

# DIMENSIONS *of* DISCOVERY

## Sponsored Program Awards

January 2014

**Abbott, Angela R;** foods & nutrition, from Michigan State University, \$23,398, "Technology Committee for Community Assessment and Education to Promote Behavioral Health Planning and Evaluation."

**Abbott, Angela R;** health and human sciences, from Indiana State Department of Health, \$84,533, "Purdue's Pregnancy and Parenting Education for Adolescents through Extension (P2EATE) Program."

**Abu-Omar, Mahdi M;** chemistry, from Trask Trust Fund, \$50,000, "Selective Catalysis for the Production of High Value Flavor and Fragrance Chemicals from Wood Biomass."

**Aguilar, Ruben C;** biological sciences, from The Lowe Syndrome Trust, \$82,215, "Toward a Greater Understanding of the Cellular Biology Underlying Lowe Syndrome through Integration with Cerebro-Renal Diseases."

**Anderson, William E; Heister, Stephen D and Lucht, Robert P;** aeronautical & astronautical engineering, mechanical engineering, from Air Force Office of Scientific Research, \$185,000, "High Fidelity Measurement and Modeling of Interactions Between Acoustics and Heat Release in Highly-Compact, High-Pressure Flames."

**Appenzeller, Joerg;** electrical & computer engineering, from Research Foundation of Suny, \$500,000, "Institute for Nanoelectronics Discovery and Exploration (Index) - Phase II; Subcontract 13-10 Modification 1; 1109538-4-64200: NERC 2013-NE-2399; Amendment 1."

**Applegate, Todd J; Adeola, Olayiwola and Ajuwon, Kolapo;** animal sciences, from Purdue University, \$65,270, "Nitrogen Analyze for Animal Nutrition Laboratory."

**Applegate, Todd J;** animal sciences, from Biomin America Inc, \$39,000, "Mycotoxin Research."

**Bayley, William G;** chemistry, from Dow Chemical Company, the, \$4,000, "DOW — Explores Soils."

**Bayley, William G;** chemistry, from West Central School Corp, \$300, "Instrumentation Van Project."

**Beaulieu, Lionel J;** Office of Engagement, from University of Alaska, \$9,600, "Multi-Sponsored Account (Purdue Center for Regional Development [PCRD])."

**Bermel, Peter A;** electrical & computer engineering, from Purdue University, \$17,608, "1314 Purdue Research Foundation (PRF), Multiphysics Design & Optimization of Earth-Abundant Solar Cells Made from Copper, Zinc, Tin, Sulfide (CZTS)."

**Bermel, Peter A; Alam, Muhammad A; Gray, Jeffery L and Lundstrom, Mark S;** electrical & computer engineering, from Stanford University, \$150,000, "Exploratory Photovoltaic Modeling and Simulation: an End-to-End Technology-Agnostic Approach; Amendment 2, Grant 106448." (a Discovery Park award — Network for Computational Nanotechnology)

**Bertino, Elisa;** computer science, from Northrop Grumman Space Technology, \$259,312, "Monitoring DBMS Activity for Detecting Data Exfiltration by Insiders."

**Bigelow, Cale A;** agronomy, from Brookside Agra, \$2,500, "Putting Greens Research."

**Bobet, Antonio and Santagata, Maria Caterina;** civil engineering, from Indiana Department of Transportation, \$124,509, "Verification of the Enhanced Integrated Climatic Module Soil Subgrade Input Parameters in the MEPDG."

**Bowman, Mark D;** civil engineering, from Indiana Department of Transportation, \$231,053, "Bridge Load Rating."

**Bowman, Mark D and Labi, Samuel;** civil engineering, from Indiana Department of Transportation, \$152,555, "Cost Benefit Analysis and Implementation of NDT Testing of Indiana Department of Transportation (INDOT) Bridge Decks."

**Breur, Gert J;** veterinary clinical science, from MED Institute, Inc., \$32,360, "Button-hole Cannulation."

**Buczkowski, Grzegorz A;** entomology, from Syngenta Crop Protection Inc., \$1,500, "Multi-Sponsored."

**Caffee, Marc W;** physics, from Rutgers State University, \$23,920, "Studies of AR-39/AR-40 Dating and Cosmogenic Nuclides in Extraterrestrial Materials."

**Campbell, Noll L;** pharmacy practice, from Indiana University, \$23,427, "Dissemination of the Aging Brain Care Program."

**Campbell, Wayne W;** foods & nutrition, from Ingredion Inc, \$246,865, "Effects of Resistant Starch on Post-Prandial Glycemic and Insulinemic Responses."

**Campbell, Wayne W; Kim, Jung E and Rosen, Arthur D;** foods & nutrition, biological sciences, from Dairy Management, Inc. (DMI), \$90,000, "Effects of Dietary Protein Patterning on Weight Loss and Resistance Training-Induced Changes in Body Composition, Skeletal Muscle, and Indices of Metabolic Syndrome."

**Campbell, Wayne W; Kim, Jung E and Rosen, Arthur D;** foods & nutrition, biological sciences, from American Egg Board, \$90,000, "Effects of Dietary Protein Patterning on Weight Loss and Resistance Training-Induced Changes in Body Composition, Skeletal Muscle, and Indices of Metabolic Syndrome."

**Cannon, Jason R and Rochet, Jean-Christophe;** health sciences, medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute of Environment Health Science, \$77,000, "PhIP-Induced Neurodegeneration: Mechanisms and Relevance to Parkinsons Disease."

**Cannon, Jason R;** health sciences, from PHS-NIH National Institute of Environment Health Science, \$249,000, "New Approaches to Gene-Environment Interaction Modeling in Parkinsons Disease."

**Casteel, Shaun N**; agronomy, from BASF Corporation, \$10,000, "Soybean Extension Research."

**Christian, John A**; comparative pathobiology, from Western University of Health Sciences, \$1,885, "Cytology Resource Center."

**Christmon, Kenneth C**; diversity and multicultural affairs — Fort Wayne campus, from Indiana Department of Workforce Development, \$194,364, "Career and Technical Education Student Services 2013/2014; Amendment 1 to EDS C1-4-PPS-3-59."

**Connor, Robert J**; civil engineering, from Indiana Department of Transportation, \$400,000, "Steel Bridge Research, Inspection, Training and Education Engineering Center – S-BRITE."

**Constable, Peter D**; veterinary clinical science, from VCA Antech Inc, \$39,230, "Radiology Residency Support."

**Cox, Monica F**; engineering education, from Norfolk State University, \$56,616, "Integrative Graduate Education and Research Traineeships Program in Magnetic and Nanostructured Materials; Amendment 3, Grant 105106."

**Craig, Bruce A**; statistics, from Eli Lilly and Company, \$14,400, "Weighted Agreement Statistics for Sum-to-One Multivariate Observations."

**Cramer, William A**; biological sciences, from PHS-NIH National Institute of General Medical Science, \$343,615, "Trans-Membrane Signaling in the Cytochrome b6f Lipoprotein Complex."

**Crist, Scott A**; comparative pathobiology, from Purdue University, \$10,000, "A New Way to Control Cholesterol Accumulation in Prostate Cancer." (a Discovery Park award—Bindley Bioscience Center)

**Davisson, Vincent J**; medicinal chemistry & molecular pharmacology, from Asedasciences GmbH, \$3,348, "Method Implementation for Intracellular Cell Markers."

**De Hoop, Maarten V**; mathematics, from Total S. A., \$170,000, "Study Agreement Collaboration DS XXXX."

**Drake, Brent M; Deemer, Eric D; Samuel, Douglas B and Tay, Sien Chieh**; Office of Institutional Research, educational studies, psychological science, from Lumina Foundation, \$2,000,000, "The Gallup-Purdue Index."

**Ebert, David S**; electrical & computer engineering, from Central Intelligence Agency, \$566,858, "Predictive Analytics Visual Analytics User Experience."

**Elliott, Stephen J and O'Connor, Kevin J**; technology — administration, industrial technology, from American National Standards Institute, \$9,000, "ISO IEC Directives."

**Endsley, Brandon M**; financial aid, from National Endowment for Financial Education, \$1,000, "Cashcourse Reimbursement Program Spring 2014."

**Fekete, Donna M**; biological sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$30,349, "Gene Transfer Tools for Delivery and Investigation of Inner Ear Micrnas."

**Fisher, Timothy**; mechanical engineering, from British Council, \$26,266, "UKIERI Trilateral Partnership." (a Discovery Park award — Birck Nanotechnology Center)

**Francisco, Joseph S**; chemistry, from William E Moore, \$1,000, "Dr. Francisco Graduate Student Expenses."

**Freeman, Lynetta and Arighi, Mimi**; veterinary clinical science, veterinary medicine — administration, from Merial Limited, \$10,000, "Purdue Mobile Surgery Unit."

**Freeman, Lynetta and Arighi, Mimi**; veterinary clinical science, veterinary medicine — administration, from PetSmart Inc, \$417,240, "Purdue Mobile Surgery Unit."

**French, Richard M and Huston, Davin H**; mechanical engineering technology, from Innovation and Commercialization Center — Information Technology Division, \$6,400, "Wisper - Hearing Assistance Over Wi-Fi."

**Garimella, Suresh V**; mechanical engineering, from Lg Electronics Co., \$30,000, "Cooling Technologies Research Center (CTRC) 2012-2013 Membership - Memo Match for 106029"

**Garimella, Suresh V**; mechanical engineering, from Lilly Endowment Inc., \$5,000,000, "Transforming Indiana into a Magnet for High-Technology Jobs: Proposal for the Initiative to Promote Opportunities through Educational Collaborations Round III."

**Garrison, James L**; aeronautical & astronautical engineering, from Goddard Space Flight Center, \$25,000, "Remote Sensing of Biomass and Root Zone Soil Moisture (RZSM) Using UHF/VHF Signals of Opportunity (SoOps)."

**Gentry, Marcia L**; educational studies, from Jack Kent Cooke Foundation, \$250,000, "Grant Agreement with Jack Kent Cooke Foundation, Year 3 Funding."

**Gletsu-Miller, Nana A**; foods & nutrition, from International Cooper Research Association, \$50,000, "Copper."

**Groll, Eckhard A**; mechanical engineering, from Whirlpool Corp, \$9,500, "Thermal Integration of Household Appliances and Solar Hot Water."

**Hammac, Gena K and Guptill-Yoran, Carolyn F**; comparative pathobiology, veterinary clinical science, from Zoetis, \$41,637, "Isolation of Serovars Causing Canine Leptospirosis."

**Han, Qingyou**; mechanical engineering technology, from Zibo Hongtai Anti Corrosion Co, \$50,000, "Center for Materials Processing Research (CMPR)."

**Han, Qingyou and Johnson, David R**; mechanical engineering technology, materials engineering, from Chrysler Corporation, \$100,000, "Shot Tooling."

**Han, Qingyou and Dunlap, Duane D**; mechanical engineering technology, electrical & computer engineering technology, from Chrysler Corporation, \$250,000, "Non-Destructive Testing (Welds) and Crack Detection."

**Han, Qingyou and Johnson, David R**; mechanical engineering technology, materials engineering, from Chrysler Corporation, \$200,000, "Increased Die Life."

**Handa, Avtar K**; horticulture & landscape architecture, from India, \$159,943, "National Overseas Scholarship to Scheduled Caste Etc. Candidates - Shri Yogesh Kumar Ahlawat."

**Heeg, Marlene O**; pharmacy — administration, from Sunovion Pharmaceuticals Inc, \$325,000, "PeerView Live, Major Depressive Episodes Associated with Bipolar Disorder: How Can Diagnosis and Management Be Improved in the Primary Care Setting? (150202363)."

**Henderson, Jason R**; agriculture — administration, from Indiana Cooperative Development Center, \$130,993, "ICDC 2014 Support."

**Hertel, Thomas W**; agricultural economics, from University of Chicago, \$142,833, "Center for Robust Decision-Making Tools for Climate and Energy Policy Project; Amendment 3, Grant 104913."

**Hertel, Thomas W**; agricultural economics, from World Trade Organization, the, \$19,650, "Global Trade Analysis Project (GTAP) Consortium."

**Hill, Catherine A;** entomology, from Showalter Trust, \$5,000, "Discovery and Development of Next Gen Insecticides."

**Hill, Catherine A; Watts, Val J and Mesecar, Andrew D;** entomology, medicinal chemistry & molecular pharmacology, biological sciences, from Army Natick Research & Development Laboratories Research & Development Laboratories, \$27,654, "Novel Vector Control Solutions for Protecting Health of US Military; Modification 6 for Grant 105922."

**Hirsch, Andrew S;** physics, from Winifred B. Bilsland Endowment, \$9,593, "An, Ran."

**Hoelscher, Laura A;** agricultural communication, from Board of Director of Extension Journal, Inc., \$113,009, "Journal of Extension."

**Hooser, Stephen B;** animal disease diagnostic laboratory, from Indiana Department of Natural Resources, \$1,500, "Indiana Department of Natural Resources/Wildlife Disease Diagnostic."

**Howell, Kathleen;** aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$35,000, "Continuation of the Development of a Cis-Lunar / Earth-Moon Multi-Body Orbit Catalog and Reference."

**Irazoqui, Pedro;** biomedical engineering, from Showalter Trust, \$5,000, "Showalter Faculty Scholar."

**Ivantysynova, Monika; Lumkes, John H and Vacca, Andrea;** agricultural & biological engineering, from University of Minnesota, \$639,600, "NSF Engineering Research Center (ERC) for Compact, Clean and Efficient Fluid Power Systems." (a Discovery Park award — Energy Center)

**Jiang, Yi;** building construction & management technology, from Indiana Department of Transportation, \$95,000, "Friction Surface Treatment Selection."

**Jiang, Yi;** building construction & management technology, from Indiana Department of Transportation, \$125,000, "Site Selection for New Lighting Technologies."

**Johnson, Carla J;** curriculum & instruction, from Kokomo-Center Township Cons School Corp, \$8,000, "Science, Technology, Engineering & Mathematics (STEM) Strategic Planning Support."

**Johnson, Mark C;** electrical & computer engineering, from Cornell University, \$1,500, "Embedded Systems Education."

**Johnson, William G;** botany & plant pathology, from Valent U.S.A. Corporation, \$1,500, "Weed Research."

**Johnson, William G;** botany & plant pathology, from Fmc Technologies, \$5,000, "Weed Research."

**Johnson, William G;** botany & plant pathology, from Winfield Solutions LLC, \$7,500, "Weed Research."

**Johnson, William G;** botany & plant pathology, from Monsanto Company, \$5,000, "Weed Research."

**Johnson, William G;** botany & plant pathology, from United Phosphorus Inc, \$3,000, "Weed Research."

**Johnson, William G;** botany & plant pathology, from Basf Corporation, \$25,800, "Weed Research."

**Johnson, William G;** botany & plant pathology, from Bayer Cropscience LP (Environmental Science), \$1,500, "Weed Research."

**Johnson, William G;** botany & plant pathology, from Bayer Cropscience LP (Environmental Science), \$10,000, "Bayer FG72 Beans."

**Johnson, William G;** botany & plant pathology, from FMC Corporation, \$8,000, "Weed Research."

**Jordan, Mark A;** biology — Fort Wayne campus, from Fort Wayne Childrens Zoo, \$1,700, "Conservation Genetics of the Blandings Turtle, *Emys Blandingii*, Using Whole-Genome Analyses."

**Kaganovich, Natalya B and Leonard, Laurence B;** psychological science, speech, language and hearing sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$133,135, "Audiovisual Processing in Specific Language Impairment."

**Kasinski, Andrea L;** biological sciences, from PHS-NIH National Cancer Institute, \$224,099, "Identification and Therapeutic Application of Mirna-Drivers in Lung Cancer."

**Kingsbury, Bruce A;** biology — Fort Wayne campus, from Fort Wayne Childrens Zoo, \$1,700, "Amphibian Occupancy in a System of Restored Wetlands."

**Kingsbury, Bruce A;** biology — Fort Wayne campus, from Fort Wayne Childrens Zoo, \$1,700, "Life in the City: Urban River Ecology of the Common Snapping Turtle in Fort Wayne, Indiana."

**Kingsbury, Bruce A;** biology — Fort Wayne campus, from Fort Wayne Childrens Zoo, \$1,700, "Response of Eastern Massasauga to Habitat Alterations by Fire and Forest Management at Camp Grayling, Michigan."

**Knipp, Gregory T;** industrial & physical pharmacy, from Boehringer Ingelheim Pharmaceutical Inc, \$9,995, "Boehringer Ingelheim Voluntary Support."

**Krane, Matthew J and Trumble, Kevin P;** materials engineering, from Chrysler Corporation, \$120,000, "High Pressure Die Cast Process Optimization."

**Laird, Carl D;** chemical engineering, from National Science Foundation, \$113,536, "Faculty Early Career Development (CAREER): Parallel Nonlinear Programming Techniques for Optimization in Rapid Therapeutics Manufacturing."

**Laird, Carl D;** chemical engineering, from Sandia National Laboratories, \$65,000, "Numerical Solution of Large-Scale Network Problems."

**Latin, Richard X;** botany & plant pathology, from Control Solutions Inc., \$3,500, "Turfgrass Disease Research."

**Latin, Richard X;** botany & plant pathology, from Makhteshim-Agan of North America, Inc., \$6,000, "Turfgrass Disease Research."

**Latin, Richard X;** botany & plant pathology, from Syngenta Crop Protection Inc., \$4,800, "Turfgrass Disease Research."

**Lechtenberg, Victor L;** president, from Woodrow Wilson National Fellowship Foundation, \$16,000, "Indiana Teaching Fellowship Program."

**Li, Kai Ming; Krousgrill, Charles M and Zhang, Haiyan H;** mechanical engineering, mechanical engineering technology, from Chrysler Corporation, \$250,000, "Elimination of NVH Sources."

**Liceaga, Andrea M;** food science, from Pasco Onions Ltd, \$8,000, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from Bay Valley Foods LLC, \$1,000, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from Pierre, \$2,000, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from John Schumm, \$2,000, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from Fieldbrook Foods Corp, \$1,000, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from John Schumm, \$3,000, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from Heartland Food Products Group, \$600, "Multi-Sponsored Gift — Sensory."

**Liceaga, Andrea M;** food science, from Sloneker, Mark a, \$1,000, "Multi-Sponsored Gift — Sensory."

**Lindsay, Ian C**; anthropology, from Purdue University, \$8,778, "Using Purdues MSE Electron Microscopy Facility to Study Pottery Technology and Social Organization Among Bronze Age Fortress Settlements in Armenia."

**Linett, Maren T**; English, from Purdue University, \$30,848, "Modernism and Disability."

**Lopez, Roberto G**; horticulture & landscape archITECTure, from Kmb Technologies LLC, \$6,000, "Multi-Sponsored Gift Account."

**Lopp, Denver W and Stanley, David L**; aviation technology, from Aero Engine Controls, \$25,000, "AirTIES."

**Love, David J**; electrical & computer engineering, from Nokia Siemens Networks, \$20,000, "Nokia Siemens Gift."

**Lowenberg-Deboer, James M and Baributsa, Dieudonne**; entomology, from Michigan State University, \$58,854, "USAID Initiative for Long-Term Training and Capacity Building Academic Year 2013-14."

**Lucht, Robert P**; mechanical engineering, from Siemens Corporate Research Inc., \$245,468, "Distributed Combustion Studies in the Purdue High-Pressure Gas Turbine Combustion Test Rig."

**Lukasik, Christopher J**; English, from Purdue University, \$35,467, "The Image in the Text."

**Lynam, Donald R**; psychological science, from University of Kentucky Research Foundation, \$47,118, "CDART- Center for Drug Abuse Research Translation."

**Lynam, Donald R**; psychological science, from University of Kentucky Research Foundation, \$20,810, "CDART- Center for Drug Abuse Research Translation."

**MacDermid Wadsworth, Shelley; Broniarczyk, Kathy M and Topp, Dave**; child development & family studies, from Goldbelt Glacier Health Services, \$439,660, "Star Behavioral Health Providers Program."

**Maeda, Yukiko**; educational studies, from Kinley Trust, \$1,505, "2013 Office of the Vice President for Research (OVPR) Non-Laboratory Equipment Program."

**Magana Deleon, Alejandra J; Bryan, Lynn A and Garcia, R Edwin**; computer & information technology, physics, materials engineering, from Purdue University, \$432,331, "Collaborative Proposal Category I: Learning Quantum Mechanics through Modeling-Based Instruction: Advancing Science, Technology, Engineering & Mathematics (STEM) Education Across Scale and Disciplines."

**Mansfield, Charles W**; agronomy, from Rubisco Seeds LLC, \$1,750, "Corn Research."

**Marais, Karen; Hwang, Inseok and Marshall, Brandeis H**; aeronautical & astronautical engineering, computer & information technology, from Federal Aviation Administration, \$86,111, "Project No. 2: Rotorcraft ASIAs."

**Martinez, Carlos J**; materials engineering, from PPG Industries, \$5,000, "MSE High Speed Camera."

**Matei, Sorin A; Bertino, Elisa and Klimeck, Gerhard**; communication, computer science, electrical & computer engineering, from Purdue University, \$22,190, "Measuring the Impact of Social Roles in NanoHUB." (a Discovery Park award — Network for Computational Nanotechnology)

**McNally, Helen A**; electrical & computer engineering technology, from University of South Florida, \$61,580, "Efficacy and Anticonvulsant Mechanism of Ketogenesis in CNS Oxygen Toxicity." (a Discovery Park award — Birk Nanotechnology Center)

**McNamara, Kevin T; Baributsa, Dieudonne and Foster, Ricky E**; agricultural economics, entomology, from University of California - Davis, \$874,838, "Building a New Partnership: Mail Extension Services Engage the Afghan Farmer."

**Melosh, Henry J and Richardson, James E**; physics, earth & atmospheric sciences, from Massachusetts Institute of Technology, \$400,000, "GRAIL-Gravity Recovery and Interior Lab-Extended Mission."

**Meyer, Scott E and Anderson, William E**; mechanical engineering, aeronautical & astronautical engineering, from Space Exploration Technologies Corp, \$79,993, "Single Element Testing for SpaceX."

**Mickelbart, Michael V**; horticulture & landscape architecture, from Nutwadee Chintakovid, \$500, "Chintakovid Bench Fees."

**Moore, Cecil W**; field extension educators, from Ivy Technology State College, \$19,910, "Coordination of Workforce and Economic Development Partnership with Ivy Technology Year 2014."

**Morgan, Susan E**; communication, from Purdue University, \$24,438, "Improving Rates of Patient Accrual to Clinical Trials."

**Mott, John H**; aviation technology, from Delta Air Lines Inc, \$30,000, "A3IR-CORE."

**Nie, Huiling**; health sciences, from Purdue Doctoral Program, \$17,556, "Specht, Aaron J."

**Olek, Jan and Weiss, William J**; civil engineering, from Indiana Department of Transportation, \$80,000, "Synthesis: Accelerating the Implementation of Research Findings to Reduce the Potential for Concrete Pavement Joint Deterioration."

**Olszewski, Lynn T**; nursing — Calumet campus, from Indiana University, \$81,600, "Northwest Indiana Area Health Center (Federal Funds 2013-2014)."

**Ouyang, Zheng; Cooks, Robert G and Chappell, William J**; biomedical engineering, chemistry, electrical & computer engineering, from National Aeronautics and Space Administration, \$249,849, "Miniature Mass Spectrometer Capable of In-Situ Detection of Organic Compounds on Mars; Supplement 2 for Grant 105742." (a Discovery Park award — Bindley Bioscience Center)

**Overholser, Brian R**; pharmacy practice, from PHS-NIH National Heart, Lung & Blood Institute, \$138,217, "Probing the Atrial Arrhythmogenic Substrate with Sustained Adrenergic Stimulation."

**Overholser, Brian R; Liu, Wanqing and Tisdale, James E**; pharmacy practice, medicinal chemistry & molecular pharmacology, from American College of Clinical Pharmacy, \$5,000, "MicroRNA 362-3p Expression During Heart Failure: a Novel Biomarker to Predict QT Interval Prolongation Sensitivity."

**Pai, Vijay S**; electrical & computer engineering, from Sandia National Laboratories, \$50,000, "Data Movement Dominates: Advanced Memory Technology to Address the Real Exascale Power Problem."

**Park, Kinam**; biomedical engineering, from PHS-NIH National Institute of General Medical Science, \$260,881, "Hydrogel Template Method for Protein Microencapsulation."

**Park, Min K**; visual & performing arts, from Purdue University, \$26,985, "Post Modern Documentary Photography."

**Patton, Aaron J**; agronomy, from BASF Corporation, \$6,500, "Multi-Sponsored."

**Patton, Aaron J**; agronomy, from Midwest Regional Turf Foundation, \$13,000, "Turf-grass Research."

**Patton, Aaron J**; agronomy, from FMCTechnologies, \$11,200, "Multi-Sponsored."

**Pelaez, Nancy; Anderson, Trevor R and Gardner, Stephanie M**; biological sciences, chemistry, from National Science Foundation, \$500,000, "Assessment of Competence in Experimental Design (ACED-Bio)."

**Peroulis, Dimitrios**; electrical & computer engineering, from National Instruments Corporation, \$50,000, "Radio Frequency (RF) Microelectromechanical System (MEMS) Tunable Filters for Instrumentation Applications." (a Discovery Park award — Birck Nanotechnology Center)

**Peroulis, Dimitrios**; electrical & computer engineering, from Memtronics Corporation, \$137,000, "Helical Tunable Filters and Advanced Filtering for UHF Communications." (a Discovery Park award — Birck Nanotechnology Center)

**Peroulis, Dimitrios**; electrical & computer engineering, from IMA Life, \$8,300, "IMA LIFE." (a Discovery Park award — Birck Nanotechnology Center)

**Pinal, Rodolfo and Otte, Andrew D**; industrial & physical pharmacy, from National Science Foundation, \$50,000, "From Compacts to Integrated Systems: a New Paradigm for the Design and Manufacture of Pharmaceuticals."

**Richmond, Douglas S**; entomology, from Control Solutions Inc., \$3,250, "Turfgrass Entomology Research."

**Rossmann, Michael G**; biological sciences, from PHS-NIH National Institute of Allergy and Infectious Diseases, \$52,190, "Structural Investigations of the Alphaviral Lifecycle."

**Rossmann, Michael G**; biological sciences, from PHS-NIH National Institute of Allergy and Infectious Diseases, \$578,075, "Structural Studies of Togaviruses."

**Sands, Laura P**; nursing, from University of California, \$44,506, "Pathophysiology of Postoperative Delirium in Older Patients; Amendment 4, Grant 104574."

**Savage, Michael L**; WBAA, from Corporation for Public Broadcasting, \$143,104, "CPB 2014 CSG."

**Savran, Cagri A**; mechanical engineering, from Trask Trust Fund, \$50,000, "High-Throughput Cell Detection for Cancer Diagnostics." (a Discovery Park award — Birck Nanotechnology Center)

**Scharf, Michael E**; entomology, from Robert or Karen Tarver, \$2,500, "Multi-Sponsor."

**Schoenlein, William E and Van Alstine, William G**; biomedical engineering, comparative pathobiology, from MED Institute, Inc., \$107,063, "Intravascular Testing Agreement Study: CI-PLBK Grant #203133."

**Scott, David E**; Indiana State Chemist, from Environmental Protection Agency, \$91,500, "FY 2014 EPA Pesticide Cooperative Agreement; Amendment 1."

**Sepulveda, Maria S**; forestry & natural resources, from University of Connecticut, \$108,292, "The Combined Effects of Environmental and Anthropogenic Stressors on Fish Health; Release of Funds."

**Shalae, Vladimir M; Boltasseva, Alexandra and Kildishev, Alexander V**; electrical & computer engineering, from Department of the Army, \$200,000, "Flat Photonics with Metasurfaces; Modification 1, Grant 106619." (a Discovery Park award — Birck Nanotechnology Center)

**Shalae, Vladimir M; Boltasseva, Alexandra; Narimanov, Evgueni E and Cox, Monica F**; electrical & computer engineering, engineering education, from Norfolk State University, \$67,021, "Partnership for Research and Education in Materials: Partnership for Advanced Functional Metamaterials (Meta-PREM); Amendment 1, Grant 106224." (a Discovery Park award — Birck Nanotechnology Center)

**Shi, Riye and Smith, Daniel T**; basic medical science, industrial & physical pharmacy, from PHS-NIH National Institute Neurological Disorders and Stroke, \$303,189, "Role of Acrolein in Spinal Cord Injury."

**Shin, Yung C**; mechanical engineering, from Chrysler Corporation, \$100,000, "Laser Cladding and Surface Treatment for Increased Die Life."

**Shipsey, Ian P**; physics, from Ann R Eberle, \$500, "High Energy Physics Project."

**Shively, Gerald E**; agricultural economics, from Tufts University, \$79,584, "Nutrition Collaborative Research Support Programs (CRSP), Focus on Asia."

**Shively, Gerald E**; agricultural economics, from Kinley Trust, \$2,916, "Non-Laboratory Research Infrastructure and Equipment Program — Tier 1, 2013."

**Singh, Manpreet**; food science, from Nestle, \$12,000, "Multi-Sponsored Gift."

**Singh, Manpreet**; food science, from Future Technology Home Inc, \$50, "Multi Sponsored Gift."

**Sloan, Mary Anne**; technical assistance program, from Elite Internal Medicine, \$1,520, "Multi-Sponsor Account I-HITEC."

**Sloan, Mary Anne**; technical assistance program, from Gibson General Hospital, \$1,520, "Multi-Sponsor Account I-HITEC."

**Sloan, Mary Anne**; statistics, from Stemm Family Dentistry, \$1,520, "Multi-Sponsor Account I-HITEC."

**Sloan, Mary Anne**; technical assistance program, from Shifa Clinic Pc, \$1,520, "Multi-Sponsor Account I-HITEC."

**Sloan, Mary Anne**; technical assistance program, from Community Westview Hospital, \$1,520, "Multi-Sponsor Account I-HITEC."

**Sloan, Mary Anne**; statistics, from Oaklawn Psychiatric Center, \$1,520, "Multi-Sponsor Account I-HITEC."

**Smith, Mjt**; graduate school administration, from National Science Foundation, \$1,315,822, "2013-14 NSF Graduate Research Fellowship Program (GRFP); Amendment 2 for Grant 106469."

**Smith, Mjt**; graduate school administration, from Purdue University Special Initiative Program, \$11,373, "Soto, Cristina M."

**Smith, Richard S**; food science, from Rose Acre Farms, \$1,500, "Food Science Research."

**Spafford, Eugene H**; computer science, from EMC Corporation, \$60,000, "Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support."

**Strachan, Alejandro H**; materials engineering, from University of Illinois, \$185,037, "Shock Wave Energy Dissipation (SWED) by Mechanochemically-Active Nanoporous Materials; Amendment 4, Grant 106049." (a Discovery Park award — Birck Nanotechnology Center)

**Straw, Mark L**; animal sciences, from Agricultural Marketing Service, \$23,895, "State Surveillance."

**Sudhoff, Scott D and Pekarek, Steven D**; electrical & computer engineering, from Office of Naval Research, \$350,000, "ESRDC — Designing and Powering the Future Fleet."

**Swihart, Robert K and Smyser, Timothy J**; forestry & natural resources, from Indiana University of Pennsylvania, \$36,785, "Developing a Genetic Catalog for Allegheny Woodrat Metapopulations in Pennsylvania."

**Szymanski, Daniel B**; agronomy, from Purdue University, \$99,998, "The Yokagowa CSU-X1 Spinning Disk Head: Necessary Technology for Live Cell Imaging in Plants."

**Tao, Weiguo A**; biochemistry, from Purdue University, \$72,060, "Acquisition of a Ultra-high Performance Liquid Chromatography (UPLC) to Couple with High Resolution Mass Spectrometer."

**Tarko, Andrew P** and **Thomaz, Jose E**; civil engineering, from Indiana Criminal Justice Institute, \$115,000, "Proposal to Assist Indiana Criminal Justice Institute in the Identification of Indianas Traffic Safety Problems-Safety Belt Survey/Indiana Codes FY 2013-14."

**Thom, James M** and **Stanley, David L**; aviation technology, from Coordinating Research Council, Inc, \$134,415, "Carburetor Ice Test Methodology Evaluation."

**Tomar, Vikas** and **El-Atwani, Osman J**; aeronautical & astronautical engineering, nuclear engineering, from U.S. Department of Energy, \$800,000, "Correlating Thermal and Mechanical Coupling Based Multiphysics Behavior of Nuclear Materials through In-Situ Measurement."

**Tsoukalas, Lefteri** and **Choi, Chan K**; nuclear engineering, from U.S. Department of Energy, \$440,000, "Creation of a Geant4 Muon Tomography Package for Imaging of Nuclear Fuel in Dry Cask Storage."

**Tuinstra, Mitchell R** and **Johal, Gurmukh S**; agronomy, botany & plant pathology, from CIMMYT, Int., \$1,009,532, "Heat Stress Resilient Maize for South Asia through a Public Private Partnership."

**Wasserman, Adam**; chemistry, from National Science Foundation, \$318,052, "Faculty Early Career Development (CAREER): Extending the Range of Applicability of Density-Functional Methods; Amendment 2 for Grant 105793."

**Weatherman, Kara D**; pharmacy practice, from Cardinal Health, \$10,000, "Cardinal Health Fellowship in Clinical Nuclear Pharmacy and Radiopharmaceutical Safety."

**Weaver, Connie M**; foods & nutrition, from American Yeast Sales Corp, \$1,667, "Lallemand/American Yeast Gift."

**Webb, Kevin J**; electrical & computer engineering, from Army Research Office, \$30,000, "Optical Magnetism; Modification 1 for Grant 106779."

**Weil, Ann B**; **Adams, Stephen B**; **Ko, Jeff C** and **Lescun, Timothy B**; veterinary clinical science, from CLaser Inc., \$10,000, "Pilot Testing of Low Intensity Laser Ablation (LILA) in Horses with Chronic Pain."

**Weiner, Andrew M** and **Qi, Minghao**; electrical & computer engineering, from Defense Advanced Research Projects Agency, \$1,254,275, "Integrated Coherent Comb and Line-by-Line Pulse Shaper for Radio Frequency (RF) Photonic Filtering; Amendment 2, Grant 106582."

**Whitford, Fred**; botany & plant pathology, from Indiana State Poultry Association, Inc., \$325, "Purdue Pesticide Programs."

**Whitford, Fred**; botany & plant pathology, from Texas Vegetation Management Association, \$1,200, "Purdue Pesticide Programs."

**Whitford, Fred**; botany & plant pathology, from Mississippi Vegetation Management Association, \$650, "Purdue Pesticide Programs."

**Wise, Kiersten A**; botany & plant pathology, from Makhteshim-Agan of North America, Inc., \$21,200, "Voluntary Support Account."

**Wise, Kiersten A**; botany & plant pathology, from Cheminova, Inc., \$22,000, "Voluntary Support Account."

**Wise, Kiersten A**; botany & plant pathology, from Basf Corporation, \$18,900, "Voluntary Support Account."

**Witkoske, Teresa J**; field extension educators, from Wabash County United Fund, \$1,500, "Strengthening Early Literacy in Wabash County."

**Woloshuk, Charles P**; botany & plant pathology, from JBS United Inc, \$4,950, "Mycotoxin Research."

**Won, You-Yeon**; chemical engineering, from SK Innovation, \$15,500, "Won-SK Innovation."

**Xie, Jun**; statistics, from PHS-NIH National Institute of General Medical Science, \$186,717, "Nonparametric Methods for Clinical Predictive Model in Pharmacogenomics Research."

**Yadav, Aman**; **Hambrusch, Susanne E**; **Korb, John T** and **Lehman, James D**; educational studies, computer science, education — administration, from National Science Foundation, \$153,590, "CS 10K: Leading the Way to CS 10K: Assessing a Just-In-Time Professional Development Approach for Teacher Knowledge Growth in Computer Science."

**Youngblood, Jeffrey P**; **Bahr, David F** and **Moon, Robert J**; materials engineering, from Nanoscale Informal Science Education, \$3,000, "Nanocellulose: K-12 Outreach."

**Yu, Wenbin**; aeronautical & astronautical engineering, from Georgia Institute of Technology, \$28,962, "Next-Generation VABS for More Realistic Modeling of Composite Blades."

**Zhang, Haiyan H** and **Shin, Yung C**; mechanical engineering technology, from Chrysler Corporation, \$200,000, "Gear Manufacturing Simulation and Tool Life Optimization." ■

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