

DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

December 2013

Abbott, Angela R and **Eicher-Miller, Heather A**; health and human sciences, foods & nutrition, from Indiana Family & Social Services Administration, \$5,945,575, "Snap Ed/FNP Project."

Abbott, Angela R; health and human sciences, from United Way-Greater Lafayette & Tippecanoe Co Indiana Inc, \$500, "Poverty Simulator Voluntary Support."

Abbott, Philip C; agricultural economics, from Goddard Space Flight Center, \$73,165, "Evaluation of the National Aeronautics and Space Administration (NASA) Carbon Monitoring System - Sup 1 for Grant 106765."

Adeola, Olayiwola; animal sciences, from Evonik Corporation, \$20,000, "Swine & Poultry Research - Evonik."

Agee, Ernest M; earth & atmospheric sciences, from Tan S. or June L. Chen (Individual Donor), \$5,000, "June & Tan Chen Voluntary Support."

Ahmed, Azza H; nursing, from Egyptian Cultural and Educational Bureau, \$8,000, "Support for Visiting Scholar."

Ajuwon, Kolapo; animal sciences, from Nutriad, \$3,600, "Swine Research."

Aliprantis, Dionysios; electrical & computer engineering, from National Science Foundation, \$166,389, "Faculty Early Career Development (CAREER): Sculpting Electric Machines for Unidirectional Motion."

Anderson, Joseph M; agronomy, from Suzanne M Cunningham, \$35, "Indiana Arborists Association, Inc."

Anderson, William E; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$30,000, "Integrated Physics-Based Modeling and Experiments For Improved Prediction of Combustion Dynamics; Supplement 5 for Grant 105385."

Anderson, William E; aeronautical & astronautical engineering, from Analytical Mechanics Association, Inc, \$85,138, "Integrated Combustion Stability Analysis Assessment."

Applegate, Todd J; animal sciences, from JBS United Inc, \$8,000, "Pyhtase in Poultry."

Bae, Euiwon; mechanical engineering, from Samsung Electronics Co., Ltd, \$100,000, "Towards a Non-Invasive Continuous Glucose Monitoring System Using Hybrid Optical Detections."

Baldwin, Michael E; Lasher-Trapp, Sonia G and Trapp, Robert J; earth & atmospheric sciences, from Indiana Department of Transportation, \$175,000, "Development of a Geographic Winter-Weather Severity Index for the Assessment of Maintenance Performance."

Bayley, William G; chemistry, from Multi-Sponsored Industrials, \$900, "Instrumentation Van Project."

Bayley, William G; chemistry, from Multi-Sponsored Industrials, \$300, "Instrumentation Van Project."

Beard, Jane A; field extension educators, from Daviess County, \$33,040, "Kiesel 2014 Daviess County Government Support."

Beaudoin, Stephen P; chemical engineering, from Northeastern University, \$75,000, "Adhesion of Explosives Residues to Swabs and Substrates."

Beaulieu, Lionel J; Office of Engagement, from Multi-Sponsored Industrials, \$500, "Multi-Sponsored Account (Purdue Center for Regional Development [PCRD])."

Beaulieu, Lionel J; Office of Engagement, from Multi-Sponsored Industrials, \$544, "Multi-Sponsored Account (Purdue Center for Regional Development [PCRD])."

Beckerman, Janna L; botany & plant pathology, from Indiana Arborists Association, Inc., \$6,000, "Indiana Arborists Association, Inc."

Bigelow, Cale A; agronomy, from Agrotain International LLC, \$10,500, "Putting Greens Research."

Blatchley, Ernest R; civil engineering, from Pure Health Solutions Inc, \$4,000, "PHSI Voluntary Support."

Bouman, Charles A; electrical & computer engineering, from Innovative Science Solutions, LLC, \$14,999, "Spectroscopic Absorption Sensine of High Velocity Flow Fields."

Bouman, Charles A; electrical & computer engineering, from Northeastern University, \$65,000, "Computed Tomography (CT) Image Reconstruction and Processing for Air Transportation Security."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$35,064, "2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Keith Rennier."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$33,982, "2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Andrew Chen."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$34,631, "2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Qiaoqiao Wan."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$35,064, "2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Max Hammond."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$35,064, "2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Silvia Canelon."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$35,064, “2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Shih Han.”

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$8,132, “2013-14 Joint PhD Program with Indiana University Purdue University at Indianapolis (IUPUI) for Graduate Support — Shaoyu Qiao.”

Bullock, Darcy M; civil engineering, from Edward C Levy Co, \$2,250, “Joint Transportation Research Program (JTRP) Supplementary Research Account.”

Bullock, Darcy M; civil engineering, from Indiana Department of Transportation, \$32,054, “2014 Transportation Research Board (TRB) Annual Meeting Activities.”

Caldwell, Barrett S; industrial engineering, from Multi-Sponsored Industrials, \$1,000, “Indiana Space Grant Consortium (INSGC) Affiliate Dues.”

Caldwell, Barrett S; industrial engineering, from National Aeronautics and Space Administration, \$575,000, “Indiana Space Grant Consortium Five Year Renewal Proposal for Activity Years 20-24 (March 15, 2010-March 14, 2015); Supplement 5 for Grant 104565.”

Caldwell, Barrett S; industrial engineering, from Purdue Doctoral Program, \$19,726, “Heiden, Siobhan M.”

Campanella, Osvaldo H; agricultural & biological engineering, from Blume Distillation, LLC, \$8,309, “Multi-Sponsored Gift Account.”

Campbell, Noll L; pharmacy practice, from Indiana University, \$12,601, “Optimistic.”

Campbell, Wayne W; Kim, Jung E and Rosen, Arthur D; foods & nutrition, biological sciences, from National Cattlemen's Beef Association, \$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 National Pork Board, \$135,700, “Effects of Dietary Protein Patterning on Weight Loss and Resistance Training-Induced Changes in Body Composition, Skeletal Muscle, and Indices of Metabolic Syndrome.”

Carlson, Jacob R; library administration, from Oregon State University, \$5,390, “Analysis of Data Management Plans to Improve Research Data Services in Data Libraries.”

Casteel, Shaun N; agronomy, from Monsanto Company, \$8,400, “Soybean Extension Research.”

Chang, Fen-Lei F; medical education — Fort Wayne campus, from Indiana University School of Medicine, \$54,000, “FY 2013-2014 Indiana University School of Medicine (IUSM) Fort Wayne Expansion Funding — State Support.”

Chen, Jun; Bolton, J S and Wodicka, George R; mechanical engineering, biomedical engineering, from Showalter Trust, \$12,492, “2013 Showalter Awards.”

Chen, Weinong W; aeronautical & astronautical engineering, from Office of Naval Research, \$40,000, “Ballistic Energy Dissipation through the Failure of Dyneema; Modification 4 for Grant 105401.”

Cheng, Ji-Xin; biomedical engineering, from National Collegiate Inventors & Innovators Alliance, \$5,000, “Intravascular Photoacoustic Catheter for Atherosclerosis Diagnosis.”

Connor, Robert J; Sohn, Young Moo and Varma, Amit H; civil engineering, from Hardesty and Hanover, \$62,389, “Analytical Evaluation of the Orthotropic Deck of the Johnson Street Bridge.”

Cooks, Robert G; chemistry, from Merck & Company Inc., \$80,000, “Merck.” (a Discovery Park award — Bindley Bioscience Center)

Coppoc, Gordon L; medical education, from Indiana University School of Medicine, \$4,000, “FY13-14 Indiana University School of Medicine (IUSM) — Lafayette Student and Faculty Recruitment & Retention.”

Coppoc, Gordon L; medical education, from Indiana University Purdue University at Indianapolis, \$2,142,000, “FY13-14 Indiana University School of Medicine (IUSM) — Lafayette General Fund.”

Coppoc, Gordon L; medical education, from Indiana University Purdue University at Indianapolis, \$375,000, “FY 13-14 Indiana University School of Medicine (IUSM)—Lafayette Student Expansion Funds.”

Csonka, Leslie N; biological sciences, from Rutgers State University, \$13,052, “The Function of Small RNA-Based Viral Defense System in E. Coli.”

Culurciello, Eugenio; biomedical engineering, from Office of Naval Research, \$106,299, “A Trillion Operations-Per-Second Vision System for DOD Applications; Modification 3 for Grant 105791.”

Culurciello, Eugenio; biomedical engineering, from Johns Hopkins University, \$27,169, “Figure-Ground Processing, Saliency and Guided Attention for Analysis of Large Natural Scenes.”

Davisson, Vincent J; medicinal chemistry & molecular pharmacology, from Leidos, \$130,480, “Raman Active Dyes.”

Delaurentis, Daniel A; Bagchi, Saurabh and Heister, Stephen D; aeronautical & astronautical engineering, electrical & computer engineering, from Missile Defense Agency, \$100,000, “An Agent-Based Concept for an Enhanced Command and Control, Battle Management, and Communications (C2BMC) Architecture; Modification 21.”

Derusha, Carmen E; field extension educators, from Indiana University Purdue University at Indianapolis, \$10,773, “Coordinator Near-West Washington Merchants Association.”

Donkin, Shawn S; animal sciences, from Zinpro Corporation, \$100,000, “Ruminant Research.”

Egel, Daniel S; botany & plant pathology, from DuPont, E.I. Denemours and Company, \$6,000, “Potassium Management.”

Engel, Bernard A and Stwalley, Robert M; agricultural & biological engineering, from Michigan State University, \$5,000, “Development of an Aquaponics System for Use in Developing Countries: Phase I Development of the Hydroponics Subsystem.”

Fankhauser, Gerald J; agriculture — administration, from Dow Agro Sciences, \$2,016, “Corn Plant Hybrid & Density Trial.”

Fankhauser, Gerald J; agriculture — administration, from Dow Agro Sciences, \$2,016, “Corn Variable Nitrogen Fertilizer Rate Trial.”

Farlow, James O; geosciences — Fort Wayne campus, from National Geographic Society, \$13,580, “Fossil Large Vertebrates from the Pipe Creek Sinkhole (Late Neogene, Grant County, Indiana).”

Fentiman, Audeen W; engineering administration engineering experiment, from National Consort Graduate Minorities Engineering & Science, \$63,000, “GEM Fellowship for Mario Rubio Dominique Lumpkin and Oscar Sandoval.”

Ferruzzi, Mario and Hamaker, Bruce R; food science, from Pepsico Inc./ World Trading Co., \$70,000, "Characterization of Orange Pomace as a Source of Bioactive Compounds for Modification of Intestinal Glucose Uptake."

Ferruzzi, Mario and Hamaker, Bruce R; food science, from Pepsico Inc./ World Trading Co., \$79,394, "Characterization of Potato Phenolics and Their Ability to Modulate Carbohydrate Digestion and Glucose Uptake in Vitro."

Ferruzzi, Mario; food science, from McCain Foods Limited, \$66,907, "Potato Phytochemical Content and Recovery through Traditional Processing."

Field, William E; agricultural & biological engineering, from Tate & Lyle Ingredients Americas, Inc., \$7,500, "Farm Safety."

French, Richard M; mechanical engineering technology, from Sinclair Community College, \$17,508, "Learning, Engaging, Attaining, and Doing with Guitars Used in Teaching Achievable Real Situations in STEM (Science, Technology, Engineering & Mathematics) (Lead Guitar in STEM)."

Fuchs, Philip L; chemistry, from John Wiley & Sons Limited England, \$3,000, "E-Encyclopedia of Reagents for Organic Synthesis."

Gabrielov, Andrei; mathematics, from National Science Foundation, \$49,933, "Perspectives of Modern Complex Analysis."

Ghiselli, Richard F; hospitality & tourism, from J. Willard & Alice S. Marriott Foundation, \$25,000, "Marriott Executive in Classroom Series."

Goforth, Reuben R; forestry & natural resources, from Indiana Department of Natural Resources, \$93,462, "An Assessment of Silver and Bighead Carp (*Hypophthalmichthys* spp.) Movements and Spawning Activities in the Wabash River Watershed, Indiana."

Golden, Barbara L; biochemistry, from Purdue University, \$99,800, "Acquisition of a Mosquito Crystallization Robot."

Golden, Barbara L; biochemistry, from PHS-NIH National Institute of General Medical Science, \$271,263, "Coupling of Structure and Dynamics in RNA Catalysis."

Goldsbrough, Peter B; botany & plant pathology, from Multi-Sponsored Industrials, \$12,500, "Multi-Sponsored Gift Account."

Golub, Alla A; agricultural economics, from Commonwealth Science and Industrial Research Organization, \$25,000, "Development of GHG Emissions Scenarios with Dynamic Global Trade Analysis Project (GTAP) Model."

Govindaraju, Rao S; civil engineering, from Pegasus Technical Services Inc, \$63,095, "Modeling and Optimization for Watershed Management."

Groll, Eckhard A and Kurtulus, Orkan; mechanical engineering, from S Ram Dynamics, \$99,021, "Regenerative Air Cycle Heat Pump for Commercial and Industrial Applications."

Haddock, John E and McDaniel, Rebecca S; civil engineering, from Indiana Department of Transportation, \$119,964, "Performance of Warranted Asphalt Pavements: Smoothness and Performance of Indiana Warranted Asphalt Pavements."

Haddock, John E; civil engineering, from Indiana Department of Transportation, \$115,000, "Development of Standardized Component Based Equipment Specifications and Transition Plan into a Predictive Maintenance Strategy."

Hamaker, Bruce R; food science, from Lynn Interdisciplinary Graduate Fellowship, \$17,318, "Kazem, Ahmad."

Han, Qingyou; mechanical engineering technology, from Multi-Sponsored Industrials, \$20,000, "Center for Materials Processing Research (CMPR)."

Han, Qingyou; mechanical engineering technology, from Multi-Sponsored Industrials, \$30,000, "Center for Materials Processing Research (CMPR)."

Heeg, Marlene O; pharmacy — administration, from Bayer Healthcare, LLC, \$134,885, "PeerView InReview, Assessing the Clinical Potential of Emerging Targeted Agents in Advanced, Differentiated Thyroid Cancer" (150202187)."

Heeg, Marlene O; pharmacy — administration, from Janssen Johnson & Johnson Services, Inc., \$60,000, "Psoriasis Clinical Review and Visiting Professorship Program."

Heeg, Marlene O; pharmacy — administration, from Janssen Johnson & Johnson Services, Inc., \$105,000, "Psoriasis Clinical Review and Visiting Professorship Program."

Heinz, Michael G and Hickox, Ann E; speech, language and hearing sciences, from American Hearing Research Foundation, \$20,000, "Behavioral Testing for Hidden Hearing Loss in Chinchillas."

Heister, Stephen D; Lucht, Robert P and Meyer, Scott E; aeronautical & astronautical engineering, mechanical engineering, from Rolls-Royce Corporation, \$15,000, "2013 Statement of Work for Rolls-Royce High Mach UTC."

Hertel, Thomas W; agricultural economics, from Food & Agr. Org. of the United Nations, \$45,000, "A Report on Quantifying the Impacts of Reducing Food Losses and Wastes on Prices, Trade, Emissions, and Resources."

Hertel, Thomas W; agricultural economics, from Multi-Sponsored Industrials, \$19,650, "Global Trade Analysis Project (GTAP) Consortium."

Hertel, Thomas W; agricultural economics, from Multi-Sponsored Industrials, \$19,650, "Global Trade Analysis Project (GTAP) Consortium."

Hockerman, Gregory H; medicinal chemistry & molecular pharmacology, from Purdue University, \$96,599, "Ionflux 16 System: Automated Voltage Clamp."

Hogenesch, Harm; comparative pathobiology, from Vaxform, LLC, \$119,218, "Development of a Recombinant Vaccine Against *Streptococcus Pyogenes* Infection and Disease."

Hogenesch, Harm; veterinary medicine — administration, from Jackson Laboratory, the, \$125,553, "CPDM: Cloning a Gene that Regulates Eosinophil Function."

Hong, Zhaohui and Yang, Fenggang; history and political science - calumet campus, from the Henry Luce Foundation, Inc, \$400,000, "Spatial Study of Chinese Religions and Society."

Hook, Tomas O; Foley, Carolyn J and Troy, Cary D; forestry & natural resources, Illinois-Indiana Sea Grant Program, civil engineering, from Indiana Department of Natural Resources, \$40,684, "Improvement in Collection and Dissemination of Real-Time Data from Lake Michigan (Michigan City, IN)."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Hu, Y Charlie; electrical & computer engineering, from Intel Corporation, \$100,000, "Intel Unified Framework."

Irazoqui, Pedro; biomedical engineering, from Space and Naval Warfare Systems Center, \$849,987, "Improving Robustness of Prosthetic Arm Control with an Innovative Radio Frequency (RF)-Based Implantable Electromyography (EMG) System; Modification 2 for Grant 105744."

Ishii, Mamoru and **Schlegel, Joshua P**; nuclear engineering, from Bettis Atomic Power Laboratory, \$208,500, "Interfacial Area Transport Study in Gas-Dispersed Flow Up to Churn-Turbulent to Annular Flow Regime Transition; Purchase Order 7005923, Amendment 4, Grant 105701."

Ivantysynova, Monika; agricultural & biological engineering, from Bobcat Company, \$50,142, "Optimization of Valve Plate to Reduce Noise and Maintain Low Control Effort for Axial Piston Pump Tandem Unit."

Jiang, Yiwei; agronomy, from O J Noer Research Foundation, \$6,000, "Turf Research — O J Noer."

Johal, Gurmukh S; botany & plant pathology, from Ag Alumni Seed Improvement Association, \$10,000, "Johal Voluntary Support."

Johnson, William G; botany & plant pathology, from Dow Agro Sciences, \$10,000, "Weed Management to Evaluate Dow Agro Sciences Herbicides and Enlist Corn and Soybean Technology."

Johnston, Cliff T; agronomy, from Clay Minerals Society, the, \$25,467, "Memorandum of Understanding Between Department of Agronomy Purdue University and Clay Mineral Society."

Kak, Avinash C; electrical & computer engineering, from Elsevier Ltd, \$8,152, "Editorship of Our Journal, Computer Vision Graphics and Image Processing (CVGIP): Image Understand."

Key, Nicole L; mechanical engineering, from Honeywell Inc., \$10,000, "Preparation for the Experimental Investigation of High Speed Centrifugal Compressor Flow Fields."

Key, Nicole L; mechanical engineering, from Duke University, \$65,174, "Grand Challenges in Turbomachinery Forced Response and NSV."

Kirkpatrick, Jane M; **Aaltonen, Pamela M**; **Coddington, Jennifer A** and **O'Neil, Elizabeth A**; nursing, from PHS-NIH National Center for Health Resources and Services Administration, \$37,866, "Health Center Outreach and Enrollment Assistance."

Klimeck, Gerhard; electrical & computer engineering, from Ruhr University Bochum, \$29,500, "Graduate Student Support."

Kokini, Jozef L; food science, from Alcoa Inc, \$3,500, "Food Science Research."

Kokini, Jozef L; food science, from Alcoa Inc, \$2,500, "Food Science Research."

Landry, Steven J and **Deshmukh, Abhijit V**; industrial engineering, from Johns Hopkins University, \$24,416, "Dynamic Contagion Mechanisms in Financial Networks."

Leary, James F; veterinary medicine — administration, from Dow Agro Sciences, \$182,388, "Extrachromosomal FP Reporter Repair by SSA and Donor DNA Targeting Efficiency Evaluation Using RTA Systems through Transient ZFNs Expression and FACS Enrichment of Protoplasts." (a Discovery Park award — Birck Nanotechnology Center)

Lee, Seokcheon; industrial engineering, from Korean Environmental Industry and Technology Institute, \$2,446, "Advanced GHG Emission Forecasting Model for Bottom-Up and Top-Down to Considering Technological Evolution."

Lee, Seokcheon and **Chun, Hyonho**; industrial engineering, statistics, from Indiana Department of Transportation, \$47,171, "Reliability Evaluation of Mechanically Stabilized Earth (MSE) Wall Straps."

Lewis, Dwight E and **Cooks, Robert G**; graduate school administration, chemistry, from National Action Council Minorities in Engineering, \$12,500, "Purdue Sloan MPhD Program of Exemplary Mentoring (PEM) Chemistry Program."

Litster, Annette L and **Ogata, Niwako**; veterinary clinical science, from Bernice Barbour Foundation, \$5,300, "The Purdue College of Veterinary Medicine Shelter Medicine Program."

Liu, Sandra S; consumer science & retail, from Emory University, \$20,588, "Patient-Centered Care: What Factors Drive Outcomes in Hospital Setting."

Low, Philip S; chemistry, from Endocyte, Inc., \$411,656, "Folate Chemo: Novel, Non-Toxic, Delivery of Hemotherapeutics."

Lu, Chien-Tsung; aviation technology, from Shandong Nanshan Aluminum Co Ltd, \$155,051, "Lu Nanshan Aero College."

Lucier, Bradley J; **Ben-Amotz, Dor** and **Buzzard, Gregory T**; mathematics, chemistry, from Office of Naval Research, \$50,000, "Digital Compressive Detection Spectroscopy: Theoretical Optimization and Experimental Implementation; Modification 2 for Grant 106405."

Luke, Eileen M; CERIS, from Animal Plant Health Inspection Service, \$135,141, "National Agricultural Pest Information System (NAPIS)."

Lumkes, John H; agricultural & biological engineering, from Michigan State University, \$5,000, "Multifunction Mobile Utility Project for Food Security in Sub-Saharan Africa."

Ma, Jianxin; agronomy, from Agricultural Alumni Seed Improvement Association Inc, \$10,000, "Plant Genetics & Genomics Research."

Madhavan, Krishna and **Vorvoreanu, Mihaela**; engineering education, computer graphics technology, from National Science Foundation, \$24,999, "Pre-Classification Workflow and Analytics Engine for Proposals Directorate for Education and Human Resources (EHR)."

Mansfield, Charles W; agronomy, from Bayer Cropscience LP, \$3,000, "Corn Research."

Marais, Karen; aeronautical & astronautical engineering, from National Science Foundation, \$408,025, "Faculty Early Career Development (CAREER): Accidental Knowledge: Using Accidents and Other Systems Engineering Failures to Inform Research and Education in Systems Engineering."

Martinez, Carlos J; materials engineering, from PPG Industries, \$60,178, "Encapsulation of Amine Catalysts in Rigid and Soft Capsules from Double Emulsions."

Matson, Eric T; computer & information technology, from National IT Industry Promo Agency, \$120,000, "NIPA Junior Capstone Program 2014."

Mattes, Richard D; foods & nutrition, from Purdue University, \$43,820, "2013 Incentive Laboratory Equipment Program."

Maylath, Nancy S; student health center, from Indiana State Department of Health, \$85,000, "Indiana Campus Sexual Assault Primary Prevention Project."

McKinley, Steven K; youth development & agricultural education, from Department of the Army, \$89,650, "2014 Operation: Military Kids."

McKinley, Steven K; youth development & agricultural education, from Kansas State University, \$23,000, "Indiana 2014 4-H Military Club."

McNamara, Kevin T; agricultural economics, from University of California — Davis, \$5,469, "A Project for Strengthening Extension Skills of Young Professionals in Afghanistan and Pakistan."

McNamara, Michael; visual & performing arts, from Kinley Trust, \$19,600, "Elation ELAR Quad Strip Lighting Fixtures."

Merwade, Venkatesh M; civil engineering, from Indiana Department of Transportation, \$183,714, "Establishing Modeling Standards for Bridges and Culverts."

Meyer, Scott E; mechanical engineering, from Central Italian Aerospace Research Center, \$92,000, "MTP Breadboard Testing for CIRA."

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

Mott, John H; aviation technology, from Multi-Sponsored Industrials, \$15,000, "Voluntary Support to Purdue University for the Advanced Aviation Analytics Institute for Research-Center of Research Excellence (A3IR-CORE)."

Muller, Kelsie J; field extension educators, from Benton Foundation, \$4,000, "Parenting Piece by Piece."

Murray, Michael D; pharmacy practice, from Regenstrief Institute for Health Care, \$28,000, "Regenstrief Institute Data Core."

Mutchler, Jane F; management — Calumet campus, from Multi-Sponsored Industrials, \$3,000, "Northwest Indiana Small Business Development Center — IUN Cash Match Support."

Narimanov, Evgueni E; electrical & computer engineering, from University of California — Berkeley, \$20,000, "Amendment No. 2 to Subagreement No. 00008073 An Optical Nanoscope for Imaging Beyond Diffraction Limit Grant 206419."

Nie, Huiling and Byrne, Patrick J; health sciences, from University of Michigan, \$17,250, "Development and Validation of a Neutron Activation Analysis System to Quantify Aluminum in Human Bone in Vivo."

Nnanna, Agbai A; mechanical engineering — Calumet campus, from Indiana Department of Natural Resources, \$50,000, "Occurrence of Emerging Contaminants in Lake Michigan and Sensory Development."

Nnanna, Agbai A; Purdue Calumet Water Institute, from Indiana Department of Natural Resources, \$50,000, "Mercury Reduction from Municipal Effluents Discharged into Lake Michigan."

Nyenhuys, John A; electrical & computer engineering, from Zimmer Dental Inc., \$2,000, "Zimmer Dental Statement of Work (SOW) 2."

Ogas, Joseph P and Leung, Yuk Fai; biochemistry, biological sciences, from PHS-NIH National Cancer Institute, \$193,324, "Determination of the Role of CHD5 Tumor Suppressor in the Zebrafish Model."

Panitch, Alyssa; biomedical engineering, from Symic Biomedical, \$12,355, "Evaluation of DS-SILY for Wound Healing."

Park, Kinam and Cheng, Ji-Xin; biomedical engineering, from PHS-CDC Centers for Disease Control, \$268,958, "Adaptable Polymer Micelles for Tumor Targeting."

Patton, Aaron J; agronomy, from Dow Agro Sciences, \$6,500, "Multi-Sponsored."

Patton, Aaron J; agronomy, from Dow Agro Sciences, \$4,000, "Multi-Sponsored."

Patton, Aaron J; agronomy, from Dow Agro Sciences, \$21,500, "Multi-Sponsored."

Peroulis, Dimitrios; electrical & computer engineering, from BAE Systems Advanced Technologies, Inc., \$200,000, "Miniature Broadband Tunable Filters for EW Receivers; Modification 6."

Peterson, John R; physics, from Large Synoptic Survey Telescope Corp, \$110,000, "Large Synoptic Survey Telescope (LSST) Image Simulations."

Pijanowski, Bryan C; Dolby, Nadine E; Ebert, David S; Morales, Carlos R; Nowack, Robert L; Shepardson, Daniel P and Thomas, Richard K; forestry & natural resources, curriculum & instruction, electrical & computer engineering, computer graphics technology, earth & atmospheric sciences, visual & performing arts, from Purdue University, \$471,777, "A Big Data, Giant Screens and Open Ears Project (A Category 1 Proposal)." (a Discovery Park award — Center for the Environment)

Pinal, Rodolfo; industrial & physical pharmacy, from Multi-Sponsored Industrials, \$35,000, "Center for Pharmaceutical Processing Research Consortium."

Pipes, R Byron; materials engineering, from Multi-Sponsored Industrials, \$50,000, "CDM Hub (Consortium)."

Powley, Terry L; psychological science, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$522,967, "Autonomic Control of Body Weight and Feeding."

Prokopy, Linda S; Goforth, Reuben R and Williams, Rod N; forestry & natural resources, from Indiana Department of Natural Resources, \$75,128, "Outreach to Protect Mussels in the Tippecanoe River."

Quagraine, Kwamena K; agricultural economics, from Oregon State University, \$525,037, "Aquaculture Production and Human Health, Nutrition, and Food Supply in Ghana and Tanzania."

Raman, Arvind; engineering administration engineering experiment, from Colciencias, \$924,724, "Colciencias-Fellowships 2014 Through 2018."

Ratliff, Timothy L and Crist, Scott A; Cancer Research Center, comparative pathobiology, from National Institutes of Health, \$147,147, "Use of Micro-RNA Arrays to Identify MDSC Functional Pathways and Markers."

Rhoads, Jeffrey F and Chiu, George T; mechanical engineering, from Northeastern University, \$70,000, "Portable, Integrated Microscale Sensors (PIMS) for Explosives Detection."

Rogers, Marcus K; computer & information technology, from Intel Corporation, \$25,000, "Teaching Matt for Secure Business Intelligence."

Roy, Kaushik; electrical & computer engineering, from Semiconductor Research Corporation, \$100,000, "Low Power Reliable STT-MRAMs: Magnetic Tunnel Junction (MTJ) Stacks, Bit-Cells & Architecture; Amendment 2, Grant 205736."

Ruhl, Gail E; botany & plant pathology, from Indiana Professional Lawn Landscapers Association, \$8, "Indiana Nursery and Landscape Association."

Sadeghi, Farshid; mechanical engineering, from Tecumseh Compressor Group, \$85,000, "Tribology Lab Research."

Sadof, Clifford S; entomology, from Animal Plant Health Inspection Service, \$7,975, "Forest Insect Taxonomic Support (FITS) Initiative for the USDA-APHIS-PPQ-CAPS Exotic Pest Detection Survey Program and the National Emerald Ash Borer."

Saha, Shubin K; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$1,000, "Multi-Sponsored Gift Account."

San Martin-Gonzalez, Maria F; Erk, Kendra A; Jones, Owen G; Liceaga, Andrea M; Narsimhan, Ganesan and Corvalan, Carlos M; food science, materials engineering, agricultural & biological engineering, from Purdue University, \$78,350, "Magnetic Interfacial Shear Rheometer with Liquid-Liquid Langmuir Trough."

Sands, Timothy D; Moghadam, Valentine M; Pawley, Alice L and Reed, Dorothy A; Office of the Provost, sociology, engineering education, education — administration, from National Science Foundation, \$1,189, “Purdue Center for Faculty Success; Amendment 9 for Grant 103359.” (a Discovery Park award — Discovery Learning Center)

Scharf, Michael E; entomology, from Dow Agro Sciences, \$65,612, “Development of RNAi Termiticides.”

Sheehan, Amy H; pharmacy practice, from Johnson & Johnson LLC Ap, \$85,900, “FDA/J&J/Purdue Pharmaceutical Regulatory Fellowship.”

Siciliano, Paul C; Brennan, Andrea N and Kalbaugh, Kirby K; horticulture & landscape architecture, from The Stanley Smith Horticultural Trust, \$10,000, “Purdue Arboretum Scan, Link, and Learn Signage.”

Singh, Manpreet; food science, from Auburn University, \$60,016, “Addressing Gaps Between Knowledge and Practice in Production and Distribution of Local and Regional Foods for a More Secure Food Supply Chain.”

Sivasankar, Preeti M; speech, language and hearing sciences, from Vanderbilt University, \$24,195, “Molecular Pathophysiology of Acute Phonotrauma; Amendment 3, Grant 105167.”

Sloan, Mary Anne; Technical Assistance Program, from Indiana State Office of Rural Health, \$72,751, “Lean Solutions for Meaningful Use and Patient Engagement.”

Sloan, Mary Anne; Technical Assistance Program, from Boone County Community Center, \$30,000, “Partnership for a Quality Transformation for Boone County Community Clinic (BCCC).”

Sloan, Mary Anne; Technical Assistance Program, from Multi-Sponsored Industrials, \$1,520, “Multi-Sponsor Account I-HITEC.”

Smith, Mjt; graduate school administration, from Interdisciplinary Assistantships, \$14,246, “Grant, James.”

Smith, Mjt; graduate school administration, from American Society for Engineering Education, \$119,875, “2013-14 Smart Fellowship.”

Snow, Lowell D; Technical Assistance Program, from Indiana Economic Development Corporation, \$49,125, “IEDC SEFWorkforce 2.1 American Commercial Lines.”

Snow, Lowell D; Technical Assistance Program, from Indiana Economic Development Corporation, \$671,287, “Manufacturing Extension Partnership FY 2013-14.”

Snow, Lowell D; Technical Assistance Program, from Indiana Economic Development Corporation, \$29,375, “IEDC SEFWorkforce 2.1 Jasper Rubber Products, Inc.”

Snow, Lowell D; Technical Assistance Program, from Indiana Economic Development Corporation, \$15,000, “IEDC SEFWorkforce 2.1 Citadel Plastics.”

Snow, Lowell D; Technical Assistance Program, from Indiana Economic Development Corporation, \$16,000, “IEDC SEFWorkforce 2.1 Ridetech.”

Snow, Lowell D; Technical Assistance Program, from Indiana Economic Development Corporation, \$16,375, “IEDC SEFWorkforce 2.1 Southeast Indiana Business Corporation.”

Son, Steven F and Strachan, Alejandro H; mechanical engineering, materials engineering, from Office of Naval Research, \$133,000, “Chemical Decomposition in High Energy Density Materials Induced by Coupled Acoustic and Electromagnetic Energy Insult; Modification 4 for Grant 105324.”

Son, Steven F; mechanical engineering, from Northeastern University, \$65,000, “Small-Scale Characterization of Homemade Explosives (HMES).”

Song, Xiaohui C; academic technologies, from University of Illinois at Champaign-Urbana, \$580,716, “XSEDE: Extreme Science and Engineering Discovery Environment.”

Spafford, Eugene H; computer science, from John Wiley & Sons Limited England, \$2,000, “Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support.”

Spafford, Eugene H; computer science, from John Wiley & Sons Limited England, \$60,000, “Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support.”

Strachan, Alejandro H and Bahr, David F; materials engineering, from Lilly Research Laboratories, \$40,000, “Residual Stress Analysis in Injection Molded Polymers: Local Property Characterization and Molecular Simulations.” (a Discovery Park award — Birck Nanotechnology Center)

Strachan, Alejandro H and Son, Steven F; materials engineering, mechanical engineering, from Defense Threat Reduction Agency, \$375,685, “Multi-Resolution Modeling and Experiments of Nanostructured Reactive Materials; Modification 5 for Grant 105025.”

Sturm, Jessica L; foreign language & literature, from Kinley Trust, \$2,966, “Acquisition of Liaison in Intermediate L2 French Students.”

Suter, Daniel M and Raman, Arvind; biological sciences, mechanical engineering, from Purdue University, \$323,873, “An Integrated AFM Platform for Cellular Dynamics and Mechanics.” (a Discovery Park award — Birck Nanotechnology Center)

Swihart, Robert K; forestry & natural resources, from Indiana Arborists Association, Inc., \$3,750, “Indiana Arborists Association, Inc.”

Taheripour, Farzad; Hertel, Thomas W and Gopalakrishnan, Badri Narayanan; agricultural economics, from World Bank, \$200,000, “Growth, Climate Change and the Role of Water in the South Asian Economy: a General Equilibrium Modeling Approach.”

Tay, Sien Chieh; psychological science, from John Templeton Foundation, \$250,000, “Measuring Virtues: Overcoming Self-Report Limitations for Cost-Effective Scalable Assessment.”

Taylor, Lynne S; industrial & physical pharmacy, from Purdue University, \$61,830, “Nanoparticle Tracking Analysis for Fundamental Investigations of Crystallization.”

Toscos, Tammy R; nursing — Fort Wayne campus, from Indiana University, \$86,745, “Improving Healthcare Systems for Access to Care by Underserved Patients.”

Townsend, Wendy M; veterinary clinical science, from American Kennel Club Health Foundation, \$74,070, “Identification of the Genetic Basis of Pigmentary Uveitis in Golden Retrievers.”

Tsai, Su-Jung; health sciences, from University of Michigan, \$18,728, “Occupational Exposure to Nanomaterials Associated with the Use of Protective Clothing and Hood Containment.”

Tuinstra, Mitchell R; agronomy, from Targeted Growth Inc, \$20,000, “CE 523 Field Trip to John Deere.”

Tzempelikos, Athanasios; civil engineering, from Lutron Electronics Co Inc, \$25,000, “Architectural Engineering - Tzempelikos.”

Vacca, Andrea; agricultural & biological engineering, from Multi-Sponsored Industrials, \$1,000, “Multi-Sponsored Gift.”

Varma, Amit H; civil engineering, from National Institute of Standards & Technology, \$149,491, “Intergovernmental Personnel Assignment (IPA) for Selvarajah Ramesh.”

Vemulapalli, Ramesh; comparative pathobiology, from Colorado State University, \$2,000, "Investigation of Japanese Encephalitis Virus in Mid-Hill and Mountain Districts of Nepal: a Climate Change Perspective; Amendment 2, Grant 106175."

Vilensky, Joel A; medical education — Fort Wayne campus, from Indiana University, \$440, "FY 2011-2014 Indiana University School of Medicine (IUSM) Fort Wayne Dr. Vilensky Research Savings."

Viswanathan, Chandramouli and Zhou, Chenn Q; Center for Innovation through Visualization & Simulation, mechanical engineering — Calumet campus, from Indiana Department of Natural Resources, \$28,552, "Educational 3-D Modules for the Contamination Movement Due to Underground Fuel Pipeline Failure."

Vitek, Jan and Petri, Gustavo; computer science, from Air Force Research Laboratory, \$145,831, "Verified Compilation of Concurrent Managed Languages; Modification 3 for Grant 106652."

Vyn, Tony J; agronomy, from Fluid Fertilizer Foundation, \$14,000, "Agricultural Cropping Systems."

Waddell, Jolena N; animal sciences, from Indiana Beef Council, \$1,500, "Beef Extension."

Wang, Haifeng; aeronautical & astronautical engineering, from American Chemical Society, \$100,000, "Study of Detailed Molecular Transport in Laminar Flamelet and Turbulent Non-Premixed Combustion."

Wang, Hong H; agricultural economics, from Michigan State University, \$46,894, "Market Potentials for US Midwest Pork in China."

Watts, Val J; medicinal chemistry & molecular pharmacology, from Purdue University, \$5,432, "Development of a Receptor-Mediated B-Arrestin Signaling Assay Platform Using Biomolecular Fluorescence Complementation (BIFC) (Inc #2 for Fringes)."

West, Terry R; earth & atmospheric sciences, from Terry R. & Shirley West (Individual Donor), \$100, "AEG Travel."

Wilker, Jonathan J; chemistry, from Office of Naval Research, \$35,354, "Biomimetic Design Principles for Underwater, Sustainable, and Modulus Tailored Adhesives; Modification 3 for Grant 106398."

Winkler, Fabian and McMullen, Shannon C; visual & performing arts, from Kinley Trust, \$3,400, "Request for Non-Laboratory Research Infrastructure and Equipment — Tier 1 Proposal."

Wirth, Mary J; chemistry, from Li-Cor Biosciences, \$52,025, "Electrophoresis of Proteins Detected by Antibody Binding."

Wirth, Mary J; chemistry, from PHS-NIH National Institute of General Medical Science, \$69,376, "Submicrometer Silica Particles for High-Throughput Separations of Protein Pharmac."

Wise, Kiersten A; botany & plant pathology, from Southern Illinois University, \$11,039, "Identification and Biology of Seedling Pathogens of Soybean."

Xu, Xianfan; mechanical engineering, from Advancement Storage Technology Consortium, \$70,000, "Characterization of Optical Size and Efficiency of Near-Field Transducer Using Scattering Scanning Near-Field Microscopy" (a Discovery Park award — Birck Nanotechnology Center)

Yang, Won Sik; nuclear engineering, from U.S. Department of Energy, \$306,500, "Development of Fuel Cycle Data Packages for Two-Stage Fast Reactor Fuel Cycle Options for Optimum Resource Utilization and Waste Management."

Yao, Yuan; Bhunia, Arun K and Saha, Shubin K; food science, horticulture & landscape architecture, from National Institute of Food & Agriculture, \$423,204, "Protective Surface Coating to Reduce Bacterial Load of Fresh and Fresh-Cut Produce: Cantaloupe as a Model."

Youngblood, Jeffrey P; materials engineering, from Air Force Research Laboratory, \$10,000, "A Colloidal Approach to Liquid Crystal Transflective Displays: Making Your E-Reader Color."

Zhang, Xiangyu and Xu, Dongyan; computer science, from Defense Advanced Research Projects Agency, \$348,035, "Safe, Reuse-Oriented Reverse Engineering of Functional Components from X86 Binaries; Modification 8."

Zhou, Chenn Q and Wu, Bin; Center for Innovation through Visualization & Simulation, from NiSource Corporate Services Company, \$18,019, "NIPSCO Bailly Generating Station Units 7 & 8 Selective Catalytic Reduction (SCR) Flow Evaluation and Optimization."

Zhuang, Qianlai; agronomy, from U.S. Geological Survey, \$23,348, "Assessing Wetland Methane Emissions in Alaska."

Ziaie, Babak; electrical & computer engineering, from Indiana University School of Medicine, \$79,988, "Progression of Diabetic Cystopathy in the Ossabaw Pig Using Long Term Wireless Ambulatory Bladder." (a Discovery Park award — Birck Nanotechnology Center)

Zollner, Patrick A; forestry & natural resources, from Great Lakes Indian Fish Commission, \$20,000, "Measuring and Simulating the Utility of a Dispersal Corridor for Martens Along the Gogebic Range."

Zwier, Timothy S; chemistry, from American Chemical Society, \$127,052, "The Journal of Physical Chemistry." ■

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