

DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

May 2014

Abu-Omar, Mahdi M and **Lipton, Mark A**; chemistry, from Eli Lilly and Company, \$53,679, "Green Solvents."

Abu-Omar, Mahdi M; chemistry, from U.S. Department of Energy, \$165,000, "Oxo Catalysts for the Conversion of Lingocellulosic Biomass; Modification 8 for Grant 103807."

Adams, George B and **Comer, Douglas E**; computer science, from Mozilla Foundation, \$5,000, "Reliable Packet Delivery with Open Flow for Advanced Manufacturing and More." (a Discovery Park award — Network for Computational Nanotechnology)

Agnew, Christopher R; psychological science, from Purdue Research Foundation (PRF) Summer Research Grants, \$28,184, "2014 GS SRG- PSY."

Allebach, Jan P; electrical & computer engineering, from Hewlett Packard, \$75,000, "Training-Based Halftoning Algorithms for Better Halftone Image Quality for HP Digital Press, Phase 9."

Anderson, William E; aeronautical & astronautical engineering, from Analytical Mechanics Association, Inc, \$64,862, "PO T00141 FY14- Integrated Combustion Stability Analysis Assessment."

Anderson, William E; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$20,000, "K.Shipley- 2012 National Aeronautics and Space Administration (NASA) Space Technology Research Fellowship; Supplement 003-Grant 106080."

Appenzeller, Joerg; electrical & computer engineering, from International Business Machines Corp, \$30,000, "IBM Fellowship for Ashish Verma Penumatcha."

Applegate, Todd J; animal sciences, from Agricultural Research Service, \$16,620, "Effects of Heat Stress on Farm Animal Well-Being."

Bayley, William G; chemistry, from Ivy Technology State College, \$150, "Instrumentation Van Project."

Beaulieu, Lionel J; Office of Engagement, from City of Valdez, \$8,000, "Multi-Sponsored Account (Purdue Center for Regional Development [PCRD])."

Beaulieu, Lionel J; Office of Engagement, from Manatee Community Foundation, \$4,400, "Multi-Sponsored Account (Purdue Center for Regional Development [PCRD])."

Bigelow, Cale A; agronomy, from Turfgrass Water Conservn Alliance Ltd, \$5,000, "Putting Greens Research."

Blankenship, Bonnie T; health & kinesiology, from Indiana Association for Health, P E, Recreation & Dance, \$2,000, "Bullying in a Summer Physical Activity Day Camp."

Bodner, George M; chemistry, from Embassy of the Arab Republic of Egypt, \$3,000, "Visiting Scholar Dr. Essam Ahmed in Chemistry."

Bofferding, Laura C; curriculum & instruction, from National Science Foundation, \$143,512, "Faculty Early Career Development (CAREER): Leveraging Contrasting Cases to Investigate Integer Understanding."

Bolinger, Julie D; pharmacy practice, from Fred Run Ltd, \$1,100, "Pharmacy Diabetes Education Program."

Bolton, J S; mechanical engineering, from Minnesota Mining & Manufacturing Co (3M), \$130,000, "Development of Acoustic Modeling and Experimental Tools to Support Micro-Perforated and Non-Woven Applications."

Bond, Timothy N; economics, from University of Houston, \$11,286, "Prejudice and Racial Matches in Employment for Low-Skilled Workers."

Borch, Richard F; medicinal chemistry & molecular pharmacology, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,727, "2014 GS SRG- MCPH."

Buckius, Richard O; Vice President for Research, from National Science Foundation, \$374,580, "Intergovernmental Personnel Act (IPA) Agreement for Richard Buckius."

Bullock, Darcy M; civil engineering, from Federal Aviation Administration, \$34,886, "Installation of Milled Rumble Strips at Purdue University Airport, Lafayette, Indiana."

Bullock, Darcy M; civil engineering, from Indiana Department of Transportation, \$750,000, "Joint Transportation Research Program Operating Budget Request FY 2015."

Bullock, Darcy M and **Hubbard, Sarah M**; civil engineering, aviation technology, from Federal Aviation Administration, \$123,174, "Project Number 8 – Aviation Rumble Strips to Enhance Aviation Safety."

Cappelleri, David J; mechanical engineering, from National Science Foundation, \$138,617, "RI-Medium: Collaborative Research: Mobile Microrobot Platform for Advanced Manufacturing Applications; Amendment 1 for Grant 106752."

Carlstedt, Bruce C; pharmacy practice, from Regenstrief Institute for Health Care, \$19,200, "Regenstrief Institute Support of Bruce Carlstedt."

Carney, Thomas Q; aviation technology, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, "2014 GS SRG- AVTC."

Caruthers, James M; chemical engineering, from National Science Foundation, \$399,998, "Nonlinear Viscoelastic Behavior of Glassy Polymers: Discriminating Experiments and Constitutive Modeling."

Casteel, Shaun N; **Camberato, James J** and **Joern, Brad C**; agronomy, from Indiana Soybean Alliance, \$67,077, "Residual Effects of Managing Swine Manure in Soybean Systems."

Casteel, Shaun N; agronomy, from National Crop Insurance Service, \$8,000, "Soybean Extension Research."

Casteel, Shaun N; agronomy, from Stoller Enterprises, Inc., \$4,500, "Soybean Extension Research."

Chapple, Clint C; biochemistry, from Purdue Research Foundation (PRF) Summer Research Grants, \$9,395, “2014 GS SRG-BCHM.”

Cheng, Ji-Xin; biomedical engineering, from National Collegiate Inventors & Innovators Alliance, \$20,000, “Intravascular Photoacoustic Catheter for Vulnerable Plaque Detection.”

Cho, Hyunyi and Zhu, Yu Michael; liberal arts — administration, statistics, from PHS-NIH National Cancer Institute, \$334,130, “Media Literacy Intervention for Indoor Tanning Prevention.”

Christmon, Kenneth C; diversity and multicultural affairs — Fort Wayne campus, from Indiana Campus Compact, \$700, “The Big Event 2014.”

Clawson, Rosalee A; political science, from Winifred B. Bilsland Endowment, \$3,237, “Cahill, Katie A.”

Connors, Susan E; management— marketing, human resources & management — Calumet campus, from Centaur, LLC, \$65,000, “Indiana Equine Economic Impact and Health Study.”

Connolly, Patrick E; computer graphics technology, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, “2014 GS SRG- CGT.”

Connor, Robert J and Varma, Amit H; civil engineering, from Hardesty and Hanover, \$14,000, “Analytical Evaluation of the Orthotropic Deck of the Johnson Street Bridge.”

Constable, Peter D; veterinary clinical science, from VCA Antech Inc, \$9,985, “Radiology Residency Support.”

Constable, Peter D; veterinary clinical science, from VCA Antech Inc, \$9,630, “Radiology Residency Support.”

Cooks, Robert G; chemistry, from National Science Foundation, \$225,000, “Ionic Reactions in Droplets and Thin Films for Preparative and Analytical Mass Spectrometry; Amendment 1.” (a Discovery Park award — Bindley Bioscience Center)

Crawford, Melba M; engineering administration engineering experiment, from National Institute of Standards & Technology, \$8,685, “J. Epling - National Institute of Standards and Technology (NIST) Summer Undergraduate Research Fellowship Program — Gaithersburg.”

Croney, Candace C; animal sciences, from Barry A Goldberg, DVM, \$5,000, “Center for Animal Welfare Science.”

Csathy, Gabor A; physics, from National Science Foundation, \$110,000, “Electronic Many-Body States with Topological Order; Amendment 2 for Grant 105953.”

Dadarlat, Marius D; mathematics, from National Science Foundation, \$80,000, “C*-Algebras, Groups and Topological Invariants.”

Doerge, Rebecca W; statistics, from Purdue Doctoral Program, \$3,409, “Gonzalez, Tracy B.”

Dotterer, Aryn M; child development & family studies, from Utah State University, \$3,635, “Parent Involvement in Young Adults Intercollegiate Athletic Careers.”

Doucette, Suzanne C; chemistry, from U.S. Department of Energy, \$150,000, “Synthetic, Spectroscopic, and Computational Studies of Redox-Active Uranium Complexes for Fundamental Organometallic Reactions.”

Dukes, Jeffrey S; forestry & natural resources, from National Science Foundation, \$99,774, “RCN: Integrated Network for Terrestrial Ecosystem Research on Feedbacks to the Atmosphere and Climate; Amendment 4 for Grant 104473.” (a Discovery Park award — Purdue Climate Change Research Center)

Dunning, John B; forestry & natural resources, from U.S. Forest Service, \$18,502, “Breeding Bird Surveys on the Hoosier National Forest, 2014.”

Duval-Couetil, Nathalie A; industrial technology, from Purdue University, \$10,000, “Kauffman Foundation Continuation Grant: Global.” (a Discovery Park award — Burton D. Morgan Center for Entrepreneurship)

Dyke, Shirley J; civil engineering, from Luna Innovations Incorporated, \$76,000, “Modification 2 to Grant 106370 Ultra-Low Power Wireless Sensors for Advanced, In Situ Structural Health Monitoring.”

Ebert, David S; electrical & computer engineering, from U.S. Department of Homeland Security, \$825,000, “Support to the First Responders Group.” (a Discovery Park award — Discovery Park Administration)

Ebert, David S; electrical & computer engineering, from U.S. Department of Homeland Security, \$53,750, “Penn State - Subcontract.” (a Discovery Park award — Discovery Park Administration)

Egel, Daniel S; botany & plant pathology, from Syngenta Crop Protection Inc., \$15,750, “Potassium Management.”

Elliott, Stephen J and Oconnor, Kevin J; technology — administration, industrial technology, from Scitor Corporation, \$31,288, “Biometric Operational Analysis and Test.”

Engel, Bernard A; agricultural & biological engineering, from Agricultural Research Service, \$21,323, “Implementation of the Wepp Model and Risk Assessment Under Current and Future Climates.”

Eremenko, Alexandre; mathematics, from National Science Foundation, \$115,641, “Problems in Geometric Function Theory.”

Esters, Levon T; youth development & agricultural education, from John Deere Agricultural US, \$9,800, “John Deere Map Summer Program.”

Farkas, Brian E; food science, from National Institute of Food & Agriculture, \$498,558, “High Temperature Surface and Interfacial Tension.”

Farlow, James O; geosciences — Fort Wayne campus, from Indiana Academy of Science, \$3,000, “Fossil Large Mammals from the Pipe Creek Sinkhole (Late Neogene, Grant County, Indiana).”

Fei, Songlin and Pijanowski, Bryan C; forestry & natural resources, from National Science Foundation, \$4,672, “Predicting Regional Invasion Dynamic Processes Pride Developing a Cross Scale Functional Trait Based Modeling Framework.”

Fentiman, Audeen W; nuclear engineering, from Argonne National Laboratory, \$30,000, “Evaluation of the Performance of the Dynamic Flowsheet Model: Support for Melissa Van Kleeck.”

Ferrol, Christina E; field extension educators, from Lilly Endowment Inc., \$7,280, “Summer Youth Program 2014.”

Finke, Linda M; health & human services — Fort Wayne campus, from Indiana Family Health Council, \$118,425, “Lafayette Street Family Health Clinic.”

Finley, John P; Bortoletto, Daniela; Shipsey, Ian P; Cui, Wei K; Neumeister, Norbert; Khlebnikov, Sergei and Kruczenski, Luis M; physics, from U.S. Department of Energy, \$1,451,000, “An Experimental and Theoretical High Energy Physics Program; Modification 4 for Grant 105894.”

Fisher, Timothy and **Ruan, Xiulin**; mechanical engineering, from Case Western Reserve University, \$184,866, “Nanofabrication of Tunable 3-D Nanotube Architectures; Amendment 3, Grant 105800.” (a Discovery Park award — Birck Nanotechnology Center)

Flesch, Lucy M; earth & atmospheric sciences, from Purdue Doctoral Program, \$30,512, “Jay, Cassidy N.”

Foster, Ricky E; entomology, from Monsanto Company, \$7,500, “Vegetable & Fruit Research.”

French, Doran C; child development & family studies, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, “2014 GS SRG- HDFS.”

Friedman, Elliot M and **Christ, Sharon L**; child development & family studies, from PHS-NIH National Institute on Aging, \$242,601, “Living Well with Later Life Multimorbidity: a Biopsychosocial Approach.”

Garimella, Suresh V; mechanical engineering, from Laird Technologies, \$7,500, “Cooling Technologies Research Center (CTRC) 2012-2013 Membership — Memo Match for 106029.”

Garimella, Suresh V; **Janes, David B**; **Peroulis, Dimitrios** and **Weibel, Justin A**; mechanical engineering, electrical & computer engineering, from Defense Advanced Research Projects Agency, \$268,437, “Micro-cooling for Intensely Concentrated Electronics (MicroICE) an Intrachip Approach.”

Garrison, James L; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$500,000, “Signals of Opportunity Airborne Demonstrator (SoOp-AD).”

Gavin, Timothy P; health & kinesiology, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, “2014 GS SRG- H&K.”

Gerber, Corey K; agronomy, from Indiana Certified Crop Advisors, \$5,500, “Crop Diagnostic Training and Research Center.”

Gerber, Corey K; agronomy, from GROW-MARK, Inc., \$4,950, “Crop Diagnostic Training and Research Center.”

Gerber, Corey K; agronomy, from Mycogen Plant Sciences, \$8,800, “Crop Diagnostic Training and Research Center.”

Gerber, Corey K; agronomy, from Pioneer Hi-Bred International, Inc., \$4,400, “Crop Diagnostic Training and Research Center.”

Gerber, Corey K; agronomy, from Becks Superior Hybrids, Inc., \$16,500, “Crop Diagnostic Training and Research Center.”

Gerber, Corey K; agronomy, from Pioneer Hi-Bred International, Inc., \$3,300, “Crop Diagnostic Training and Research Center.”

Gerber, Corey K; agronomy, from Dow Agro Sciences, \$13,200, “Crop Diagnostic Training and Research Center.”

Ghiselli, Richard F; hospitality & tourism, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, “2014 GS SRG- HTM.”

Gilpin, Christopher J; horticulture & landscape architecture, from Purdue University, \$61,089, “1314 Office of the Vice President for Research (OVPR) CORE Supplement Funding Program. CCD Camera for TEM Control Software.”

Gounder, Rajamani P; chemical engineering, from Oak Ridge Associated Universities, \$5,000, “New Insights into Catalyst Performance for NOx Pollution Abatement in Diesel Engine Emissions.”

Groll, Eckhard A; mechanical engineering, from American Society of Mechanical Engineers, \$13,600, “KCORC Research.”

Groll, Eckhard A; mechanical engineering, from Regal Beloit Manufacturing Corp, \$33,895, “Performance Testing for Unitary Split-System Heat Pump with Viper Expander.”

Hacker, Thomas J; computer & information technology, from Mississippi State University, \$53,380, “Participant Support for Cyberbridges 2014.”

Hamilton, Roy L; Education Opportunities Program — Calumet campus, from Indiana Commission for Higher Education, \$1,500, “Indiana Scholarcorps AmeriCorps Program.”

Han, Bumsoo; mechanical engineering, from Purdue University, \$243, “Kauffman Foundation Continuation Grant Global.” (a Discovery Park award — Burton D. Morgan Center for Entrepreneurship)

Han, Qingyou; mechanical engineering technology, from Materials Res Institute Shandong, \$50,000, “Center for Materials Processing Research (CMPR).”

Handwerker, Carol A; **Hua, Inez**; **Iyer, Ananth V** and **Ramani, Karthik**; materials engineering, civil engineering, management, mechanical engineering, from National Science Foundation, \$691,063, “Integrative Graduate Education and Research Traineeship (IGERT): Global Traineeship in Sustainable Electronics-Amend 002 Grant 106000.”

Handwerker, Carol A; materials engineering, from Foresite, Inc, \$6,000, “Foresite Tin Whiskers Research.”

Harbin, Sherry L; biomedical engineering, from Chappelle, \$1,530, “Blum, Kevin M.”

Hassanein, Ahmed; nuclear engineering, from U.S. Department of Energy, \$950,000, “Integrated Prediction and Benchmarking of Material Damage and Lifetime Analysis During Major Plasma Instabilities in Fusion Devices.”

Heeg, Marlene O; pharmacy — administration, from Takeda Pharmaceutical International Inc US Region, \$342,013, “CGA-2014-IBD, 2014 ACG Trial by Jury.”

Heeg, Marlene O; pharmacy — administration, from Astellas Pharma US Inc, \$60,000, “The Role of Allied Healthcare Professionals in Maintenance Immunosuppression for Renal Transplantation: Improving Adherence, Improving Outcomes.”

Heeg, Marlene O; pharmacy — administration, from Salix Pharmaceuticals, Inc., \$15,000, “2014 ROME Foundation Update from Digestive Disease Week (DDW).”

Heeg, Marlene O; pharmacy — administration, from Prometheus Laboratories Inc, \$2,500, “2014 ROME Foundation Update from Digestive Disease Week (DDW).”

Hertel, Thomas W; agricultural economics, from Economics and Social Research Institute, \$19,650, “Global Trade Analysis Project (GTAP) Consortium.”

Hertel, Thomas W; agricultural economics, from Centre Detudes Prosp Et Dinfo International, \$19,650, “Global Trade Analysis Project (GTAP) Consortium.”

Hertel, Thomas W; agricultural economics, from Massachusetts Institute of Technology, \$19,650, “Global Trade Analysis Project (GTAP) Consortium.”

Hoag, Molly M; field extension educators, from United Way of Wells County, \$1,320, “Block Party.”

Hosking, Antony L; computer science, from Qualcomm Technologies Inc, \$50,000, “Qualcomm.”

Howell, Kathleen; aeronautical & astronautical engineering, from Analytical Mechanics Association, Inc, \$7,905, “National Aeronautics and Space Administration (NASA) Guidance, Navigation, and Control Technical Discipline Team (Tdt); Purchase Order T00163; Revision 3.”

Huang, Chi-Hua; agronomy, from Agricultural Research Service, \$5,138, “Acquisition of Goods and Services.”

Hubbard, Bryan J; building construction & management technology, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, “2014 GS SRG- BCMT.”

Hunt, Greg J and Gibson, Joshua D; entomology, from Indiana Academy of Science, \$2,934, “The Genetics of Varroa Mite Resistance in Honey Bees (*Apis Mellifera*).”

Hwang, Inseok; aeronautical & astronautical engineering, from Optimal Synthesis Inc, \$220,000, “A Formal Approach to User Interface Design Using Hybrid System Theory.”

Hwang, Inseok; aeronautical & astronautical engineering, from Optimal Synthesis Inc, \$45,000, “A Hybrid Systems Approach to Intelligent Information Management in Human-Automation Interaction.”

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$29,484, “Task 1: Interfacial Area Transport in a 1-Inch Pipe; Modification 1, Grant 106757.”

Jacobs, Douglass F; forestry & natural resources, from U.S. Forest Service, \$10,000, “Chemical Repellents to Deter Herbivory of Planted Forest Trees.”

Jiang, Keyuan; Calix, Ricardo A and Nakayama, Shoji; computer information technology — Calumet campus, construction & engineering - calumet campus, from Engineered Companies Inc, \$1,550, “A Safety Database System for Northwest Indiana Business Roundtable Safety Statistics Subcommittee.”

Johnson, William G and Hallett, Steven G; botany & plant pathology, from Indiana Soybean Alliance, \$45,601, “Understanding Glyphosate Resistance in Common Waterhemp and Palmer Amaranth.”

Johnson, William G; botany & plant pathology, from Bayer CropScience LP (Environmental Science), \$10,000, “Weed Biology and Management.”

Johnson, William G; botany & plant pathology, from BASF Corporation, \$31,750, “Protocols D03-A, D03-B, D04-A, D0J-A, D0K-R.”

Johnson, William G; botany & plant pathology, from Indiana Soybean Alliance, \$41,423, “Influence of Spray Water Quality on Glufosinate, Dicamba, and 2,4-D, Efficacy on Indianas Toughest Broadleaf Weeds.”

Johnson, William G; botany & plant pathology, from Indiana Soybean Alliance, \$30,000, “Screening and Control of Glyphosate-Resistant Weeds in Soybean Production Systems.”

Johnson, William G and Wise, Kiersten A; botany & plant pathology, from Indiana Corn Marketing Council, \$25,972, “The Effect of Herbicide-Resistant Volunteer Corn Growing in Corn on Grain Quality and Mycotoxin Contamination.”

Johnson, William G and Wise, Kiersten A; botany & plant pathology, from Indiana Corn Marketing Council, \$39,025, “Impact of Annual Ryegrass Management on Goss's Wilt Survival in Corn.”

Jung, Byunghoo; electrical & computer engineering, from National Science Foundation, \$50,000, “I-Corps: Applications of Local Wireless Tracking Technology to 3-D User Interfaces.”

Kaplan, Ian and Angelella, Gina M; entomology, agronomy, from Indiana Academy of Science, \$2,414, “Do Aphid Secondary Endosymbionts Mediate Plant Virus Transmission?”

Kaplan, Ian and Blubaugh, Carmen K; entomology, from National Science Foundation, \$20,015, “Dissertation Research: Does Fear Beget Fear? Examining Antipredator Cascades Over Four Trophic Levels.”

Karpicke, Jeffrey D; psychological science, from Institute of Education Sciences, \$449,413, “Retrieval-Oriented Learning Strategies — Action 7 for Grant 105339.”

Kaufmann, Ralph M; mathematics, from Simons Foundation, \$35,000, “Geometry, Topology and Physics.”

Kladivko, Eileen J; agronomy, from Pioneer Hi-Bred International, Inc., \$500, “Soil Physics.”

Klimeck, Gerhard; electrical & computer engineering, from Semiconductor Research Corporation, \$100,000, “SRC Contract 2013-IN-2434, Amendment No. 1.”

Klimeck, Gerhard; electrical & computer engineering, from University of Wisconsin-Madison, \$73,333, “Nsolid State Quantum Computing Using Spin Qubits in Silicon Quantum Dots.” (a Discovery Park award — Network for Computational Nanotechnology)

Klimeck, Gerhard; electrical & computer engineering, from Purdue University F N Andrews Fellowship, \$30,260, “Charles, James A.”

Krupke, Christian H; entomology, from South Dakota State University, \$30,000, “Research Subaward Agreement.”

Kuang, Shihuan; animal sciences, from Muscular Dystrophy Association, \$253,800, “Targeting Hypoxia Signaling to Improve the Efficiency of Myoblast Transfer.”

Kulatunga, N A; engineering technology, from Institute of International Education, \$250,000, “Consortium for Rapid Smart Grid Impact.”

Lasher-Trapp, Sonia G; earth & atmospheric sciences, from National Science Foundation, \$113,165, “The Convective Precipitation Experiment- Microphysical and Entrainment Dependencies (COP-MED).”

Leary, James F; basic medical science, from Korea Institute of Science & Technology, \$50,000, “Korea Institute of Science & Technology (KIST):Purdue Collaboration - Supplemental Fund.” (a Discovery Park award — Bindley Bioscience Center)

Leonard, Laurence B; speech, language and hearing sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$224,426, “Communicative Disorders.”

Leonard, Laurence B; speech, language and hearing sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$1,815, “Communicative Disorders.”

Leonard, Laurence B and Deevy, Patricia L; speech, language and hearing sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$231,000, “Sensitivity to Morphological Cues in Children with Specific Language Impairment.”

Lescun, Timothy B and Adams, Mackenzie K; veterinary clinical science, from American Quarter Horse Association, \$19,173, “Comparison of Tapered Versus Standard Cylindrical Transfixation Pin Insertion into Equine Third Metacarpal Bones.”

Liceaga, Andrea M; food science, from Salm Partners LLC, \$1,000, “Multi-Sponsored Gift—Sensory.”

Liceaga, Andrea M; food science, from Maplehurst Bakeries Inc., \$1,600, “Multi-Sponsored Gift—Sensory.”

Liceaga, Andrea M; food science, from Kroger Company, \$2,013, “Multi-Sponsored Gift—Sensory.”

Liceaga, Andrea M; food science, from Maraxi Inc, \$1,025, “Multi-Sponsored Gift—Sensory.”

Liceaga, Andrea M; food science, from The Hain Celestial Group, Inc., \$1,000, “Multi-Sponsored Gift—Sensory.”

Liceaga, Andrea M; food science, from Kroger Company, \$3,750, “Multi-Sponsored Gift—Sensory.”

Liu, Xiaoqi; Cancer Research Center, from University of Wisconsin-Madison, \$81,340, "Role of Sirt1 in Melanocyte Biology and Melanocytic Transformation."

Lopez, Roberto G; horticulture & landscape architecture, from Everris Na Inc, \$3,125, "Multi-Sponsored Gift Account."

Lopez-De-Bertodano, Martin A; nuclear engineering, from Bechtel Bettis, Inc., \$49,706, "Modified Two-Phase Law of the Wall for Subcooled Nucleate Boiling Two-Fluid Model."

Low, Philip S; chemistry, from On Target Laboratories LLC, \$176,136, "On Target."

Low, Philip S; chemistry, from Endocyte, Inc., \$3,500,000, "Folate Chemo: Novel, Non-Toxic, Delivery of Hemotherapeutics."

Lucas, Jeffrey R; Ronald, Kelly L and Fernandez-Juricic, Esteban; biological sciences, from Animal Behavior Society, \$1,300, "Taking the Sensory Approach: Individual Variation on Multimodal Sensory Processing and the Implications for Mate-Choice."

Lucht, Robert P; mechanical engineering, from GE Aviation, \$175,000, "High-Pressure TAPS Flame Visualization."

Luke, Eileen M; Center for CERIS, from Animal Plant Health Inspection Service, \$230,459, "National Agricultural Pest Information System (NAPIS)."

Lundstrom, Mark S; electrical & computer engineering, from Purdue University, \$154,360, "NanoHUB-U." (a Discovery Park award — Network for Computational Nanotechnology)

Ma, Jianxin; agronomy, from Indiana Soybean Alliance, \$84,233, "Enhancing Soybean Genetic Diversity for High Yield Potential and SCN Resistance."

Madhavan, Krishna; Vorvoreanu, Mihaela and Elmqvist, Lars Niklas E; engineering education, computer graphics technology, electrical & computer engineering, from National Science Foundation, \$136,831, "Collaborative Research: Deep Insights Anytime, Anywhere (DIA2); Amendment 4 for Grant 105640."

Maeda, Yukiko; educational studies, from Administrator Assistance, \$5,000, "Basic Psychometric Analyses on ECA and Readiness Assessment Data."

Malis, Oana and Manfra, Michael J; physics, from National Science Foundation, \$133,124, "Global Strain-Free III-Nitride Heterostructures: Growth, Structure and Near-Infrared Optical Properties; Amendment 2 for Grant 105959." (a Discovery Park award — Birk Nanotechnology Center)

Manfra, Michael J; physics, from Purdue University, \$17,608, "1314 Purdue Research Foundation (PRF): Manfra, CTM."

Marshall, Jordan M; biology — Fort Wayne campus, from Indiana Academy of Science, \$1,018, "Ash Leaf Nutritional and Fiber Content Relative to Emerald Ash Borer Feeding Behavior."

Mason, Linda J; graduate school administration, from Zachary Confections Inc, \$1,000, "Urban and Industrial Pest Management Research."

McDaniel, Rebecca S; civil engineering, from Indiana Department of Transportation, \$2,000, "Efficient Pavement Thickness Design for Indiana SPR 3307."

McKee, Renee K; field extension administration 4-H cost center, from National 4-H Council, \$7,500, "2014 4-H Agricultural Science Commodity Carnival Learning Experience Level 1."

McLuckey, Scott A; chemistry, from U.S. Department of Energy, \$165,000, "The Dynamics and Thermodynamics of Gaseous Macro-Ions-Replacement Equipment Supplement; Modification 14 for Grant 101839."

McLuckey, Scott A; chemistry, from Eli Lilly and Company, \$15,603, "Complex Mixture Analysis: Functional Group Detection."

McNamara, Kevin T; Lowenberg-Deboer, James M and Oliver, Haley F; agricultural economics, International Programs in Agriculture, food science, from Family Health International, \$150,000, "STEP-UP--RFA 306-13-0003 USAID."

McNamara, Kevin T and Lowenberg-Deboer, James M; agricultural economics, International Programs in Agriculture, from Agency for International Development, \$1,165,000, "Afghan Agriculture University Faculty Strengthening."

Melosh, Henry J; physics, from Massachusetts Institute of Technology, \$400,000, "(GRAIL) — Gravity Recovery and Interior Lab; Modification 10, Grant 104726."

Mesecar, Andrew D; biological sciences, from University of Kansas, \$152,916, "SARS CoV Inhibitors and Imaging Probes that Target the Papain-Like Protease."

Moore, Tamara J; engineering education, from National Science Foundation, \$177,463, "Faculty Early Career Development (CAREER): Implementing K-12 Engineering Standards through Science, Technology, Engineering & Mathematics (STEM) Integration."

Moore, Tamara J; engineering education, from University of Minnesota, \$56,521, "EngrTEAMS: Engineering to Transform the Education of Analysis, Measurement, and Science in a Team-Based Targeted Mathematics-Science Partnership."

Mudawar, Issam; mechanical engineering, from National Aeronautics and Space Administration, \$100,000, "Flow Boiling and Condensation Experiment (FBCE) - Sup 3 for Grant 106537."

Murray, Michael D; pharmacy practice, from Indiana University, \$8,812, "The Natural History of Schizophrenia in a Geographically-Defined Population."

Nachappa, Punya B and Krupke, Christian H; biology — Fort Wayne campus, entomology, from Indiana Soybean Alliance, \$29,686, "Surveying Indiana Soybean for Soybean Vein Necrosis Virus and Evaluating Biological Control and Plant Defense Elicitors."

Nalam, Vamsi J and Krupke, Christian H; biology — Fort Wayne campus, entomology, from Indiana Soybean Alliance, \$27,923, "Engineering a Host Defense Regulatory Gene, Phytoalexin Deficient4 (PAD4) for Enhancing Resistance to Soybean Aphid."

Negishi, Ei-Ichi; chemistry, from Teijin Ltd, \$90,000, "Teijin Limited."

Neumeister, Norbert; physics, from Fermi National Accelerator Laboratory, \$195,326, "U.S. Compact Muon Solenoid (CMS) Operations at Large Hadron Collider (LHC) (Upgrade-FPix)."

Nielsen, Robert L; Camberato, James J and Casteel, Shaun N; agronomy, from Indiana Corn Marketing Council, \$106,057, "Profitable Rates for Seed and Nitrogen Fertilizer Use in Corn Throughout Indiana."

Olek, Jan; civil engineering, from Indiana Department of Transportation, \$25,000, "North Central Superpave Center SPR-2042."

Paarlberg, Philip L; agricultural economics, from Animal Plant Health Inspection Service, \$65,650, "Implementation of Economic Modeling Frameworks for Invasive Plant Pests."

Panitch, Alyssa; Breur, Gert J; Neu, Corey P and Snyder, Paul W; biomedical engineering, veterinary clinical science, comparative pathobiology, from PHS-NIH National Institute of Arthritis and Musculoskeletal and Skin Diseases, \$398,326, "Investigation of Proteoglycan Mimetics as Treatments for Osteoarthritis."

Patrick, Helen; educational studies, from Kinley Trust, \$4,990, “Non-Laboratory Research Infrastructure and Equipment Program — Patrick, H.”

Patton, Aaron J; agronomy, from Midwest Regional Turf Foundation, \$13,000, “Turfgrass Research.”

Patton, Aaron J; agronomy, from National Turfgrass Evaluation Program, \$12,500, “2013 USGA/NTEP Warm-Season Putting Green Test.”

Patton, Aaron J; agronomy, from National Turfgrass Evaluation Program, \$11,000, “2013 National Zoysiagrass Test.”

Pekny, Joseph F; chemical engineering, from Purdue University, \$10,000, “Kauffman Foundation Continuation Grant Global.” (a Discovery Park award — Burton D. Morgan Center for Entrepreneurship)

Pekny, Joseph F; chemical engineering, from Purdue University, \$9,757, “Kauffman Foundation Continuation Grant Global.” (a Discovery Park award — Burton D. Morgan Center for Entrepreneurship)

Peleato-Inarrea, Borja M; electrical & computer engineering, from Hisilicon Technologies Co Ltd, \$25,000, “Noise Characterization for the Flash Read and Write Channels.”

Pelter, Libbie S; chemistry and physics — Calumet campus, from University of Nebraska-Lincoln, \$23,000, “Catalytic Asymmetric Hydroboration.”

Popov, Alexander K; electrical & computer engineering, from National Science Foundation, \$81,750, “Theoretical Studies and Numerical Simulations of Backward-Wave Photonic Microdevices.” (a Discovery Park award — Birck Nanotechnology Center)

Pourpoint, Timothee L; aeronautical & astronautical engineering, from Inspace, LLC, \$45,000, “Vapor Containment and Fire Suppression System for Hypergolic Propellants MDA Phase II Small Business Innovation Research (SBIR).”

Prokopy, Linda S; forestry & natural resources, from National Oceanographic & Atmospheric Administration, \$141,267, “Evaluating the Impact of Extreme Drought on Farm Advisors Perception of Climate Risks in the US Corn Belt.”

Pruitt, Robert E; botany & plant pathology, from Indiana Vegetable Growers Association, \$1,000, “Pruitt Voluntary Support.”

Rainey, Katherine M; agronomy, from Dow Agro Sciences, \$558,506, “Characterization of Soynam Population for Node and Pod Number.”

Ratliff, Timothy L; Cancer Research Center, from Walther Cancer Institute Foundation Inc, \$700,000, “Request for Support to Recruit Structural Biologist for Drug Discovery.”

Rayburn, Rachel L; Research Engagement & Sponsored Programs — Fort Wayne campus, from Purdue University, \$61,549, “Desistance from Crime in New Orleans.”

Rhoads, Jeffrey F; Bolton, J S and Chiu, George T; mechanical engineering, from Google Inc, \$33,963, “Model-Enabled Predictive Design of Small-Scale Electrostatic Loud Speakers.”

Richert, Brian T; animal sciences, from Agricultural Research Service, \$32,281, “Designer Diets Decrease Aggression and Increase Welfare.”

Robicheaux, Francis J; physics, from National Science Foundation, \$75,000, “Interactions with and Between Rydberg Atoms.”

Rossmann, Michael G; biological sciences, from National Science Foundation, \$290,000, “X-Ray Determinations of Proteins and Viruses; Amendment 4 for Grant 104839.”

Rundell, Ann E; Harbin, Sherry L; Irazoqui, Pedro; Panitch, Alyssa and Park, Kinam; biomedical engineering, from PHS-NIH National Institute of Biomedical Imaging & Bioengineering, \$43,200, “A Multidisciplinary and Needs-Driven Approach to Translational Team-Based Biomedical Engineering Design.”

Savage, Michael L; WBAA, from Corporation for Public Broadcasting, \$7,906, “CPB 2014 CSG.”

Scharf, Michael E and Peterson, Brittany F; entomology, from Indiana Academy of Science, \$2,955, “Understanding the Termite Bioreactor and its Implications for Biofuels.”

Schneider, Steven P; aeronautical & astronautical engineering, from Sandia National Laboratories, \$30,000, “Measurements of Pulsed-Jet-Generated Turbulent Spots on the Wall of the Mach-6 Quiet Tunnel.”

Schneider, Steven P; aeronautical & astronautical engineering, from Air Force Office of Scientific Research, \$400,000, “Measurements of Boundary-Layer Instability and Transition in the Mach-6 Quiet Tunnel; Modification 2 for Grant 105612.”

Schoenlein, William E and Van Alstine, William G; biomedical engineering, comparative pathobiology, from Medicine Institute, Incorporated, \$55,434, “Testing Prototype Vascular Devices in an Animal Model Studies: CI-VVCF, CI-PLBK, CI-POC, CI-TRIC, CI-MFCB and CI-ENPA Grant 203133.”

Schoonmaker, Jon; animal sciences, from United Minerals Group, \$74,954, “Determine the Effect of Saponite on Performance, Diet Digestibility, and Aflatoxin Binding Capacity in Steers Fed High Concentrate Diets.”

Shalae, Vladimir M and Boltasseva, Alexandra; electrical & computer engineering, from University of Pennsylvania, \$253,500, “Large-Area, 3-D Optical Metamaterials with Tunability and Low Loss; Amendment 10, Grant 105104.” (a Discovery Park award — Birck Nanotechnology Center)

Shepson, Paul B; earth & atmospheric sciences, from Clean Air Task Force, \$26,100, “Clean Air Task Force.”

Singh, Manpreet; food science, from Masters Hand BBQ LLC, \$100, “Multi-Sponsored Gift.”

Singh, Manpreet; food science, from Ron K or Janet E Allbaugh, \$50, “Multi-Sponsored Gift.”

Singh, Manpreet; food science, from Auburn University, \$79,072, “Identifying Gaps Between Knowledge and Practice in Production and Distribution of Local and Regional Foods for a More Secure Food Supply.”

Sloan, Mary Anne; Office of Global Affairs, from Reddy Rheumatology of Northwest Indiana, \$380, “Multi-Sponsor Account I-HITEC.”

Smith, Mjt; graduate school administration, from Purdue University Special Initiative Program, \$28,667, “Kozan, Kadir.”

Smith, Mjt; graduate school administration, from Purdue University Special Initiative Program, \$2,494, “Kulesza, Christopher F.”

Smith, Mjt; graduate school administration, from Purdue University Special Initiative Program, \$30,361, “Garcia De Hurtado, Belen.”

Stanciu, Lia A; Garcia, R Edwin and Magana Deleon, Alejandra J; materials engineering, computer & information technology, from National Science Foundation, \$175,000, “Li-Ion Battery Ceramics: Structural and Microstructural Evolution Mechanisms of Processing Under an Electric Field; Amendment 1 for Grant 106711.”

Subbarayan-Shastri, Ganesh; mechanical engineering, from Research Foundation of the State University of New York (SUNY), \$95,000, “3-D Simulations of Electromigration Driven Failure: Enabling Limiting Current Prediction for Cu Pillar Microbumps and 3-D TSVs.”

Swihart, Robert K and **Michler, Charles H**; forestry & natural resources, from U.S. Forest Service, \$119,000, “Hardwood Tree Improvement and Regeneration Center.”

Swihart, Robert K; **Saunders, Michael R**; **Chapman, Robert N**; **Dunning, John B**; **Holland, Jeffrey D** and **Jenkins, Michael A**; forestry & natural resources, entomology, from Indiana Department of Natural Resources, \$580,880, “Hardwood Ecosystem Experiment.”

Szymanski, Daniel B; agronomy, from National Science Foundation, \$7,560, “2014 Plant Cell Dynamics.”

Talbert, Brian A; **Tormoehlen, Roger L** and **Esters, Levon T**; youth development & agricultural education, from Indiana Education Roundtable, \$173,250, “Creating a Pipeline for Agricultural Education Teachers in Indiana.”

Tao, Weiguo A; biochemistry, from Louisiana State University, \$43,452, “Dot1 and Histone H3 K79 Methylation in Global Genomic Nucleotide Excision Repair.”

Taylor, Lynne S and **Simpson, Garth J**; industrial & physical pharmacy, chemistry, from National Institute for Pharmaceutical Technology and Education, \$170,000, “Further Development of Nonlinear Optical Imaging for Sensitive Detection of Crystallinity in Amorphous Formulations.”

Taylor, Lynne S and **Simpson, Garth J**; industrial & physical pharmacy, chemistry, from Merck Sharp & Dohme Corp, \$60,000, “Study Agreement.”

Thompson, David H; chemistry, from Pandion Laboratories LLC, \$19,000, “Pandion Laboratories.”

Thompson, David H; chemistry, from Pandion Laboratories LLC, \$7,000, “Pandion Laboratories.”

Thompson, David H; chemistry, from Pandion Laboratories LLC, \$10,000, “Pandion Laboratories.”

Tisdale, James E; pharmacy practice, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,727, “2014 GS SRG- PHPR.”

Topp, Elizabeth M; industrial & physical pharmacy, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,727, “2014 GS SRG- INPP.”

Tsai, Su-Jung; health sciences, from Imerys Minerals Ltd, \$1,900, “Occupational Exposure Evaluation to Microfibrillar Cellulose (MFC) at a Paper Mill.”

Varma, Amit H; civil engineering, from U.S. Department of Energy, \$159,983, “Design of Steel Plated Composite Concrete (SC) Walls and Slabs for Impulsive Loading.”

Vitek, Jan; computer science, from Google Inc, \$60,000, “Google- HyDyS: Hybrid Dynamic/Static Analysis for Managed Languages.”

Vitek, Jan; **Vitek, Olga**; **Cleveland, William S**; **Grama, Ananth Y** and **Jagannathan, Suresh**; computer science, statistics, from National Science Foundation, \$0, “SI2: Conceptualization: Dynamic Languages for Scalable Data Analytics.”

Vitek, Jan; computer science, from Office of Naval Research, \$199,704, “Simpler: Hybrid Dynamic and Static Techniques for Trustworthy Data Analytics - Modification 1 for Grant 106749.”

Vyn, Tony J; agronomy, from Mosaic Crop Nutrition LLC, \$20,000, “Agricultural Cropping Systems.”

Vyn, Tony J; agronomy, from Pioneer Hi-Bred International, Inc., \$35,000, “Agricultural Cropping Systems.”

Vyn, Tony J; agronomy, from Indiana Corn Marketing Council, \$59,831, “Indiana Contributions to Global Corn Modeling Project Year 2.”

Vyn, Tony J; agronomy, from Monsanto Company, \$90,000, “Corn Physiology Fund.”

Vyn, Tony J and **Camberato, James J**; agronomy, from Dow Agro Sciences, \$98,940, “Nitrogen Use Efficiency Evaluations in Current and New Corn Genotypes Using Isotopic Nitrogen in Field Plots at Varying N Inputs: Year 2.”

Wachs, Juan P; industrial engineering, from Air Force Office of Scientific Research, \$119,586, “Embodied Interaction in Human-Machine Decision Making for Situation Awareness; Modification 1 for Grant 106506.”

Walther, Hans U; mathematics, from National Science Foundation, \$89,408, “Local Cohomology and D-Modules.”

Wassgren, Carl R; mechanical engineering, from Eli Lilly and Company, \$25,000, “Measurements and Models to Predict Picking and Sticking During Tableting.”

Wassgren, Carl R; **Beaudoin, Stephen P** and **Litster, James D**; mechanical engineering, chemical engineering, from Eli Lilly and Company, \$25,000, “Predicting Continuous Blending at Any Scale.”

Weaver, Connie M and **McCabe, George P**; foods & nutrition, science — administration, from Alliance for Potato Research and Education, \$130,000, “Bioavailability of Potassium from Potatoes and Potassium Citrate.”

Weaver, Connie M; foods & nutrition, from Tate & Lyle Ingredients Americas, Inc., \$6,000, “Corporate Affiliates Fund.”

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

Weaver, Connie M; **Byrn, Stephen R**; **Campbell, Wayne W**; **McCabe, George P**; **Ratliff, Timothy L**; **Story, Jon A**; **Wodicka, George R**; **Freeman, Lynetta**; **Leary, James F**; **Mattes, Richard D**; **Panitch, Alyssa**; **Savaiano, Dennis A**; **Teegarden, Dorothy**; **Turek, John J** and **Van Alstine, William G**; foods & nutrition, industrial & physical pharmacy, statistics, comparative pathobiology, graduate school administration, biomedical engineering, veterinary clinical science, basic medical science, from Indiana University, \$23,703, “Indiana Clinical and Translational Science Institute; Amendment 1, Grant 106876.” (a Discovery Park award — Bindley Bioscience Center)

Weaver, Gabriela C; chemistry, from Association of American Universities, \$58,178, “AAU Group on Science, Technology, Engineering & Mathematics (STEM)-ED Hub.” (a Discovery Park award — Discovery Learning Center)

Weiner, Andrew M; electrical & computer engineering, from National Science Foundation, \$375,637, “Spectral Manipulation of Broadband Time-Frequency Entangled Photons.”

Wendt, Oliver and **Yip, Jane**; speech, language and hearing sciences, from Kinley Trust, \$19,999, “Comparative Efficacy of Low-Technology Versus High-Technology Communication Intervention for Children with Severe, Nonverbal Autism.”

Whitford, Fred; botany & plant pathology, from Pest Management Foundation, \$800, “Purdue Pesticide Programs.”

Whitford, Fred; botany & plant pathology, from Northwest Indiana Nursery & Landscape Association Inc, \$100, “Purdue Pesticide Programs.”

Whitford, Fred; botany & plant pathology, from Alabama Vegetation Management Society, \$194, “Purdue Pesticide Programs.”

Whitford, Fred; botany & plant pathology, from Indiana Spray Center LLC, \$150, “Purdue Pesticide Programs.”

Whitford, Fred; botany & plant pathology, from Howard County Soil and Water Conservation District, \$85, “Purdue Pesticide Programs.”

Whiting, Nancy M and Olek, Jan; civil engineering, from Indiana Department of Transportation, \$39,662, “Concrete Pavement Joint Deterioration-SPR-3506.”

Williams, Anna K; field extension educators, from St. Joseph County 4-H Fair, Inc., \$4,000, “4-H Program Assistant.”

Wise, Kiersten A; botany & plant pathology, from Iowa State University, \$30,000, “Developing an Integrated Management and Communication Plan for Sudden Death Syndrome.”

Wise, Kiersten A and Hughes, Teresa J; botany & plant pathology, from Indiana Soybean Alliance, \$12,133, “Quantifying the Impact of Fungicides on Soybean Health and Charcoal Rot in Indiana.”

Wise, Kiersten A; botany & plant pathology, from Indiana Corn Marketing Council, \$12,238, “How Late is Too Late? Understanding the Impact of Late Fungicide Applications on Northern Corn Leaf Blight.”

Wu, Steven Y and Balagtas, Joseph V; agricultural economics, from National Institute of Food & Agriculture, \$450,581, “Economic Analysis of Policies that Combat Obesity through Restrictions on Food Retailing: a Mechanism Design and Experimental Economics Approach.”

Yang, Won Sik; nuclear engineering, from Korea Atomic Energy Research Institute, \$140,180, “Development of Computational Algorithms for Modern Depletion and Fuel Cycle Analysis Code.”

Yaninek, John S and Bledsoe, Larry W; entomology, from Indiana Department of Natural Resources, \$97,276, “Indiana Agricultural Pest Survey (CAPS) Work Plans and Budgets.”

Yernool, Dinesh A; biological sciences, from PHS-NIH National Institute of General Medical Science, \$287,312, “Structure and Function of Sodium-Calcium Exchangers.”

Zahraee, Mohammad A; engineering technology — Calumet campus, from Sinclair Community College, \$9,744, “The High-school Science, Technology, Engineering & Mathematics (STEM) Teacher Synergistic Institute.”

Zheng, Wei; health sciences, from Purdue Research Foundation (PRF) Summer Research Grants, \$4,697, “2014 Gs Srg- Hs.”

Zhou, Chenn Q; mechanical engineering — Calumet campus, from National Institute of Standards & Technology, \$480,049, “Advanced Simulation and Visualization for Steel Optimization Consortium.”

Zwier, Timothy S; chemistry, from DOE-ER-Basic Energy Sciences Chemistry, \$574,773, “Isomer-Specific Spectroscopy of Lignin-Related Neutrals, Ions and Pyrolysis Products.” ■

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