program (Faculty Sponsor: Dr. Sangtae Kim)."

**Gounder, Rajamani P;** chemical engineering, from University of Kentucky, \$183,658, "Development of Passive HC/NOx Trap Catalysts for Low Temperature Gasoline Applications."

**Govindaraju, Rao S;** civil engineering, from Pegasus Technical Services Inc, \$77,000, "Decision Support Tool for Risk-Based Watershed Management."

**Grama, Ananth Y and Szpankowski, Wojciech;** computer science, from Case Western Reserve University, \$215,251, "Theoretical Foundations and Software Infrastructure for Biological Network Databases."

**Granger, Darryl E;** earth, atmospheric, and planetary science, from Sierra Pacific Industries, \$7,500, "Darryl Granger Discretionary Funds."

**Grant, Richard H;** agronomy, from Dow Agro Sciences, \$25,126, "Climatology of Temperature Inversions and Associated Conditions: Regional Assessment."

**Gray, Nicholas W;** admissions, from U.S. Department of Education, \$6,438, "Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound I."

**Gray, Nicholas W;** admissions, from U.S. Department of Education, \$6,438, "Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound II."

**Guan, Wenjing;** horticulture and landscape architecture, from Texas A&M Agrilife Research, \$18,621, "Table to Farm: A Sustainable, System-Based Approach for a Safer and Healthier Melon Supply Chain in the U.S."

**Guan, Wenjing; Egel, Daniel S; Maynard, Elizabeth T; Torres Bravo, Ariana P and Ingwell, Laura L;** horticulture and landscape architecture, botany and plant pathology, agricultural economics, entomology, from University of Minnesota, \$200,000, "Improving Seedless Cucumber Production to Diversify High Tunnel Crops in the North Central Region."

**Gupta, Sumeet Kumar;** electrical and computer engineering, from National Science Foundation, \$450,000, "Software and Hardware Foundations (SHF): Small: Ferroelectric Transistor Based Coupled Oscillators for Non-Boolean Computing."

**Guzey, Sukru;** civil engineering, from Pemy Consulting, \$19,800, "Assistant Frangible Roof Computer Program Saferoof Update: Phase 2."

**Haddock, John E;** civil engineering, from Indiana Department of Transportation, \$93,114, "Implementing the Superpave 5 Asphalt Mixture Design Method and Refining the Indiana Department of Transportation (INDOT) Ndesign Table, Lift Thickness, and Mixture Compactability."

**Haddock, John E;** civil engineering, from Indiana Department of Transportation, \$200,000, "Structural Evaluation of Full Depth Flexible Pavement Using Accelerated Pavement Testing (APT)."

**Harbin, Sherry L;** biomedical engineering, from National Science Foundation, \$50,000, "Innovation Corps (I-Corps) Team – GeniPhy Personalized Tissue Engineering."

**Harbin, Sherry L and Puls, Theodore J;** biomedical engineering, from International Foundation for Ethical Research, \$12,500, "Engineering Novel 3 D Tumor-Stroma to Bridge the Gap Between Pre-clinical Model and Human Clinical Outcomes."

**Harris, Jason T;** health sciences, from U.S. Department of State, \$87,807, "Nuclear Security Culture and Insider Threat Workshop in Turkey."

**Hertel, Thomas W;** agricultural economics, from United Nations Ec. Comm. for Africa, \$20,435, "Global Trade Analysis Project (GTAP) Consortium."

**Hertel, Thomas W;** agricultural economics, from Inter-American Development Bank, \$20,435, "Global Trade Analysis Project (GTAP) Consortium."

**Hong, Wei;** liberal arts – administration, from Chinese Language Council International, \$6,486, "Confucius Institute at Purdue University."

**Hook, Tomas O and Foley, Carolyn J;** forestry and natural resources, Illinois-Indiana Sea Grant College Program, from Indiana Department of Natural Resources, \$85,483, "T7R24 Mussel Habitat Modeling."

**Hook, Tomas O;** forestry and natural resources, from University of Illinois, \$238,999, "2014-18 IL in Sea Grant Omnibus."

**Jacobs, Douglass F;** forestry and natural resources, from U.S. Forest Service, \$10,000, "Nursery Production in the Eastern US."

**Jacobs, Douglass F;** forestry and natural resources, from U.S. Forest Service, \$10,000, "Nursery Production in the Eastern US."



## Jenkins to Matson

**Jenkins, James L; Huang, Wan Ju and Takahashi, George;** construction management technology, teaching and learning technologies administration, RCAC, from Occupational Safety and Health Administration, \$49,996, "Susan Harwood Grant: Augmented and Virtual Reality Training for Construction Fall Protection."

**Johnson, Carla J;** curriculum and instruction, from Battelle Memorial Institute, \$194,000, "Battelle – Army Educational Outreach Program Cooperative Agreement, Modification 8; Grant 108058."

**Johnson, David R;** materials engineering, from Arcelormittal USA, \$27,000, "Boron Segregation and its Effects."

**Johnson, Timothy;** animal sciences, from Agricultural Research Service, \$79,967, "Computational Analysis of Antimicrobial Resistance Gene Abundance and Co-Occurance."

**Johnson, William G;** botany and plant pathology, from Engage Agro, \$32,800, "Weed Science Research Voluntary Support."

**Karcher, Elizabeth L; Karcher, Darrin M and Unknown Coeus Person;** animal sciences, from US Poultry and Egg Harold E Ford Foundation, \$6,865, "The Poultry Industry in a Shell."

**Karpicke, Jeffrey D;** psychological science, from Iowa State University, \$115,206, "Implementing Principles from the Science of Learning within Educational Practice; Amendment 1; Grant 209596."

**Kildishev, Alexander V;** electrical and computer engineering, from Egyptian Cultural and Educational Bureau, \$4,000, "Walied Sayed Hussein Abdelhalim." (a Discovery Park award – Birk Nanotechnology Center)

**Kladienko, Eileen J and Morrow, Anna L;** agronomy, from University of Minnesota, \$74,680, "Midwest Cover Crop Council -Cover Crop Decision Tool."

**Kluender, Keith R;** speech, language and hearing sciences, from Indiana Lions Speech and Hearing Inc., \$2,500, "2018 Increase: Clinical Support for Speech-Language-Audiology Services from the Indiana Lions Club (205024)."

**Kramer, Robert A;** chemistry and physics, from Indianapolis Department of Public Works, \$100,000, "Extension of Indianapolis Street Lighting Contract to Consider Installation and Design Details."

**Krane, Matthew J M;** materials engineering, from Arcelormittal USA, \$6,000, "Arcelor Mittal Steel Processing Project."

**Krane, Matthew J M;** materials engineering, from Arcelormittal USA, \$27,000, "Boron Segregation and its Effects."

**Krogmeier, James V and Buckmaster, Dennis;** electrical and computer engineering, agricultural and biological engineering, from Foundation for Food and Agricultural Research, \$129,650, "An Open Source Framework and Community for Sharing Data and Algorithms."

**Krogmeier, James V; Buckmaster, Dennis; Camberato, James J; Crawford, Melba M; Deering, Amanda J; Grant, Richard H; Oliver, Haley F; Reibman, Amy R; Saraswat, Dharmendra and Ward, Mark Daniel;** electrical and computer engineering, agricultural and biological engineering, agronomy, food sciences, statistics, from Foundation for Food and Agricultural Research, \$936,698, "An Open Source Framework and Community for Sharing Data and Algorithms."

**Krupke, Christian H;** entomology, from National Institute of Food and Agriculture, \$500,000, "Neonicotinoid Seed Treatments in Bt Maize: Balancing Contributions to Insect Resistance Management with Impacts on Soil Health."

**Labi, Samuel; Fricker, Jon D and Sinha, Kumares C;** civil engineering, from Indiana Department of Transportation, \$167,513, "Cost-Effectiveness of Converting Signalized Arterials to Free-Flow Facilities."

**Leung, Yuk Fai;** biological sciences, from International Retinal Research Foundation, \$100,000, "Evaluation of New Drugs for Retinitis Pigmentosa with Zebrafish."

**Liang, Faming;** statistics, from National Science Foundation, \$120,658, "On Statistical Modeling and Parameter Estimation for High Dimensional Systems."

**Liceaga, Andrea M;** food sciences, from Impossible Foods Inc., \$5,000, "Multi-Sponsored Gift- Sensory."

**Liceaga, Andrea M;** food sciences, from Impossible Foods Inc., \$4,500, "Multi-Sponsored Gift- Sensory."

**Liceaga, Andrea M;** food sciences, from Halong Bay Savory, \$1,500, "Multi-Sponsored Gift- Sensory."

**Lim, Seung-Oe;** medicinal chemistry and molecular pharmacology, from Susan G. Komen Breast Cancer Foundation, \$450,000, "A Novel Strategy of Immunotherapy by Targeting Glycosylation of PD-L1."

**Lodmell, Lesley N;** field extension education, from Lawrence County Community Foundation, \$2,000, "Science, Technology, Engineering and Mathematics (STEM) Learning Kit."

**Longuski, James M and Saikia, Sarag J;** aeronautics and astronautics, from Lockheed Martin Corp., \$25,000, "Mars Base Camp."

**MacDermid Wadsworth, Shelley and Wellnitz, Andrea L;** human development and family studies, from Department of Veterans Affairs, \$5,889, "Intergovernmental Personnel Assignment (IPA) with Mn Veterans Administration for Andrea Wellnitz."

**MacDermid Wadsworth, Shelley and Topp, Dave;** human development and family studies, from Department of Veterans Affairs, \$5,769, "Intergovernmental Personnel Assignment (IPA) with Mn Veterans Administration for Dave Topp."

**MacDermid Wadsworth, Shelley;** human development and family studies, from Department of Veterans Affairs, \$10,900, "Intergovernmental Personnel Assignment (IPA) with Mn Veterans Administration for Dr. MacDermid Wadsworth."

**Manfra, Michael James;** physics and astronomy, from Microsoft Corporation, \$152,899, "Microsoft Quantum Computing."

**Matson, Eric T;** computer and information technology, from Korea Institute of Machinery and Materials, \$18,000, "Development of Virtual-Reality Based User Interface Technologies for Immersive Visualization."

**Matson, Eric T;** computer and information technology, from Information and Communication Technology Promotion, \$72,165, "IITP Industry Professional Practice 2018."

## Maynard to Raghunathan

**Maynard, Elizabeth T; Guan, Wenjing; Langenhoven, Petrus and Hoagland, Lori A;** horticulture and landscape architecture, from Indiana State Department of Agriculture, \$55,199, "Healthy Transplants for Healthy Crops: Developing a Protocol for Organic Transplant Production."

**McMillan, Sara K;** agricultural and biological engineering, from Agricultural Research Service, \$71,940, "Effect of Hydrologic and Biogeochemical Processes on Sediment and Nutrient Transport."

**Menekse, Muhsin;** engineering education, from University of Pittsburgh, \$10,247, "Investigating Motivation and Transfer in Physical Science through Preparation for Future Learning Instruction, Amendment 2; Grant 108341."

**Milislavljivic, Danny;** physics and astronomy, from Smithsonian Astrophysical Observatory, \$39,770, "Birth of a Pulsar Wind Nebula in SN 1970G."

**Miller, Margaret A;** comparative pathobiology, from National Institutes of Health, \$12,602, "NIH Institutes of Health Training Grant for Jessica Beck."

**Miller, Margaret A;** comparative pathobiology, from PHS-NIH National Cancer Institute, \$11,001, "NIH Comparative Biomedical Scientist Training Program."

**Mishra, Dharmendra K;** food sciences, from Grafton Peek Inc, \$75, "Multi-Sponsored Gift."

**Mishra, Dharmendra K;** food sciences, from Lakeside Farm Market, \$225, "Multi-Sponsored Gift."

**Mohammadi, Mohsen;** agronomy, from Agricultural Research Service, \$13,834, "Acquisition of Goods and Services – Sarah Allen."

**Morissette, Dallas T;** electrical and computer engineering, from Sonrisa Research Inc, \$501,209, "Radical Innovations in Silicon Carbide (SiC) Power Devices; Amendment 2, Grant 108568."

**Murray, Michael D;** pharmacy practice, from Regenstrief Institute for Health Care, \$20,339, "Observational Medical Outcomes Partnership (OMOP) 2011 Research Collaborations."

**Nagy, Zoltan;** chemical engineering, from Archer Daniels Midland Co, \$60,000, "Process Development for Crystallization and Dextrose D-Allulose."

**Nemali, Krishna and Langenhoven, Petrus;** horticulture and landscape architecture, from Indiana State Department of Agriculture, \$50,000, "Research Based Extension Education Program for Increased Year-Round-Profitability in Hydroponic Lettuce Production."

**Nemali, Krishna; Ballard, Roy W and Witkowski, Nicole L;** horticulture and landscape architecture, field extension educators, from Indiana State Department of Agriculture, \$35,000, "Research Based Education for Indiana Beginner Farmers on Profitable Indoor (Vertical) Farming."

**Nielsen, Robert L;** agronomy, from Pioneer Hi-Bred International, Inc., \$1,000, "Corn and Soybean Production."

**Nielsen, S Suzanne;** food sciences, from University of Greenwich, \$19,285, "Nutri-P-Loss: Nutritional Postharvest Loss Estimation Methodology."

**Nielsen, S Suzanne;** food sciences, from Association of Public and Land Grant University, \$5,000, "Nielsen Multi-Sponsored Gift."

**Ortalan, Volkan;** materials engineering, from Arcelormittal USA, \$27,000, "Boron Segregation and its Effects."

**Overholser, Brian R and Shugg, Tyler A;** pharmacy practice, from Academic Pharmaceuticals, Inc, \$10,000, "Herg Inhibition with Sotalol Derivatives."

**Overstreet, Bryan K;** field extension education, from University of Nebraska-Lincoln, \$3,791, "Introducing Environmental Sustainability Principles for Food Production into High School Science."

**Paniagua Perez, Guillermo and Meyer, Terrence R;** mechanical engineering, from Rolls-Royce Corporation, \$160,777, "Rolls-Royce Small Turbine Aerothermal Research Rig (STARR)."

**Parashar, Neeti;** chemistry and physics, from Cornell University, \$7,056, "U.S. Compact Muon Solenoid (CMS) Operations at the Large Hadron Collider (LHC)."

**Parsons, Paul;** computer graphics technology, from James Madison University, \$4,000, "Beyond Boundaries: Exploring Transdisciplinary Potential in Visualization."

**Patrick, Helen and Mantzicopoulos-James, Panayota Y;** education – administration, educational studies, from Institute of Education Sciences, \$320,771, "Measuring Effective Teaching Across Core Academic Content Areas in Kindergarten." (a Discovery Park award – Discovery Learning Research Center)

**Patton, Aaron J;** horticulture and landscape architecture, from University of Minnesota, \$456,640, "Increasing Low-Input Turfgrass Adoption Though Breeding, Innovation, and Public Education."

**Peeta, Srinivas;** engineering administration and engineering experiment station, from University of Michigan, \$819,270, "Center for Connected and Automated Transportation (CCAT) – U.S. DOT Utc Regional 2016 Proposal." (a Discovery Park award – Discovery Park Administration)

**Pourpoint, Timothee L;** aeronautics and astronautics, from Naval Air Warfare Center (Aircraft Div), \$145,000, "Development of Low-Toxicity Liquid Propellant System for Orbital/Sub-Orbital Applications."

**Prabhakar, Sunil K;** computer science, from National Physical Science Consortium, \$5,000, "NPSC Fellowship for Amber Johnson."

**Prokopy, Linda S;** forestry and natural resources, from Conservation Technology Information Center, \$107,279, "Regional Forums and Surveys to Evaluate NRCS WRI Projects."

**Pyrak-Nolte, Laura J;** physics and astronomy, from Sandia National Laboratories, \$246,921, "Advanced Downhole Acoustic Sensing for Wellbore Integrity."

**Radcliffe, John Scott;** animal sciences, from Agricultural Research Service, \$22,239, "Evaluating the Effects of Climate Change on Livestock Physiology and Well-Being."

**Raghunathan, Anand;** electrical and computer engineering, from Intel Corporation, \$65,000, "Architectures for Post-CMOS (Complementary Metal-Oxide Semiconductor) Devices ---- Gift Letter from Intel."

## Rainey to Tyner

**Rainey, Katherine Martin**; agronomy, from Agricultural Research Service, \$11,999, "Characterization of the High Stearic Acid Soybean Oil Trait."

**Ratliff, Timothy L**; comparative pathobiology, from Carroll County Cancer Association, \$20,000, "Cancer Research."

**Rich, Patrick J**; agronomy, from International Atomic Energy Agency, \$9,953, "Technical Contract to Determine Mechanisms of Striga Resistance and Characterize Field Resistant Individuals Identified in Mutagenized Populations Among Research Contract Holders."

**Robicheaux, Francis J**; physics and astronomy, from U.S. Department of Energy, \$90,000, "Atoms and Ions Interacting with Particles and Fields."

**Rogers, Timothy G**; electrical and computer engineering, from Sandia National Laboratories, \$85,000, "Gpgpu-Sim Sst Integration."

**Rozhon, Atina M**; field extension educators, from Jennings County Community Foundation, \$1,500, "Reading Made Fun."

**Sadeghi, Farshid**; mechanical engineering, from Timken Company, \$90,000, "Tribology Lab Research."

**Sadof, Clifford S**; entomology, from Animal Plant Health Inspection Service, \$27,500, "Forest Insect Taxonomic Support Forest Insect Taxonomic Support (FITS) Initiative for the USDA Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) Cooperative Agricultural Pest Survey (CAPS) Exotic Pest Detection Survey Program and the National Emerald Ash Borer Emerald Ash Borer (EAB) Survey."

**Sandhage, Kenneth H and Sangid, Michael D**; materials engineering, aeronautics and astronautics, from Rolls-Royce Corporation, \$250,091, "Fatigue of Silicon Carbide (SiC) Based Composites."

**Scalo, Carlo**; mechanical engineering, from Army Research Office, \$60,000, "ARO-YIP: Coherent-Vorticity-Preserving (CvP) Large-Eddy Simulations (LES) of Very-High-Reynolds-Number Vortex Dynamics."

**Schinckel, Allan P; Allen, Emma C and Thompson, Nathanael M**; animal sciences, youth development and agricultural education, agricultural economics, from National Pork Board, \$5,000, "Interaction with the Pork Industry on the Initial Use of a Program to Evaluate the Accuracy in Which Pigs Are Sorted for Market."

**Schoenlein, William E**; biomedical engineering, from Cook Research Incorporated, \$148,502, "Pre-Clinical Device Testing Agreement; Studies: CBI-SPDF, CI-THP2, CI-SCNP, CI-XCSF, CI-HM3X, CI-TA3X, CI-CLVR, CI-ZNTH, CI-ZTHO AND POC."

**Schwichtenberg, Amy J M**; human development and family studies, from Indiana University, \$4,544, "Infant Behavioral Sleep Intervention: Efficacy of a Novel Approach and Implementation into Primary Care."

**Semperlotti, Fabio**; mechanical engineering, from Sandia National Laboratories, \$97,847, "Development of Metamaterial-Based Technology for Subwavelength Elastic Wave Control."

**Sen, Shreyas**; electrical and computer engineering, from Intel Corporation, \$70,000, "Multi-Sponsored Industrial."

**Shalaev, Vladimir M; Boltasseva, Alexandra and Kildishev, Alexander V**; electrical and computer engineering, from Air Force Office of Scientific Research, \$195,000, "Space-Time Photonic Metamaterials: From Design and Materials to Device Concepts." (a Discovery Park award – Birck Nanotechnology Center)

**Shalaev, Vladimir M and Boltasseva, Alexandra**; engineering administration and engineering experiment station, electrical and computer engineering, from Georgia State University, \$304,258, "Novel Nonlinear Optical Processes in Active, Random and Nano-structured Systems; Amendment 1."

**Shan, Jie**; civil engineering, from Kitware Inc, \$179,998, "Danesfield: Data Nexus for Estimating Semantics and Fusing Inferred Exterior Layers in 3-D."

**Shannahan, Jonathan H**; health sciences, from PHS-NIH National Institute of Environment Health Science, \$249,000, "Disease-Induced Modification in Nanoparticle-Corona Identity and Toxicity."

**Shaver, Gregory M**; mechanical engineering, from Argonne National Laboratory, \$79,218, "Si Engine Controls Development for an Extended Range Electric Vehicle."

**Shih, Tom I-P**; aeronautics and astronautics, from Ames Laboratory, \$100,000, "Computational Analysis of Advanced Cooling Strategies for High-Efficiency and Long-Service Life Turbines, Amendment 26; [Grant 104396]."

**Slabaugh, Carson D and Anderson, William E**; aeronautics and astronautics, from Siemens Energy and Automation Inc., \$100,000, "Siemens Premixed Combustion Instability, Phase 4."

**Stahelin, Robert V**; medicinal chemistry and molecular pharmacology, from National Institutes of Health, \$78,169, "Investigation of Vp40 Mutations Found in Previous Outbreaks on the Assembly and Budding of Filoviruses."

**Stahelin, Robert V**; medicinal chemistry and molecular pharmacology, from National Institutes of Health, \$313,525, "Lipid-Protein Interactions in Viral Assembly and Virus Like Particle Formation."

**Stewart, Kara R**; animal sciences, from DSM Nutritional Products, Inc., \$14,000, "Swine Research."

**Tay, Sien Chieh**; psychological science, from University of Pennsylvania, \$125,088, "Performance Task Measures of Self-Control and Grit; Amendment 4; Grant 209126."

**Tormoehlen, Roger L and Field, William E**; agricultural and biological engineering, from National Institute of Food and Agriculture, \$100,000, "YFSEC Instructor Training Project."

**Tran, Dan N and Pastakia, Sonak D**; pharmacy practice, from Vanderbilt University, \$89,398, "Vanderbilt-Emory-Cornell-Duke Consortium for Global Health Fellows (VECDor)."

**Tu, Manghui and Jiang, Keyuan**; computer information technology and graphics, from National Science Foundation, \$1,200,110, "Cybercorps (R): Scholarship for Service (SFS) Program at Purdue University Northwest."

**Tyner, Wallace E**; agricultural economics, from Farm Foundation, \$123,111, "Soil Health Economics: Measuring and Validating the Economic Benefits and Costs of Soil Health Practices."



## Vacca to Zwier

**Vacca, Andrea;** agricultural and biological engineering, from Sun Hydraulics Corporation, \$192,441, “Electro-Hydraulic Counter-Balance Valve.”

**Varma, Amit H and Seo, Jungil;** civil engineering, from Dankook University Jukieon Campus, \$79,225, “Collaborative Experimental Investigation of Steel-plate Composite (SC) Walls Subjected to Missile Impact.”

**Vyn, Tony J;** agronomy, from Blosser, Russell O. Memorial Fellowship, \$1,500, “Pasley, Heather.”

**Wan, Hong;** industrial engineering, from Shuju Technology, \$5,000, “Shuju Technology Voluntary Support.”

**Wan, Hong;** industrial engineering, from Fulan Technologies, \$5,000, “Fulan Technologies Voluntary Support.”

**Wan, Hong;** industrial engineering, from Collinstar Capital Pty Ltd, \$1,500,000, “Blockchain Pioneer Research with Applications in Internet of Things (IoT), Artificial Intelligence (AI) and Big Data.”

**Wang, Haiyan;** materials engineering, from Office of Naval Research, \$200,000, “Wang – Explore the Fundamentals for Field-Enhanced Mass Transport Phenomena in Ceramics.”

**Weaver, Connie M;** nutrition science, from Dairy Management, Inc. (Dmi), \$22,000, “Guidelines for Enhancing Design and Analysis of Prospective Cohort Studies Related to Bone Health for Use in Nutrition and Health Research.”

**Weaver, Connie M and Story, Jon A;** nutrition science, from Indiana University Purdue University at Indianapolis, \$101,402, “Clinical and Translational Sciences Institute (CTSI) – Training Grant Year 5.” (a Discovery Park award – Bindley Bioscience Center)

**Weiner, Andrew M;** electrical and computer engineering, from Oak Ridge National Laboratory, \$2,998, “A Quantum Interconnect for Matter Qubits Based on Frequency Encoded Photonic Qubits.”

**Wells, Ellen M;** health sciences, from PHS-CDC National Institute of Occupational Safety and Health, \$14,385, “Occupational Safety and Health Training Grant – Revision for Grant #109271.”

**West, Terry R;** earth, atmospheric, and planetary science, from AEG Chicago Chapter, \$100, “AEG Travel.”

**Woodcox, Stephanie G;** health and human sciences, from Health Care Education-Training Inc, \$61,000, “Strong Teens Acting Responsibly (STAR).”

**Wu, Wenzhuo;** industrial engineering, from Battelle Energy Alliance LLC, \$56,000, “Hybrid Nanomanufacturing of Hierarchical Electrochemical Systems for High-Efficiency Electrocatalysis.”

**Xu, Dongyan;** computer science, from The Boeing Company, \$50,000, “Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support (8000083896).”

**Xu, Dongyan;** computer science, from Raytheon, \$75,000, “Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support.” (a Discovery Park award – Center for Education and Research in Information Assurance and Security [CERIAS])

**Xu, Jiaming;** management, from National Science Foundation, \$174,351, “CRII: CIF: Learning Hidden Structures in Networks: Fundamental Limits and Efficient Algorithms.”

**Xu, Jin-Rong;** botany and plant pathology, from Agricultural Research Service, \$50,162, “Distinct Regulatory Functions of the TRI6 and TRI10 Genes in Deoxynivalenol (DON) Biosynthesis..”

**Yaninek, John S;** entomology, from Indiana Department of Natural Resources, \$26,557, “Indiana Cooperative Agricultural Pest Survey Work Plans and Budgets Federal FY 2017, Remaining Funding. (Grant 209713) (Contract 23151).”

**Ye, Peide;** electrical and computer engineering, from Semiconductor Research Corporation, \$100,000, “High-Mobility Narrow Bandgap 2D Materials for TFET Applications, Amendment 2 [Grant 209020].”

**Young, Bryan G;** botany and plant pathology, from Carnegie-Mellon University, \$20,926, “Development of Agrochemical Formulations Based on Multi-Functional Lignopolymer Dispersants.”

**Yu, Wenbin;** aeronautics and astronautics, from Georgia Technology, \$13,920, “Vabs as a Tool for Real Blade Analysis, Design, and Certification, Amendment 2 Grant 108848.”

**Yu, Wenbin;** aeronautics and astronautics, from The Boeing Company, \$50,000, “CDM HUB (Consortium).”

**Zentner, Michael G;** rcac, from PHS-NIH National Cancer Institute, \$94,649, “Establishing a Prototype Hub for the National Cancer Informatics Program.”

**Zhuang, Qianlai;** department earth, atmospheric, and planetary science, from University of Colorado at Boulder, \$75,268, “Process-Level Investigation of Revised Global Methane Budget Based on in Situ and Remote Sensing of Atmospheric Composition and the Land Surface, Amendment 1; Grant 109310.”

**Zook, Melinda S;** college of liberal arts-administration, from The Teagle Foundation, \$175,000, “Cornerstone Integrated Liberal Arts Program.”

**Zwier, Timothy S;** chemistry, from American Chemical Society, \$134,786, “The Journal of Physical Chemistry.” ■

## Notice Regarding Sponsored Program Awards

The Sponsored Program Awards list is generated by Sponsored Program Administration. Questions concerning the information contained in these pages should be directed to Stephanie Willis at [swillis@purdue.edu](mailto:swillis@purdue.edu). ■