

DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

May 2018

Adeola to Bogdanor

Adeola, Olayiwola; animal sciences, from Biomatrix Inc, \$5,000, “Danisco.”

Adeola, Olayiwola; animal sciences, from Amyris Inc, \$35,013, “Investigation of the Ileal Amino Acid Digestibility and Energy Value of Feed Ingredient for Pigs.”

Aguilar, Ruben C; Institute for Integrated Neuroscience, from Lowe Syndrome Association, \$25,000, “Allosteric Activators of Ocr11: A Novel Therapeutic Strategy Against Lowe Syndrome.”

Aguilar, Ruben C; biological sciences, from Enhance Therapies LLC, \$20,000, “New Strategies to Bladder Cancer Imaging.”

Alexeenko, Alina; aeronautical & astronautical engineering, from Abbott Laboratories, \$10,000, “LyoHub Consortium.”

Aliaga, Daniel G; computer science, from Applied Research Associates, Inc, \$38,037, “The Lego System: Large-Scale Environment-Modeling Using Geometric Optimization; Modification 1, Grant 109353.”

Ambrose, Rose Prabin Kingsly; agricultural & biological engineering, from National Grain & Feed Association, \$67,165, “Compiling and Reporting Information on Agricultural Dust Explosions.”

Anderson, Trevor R; chemistry, from Purdue Research Foundation (PRF) Summer Research Grants, \$170,144, “Chem – SRG.”

Andrisani, Ourania M; Tran, Elizabeth and Xie, Jun; basic medical science, biochemistry, statistics, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$34,618, “Mechanisms of Hepatocyte Transformation by the Hepatitis B Virus X Protein.”

Appenzeller, Joerg; Chen, Zhihong; Datta, Supriyo and Lundstrom, Mark S; electrical & computer engineering, from National Science Foundation, \$16,000, “Research Experience for Undergraduates (REU) – E2CDA: Type I: Probabilistic Spin Logic for Low-Energy Boolean and Non-Boolean Computing.” (a Discovery Park award – Birck Nanotechnology Center)

Aref, Walid G; computer science, from Purdue Research Foundation (PRF) Summer Research Grants, \$69,121, “COMPSC – SRG.”

Armstrong, Shalamar D; agronomy, from Illinois Nutrient Research Council, \$207,943, “A Long-Term Evaluation of Nitrogen Application Timing and Cover Crops Impacts on the Fate and Availability of Nitrogen Fertilizer and Crop Production on Tile Drained Fields.”

Armstrong, Shalamar D; agronomy, from Illinois State University, \$7,000, “The Effect of Cover Crops on Surface Water Quality: A Paired Watershed Experiment in the Lake Bloomington Watershed.”

Bae, Euiwon; mechanical engineering, from Spectabit Optics, LLC, \$59,932, “Development of Flexible Broad Band Optical Interrogation Device.”

Bailey, Regan K; Bhadra, Anindya and Eicher-Miller, Heather A; foods & nutrition, statistics, from PHS-NIH National Cancer Institute, \$348,136, “Development of a Total Nutrient Index.”

Baributsa, Dieudonne and Ricker-Gilbert, Jacob E; entomology, agricultural economics, from Catholic Relief Services, \$14,577, “United in Building and Advancing Life Expectations (UBALE) Project in Malawi.”

Beaulieu, Lionel J; Office of Engagement, from Indiana Office of Community & Rural Affairs, \$23,293, “Project 2: Enhancing Community and Regional Capacity and Resources: Rural Indiana Stats Website Update & Expansion.”

Beaulieu, Lionel J; Office of Engagement, from Indiana Office of Community & Rural Affairs, \$119,668, “Project 1: Enhancing Community and Regional Capacity and Resources: Hometown Collaboration Initiative.”

Beaulieu, Lionel J; Office of Engagement, from Office of Small Business & Entrshp, \$83,481, “Southeast Small Business Development Center (SBDC) 2018 – State.”

Bertino, Elisa; computer science, from IBM, \$47,668, “IBM DAIS ITA.”

Bigelow, Cale A; horticulture & landscape architecture, from Harrells LLC, \$116, “MRTF Gift Account.”

Bilionis, Ilias and Aliprantis, Dionysios; mechanical engineering, electrical & computer engineering, from Ford Motor Company, \$204,930, “Development of Computational Tools for EM Design Including Manufacturing Uncertainties.”

Bofferding, Laura C; curriculum & instruction, from National Science Foundation, \$128,466, “Faculty Early Career Development (CAREER): Leveraging Contrasting Cases to Investigate Integer Understanding.”

Bogdanor, Michael J and Pipes, R Byron; Composites Manufacturing and Simulations Center, materials engineering, from Hendrickson Suspension, \$20,601, “FEA Analysis for Composite Leaf Spring.”

Bolin to Chang

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships and Partnerships, from Purdue University, \$30,144, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$30,144, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$104,000, “FY18-19 Purdue Research Foundation (PRF) Summer Faculty Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$3,195,264, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$218,400, “FY18-19 Purdue Research Foundation (PRF) Summer Faculty Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$8,000, “FY 18-19 International Travel Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$39,648, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$52,000, “FY18-19 Purdue Research Foundation (PRF) Summer Faculty Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$30,144, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$30,144, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

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Bolin, Jeffrey T; Executive Vice President for Research and Partnerships, from Purdue University, \$30,144, “FY18-19 Purdue Research Foundation (PRF) Research Grants.”

Boltasseva, Alexandra; Jacob, Zubin and Shalaev, Vladimir M; electrical & computer engineering, from U.S. Department of Energy, \$436,385, “Control of Light-Matter Interaction with Epsilon-Near-Zero Homogeneous Alternative Plasmonic Materi.”

Boltasseva, Alexandra and Shalaev, Vladimir M; electrical & computer engineering, from Office of Naval Research, \$169,974, “Optical Characterization System for Novel on-Chip Nanoscale Light Sources.” (a Discovery Park award – Birck Nanotechnology Center)

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

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

Braun, James E; mechanical engineering, from Kulthorn Kirby, \$25,000, “Center for High Performance Building Consortium.”

Braun, James E; mechanical engineering, from Lennox Industries, Inc., \$50,000, “Center for High Performance Building Consortium.”

Breur, Gert J; veterinary clinical science, from Design Lab Inc, \$9,431, “Preference Testing of Chew Toys II.”

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$39,750, “2018-19 Joint MDPhD Program for Graduate Support – Zeng.”

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$39,750, “2018-19 Joint MDPhD Program for Graduate Support – Chakravarthula.”

Bullock, Darcy M; civil engineering, from Indiana Department of Transportation, \$87,385, “Apt Capital Expenditure Account.”

Bullock, Darcy M; civil engineering, from Indiana Department of Transportation, \$119,983, “Weigh in Motion Implementation and Data Quality Control for Asset Damage Reduction (210572).”

Buzon, Michele R; anthropology, from University of Chicago, \$12,219, “Coping with Changing Climates in Early Antiquity: Comparative Approaches Between Empiricism and Theory.”

Buzzard, Gregory T; mathematics, from Purdue Research Foundation (PRF) Summer Research Grants, \$207,363, “Math – SRG.”

Caffee, Marc W and Goehring, Brent M; physics, earth & atmospheric sciences, from U.S. Geological Survey, \$3,955, “Cooperative Ecosystem Studies Unit, Great Lakes Northern Forest.”

Cai, Hua; industrial engineering, from Ford Motor Company, \$199,516, “Understanding the Greenhouse Gas Emission Impacts of Smart Transportation Systems.”

Caldwell, Barrett S; industrial engineering, from National Aeronautics and Space Administration, \$10,000, “Purdue Support of Finesse Science and Exploration.”

Caldwell, Barrett S; industrial engineering, from National Aeronautics and Space Administration, \$54,248, “Purdue Support of Basalt Program.”

Camberato, James J and Nielsen, Robert L; agronomy, from Indiana Corn Marketing Council, \$96,113, “Profitable and Environmentally Sustainable Corn Production in Indiana 2018.”

Chan, Stanley H; electrical & computer engineering, from Leidos, \$78,501, “Mitigating Turbulence in Long Range Imagery through Consensus Equilibrium.”

Chang, Fen-Lei F; medical education, from Indiana University, \$1,000, “FY18 Indiana University School of Medicine (IUSM)-Fort Wayne Research Fund (Inc 210004).”

Chang, Fen-Lei F; medical education, from Indiana University, \$1,000, “FY 18 Indiana University School of Medicine (IUSM)-Fort Wayne Equipment Fund (Inc 209998).”

Chen to Erasmus

Chen, Yingjie; Jiang, Wen; Sors, Thomas G and Watson, William R; inflammation, immunology & infectious diseases, Executive Vice President for Research and Partnerships, from PHS-NIH National Eye Institute, \$122,549, “Virtual Reality Augmented Hands-on Cryo-Electron Microscopic (EM) Training.”

Cleveland, William S; statistics, from Air Force Research Laboratory, \$86,000, “Diagnostic Methods & Software for Gitted Model Checking.”

Cole, Connie S; health and human services, from Indiana Family Health Council, Inc., \$149,180, “Lafayette Street Family Health Clinic Title Xx/Tanf.”

Cooks, Robert Graham; Thompson, David H; Barker, Eric L; Grama, Ananth Y and Nagy, Zoltan; chemistry, pharmacy – administration, computer science, chemical engineering, from Defense Advanced Research Projects Agency, \$400,000, “Analytic-Directed Multi-Scale Synthesis System.”

Cooks, Robert Graham; chemistry, from University of Colorado Denver, \$257,858, “Quantitation of Tenofovir-Diphosphate (TFV-DP) in Blood Cells.”

Cooks, Robert Graham and Ferreira, Christina R; chemistry, from Indiana Bioscience Research Institute, \$17,822, “Feasibility of Sierra Microfluidic-Bacteria Isolation for MRM-Profilng Analysis.”

Crawford, Melba M; agronomy, from National Institute of Standards & Technology, \$8,978, “Surf Gaithersburg.”

Croney, Candace C and Ekenstedt, Kari J; animal sciences, basic medical science, from Stanton Foundation, \$176,596, “Establishing a Scientific Basis for Improving Canine Welfare in Commercial Breeding Operations Study 2: Does Maternal Fear and Stress Impact Puppy Health and Behavior?”

Croney, Candace C and Ekenstedt, Kari J; animal sciences, basic medical science, from Stanton Foundation, \$466,521, “Establishing a Scientific Basis for Improving Canine Welfare in Commercial Breeding Operations: Study 1: Does Risk Assessment Predict Rehoming Outcomes in Retiring CB Dogs?”

Culurciello, Eugenio; biomedical engineering, from Office of Naval Research, \$40,000, “Software and Hardware for Deep Learning of Video Sequences.”

Cushman, Mark S; medicinal chemistry & molecular pharmacology, from Winifred B. Bilsland Endowment, \$10,404, “El-Sayed, Mohamed.”

Cushman, Mark S; medicinal chemistry & molecular pharmacology, from Winifred B. Bilsland Endowment, \$10,404, “Shugg, Tyler.”

Dadarlat, Marius D; mathematics, from National Science Foundation, \$59,983, “Operator Algebras, Groups and Topological Invariants.”

Davis, John M and Thom, James Mark; aviation technology, from Woodward FST, \$10,000, “Woodward PT6 Ignition Test Project.”

DeBoer, Jennifer J; engineering education, from Backyard Brains, \$165,000, “Backyard Brains Education Research.”

Deering, Amanda J; food science, from Indiana State Department of Health, \$125,903, “State & Territory Cooperative Agreement to Enhance Produce Safety in Preparation of Implementation of FDAs Rule:, Amendment 2; Grant 209527.”

DeLaurentis, Daniel A; aeronautical & astronautical engineering, from Science Applications International, \$181,000, “TI-04 Conventional Prompt Strike (CPS).”

DeLaurentis, Daniel A; Lee, Seokcheon and Nof, Shimon Y; aeronautical & astronautical engineering, industrial engineering, from Naval Sea Systems Command Naval Surface Warfare Center (NAV-SEA/NSWC) Crane, \$40,000, “For Research Maturation of Complex Systems / System-of-Systems Technologies for Architecting, Evolving and Rapid Response Research (RAPID) Decision-Making.”

DeLaurentis, Daniel A; aeronautical & astronautical engineering, from Purdue Research Foundation, \$7,500, “Purdue Crowdfunding for UAV Research (National Aeronautics and Space Administration (NASA) Memo Match).”

Delp, Edward J; electrical & computer engineering, from Google Inc, \$45,000, “Delp: Google Faculty Award.”

Delp, Edward J; electrical & computer engineering, from Lockheed Martin Corp., \$100,000, “Multi-Entity Activity Characterization.”

Deng, Meng; agricultural & biological engineering, from Winifred B. Bilsland Endowment, \$21,229, “Narayanan, Naagarajan.”

Diaz-Vargas, Xiomara N; field extension educators, from Lilly Endowment Inc., \$8,000, “Teens as Teachers 2018.”

Dodd, Michael F; aeronautical & astronautical engineering, from McKinney Associates, \$15,000, “iGSDI Consortium.” (a Discovery Park award – Discovery Park administration)

Dodd, Michael F; aeronautical & astronautical engineering, from Mercury Systems, Inc, \$15,000, “iGSDI Consortium.” (a Discovery Park award – Discovery Park administration)

Dykhuisen, Emily C; medicinal chemistry & molecular pharmacology, from Winifred B. Bilsland Endowment, \$15,815, “Connelly, Katelyn.”

Eastland, Taryn; Davis, Janet H and Morrow, Mary R; nursing, from Indiana Nurses Foundation, \$2,500, “The Effectiveness of Institutional Strategies to Recruit and Retain Minority Nurses.”

Egel, Daniel S; botany & plant pathology, from Michigan Vegetable Council Inc, \$1,000, “MW Veg Prod. Guide for Comm Growers Id -56.”

Egel, Daniel S; botany & plant pathology, from Syngenta Crop Protection Inc., \$3,000, “Potassium Management.”

Ejeta, Gebisa; agronomy, from Kansas State University, \$133,562, “Genetic Enhancement of Sorghum to Promote Commercial Seed Supply and Grain Market Development in Ethiopia.”

El-Azab, Anter A; materials engineering, from U.S. Department of Energy, \$23,379, “Dislocation Patterning in Deformed Crystals: Theory, Computational Predictions and Validation.”

El-Azab, Anter A; materials engineering, from Bechtel Bettis, Inc., \$112,701, “Continuum Dislocation Dynamics Simulations of Austenitic Stainless Steel Under Cyclic Loading.”

Engelberth, Abigail S; agricultural & biological engineering, from Winifred B. Bilsland Endowment, \$21,229, “Brace, Emma.”

Erasmus, Marisa A; animal sciences, from Agricultural Research Service, \$150,000, “Probiotic, *Bacillus Subtilis*, Prevents Injurious Behaviors and Increases Skeletal Health in Laying Hens.”

Fairfax to Gunduz

Fairfax, Keke C and **Cortes Selva, Diana M**; comparative pathobiology, from American Heart Association, \$26,844, “Delineating the Role of Hepatic Macrophages in *Schistosoma Mansoni* Induced Protection from Atherosclerosis.”

Fanjoy, Richard O; aviation technology, from Chappelle, \$21,229, “Gifford, Colin.”

Fekete, Donna M and **Heinz, Michael G**; Institute for Integrated Neuroscience, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$1,037, “Interdisciplinary Training in Auditory Neuroscience.”

Fekete, Donna M and **Heinz, Michael G**; Institute for Integrated Neuroscience, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$94,303, “Interdisciplinary Training in Auditory Neuroscience.”

Figueiredo, Marxa L; basic medical science, from Purdue Doctoral Program, \$32,389, “Rivera-Cruz, Cosette.”

Figueiredo, Marxa L; basic medical science, from PHS-NIH National Cancer Institute, \$34,998, “Disrupting Tumor/Bone Malignant Interactions with Multifunctional Cytokine Sonodelivery.”

Fisher, Timothy; mechanical engineering, from Northrop Grumman Corporation, \$100,000, “Integrated Thermal Management of Aerospace Vehicles Consortium Membership.”

Fisher, Timothy; mechanical engineering, from Honeywell Inc., \$100,000, “Integrated Thermal Management of Aerospace Vehicles Consortium Membership.”

Frankenberger, Jane R; **Bowling, Laura C**; **Engel, Bernard A**; **Kladivko, Eileen J** and **Prokopy, Linda S**; agricultural & biological engineering, agronomy, forestry & natural resources, from National Institute of Food & Agriculture, \$999,579, “Managing Water for Increased Resiliency of Drained Agricultural Landscapes.”

Frosch, Robert J and **Williams, Christopher S**; civil engineering, from Dywidag Systems International USA Inc, \$37,000, “Relaxation Testing – Final Production Heat.”

Garimella, Suresh V; mechanical engineering, from Intel Corporation, \$15,000, “Cooling Technologies Research Center (Cooling Technologies Research Center (CTRC)) 2018 Membership.”

Garimella, Suresh V; mechanical engineering, from Intel Corporation, \$15,000, “Cooling Technologies Research Center (CTRC) 2018 Membership.”

Gerber, Corey K; agronomy, from Indiana Association of Professional Crop Consultants, \$2,100, “Crop Diagnostic Training and Research Center.”

Gielda, Lindsay M; **Evans, Nicole C** and **Zimmer, Michael I**; biological sciences, from Indiana Academy of Science, \$2,604, “Development of a Model System Investigating *Serratia Marcescens* Virulence Factors in *Drosophila Melanogaster*.”

Ginzel, Matthew D; entomology, from Animal Plant Health Inspection Service, \$32,253, “Evaluating Systemics to Control Invasive Pests in Chestnut and Walnut.”

Gleich, David F; computer science, from Stanford University, \$45,000, “Miner: Multimodal Networks: A General Representational Language Applied to Bio-Medical Hypothesis Generation and Validation, Amendment 11; (Grant 107796).”

Goergen, Craig J; biomedical engineering, from Chappelle, \$21,229, “Romary, Daniel.”

Goergen, Craig J; biomedical engineering, from Chappelle, \$21,229, “Qureshi, Hamna.”

Goins, Edray H and **Peterson, Jonathon R**; mathematics, from National Science Foundation, \$77,713, “Research Experience for Undergraduates (REU) Site: Purdue Research in Mathematics Experience (PRIME).”

Gondhalekar, Ameya D; entomology, from Dow Agro Sciences, \$20,000, “Evaluation of Flexible Ag Stations Containing Gf-3640 Against Termites.”

Gondhalekar, Ameya D; entomology, from Dow Agro Sciences, \$10,000, “Evaluation of Bed Bug Harborage.”

Gounder, Rajamani P; chemical engineering, from Ford Motor Company, \$200,000, “Zeolite NOx and Hydrocarbon Traps for Low Temperature Emissions Control.”

Gounder, Rajamani P; chemical engineering, from Alfred P. Sloan Foundation, \$65,000, “Dynamic Multinuclear Active Sites Formed from Mobilized Single Ions on Heterogeneous Supports.”

Govindaraju, Rao S; civil engineering, from American Society of Civil Engineers, \$6,125, “Support for the ASCE Journal of Hydrologic Engineering.”

Govindaraju, Rao S; civil engineering, from American Society of Civil Engineers, \$6,125, “Support for the ASCE Journal of Hydrologic Engineering.”

Gray, Colin M; computer graphics technology, from National Science Foundation, \$16,000, “CRII: CHS: Dark Patterns, Pragmatist Ethics, and User Experience.”

Greene, Christopher H; physics, from U.S. Department of Energy, \$155,000, “Physics of Correlated Systems.”

Griffin, Paul M; industrial engineering, from Regenstrief Foundation, \$10,000,000, “Driving to Impact: Regenstrief Center for Healthcare Engineering 2019-2024.” (a Discovery Park award – Regenstrief)

Groll, Eckhard A; mechanical engineering, from Air Squared, \$200,000, “Vapor Compression Refrigeration System for Cold Storage on Spacecrafts.”

Guan, Wenjing; horticulture & landscape architecture, from Seedway, \$1,200, “Practical Placement Strategies for Potassium Fertilizer in Corn.”

Guan, Wenjing; horticulture & landscape architecture, from Syngenta Crop Protection Inc., \$1,200, “Practical Placement Strategies for Potassium Fertilizer in Corn.”

Gunaratna, Nilupa S; foods & nutrition, from Project Concern International, \$1,286,095, “Effect and Effect Plus.”

Gunduz, Ibrahim E; mechanical engineering, from Energetic Materials & Products Inc, \$5,000, “SEM/EDX of Thermite Slurry.”

Hamaker to Irazoqui

Hamaker, Bruce R and **Ferruzzi, Mario**; food science, from Kansas State University, \$22,943, “Expanding Markets for Sorghum and Millet Farmers in West Africa through Strengthening of Entrepreneur Processors and Nutrition-Based Promotion of Products.”

Han, Bumsoo; **Chiu, George T** and **Siegmund, Thomas H**; mechanical engineering, from Leidos Biomedical Research Inc, \$300,252, “Collapsible Basket for High Throughput Histology Analysis of Tumor Spheroid Arrays.”

Handa, Avtar Krishan; horticulture & landscape architecture, from Egyptian Cultural and Educational Bureau, \$5,000, “Bench Fee – Dhuha Salah Mohamed Mahmoud.”

Handwerker, Carol A and **Subbarayan-Shastri, Ganesh**; materials engineering, mechanical engineering, from Intel Corporation, \$100,000, “Low Temperature Solder System Development and Fundamental Understanding.”

Handy, James C; Technical Assistance Program, from Indiana Department of Transportation, \$76,224, “Indiana Department of Transportation (INDOT) Permit Manual Development Project.”

Harbor, Jonathan M and **Lifton, Nathaniel A**; earth & atmospheric sciences, physics, from National Science Foundation, \$205,657, “Mapping, Measuring and Modeling Geomorphology and Ice Change in Dronning Maud Land, Antarctica.”

Hartman, Nathan W and **Sangid, Michael D**; Executive Vice President for Research and Partnerships, engineering administration engineering experiment, from Lockheed Martin Corp., \$312,562, “Completing the Model-Based Definition: Capturing Product Behavioral and Contextual Characteristics through a Model-Based Feature Information Network.”

Hartman, Nathan W; computer graphics technology, from Rockwell Collins, \$50,000, “Product Lifecycle Management Center of Excellence (PLM).”

Heister, Stephen D; aeronautical & astronautical engineering, from Hammond Group, Inc, \$65,501, “Design and Fabrication of Novel Lead Oxide Combustion Injector – Phase III.”

Hertel, Thomas W; agricultural economics, from Centre Detudes Prosp Et Dinfo International, \$20,435, “Global Trade Analysis Project (GTAP) Consortium.”

Hertel, Thomas W; agricultural economics, from OECD Environment Directorate/Gsp, \$20,435, “Global Trade Analysis Project (GTAP) Consortium.”

Hertel, Thomas W; agricultural economics, from World Trade Organization, the, \$20,435, “Global Trade Analysis Project (GTAP) Consortium – World Trade Organization.”

Hertel, Thomas W; agricultural economics, from University of Chicago, \$45,169, “Robust Decision-Making on Climate and Energy; Amendment 4; (Grant 108085).”

Hockerman, Gregory H and **Krusemark, Casey J**; medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute Neurological Disorders and Stroke, \$18,512, “Differential Modulation of Cav1.2 and Cav1.3.”

Hockley, Duncan K and **Fellenstein, Carol A**; veterinary medicine – administration, veterinary clinical science, from Petsmart Charities, Inc, \$100,000, “Priority for Paws Spay and Neuter Initiative.”

Hoffmann, Stephen R; chemistry, from Winifred B. Bilsland Endowment, \$21,229, “Cardenas, Emilio.”

Hoffmann, Stephen R; chemistry, from Winifred B. Bilsland Endowment, \$21,229, “Tatebe, Caleb.”

Hoffmann, Stephen R; chemistry, from Winifred B. Bilsland Endowment, \$21,229, “Adhikari, Sarju.”

Horgan, Briony H; earth & atmospheric sciences, from Jet Propulsion Laboratory, \$39,839, “Using Composition to Constrain Paleoenvironments and Sites of Organic Preservation in Gale Crater; Modification 6, Grant 108399.”

Howell, Kathleen; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$75,000, “Trajectory Design in a Combined Low-Thrust Multi-Body Environment – Cox.”

Howell, Kathleen; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$75,000, “A Numerical Method to Generate Reference Trajectories for Optimization Methods to Support Low-Thrust Mission Design.”

Hrycyna, Christine A; chemistry, from Multi-Sponsored Industrials, \$418, “Zara Welch Memorial.”

Hu, Changdeng; medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$516,741, “Role and Targeting of Prmt5 in Prostate Cancer.”

Huber, Matthew; **Liu, Jing**; **Van Der Mensbrugghe, Dominique Y** and **Hertel, Thomas W**; earth & atmospheric sciences, agricultural economics, from National Science Foundation, \$499,341, “Innovations at the Nexus of Food, Energy, and Water Systems (Infews: U.S.-China): A Multi-Scale Integrated Modeling Approach to Managing the Transition to Sustainability.”

Hudmon, Andy; medicinal chemistry & molecular pharmacology, from Indiana University, \$46,500, “Sodium Channels and Electrogenesis in Sensory Neurons.”

Hudmon, Karen S; pharmacy practice, from National Institutes of Health, \$334,816, “Standardized Patients to Assess Competency in Tobacco Cessation Counseling.”

Hung, Chen-Lung; physics, from Air Force Office of Scientific Research, \$125,934, “Long-Range Quantum Magnetism in Atom-Nanophotonic Hybrid Lattices.”

Ileleji, Klein; agricultural & biological engineering, from Infosys Technologies Ltd, \$173,866, “Technologies and Expert Systems for Safe Quality Management of Bulk Commodities.”

Irazoqui, Pedro; **Powley, Terry L**; **Robinson, Joseph Paul**; **Ward, Matthew Peter** and **Liu, Zhongming**; biomedical engineering, psychological science, basic medical science, from Defense Advanced Research Projects Agency, \$50,000, “Suppressing Inflammation via Neuromodulation of the GI Tract; Modification 5; Grant 107939.”

Irazoqui, Pedro; biomedical engineering, from Bionode LLC, \$100,000, “Chronic Glaucoma Treatment via Wearable Devices Driven by Applied Magnetic Fields.”

Irazoqui, Pedro; biomedical engineering, from Chappelle, \$21,229, “Swenson, Rachael.”

Ishii to Kuang

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$60,557, “Advanced Two-Phase Instrumentation: Experimental Support for Trace Model Development.”

Ishii, Mamoru; nuclear engineering, from Bechtel Bettis, Inc., \$83,000, “Demonstration of Local Measurement of Void Fraction and Interfacial Area at High Pressure and Heat Flux Subcooled Boiling Conditions.”

Jacob, Zubin; electrical & computer engineering, from National Science Foundation, \$88,457, “Faculty Early Career Development (CAREER): Controlling Single Photon Interactions with K-Surface Engineered Nanomaterials.”

Jenkins, Michael A; forestry & natural resources, from U.S. Forest Service, \$10,000, “The Use of Prescribed Fire to Promote Oak Species Regeneration within Silvicultural Harvest Treatments.”

Jin, Jian; agricultural & biological engineering, from Monsanto Company, \$10,000, “Project Boilermaker.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$5,600, “Effect of Spray Volume and Pressure on Xtendimax Weed Control.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$5,250, “Harness Max Weed Control System Pre Fb Post.”

Johnson, William G; botany & plant pathology, from Syngenta Crop Protection Inc., \$23,500, “Weed Science Research Voluntary Support.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Bayer Ag, \$9,000, “To Evaluate Weed Control Programs Containing LL, GLY and IFT in Terms of Weed Control and Tolerance and Determine the Utility of FG72/LL Soybeans.”

Johnson, William G; botany & plant pathology, from Monsanto Company, \$35,000, “Weed Science Research Voluntary Support.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$14,800, “4848_WS18_CHM_HEPO_PPO_W3.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$8,800, “4853_WS18_CHM_HEPO_NXD_W8.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$6,000, “Xtend Soybean System Comparison – No-Till.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$4,600, “Lack of Control in Soybeans.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$5,000, “Harness Max Post to Corn and Weeds.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$6,000, “HT3 Soybean System Comparison.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Indiana Corn Marketing Council, \$48,285, “Control of Herbicide-Resistant Weeds with Cover Crops and Herbicides in Corn Production Systems-Year 2.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$5,000, “Harness Max Pre to Corn and Weeds.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Dow Agro Sciences, \$10,000, “Enlist Soybean Board Project (Graduate Student Project Involving Enlist Soybeans.”

Johnson, William G and Young, Bryan G; botany & plant pathology, from Monsanto Agriculture Company, \$6,100, “PPO Resistant Weed Control.”

Johnston, Cliff T and Holloway, Eric A; agronomy, engineering administration engineering experiment, from Purdue Research Foundation, \$12,584, “Oil and Gas Analytical Chemist.” (a Discovery Park award – Energy Center)

Kaganovich, Natalya B; psychological science, from Kinley Trust, \$20,000, “Perception of Audiovisual Speech in School-Age Children with Specific Language Impairment and Their Typically Developing Peers.”

Kak, Avinash C; electrical & computer engineering, from Applied Research Associates, Inc, \$82,601, “Creation of Operationally Realistic 3-D Environment (CORE3D); Modification 1.”

Keehn, Brandon M; speech, language and hearing sciences, from National Institutes of Health, \$226,857, “Understanding Attentional Strengths and Weaknesses in Autism Spectrum Disorder.”

Key, Nicole L; mechanical engineering, from Honeywell Inc., \$365,000, “Honeywell Aerospace Voluntary Support.”

Key, Nicole L; mechanical engineering, from Duke University, \$2,000, “Grand Challenges in Turbomachinery Forced Response and NSV (INC 207098).”

Kihara, Daisuke; biological sciences, from National Institutes of Health, \$29,516, “Structural Modeling of Multifarious Protein Complexes.”

Kildishev, Alexander V; electrical & computer engineering, from Pennsylvania State University, \$187,805, “Acteom – Advanced Computational Toolkit for Engineered Optical Materials; Amendment 5.”

Kingsbury, Bruce A; arts & sciences administration, from Army Corps of Engineers, U.S., \$25,000, “Improving Translocation Techniques for Wildlife on DOD Installations; Modification 3, Grant 108288.”

Kladivko, Eileen J and Morrow, Anna L; agronomy, from Mcknight Foundation, \$160,000, “MCCC Mississippi River Proposal.”

Kluender, Keith R; speech, language and hearing sciences, from Chappelle, \$21,229, “Blair, Casie R.”

Krogmeier, James V and Bullock, Darcy M; electrical & computer engineering, civil engineering, from Indiana Department of Transportation, \$70,000, “Telematics and Utilization Analysis for Indiana Department of Transportation (INDOT) Mowing Operations.”

Kuang, Shihuan and Liu, Xiaoqi; animal sciences, Cancer Research Center, from National Institutes of Health, \$34,100, “PTEN Function in Satellite Cells.”

Landry to Mauer

Landry, Steven J; industrial engineering, from Universities Space Research Association, \$26,894, “Unmanned Aerial System Airspace Capacity Calculation.”

Langenhoven, Petrus; horticulture & landscape architecture, from Mint Industry Research Council, \$5,000, “Mint Industry Research.”

Laskin, Julia; chemistry, from Pacific Northwest National Laboratory, \$45,000, “Center for Lung Development Imaging and Omics; Modification 1, Grant 109511.”

Leidy, Heather J; foods & nutrition, from American Egg Board, \$20,000, “The Effects of an Egg-Based Breakfast on Appetite Control, Eating Behavior, and Sleep Health in Young Adults Prone to Sleep Disturbances.”

Leidy, Heather J; foods & nutrition, from Sabra Consumer Relations, \$109,526, “The Benefits of Consuming Hummus as an Afternoon Snack on Appetite Control, Daily Food Intake, and Diet Quality in Adults.”

Li, Jianming and Durkes, Abigail C; Center for Paralysis Research, comparative pathobiology, from Indiana State Department of Health, \$156,814, “Repair and Regeneration of the Damaged Spinal Cord Using Alpha-Gal Nanoparticles: Harnessing the Post-Science Immune Response.”

Li, Ninghui; computer science, from Indiana University, \$60,991, “Correct Enforcement of Access Control Policy in Modern Operating Systems, Amendment 1; Grant 108340.”

Li, Tonglei; industrial & physical pharmacy, from Ross Graduate Fellowship-Assistantship, \$27,346, “Deac, Alexandru.”

Li, Tonglei; industrial & physical pharmacy, from Winnings Sun Holdings Limited, \$28,800, “Li, Tonglei – Winning Sun Holdings.”

Li, Tonglei; industrial & physical pharmacy, from Purdue Research Foundation (PRF) Summer Research Grants, \$5,317, “INPP – SRG.”

Liang, Faming; statistics, from PHS-NIH National Institute of General Medical Science, \$297,926, “Equivalent Partial Correlation Methods for Integrative Genetic Network Analysis.”

Liceaga, Andrea M; food science, from Impossible Foods Inc., \$4,500, “Multi Sponsored Gift- Sensory.”

Lin, Guang; mathematics, from National Science Foundation, \$23,898, “Collaborative Research: Amps: Multi-Fidelity Modeling via Machine Learning for Real-Time Prediction of Power Systems.”

Lindemann, Stephen R; food science, from Higher Education Commission Pakistan, \$3,500, “Bench Fees – Anam Nasir.”

Lindemann, Stephen R; food science, from Higher Education Commission Pakistan, \$3,500, “Bench Fees – Iram Ashfaq.”

Liu, Xiaoqi; Ratliff, Timothy L and Xie, Jun; Cancer Research Center, statistics, from PHS-NIH National Cancer Institute, \$35,773, “Enhancing Anti-Neoplastic Activity of Metformin in Prostate Cancer.”

Low, Philip S; chemistry, from John Thomas & Julie Ann Hurvis, \$336,500, “Hurvis – Hulow Research.”

Lu, Na; civil engineering, from National Science Foundation, \$16,000, “Research Experience for Undergraduates (REU): Faculty Early Career Development (CAREER): Investigating Process-Structure-Property Correlations of Nitrides and Oxides for High Temperature Thermoelectric Applications.”

Lu, Yung-Hsiang; electrical & computer engineering, from Google Inc, \$79,500, “Google.”

Ma, Linquan; mathematics, from National Science Foundation, \$78,445, “Studies in Commutative Algebra.”

MacGowan, Brian J; Farlee, Lenny D. and Jackson, Elizabeth A; forestry & natural resources, from Indiana Division of Forestry, \$115,742, “Indiana Woodland Owner Education Program.”

Manfra, Michael James; physics, from Microsoft Corporation, \$150,000, “Microsoft Quantum Computing.”

Mansfield, Charles W; agronomy, from Eastman Chemical Company, \$1,600, “Wheat Plant Growth Regulator Test.”

Mansson, Jan-Anders E and Goodsell, Johnathan Eugene; chemical engineering, aeronautical & astronautical engineering, from Ford Motor Company, \$230,508, “Application of Fiber Placement Method for Selective Reinforcement of Crash Critical Molded Parts.”

Mansson, Jan-Anders E and Dustin, Joshua S; chemical engineering, Composites Manufacturing & Simulations Center, from Deere & Company, \$46,179, “John Deere Composite Pulley Feasibility Study.”

Marconnet, Amy M; mechanical engineering, from Bnnt, LLC, \$9,900, “Characterization of Bnnt Composites.”

Mason, Linda J; graduate school administration, from Purdue University Special Initiative Program, \$29,971, “Taylor-Watson, Kadari.”

Mason, Linda J; graduate school administration, from Purdue University Special Initiative Program, \$30,155, “Montoya, Tiffany.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Dongguk University, \$23,965, “Purdue Dongguk Software Oriented University Summer Program 2018.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Kyungpook National University, \$23,965, “Purdue Kyungpook Software Oriented University Summer Program 2018.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Sogang University, \$33,551, “Purdue Sogang Software Oriented University Summer Program 2018.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Sejong University, \$9,586, “Purdue Sejong Software Oriented University Summer Program 2018.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Chung-Ang University, \$23,965, “Purdue Chung-Ang Software Oriented University Summer Program 2018.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Kyung Hee University, \$19,172, “Purdue Kyung Hee Software Oriented University Summer Program 2018.”

Matson, Eric T and Smith, Anthony H; computer & information technology, from Seoul Womens University, \$9,586, “Purdue Seoul Women Software Oriented University Summer Program 2018.”

Mattson, Marifran; communication, from Ross Graduate Fellowship-Assistantship, \$23,229, “Elise Taylor.”

Mauer, Lisa J and Allan, Matthew C; food science, from National Institute of Food & Agriculture, \$165,000, “The Effects of Sugars and Salts on Starch Retrogradation – Allan, Matthew.”

Mayes to Pinal

Mayes, Amanda S; Purdue Convocations, from Arts Midwest, \$3,200, "Postsecret: The Show."

Maynard, Elizabeth T; horticulture & landscape architecture, from Mary S. Rice Farm Estate, \$3,500, "Improving Soil Preparation and Stand Establishment for Vegetable Research."

McLuckey, Scott A; chemistry, from PHS-NIH National Institute of General Medical Science, \$28,311, "Gas-Phase Bio-Conjugation in the Tandem Mass Spectrometry of Peptides, Proteins, and Protein Complexes."

Mei, Jianguo; chemistry, from National Science Foundation, \$106,087, "Faculty Early Career Development (CAREER): Impact of Flow-Induced Chain Alignment in Melt-Processed Complementary Semiconducting Polymer Blends."

Meilan, Richard; forestry & natural resources, from Futuragene, Inc., \$3,500, "Field Testing Futuragene."

Mendrysa, Susan M; basic medical science, from Winifred B. Bilsland Endowment, \$14,221, "Cruz Cruz, Joselyn."

Mengiste, Tesfaye D; botany & plant pathology, from Kansas State University, \$122,903, "Genetic Improvement of Sorghum for Resistance to Fungal Pathogens."

Mesecar, Andrew D; biochemistry, from Purdue Research Foundation (PRF) Summer Research Grants, \$26,585, "BCHM – SRG."

Michalski, Greg M; earth & atmospheric sciences, from Purdue Research Foundation (PRF) Summer Research Grants, \$15,951, "EAPS – SRG."

Mohammadi, Mohsen; agronomy, from Agricultural Research Service, \$17,375, "Acquisition of Goods and Service – Sarah Allen."

Moore, Tamara J and Guzey, Siddika; engineering education, curriculum & instruction, from University of Minnesota, \$70,485, "EngrTEAMS: Engineering to Transform the Education of Analysis, Measurement, and Science in a Team-Based, Targeted Mathematics-Science Partnership, Amendment 7; (Grant 107039)."

Mosier, Nathan S; agricultural & biological engineering, from Indiana Soybean Alliance, \$49,735, "Development of Enzymatic Process for Soy-Based Polymers."

Mudawar, Issam; mechanical engineering, from National Aeronautics and Space Administration, \$50,000, "Flow Boiling and Condensation Experiment (FBCE)."

Mudawar, Issam; mechanical engineering, from National Aeronautics and Space Administration, \$20,000, "Flow Boiling and Condensation in Microgravity-NSTRF Fellowship for Lucas Oneill."

Narayanan, Sanjeev K; comparative pathobiology, from Ross Graduate Fellowship-Assistantship, \$31,044, "Wakim, Chris."

Newton, Kathryn A; engineering technology, from Winifred B. Bilsland Endowment, \$17,642, "Promann, Marlen."

Nielsen, S Suzanne; food science, from University of Greenwich, \$12,902, "Nutri-P-Loss: Nutritional Postharvest Loss Estimation Methodology."

Noinaj, Nicholas; biological sciences, from PHS-NIH National Institute of General Medical Science, \$286,396, "Structural Characterization of the TOC Protein Translocon Machinery."

Ohaire, Marguerite E; comparative pathobiology, from Purdue Doctoral Program, \$31,904, "Jensen, Clare."

Olek, Jan; civil engineering, from Indiana Department of Transportation, \$97,821, "Development of Subgrade Stabilization and Slab Undersealing Solutions for PCC Pavements Restoration and Repairs SPR-4004."

Owada, Takashi; statistics, from National Science Foundation, \$43,253, "Random Algebraic Topology."

Pai, Dhananjay A; mechanical engineering, from Dow Agro Sciences, \$856, "Granule Porosity Measurements for Dow Agro Sciences."

Paniagua Perez, Guillermo; mechanical engineering, from MBDA France, \$75,032, "Compact Expansion Machine for Supersonic Flows."

Parsons, Paul; computer graphics technology, from National Science Foundation, \$16,000, "CRII: CHS: Understanding Cognitive Potentials of Interactive Visualizations."

Pastakia, Sonak D; pharmacy practice, from Moi University, \$15,819, "Strengthening Referral Networks for Management of Hypertension Across the Health System (Strengths)."

Patton, Aaron J; horticulture & landscape architecture, from Midwest Regional Turf Foundation, \$32,000, "Turfgrass Research."

Patton, Aaron J; horticulture & landscape architecture, from Red Hen Turf Farm Inc, \$500, "Patton Multi Sponsored #2 (Orig 301226)."

Patton, Aaron J; horticulture & landscape architecture, from Dow Agro Sciences, \$9,000, "Evaluation of Gameon and Relzar for Broadleaf Weed Control."

Payer, Mathias J; computer science, from Office of Naval Research, \$100,000, "Towards Transformation-Based Legacy Software Fitness: Usage-Driven Binary Debloating and Hardening."

Pekny, Joseph F; chemical engineering, from United States Military Academy, \$129,000, "Developing Best Practices in Civilian Military Educational Partnerships."

Perkins Coppola, Matthew P and Masters, Mark F; educational studies, physics, from American Institute of Physics, \$24,805, "Physics Festival for Student and Teacher Teams."

Peroulis, Dimitrios; electrical & computer engineering, from Landauer Inc., \$37,500, "Center for Electronic Defense Systems (CEDs) Consortium."

Peterson, John R; physics, from University of Arizona, \$15,000, "Updated Implementation of the JWST NIRC2 Instrument in the Photon Simulator (PhoSim)."

Peterson, John R; physics, from Association of Universities for Research In Astronomy, \$110,000, "Phosim Large Synoptic Survey Telescope (LSST) Characteristics Development & Large-Scale Image Production."

Pinal, Rodolfo; industrial & physical pharmacy, from Astrazeneca Pharmaceuticals LP, \$40,000, "Center for Pharmaceutical Processing Research Consortium."

Pogranichniy to Saunders

Pogranichniy, Roman M and **Ragland, Darryl**; comparative pathobiology, veterinary clinical science, from Foreign Agricultural Service, \$149,798, “Biosecurity for African Swine Fever Virus.”

Pol, Vilas G; Mukherjee, Partha P; Tomar, Vikas; Adams, Thomas E and **Sharma, Pankaj**; chemical engineering, mechanical engineering, aeronautical & astronautical engineering, nuclear engineering, engineering technology, from Office of Naval Research, \$541,661, “Li-Ion Battery Safety by Prevention, Detection, and Control.”

Pothen, Alex; computer science, from U.S. Department of Energy, \$181,034, “Combinatorial Algorithms to Enable Scientific Computing on Multithreaded Architectures.”

Pothen, Alex; computer science, from Pacific Northwest National Laboratory, \$60,597, “Exagraph: Combinatorial Methods for Enabling Exascale Applications; Modification 1; Grant 109198.”

Pourpoint, Timothee L; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$40,000, “Reactive Nano Scale Emulsions for High Performance Hybrid Propulsion – Joshua Mathews.”

Pourpoint, Timothee L; aeronautical & astronautical engineering, from Sandia National Laboratories, \$81,000, “Investigation and Diagnosis of Rocket Exhaust Plumes.”

Pourpoint, Timothee L; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$75,000, “Measurement and Modeling of Surface Coking in Fuel-Film Cooled Liquid Rocket Engines – Rufat Kulakhmetov.”

Pourpoint, Timothee L; aeronautical & astronautical engineering, from IERUS Technologies, Inc, \$95,000, “Vacuum Chamber Testing of Rocket Nozzle for Exo-Atmospheric Plume Project.”

Purzer, Senay and **Sharma, Pankaj**; engineering education, industrial technology, from The Concord Consortium Inc, \$82,509, “Science and Engineering Education for Infrastructure Transformation (SEET).”

Qu, Ming and **Yazawa, Kazuaki**; civil engineering, from National Science Foundation, \$205,591, “Collaborative US-Ireland: Thermo-electric Concrete Envelope (ThermoConc).”

Ramanathan, Shriram; materials engineering, from Air Force Office of Scientific Research, \$153,746, “Carrier Doping and Dynamics in Correlated Oxides.”

Ramanathan, Shriram; materials engineering, from Air Force Office of Scientific Research, \$135,000, “Defect Equilibration Studies in Binary Metal-Oxides.”

Ramirez, Julio Alfonso; civil engineering, from Purdue University, \$429,833, “New Horizon: Human Settlements for Extreme Environments.”

Ramkrishna, Doraiswami; chemical engineering, from Abbvie Inc, \$40,000, “Modeling of Crystal Morphology and Polymorphs.”

Rasche, Nancy J; computer graphics technology, from Ford Motor Company, \$211,839, “Collaborative Software Application for System Engineering FEDE.”

Rhoads, Jeffrey Frederick; Bolton, J Stuart; Davies, Patricia; Gonzalez, Marcial and **Son, Steven F**; mechanical engineering, from Air Force Research Laboratory, \$50,000, “Exploring the Thermomechanics of Energetic and Mock Energetic Composite Materials Under Quasi-Static.”

Rhoads, Jeffrey Frederick and **Bolton, J Stuart**; mechanical engineering, from Office of Naval Research, \$54,000, “Acoustics-Based IED Detection and Neutralization.”

Ribeiro, Fabio H; chemical engineering, from Tenawa Resource Management, LLC, \$10,000, “2017-18 Membership Fees for CISTAR Industrial Advisory Board.”

Ribeiro, Fabio H; Cardella, Monica E and **Harris, Michael T**; chemical engineering, engineering education, from National Science Foundation, \$100,000, “Research Experience and Mentoring Program – ERC Supplement.”

Richer, Sarah S; field extension educators, from Orange Cty Community Foundation, Inc, \$3,500, “Science, Technology, Engineering & Mathematics (STEM) Activity Kit.”

Ritchie, Kenneth P; physics, from Purdue Research Foundation (PRF) Summer Research Grants, \$79,755, “Phys – SRG.”

Rochet, Jean-Christophe; Cannon, Jason R and **Zhang, Min**; medicinal chemistry & molecular pharmacology, health sciences, statistics, from Michael J. Fox Foundation, \$57,000, “Neuroprotective Effects of NFE2L1 in PD Models.”

Rompf, Tiark; computer science, from Google Inc, \$80,000, “Multi-Sponsored Voluntary Support.”

Roy, Kaushik and **Raghunathan, Anand**; electrical & computer engineering, from Indiana Economic Development Corporation, \$1,515,000, “C-BRIC: Center for Brain-Inspired Computing Enabling Autonomous Intelligence.”

Ryu, Minjung; chemistry, from National Science Foundation, \$42,252, “Collaborative Research: Project Reset: Refugee Engagement in Science Exploration for Transformative Purposes.”

Sadeghi, Farshid; mechanical engineering, from Siemens Energy & Automation Inc., \$146,300, “Tribology Research on Gas Turbine Inlet Ring and Spring Clip Designs.”

Sanmiguel, Sandra F; Burgess, Wilella Daniels and **Parker, Loran Carleton**; veterinary medicine – administration, education – administration, from PHS-NIH Office of the Director, \$235,164, “This is How We Role: Inspiring Future Researchers through Veterinary Medicine.”

Sanmiguel, Sandra F; veterinary medicine – administration, from University of Arizona at Pine Bluff, \$58,900, “Increasing Minority Student Participation in the Veterinary Sciences through Outreach, Curriculum Development and Experiential Learning.”

Saunders, Michael R; Swihart, Robert K; Aime, Mary Catherine; Dunning, John B and **Holland, Jeffrey D**; forestry & natural resources, botany & plant pathology, entomology, from Indiana Department of Natural Resources, \$629,790, “Hardwood Ecosystem Experiment (2018-2020).”

Savikhin to Topp

Savikhin, Sergei F; physics, from National Science Foundation, \$70,000, "Research Experience for Undergraduates (REU) Site: Multidisciplinary Physics at Purdue University."

Scalo, Carlo; mechanical engineering, from Air Force Office of Scientific Research, \$73,429, "Direct Numerical Simulation of Hypersonic Transition Delay Over Carbon/Carbon Ultrasonically Absorptive Coatings."

Schinckel, Allan P and **Ajuwon, Kolapo**; animal sciences, from University of Arizona, \$26,851, "Engineering Soybeans to Enhance Gut-Health."

Schmitt, Sara A; **Purpura, David J**; **Duncan, Robert J** and **Elicker, James G**; child development & family studies, from Indiana Family & Social Services Administration, \$820,297, "On My Way Prekindergarten Expansion Project."

Schneider, Steven P; aeronautical & astronautical engineering, from Office of Naval Research, \$410,930, "Laminar Flow Control in a Hypersonic Quiet Nozzle Using Wall Suction: Feasibility Studies."

Schoenlein, William E and **Durkes, Abigail C**; biomedical engineering, comparative pathobiology, from Cook Research Incorporated, \$138,489, "Pre-Clinical Device Testing Agreement; Studies: CI-MADN, CI-RRFR, CI-PMSG, CI-VARB, CI-BIOH, CI-BIOM, CI-ZNTH/CI-ZTHO-PART THREE and POC."

Seleem, Mohamed; comparative pathobiology, from PHS-NIH National Institute of Allergy and Infectious Diseases, \$447,761, "Repurposing Auranofin and Ebselen for Treatment of Multidrug Resistant Pathogens."

Sen, Shreyas; electrical & computer engineering, from Georgia Institute of Technology, \$26,750, "Self-Powered IoT Sensor Node with In-Situ Data Analytics and Energy-Aware End-to-End Real-Time Optimization (209823)."

Sepulveda, Maria Soledad; forestry & natural resources, from Department of the Army, \$387,016, "Development of Amphibian Poly- and Perfluoroalkyl Substances Toxicity Reference Values."

Shalaev, Vladimir M and **Boltasseva, Alexandra**; electrical & computer engineering, from Harvard University, \$339,286, "Active Metasurfaces for Advanced Wavefronts Engineering and Waveguiding; Amendment 5; Grant 107476."

Shan, Jie; civil engineering, from Indiana Department of Transportation, \$154,975, "Investigation of Durability and Performance of High Friction Surface Treatment."

Sheehan, Amy Heck; pharmacy practice, from Janssen Scientific Affairs, \$117,602, "FDA/Purdue/ Janssen Scientific Affairs Drug Information Pharmaceutical Fellowship."

Simpson, Garth J and **Das, Chittaranjan**; chemistry, from PHS-NIH National Institute of General Medical Science, \$28,853, "Non-linear Optical Imaging for Guiding Protein Structure Determination."

Slabaugh, Carson D and **Lucht, Robert P**; aeronautical & astronautical engineering, from GE Aviation, \$207,000, "Advanced Combustion Diagnostics at Engine Conditions."

Snow, Lowell D; Technical Assistance Program, from Genedge Alliance, \$100,000, "MedAccred-Purdue University Manufacturing Extension Partnership."

Son, Steven F; mechanical engineering, from National Aeronautics and Space Administration, \$51,904, "Development and Characterization of a Novel Additive Manufacturing Technology Capable of Printing Propellants with High Solids Loadings – Fellowship for McClain."

Staiger, Christopher J; botany & plant pathology, from Purdue Research Foundation (PRF) Summer Research Grants, \$37,219, "Biol – SRG."

Stefanska, Barbara M; Cancer Research Center, from Purdue University, \$10,000, "Epigenetic Regulation of Enhancer Regions in Breast Cancer."

Strachan, Alejandro H; materials engineering, from Office of Naval Research, \$1,311,589, "Pc@Xtreme – Predictive Chemistry & Physics at Extreme Temperature and Pressure: Molecules, Crystals."

Strachan, Alejandro H; materials engineering, from Livermore, Lawrence National Laboratory, \$43,825, "Shock Induced Chemistry in High-Energy Density Materials via Reactive Molecular Dynamics." (a Discovery Park award – Network for Computational Nanotechnology)

Sudhoff, Scott D; electrical & computer engineering, from National Renewable Energy Laboratory, \$33,336, "SuNLaMP AMPVI: Develop Magnetics Design Optimization Tool and Design and Construct Optimized Power Magnetics; Modification12; Grant 108167."

Sudhoff, Scott D; electrical & computer engineering, from Florida State University, \$130,147, "Purdue 2017-2021 Esrdc Efforts; Amendment 6; (Grant 108689)."

Sundaram, Neera J; mechanical engineering, from Office of Naval Research, \$101,491, "Reimagining Thermal Management Systems through Optimal Plant and Control Co-Design."

Taheripour, Farzad and **Tyner, Wallace E**; agricultural economics, from National Biodiesel Board, \$172,138, "Land Use Change Research Proposal for the National Biodiesel Board."

Talavage, Thomas M; electrical & computer engineering, from Bemcalc Inc, \$22,000, "Talavage Voluntary Support."

Taleyarkhan, Rusi P; nuclear engineering, from Oak Ridge Associated Universities, \$3,750, "Fellowship Check TBD."

Tesini Roseguini, Bruno; **Kim, Kyoungrae** and **Gavin, Timothy P**; health & kinesiology, from Gatorade Sport Science Institute, \$125,598, "Accelerating Postexercise Muscle Glycogen Resynthesis in Humans: Impact of Intermittent Pneumatic Compression and Heat Therapy."

Thompson, David H; chemistry, from Cornell University, \$100,067, "Modulation of Lipid Bisretinoids Clearance with Beta-Cyclodextrins; Amendment 2; Grant 109621."

Tonnson, Bridgette L; psychological science, from PHS-NIH National Institute of Mental Health, \$182,514, "Teleheal Assessment of Syndromic Autism Risk in Infants."

Topp, Elizabeth M; industrial & physical pharmacy, from Corvidia Therapeutics, \$9,980, "Lyophilization of an Amphipathic Peptide."

Topp, Elizabeth M; industrial & physical pharmacy, from Baxter Healthcare Corporation, \$12,500, "Support for Iris Cho."

Trekles to Zhang

Trekles, Anastasia M and **Stefanek, George L**; education, computer information technology, from National Security Agency, \$95,854, "PWN Gencyber Summer Boot Camp for High School Teachers in Northwest Indiana and Southwest Michigan."

Tsoukalas, Lefteri and **Alamaniotis, Miltiadis**; nuclear engineering, from Office of Naval Research, \$140,000, "Critical System Simulation Tool for Investigating the Resilience of a Cyberphysical Security Ecosystem."

Tung, Wen-Wen; earth & atmospheric sciences, from Winifred B. Bilsland Endowment, \$17,562, "De, Bithi."

Tung, Wen-Wen; earth & atmospheric sciences, from Winifred B. Bilsland Endowment, \$3,667, "De, Bithi."

Tyner, Wallace E; agricultural economics, from Soil Health Institute, \$6,446, "Soil Health Data Analysis."

Useem, Bert; sociology, from Charles Koch Foundation, \$25,921, "Restrictive Housing in California Prisons in the Aftermath of Ashker V. Governor of California: A Longitudinal Mixed Methods Study."

Velasquez, Juan D and **Hoagland, Lori A**; Office of Corporate and Global Partnerships, horticulture & landscape architecture, from Colfuturo, \$50,000, "Cultuturo Latin American Technical, Research and Administration Leaders Program (Lateral) – Maria Paula Zea."

Voyles, Richard M; engineering technology, from Mark V Automation Corp, \$5,000, "Rose-Hub Membership (Members Cost Shared on 107355)."

Vyn, Tony J; agronomy, from Monsanto Company, \$87,767, "Determination of Plant N Efficiency Gains in Elite Corn Hybrids Exposed to Varying N Management."

Vyn, Tony J; agronomy, from Indiana Corn Marketing Council, \$59,557, "Practical Placement Strategies for Potassium Fertilizer in Corn – Year 2."

Walker, Victoria L and **Hanshaw, George O**; curriculum & instruction, from Wiley, \$4,400, "Creating a Connected Classroom."

Wang, Haiyan; materials engineering, from National Science Foundation, \$55,372, "From Atomic Scale Strain Probing to Smart 3-D Interface Design."

Wang, Haiyan; materials engineering, from Office of Naval Research, \$85,000, "Strain Driven Novel Layered Oxide Thin Films with Unique Functionalities."

Wang, Haiyan; materials engineering, from Office of Naval Research, \$169,180, "Probe the Fundamentals in Field-Enhanced Sintering Process of High Temperature Ceramics via in Situ Tem."

Wang, Haiyan; materials engineering, from National Science Foundation, \$417,497, "Novel Phase Change Materials with Tunable Transition Properties."

Wang, Xiaoming; engineering technology, from Ryobi Die Casting (USA) Inc, \$5,000, "Refractory for Melting Aluminum."

Weake, Vikki Marie; biochemistry, from PHS-NIH National Eye Institute, \$38,158, "Epigenetic Regulation of Gene Expression in the Aging Eye."

Webb, Kevin J; electrical & computer engineering, from Army Research Office, \$70,000, "The Optomechanical Response of Nanostructured Materials."

Weibel, Justin A; mechanical engineering, from Ford Motor Company, \$45,000, "Ford URP – Voluntary Support."

Weiner, Andrew M and **Qi, Minghao**; electrical & computer engineering, from Air Force Office of Scientific Research, \$234,776, "Microresonator-Based Optical Frequency Combs: Initiation, Characterization, Control."

Wendt, Michael K; medicinal chemistry & molecular pharmacology, from Winifred B. Bilsland Endowment, \$15,815, "Shinde, Aparna."

Wendt, Michael K; medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$34,933, "Overcoming Metastatic Resistance to Erbb-Targeted Therapies."

Wilker, Jonathan J; chemistry, from Office of Naval Research, \$66,159, "Biomimetic Adhesives Delivered Underwater, with Charges, and from Renewable Resources."

Wilker, Jonathan J; chemistry, from Office of Naval Research, \$47,986, "Biomimetic Adhesives for Underwater Bonding."

Williams, Samantha M; field extension educators, from Pulaski Alliance for Community Education, \$6,425, "2018 Pace Grant."

Woodcox, Stephanie G; health and human sciences, from Indiana State Department of Health, \$55,109, "Mental Health First Aid."

Yeomans, Christopher L; philosophy, from Purdue Research Foundation (PRF) Summer Research Grants, \$5,317, "Phil – SRG."

Young, Bryan G; botany & plant pathology, from West Central, \$7,350, "Multi Sponsored Gift Account."

Young, Bryan G; botany & plant pathology, from Soil Service Inc, \$4,550, "Multi Sponsored Gift Account."

Young, Bryan G; botany & plant pathology, from Brandt Consolidated, \$4,200, "Multi Sponsored Gift Account."

Young, Bryan G and **Johnson, William G**; botany & plant pathology, from Bayer Ag, \$4,500, "2018 University Field Trial Agreement (HP18USAXP4)."

Yu, Wenbin; aeronautical & astronautical engineering, from Cytec Industries Inc, \$50,000, "CDM HUB (Consortium)."

Zhang, Guangjun; comparative pathobiology, from Ross Graduate Fellowship-Assistantship, \$31,904, "Han, Han."

Zhang, Hao; statistics, from Purdue Research Foundation (PRF) Summer Research Grants, \$42,536, "Stat – SRG."

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from Wayne State University, \$36,120, "WSU Support for Graduate Student at Purdue."

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from National Institutes of Health, \$46,947, "Development of SHP2 Inhibitors for Targeted Anti-Cancer Therapy."

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from Purdue Doctoral Program, \$29,591, "Jung, Da."

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Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from Purdue Research Foundation (PRF) Summer Research Grants, \$15,951, “MCPH – SRG.”

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from Purdue University F N Andrews Fellowship, \$29,663, “Verburt, Jacob.”

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from Ross Graduate Fellowship-Assistantship, \$27,346, “Pelfrey, Ian.”

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacology, from Ross Graduate Fellowship-Assistantship, \$27,346, “David, Emily.”

Zhou, Chenn Qian and **Silaen, Armin K**; Center for Innovation Through Visualization & Simulation, from Nucor Steel Corp., \$9,897, “Computational Fluid Dynamics (CFD) Study on Water Distribution Inside the Process Gas Quench Orifice and Venturi Scrubber.”

Zhou, Chenn Qian and **Silaen, Armin K**; Center for Innovation Through Visualization & Simulation, from Enbridge, \$40,398, “Enbridge Tank Mixer Simulation.”

Zhu, Jian-Kang; horticulture & landscape architecture, from Konkuk University, \$64,444, “Letter of Agreement to Conduct Collaborative Research-Plant Stress Research for Climate Change.”

Zillich, Alan J; pharmacy practice, from Purdue Research Foundation (PRF) Summer Research Grants, \$5,317, “PHPR – SRG.”

Zillich, Alan J; pharmacy practice, from Ross Graduate Fellowship-Assistantship, \$27,346, “Amarh, Enoch.”

Zimpfer, Mark D and **De Cresce El Debs, Luciana**; building construction & management technology, from National Housing Endowment, \$100,000, “Purdue SCMT Construction Channel Sponsored by the NHE.” ■

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