

DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

October 2018

Abbott to Bolin

Abbott, Angela R; nutrition science, from Indiana Family & Social Services Administration, \$426,484, "Addl. State Funding – Indiana NEP: Snap-ED Plan 2018 (No Expiration Date)."

Abbott, Angela R and **Beyer, Rachel E;** nutrition science, from The Glick Fund, \$10,000, "Improving Senior Nutrition in Lawrence County."

Abbott, Angela R and **Love-Tillotson, Jennifer M;** health & human sciences administration, nutrition science, from The Glick Fund, \$10,000, "Nutrition Education Program."

Aime, Mary Catherine; botany & plant path, from Agricultural Research Service, \$65,301, "Pan-Mycobiome of Potato Cyst Nematodes."

Alam, Muhammad A; electrical & computer engineering, from Texas Instruments, Inc., \$135,000, "Texas Instruments Gift."

Alexeenko, Alina; aeronautics & astronautics, from Baxter Medical Products R & D, \$10,000, "LyoHub Consortium – Baxter."

Allebach, Jan P; Bolton, J Stuart; Chiu, George T and **Davies, Patricia;** electrical & computer engineering, mechanical engineering, from Hewlett Packard, \$285,856, "Print Quality Improvement."

Allebach, Jan P; electrical & computer engineering, from Hewlett Packard, \$75,000, "Deep/Machine Learning for Printed Image Quality."

Anderson, Joseph M; agronomy, from Rubisco Seeds LLC, \$2,250, "Corn Research."

Ardekani, Arezoo Motavalizadeh and **Dabiri, Sadegh;** mechanical engineering, agricultural & biological engineering program, from Merck & Company Inc., \$58,773, "Development of a Method to Evaluate Mixing/Sample Homogeneity for Complex Biological Samples after Freezing."

Armstrong, Shalamar D; agronomy, from University of Minnesota, \$11,999, "Understanding Cereal Rye Nitrogen Decomposition and its Transition into Inorganic and Organic Soil Nitrogen Pools."

Bagchi, Saurabh; Kulkarni, Milind; Lin, Xiaozhu; Panchal, Jitesh H and **Scutari, Gesualdo;** electrical & computer engineering, mechanical engineering, industrial engineering, from National Science Foundation, \$49,500, "Workshop on State-of-the-Art and Challenges in Resilience."

Bailey, Regan K; nutrition science, from Wallace, Taylor C, \$11,250, "Think Healthy Voluntary Support – Bailey."

Bareinboim, Elias; computer science, from Adobe Systems Incorporated, \$50,000, "Multi-Sponsored Voluntary Support."

Basaran, Osman A; chemical engineering, from Chevron U.S.A., Inc., \$25,000, "Purdue Process Safety and Assurance Center(P2SAC) (40001308)."

Basaran, Osman A; chemical engineering, from Amgen, Inc., \$25,000, "Purdue Process Safety and Assurance Center(P2SAC)."

Beaudoin, Stephen P; chemical engineering, from Northeastern University, \$61,691, "Adhesion of Explosives Residues to Swabs and Substrates."

Benjamin, Tamara J and **Hawley, John L;** horticulture & landscape architecture, field extension, from Indiana State Department of Health, \$70,000, "Farm to School."

Bhave, Sunil A; electrical & computer engineering, from GE Global Research Center, \$75,000, "Opto-Electro-Mechanical Accelerometer."

Bhave, Sunil A; electrical & computer engineering, from U.S. Department of Interior, \$328,085, "MCOQA: Mechanically-Driven, Coherence-Enhanced Quantum Angle Sensor."

Bhunias, Arun K; food science, from Biomatrix Inc, \$3,000, "Shuttleworth North America."

Bhunias, Arun K; food science, from National Academy of Sciences, \$3,800, "Biofilm Inactivation Using Smart Antimicrobial Nanoparticle."

Bidwell, Christopher A; animal sciences, from Agricultural Research Service, \$42,048, "Mitigating the Negative Effects of in Utero Heat Stress on Piglet Welfare Following Weaning and Transport."

Biswas, Rudro R; physics & astronomy, from Sandia National Laboratories, \$65,543, "Reversible Computing Academic Alliance."

Blankenship, Bonnie T; health & kinesiology, from Indiana Department of Education, \$90,013, "PALS Camp."

Bledsoe, Larry W; entomology, from Michigan Commercial Beekeepers, \$1,000, "Entomology – Research."

Bobet, Antonio; civil engineering, from Indiana Department of Transportation, \$225,640, "Improved Reliability of Fwd Tests Results and Correlation with Resilient Modulus."

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

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

Bolin, Jeffrey T; Executive Vice President for Research and Partnerships administration, from Purdue University, \$721,522, "FY 18-19 Purdue Research Foundation (PRF) Research Grants."

Bouman to Dilkes

Bouman, Charles A; electrical & computer engineering, from General Electric Company, \$128,644, “Deep Learning for MBIR for the Revolution System.”

Bouman, Charles A; electrical & computer engineering, from Northrop Grumman Corporation, \$37,598, “Model Based Iterative Reconstruction Methods for Computed Tomography (Computed Tomography (CT)); Amendment 7; Grant 13000527.”

Bouman, Charles A; electrical & computer engineering, from Northeastern University, \$75,000, “Alert: CT Image Reconstruction and Processing for Air Transportation Security Phase 2.”

Bouman, Charles A; Midkiff, Samuel P and Raghunathan, Anand; electrical & computer engineering, from High Performance Imaging, \$74,463, “High Performance Computing for Imaging through Atmospheric Turbulence: Phase I.”

Bowman, Aaron B and Nie, Linda H; health sciences, from International Manganese Institute, \$14,590, “Hair Manganese Accumulation as a Novel Biomarker for External Mn Exposure.”

Bowman, Aaron B; health sciences, from PHS-NIH National Institute of Environment Health Science, \$318,584, “Gene-Neurotoxicant Interactions in Huntington Disease.”

Bowman, Aaron B; health sciences, from PHS-NIH National Institute of Environment Health Science, \$164,183, “Gene-Neurotoxicant Interactions in Huntington Disease.”

Bowman, Aaron B; health sciences, from Albert Einstein College of Medicine, \$137,898, “Mechanisms of Methylmercury Induced Neuronal Toxicity.”

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

Braun, James E and Horton, William Travis; mechanical engineering, civil engineering, from Northwest Energy Efficiency Alliance, \$80,000, “Load-Based Testing of Variable-Speed Residential Heat Pumps.”

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$24,824, “2017-18 Joint MDPHD Program for Graduate Support Liu.”

Brooke, Jarred M; forestry & natural resources, from Jennings Cty Soil and Water, \$154, “Voluntary Support – Brooke.”

Bryan, Lynn A and Samarapungavan, Ala; physics & astronomy, educational studies, from The Concord Consortium Inc, \$242,390, “Sensing Science through Modeling Matter: Kindergarten Students Development of Understanding of Matter and its Changes; Amendment 2, Grant 10001246.”

Bullock, Darcy M; civil engineering, from Indiana Department of Transportation, \$361,497, “Extraction of Vehicle Can Business Data for Enhanced Winter Roadway Condition Monitoring.”

Bullock, Darcy M; civil engineering, from Ford Motor Company, \$73,684, “Shared Dockless E-Scooter Pilot.”

Bullock, Darcy M; civil engineering, from Indiana Department of Transportation, \$200,000, “Enhanced Traffic Signal Performance Measures (Inc 21000232).”

Casteel, Shaun N; agronomy, from Kansas State University, \$53,829, “Effect of Cultural Practices on Soybean Seed Quality: a Review and Research Studies.”

Casteel, Shaun N; agronomy, from Helena Agri-Enterprises, LLC, \$9,500, “Soybean Extension Research.”

Chandrasekar, Srinivasan and Viswanathan, Koushik; industrial engineering, from Saint Gobain Corporation, \$72,950, “Correlating Performance of Coated Abrasive Products with Chip Attributes.”

Chen, Weinong W; aeronautics & astronautics, from University of Delaware, \$22,500, “Real Time Damage Visualization in Composites; Amendment 2; Grant 13000656.”

Chmielewski, Jean A and Seleem, Mohamed; chemistry, comparative pathobiology, from Therapeutic Systems Research Lab, Inc, \$143,983, “Cell-Penetrating Peptides for Treatment of Complicated Bacterial Skin and Soft Tissue Infections.”

Connor, Robert J; Habib, Ayman F and Mott, John H; civil engineering, aviation & transportation technology, from Indiana Department of Transportation, \$25,000, “Development of an Integrated Unmanned Aerial Systems (UAS) Validation Center.”

Creighton, John C; biological sciences, from America Beetle Conservation Bank, \$5,513, “Preliminary Surveys for the American Burying Beetle in Michigan.”

Creswell, Tom C; botany & plant path, from Michigan State University, \$50,000, “National Plant Diagnostic Network – North Central Region 2018-19.”

Crossley, William A; aeronautics & astronautics, from Federal Aviation Administration, \$50,000, “Project #25: General Aviation 2030 – GA Exploratory Analyses.”

Crossley, William A; aeronautics & astronautics, from National Institute Aerospace, \$40,000, “Development of a Multiple Sampling Extension for the Amiego Mixed Integer Nonlinear Programming Algorithm.”

DeLaurentis, Daniel A; aeronautics & astronautics, from Von Braun Center for Science & Innovation, \$17,000, “Improving MBSE in Space Exploration Architecture.”

Delp, Edward J and Reibman, Amy R; electrical & computer engineering, from U.S. Department of Homeland Security, \$119,853, “Ensuring Privacy and Anonymity in Swarms of Body Camera Videos.”

Delp, Edward J; electrical & computer engineering, from George Mason University, \$250,000, “Joint Exploitation of Personal and Premises Surveillance Video.”

Delp, Edward J and Allebach, Jan P; electrical & computer engineering, from Hewlett Packard, \$75,000, “Label-Free Live Cell Imaging.”

Delp, Edward J and Comer, Mary L; electrical & computer engineering, from Lockheed Martin Corp., \$150,000, “Multi-Entity Activity Characterization.”

Dilkes, Brian; biochemistry, from Binational Agricultural Research & Development, \$101,000, “Identifying Molecular Markers for Benzoxazinoid in Wild Emmer Wheat Against Aphids Feeding.”

Donkin to Fernandez-Juricic

Donkin, Shawn S; animal sciences, from Archer Daniels Midland Co, \$39,111, "Assessment of Administration Encapsulated Lysine for Lactating Dairy Cattle."

Dooley, Frank J; Luzader, Timothy B and Rickus, Jenna L; career success, provost administration, from Arizona State University, \$149,556, "UIA: Bridging the Gap from Education to Employment (BGEE)."

Doucette, Suzanne C; chemistry, from Florida State University, \$107,989, "Energy Frontier Research Center: Center for Interdisciplinary Actinide Science; Amendment 2 [Grant 14000278]."

Ebert, David S; electrical & computer engineering, from Stevens Institute of Technology, \$154,156, "Social Media Analytics Research and Training for the U. S. Coast Guard."

Edwards, Nancy E; nursing, from Health Resources & Services Administration, \$285,000, "Health Center Cluster."

Engel, Bernard A; agricultural & biological engineering program, from Farm Service Agency, \$163,390, "Development of Water Quality Impacts Decision-Support Tool(s) (DST) Using the Agricultural Policy Environmental Extender (APEX)."

Farkas, Brian E; food science, from Crown Brewing, \$75, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from High Bines Hop Yard LLC, \$70, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Randall Tuterow, \$105, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Emily D Edwards, \$550, "Pilot Plant Multi-Sponsored Gift."

Farkas, Brian E; food science, from Land Locked Hops Inc, \$250, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Howe Farms LLC, \$35, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Matthew T & Keriane Ross, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Peter L Oren, \$150, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Brent Strickhouser, \$100, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Carol & Daryl R Tressler, \$25, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Koh Knox Inc, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from The Pines Farm Hops, LLC, \$145, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Daniel A or Diane J Smith, \$126, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Howe Farms LLC, \$105, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Land Locked Hops Inc, \$100, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Jenny Reutter, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Prairie Mills Products, LLC, \$150, "Pilot Plant Multi-Sponsored Gift."

Farkas, Brian E; food science, from High Bines Hop Yard LLC, \$70, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Hanley Hops LLC, \$25, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Indiana Design Consortium, Inc, \$500, "Pilot Plant Multi-Sponsored Gift."

Farkas, Brian E; food science, from Hanley Hops LLC, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Matthew T & Keriane Ross, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from High Bines Hop Yard LLC, \$35, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Peter L Oren, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Robert & Tamara Pringle, \$35, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Robert & Tamara Pringle, \$70, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Larry & Emily D Edwards Thomas, \$700, "Pilot Plant Multi-Sponsored Gift."

Farkas, Brian E; food science, from Howe Farms LLC, \$35, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Hanley Hops LLC, \$25, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Peter L Oren, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Land Locked Hops Inc, \$150, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Multi-Sponsored Industrials, \$25, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Otto Richard or Pat Leis, \$50, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Daniel A or Diane J Smith, \$127, "Multi-Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Nutripledge LLC, \$600, "Pilot Plant Multi-Sponsored Gift."

Farkas, Brian E; food science, from Land Locked Hops Inc, \$100, "Multi-Sponsored Gift Fermentation."

Feng, Yaohua; food science, from Foreign Agricultural Service, \$48,935, "Borlaug Fellow from Thailand on Research and Extension of Food Safety."

Fernandez-Juricic, Esteban; biological sciences, from Arkion Life Sciences LLC, \$1,610, "Vision in Red-Winged Blackbirds: Visual Physiology and Perceptual Modeling."

Field to Holford

Field, William E; agricultural & biological engineering program, from National Institute of Food & Agriculture, \$531,000, “National Agriability Project, 2016-2020.”

Field, William E; agricultural & biological engineering program, from Sigma Alpha, \$4,102, “Breaking New Ground.”

Field, William E; agricultural & biological engineering program, from National Institute of Food & Agriculture, \$180,000, “Indiana Agriability Project.”

Finley, John P; physics & astronomy, from Scharenberg, Rolf or Mary Jane, \$132,900, “Voluntary Support.”

Gallardo, Roberto; agriculture administration, from Rural Development, \$65,283, “Digital Ready for Businesses: Establishing and Expanding Online Presence for Entrepreneurs & Small Businesses.”

Gallardo, Roberto; agriculture administration, from Michigan State University, \$24,988, “Expanding the Intelligent Community Extension Program.”

Garimella, Suresh V; mechanical engineering, from Aavidthermalloy, \$7,500, “Cooling Technologies Research Center (CTRC) 40001184.”

Garimella, Suresh V; Office of Corporate and Global Partnership administration, from Infosys Technologies Ltd, \$2,000,000, “Infosys Purdue Cybersecurity Education Program.”

Garimella, Suresh V; mechanical engineering, from Sandia Corporation, \$30,000, “Cooling Technologies Research Center (CTRC) 40001184.”

Garimella, Suresh V; mechanical engineering, from Qualcomm Technologies Inc, \$30,000, “Cooling Technologies Research Center (CTRC).”

Garrison, James L and Spencer, David A; aeronautics & astronautics, from National Aeronautics and Space Administration, \$790,170, “SNOOPI: Signals-of-Opportunity P-Band Investigation.”

Gaskill, Brianna N; animal sciences, from Agricultural Research Service, \$149,951, “Development of a Decision Support Tool for Improving Sow Welfare During a Heat Stress Event.”

Ginzel, Matthew D; forestry & natural resources, from U.S. Forest Service, \$16,540, “Evaluating Systemic Insecticide Residues in Chestnut and Walnut Trees.”

Gletsu-Miller, Nana Adwoa; nutrition science, from Cura Global Health, Inc, \$6,421, “Nana Gletsu-Miller.”

Goergen, Craig J; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$3,624, “2018-2019 Graduate Support – John Darmrath.”

Goni Cortes, Joaquin; industrial engineering, from Lawrence Livermore National Lab, \$28,510, “Brain Connectomics: Opportunities for High Performance Computing (14000372).”

Gonzalez, Marcial; mechanical engineering, from Procter & Gamble Company, \$12,500, “Voluntary Support.”

Govindaraju, Rao S; civil engineering, from American Society of Civil Engineers, \$6,125, “Support for the ASCE Journal of Hydrologic Engineering (40001245).”

Gray, Nicholas W; TRIO programs, from U.S. Department of Education, \$275,155, “Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound II.”

Gray, Nicholas W; TRIO programs, from U.S. Department of Education, \$275,155, “Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound I.”

Gray, Nicholas W; TRIO programs, from U.S. Department of Education, \$10,530, “Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound I (Supplement).”

Green, Henry W; veterinary clinical sciences, from Hemocleanse, Inc., \$78,197, “Sheep Hemocleanse Study.”

Groll, Eckhard A; mechanical engineering, from Regal Beloit Corp, \$20,000, “Multi Sponsor Groll.”

Groll, Eckhard A; mechanical engineering, from Honeywell Inc., \$64,473, “Theoretical Evaluation of Compressor Technologies for a Low-Pressure Refrigerant.”

Gruver, Melissa D; leadership development, from Indiana Campus Compact, \$1,500, “Purduevotes.”

Han, Bumsoo and Konieczny, Stephen F; mechanical engineering, biological sciences, from Cincinnati Childrens Hospital Medicine Center, \$188,074, “Targeting the Plasminogen Activation System to Limit Pancreatic Cancer Progression and Associated Thrombosis.”

Handa, Avtar Krishan; horticulture & landscape architecture, from Agricultural Research Service, \$84,000, “Acquisition of Goods and Services.”

Handa, Avtar Krishan; horticulture & landscape architecture, from Agricultural Research Service, \$99,000, “Discerning Metabolome and Transcriptome of Elite Germplasm Grown in the Field Under Different Cultivation Practices.”

Harbin, Sherry L; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$35,568, “2018-2019 Joint PhD Graduate Support – Hung-Yi Liu.”

Heber, Albert J and Ni, Jiqin; agricultural & biological engineering program, from Ohio State University, \$60,983, “Modeling Fluxes, Fate and Transport of Ammonia Emission from Egg Production and Manure Management Facilities.”

Helton, Hannah E; field extension, from Indiana Youth Institute, \$750, “Food and Nutrition Conference and Expo (FNCE).”

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

Hertel, Thomas W; agricultural economics, from Economic Research Service, \$100,000, “A New Trade Modeling Framework for USDA.”

Hogenesch, Harm; veterinary medicine administration, from Ohio State University, \$10,000, “An Efficacious Intranasal Corn-Based Nanoparticle Swine Influenza Virus Vaccine in Pigs.”

Holford, Kenneth C; Center for Innovation thru Visualization & Simulation, from U.S. Forest Service, \$9,900, “Urban Waters Partnership in Northwest Indiana.”

Holland to Lee

Holland, Jeffrey D; entomology, from University of Minnesota, \$11,988, "Springtails as Bioindicators of Soil Health."

Hook, Tomas O; Archer, Angela S; Beugly, Jayson S and Foley, Carolyn J; forestry & natural resources, from University of Illinois, \$16,803, "High-Resolution Monitoring of Illinois Lake Michigan Waves and Currents to Improve Coastal Models and Public Safety."

Hooser, Stephen B; comparative pathobiology, from PHS-Food and Drug Administration, \$9,976, "Veterinary – LIRN Feed Contaminant Survey."

Hountz, Randall A and Clare, Mark K; industrial engineering, from Indiana State Department of Health, \$25,000, "ISDH Process Improvement." (a Discovery Park award – Regenstrief Center for Healthcare Engineering)

Hountz, Randall A; industrial engineering, from Indiana University, \$1,316,345, "Great Lakes Practice Transformation Network." (a Discovery Park award – Regenstrief Center for Healthcare Engineering)

Howarter, John A and Youngblood, Jeffrey P; materials engineering, from U.S. Forest Service, \$15,000, "Fundamental Measurements of Nanoscale Free Volume and Associated Molecular Transport in Cellulosic Nanomaterials and its Composites."

Howell, Kathleen; aeronautics & astronautics, from Orbital ATK, \$50,000, "Orbital Maintenance and Transfer Analysis to Support Cis-Lunar Flight Dynamic Projects."

Howell, Kathleen; aeronautics & astronautics, from Analytical Mechanics Association, Inc, \$2,500, "National Aeronautics and Space Administration (NASA) Guidance, Navigation, and Control Technical Discipline Team (TDT)."

Hubbard, Sarah M and Hubbard, Bryan J; aviation & transportation technology, construction management technology, from Indiana Department of Transportation, \$89,143, "Investigation of Strategic Deployment Opportunities for Unmanned Aircraft Systems (UAS)."

Hwang, Inseok; aeronautics & astronautics, from Rockwell Collins, \$74,582, "Development of a Machine Learning Architecture for Aircraft Maneuvering."

Ileleji, Klein; agricultural & biological engineering program, from Foreign Agricultural Service, \$11,118, "Purdue Nigeria Grain Storage Cap. Build."

Irazoqui, Pedro; electrical & computer engineering, from Rehabilitation Institute of Chicago, \$15,509, "A Pilot Trial to Assess Implantable Myonodes to Improve Prosthetic Function for Transhumeral Amputees after Targeted Muscle Reinnervation; Amendment 2 [Grant 13000519]."

Jenkins, James L; Huang, Wan Ju and Takahashi, George; construction management technology, customer relations & process management administration, from Occupational Safety & Health Administration, \$75,000, "Excavation Training in Construction Utilizing Extended Reality (XR)."

Johnson, Carla J; curriculum & instruction, from Battelle Memorial Institute, \$104,000, "Battelle – Army Educational Outreach Program Cooperative Agreement, Mod 11; Grant 13000423."

Johnson, Timothy; animal sciences, from Agricultural Research Service, \$26,000, "Computational Analysis of Antimicrobial Resistance Gene Abundance and Cooccurrence."

Kais, Sabre; Chen, Yong P and Huang, Libai; chemistry, physics & astronomy, from U.S. Department of Energy, \$825,000, "Quantum Computing Algorithms and Applications for Coherent and Strongly Correlated Chemical Systems."

Karcher, Darrin M; animal sciences, from Agricultural Research Service, \$28,500, "Impact of Northern Fowl Mites on Cage-Free Layer Performance from 17 to 90 Weeks of Age."

Karcher, Darrin M; animal sciences, from Midwest Regional Turf Foundation, \$1,000, "Poultry Research."

Katare, Bhagyashree and Wetzstein, Michael E; agricultural economics, from Economic Research Service, \$30,000, "Evaluating the Impacts of Proposed Meat Taxes on Producers and Consumers."

Kelly, Brian C; sociology, from Utah State University, \$59,791, "Sibling Socialization of Alcohol and Drug Use from Early through Late Adolescence; Amendment 1; Grant 11000679."

Kentamaa, Hilkka I; chemistry, from Purdue Research Foundation, \$63,938, "Advancing Chemically Enhanced Oil Recovery."

Kentamaa, Hilkka I; chemistry, from Neste Oil Oyj, \$101,000, "Development of Analysis Methods and Instruments for the Needs of Refinery Industry."

Kladienko, Eileen J and Morrow, Anna L; agronomy, from University of Missouri, \$30,000, "Cover Crop Training for Farm Advisors."

Klimeck, Gerhard; electrical & computer engineering, from Taiwan Semiconductor Manufacturing Co, \$75,000, "Network for Computational Nanotechnology (NCN) Membership – TSMC."

Kokini, Klod; Buzzard, Gregory T; Danielli-Garofalo, Donatella; Davies, Patricia and Sahley, Christie L; mechanical engineering, mathematics, biological sciences, from the Henry Luce Foundation, Inc, \$300,000, "2018-2019 Clare Boothe Luce Fellowship."

Krogmeier, James V; electrical & computer engineering, from Canadian Produce Marketing Association, \$5,000, "OATS Center Memo Match."

Kubis, Tillmann C; electrical & computer engineering, from Silvaco, \$3,533,335, "Commercial Development and Implementation of Atomistic Level Tcad Simulation for the Advanced Semiconductor Market."

Laskin, Julia; Ye, Dong Hye and Park, Joon Hyeong; chemistry, electrical & computer engineering, from PHS-NIH National Heart, Lung & Blood Institute, \$375,000, "Novel Platform for Quantitative Subcellular Resolution Imaging of Human Tissues Using Mass Spectrometry."

Lee, Chi Hwan; mechanical engineering, from UES Inc., \$32,000, "Defect-Free Integration of Plasmonic Thin Film Architectures with Arbitrary Substrates."

Lee, Linda S; Sepulveda, Maria Soledad and Ma, Zhao; agronomy, forestry & natural resources, from National Academy of Sciences, \$79,823, "Endocrine Disrupting Chemicals (EDCs) in Kabul and Swat Rivers and Their Impact on Fish Populations and Rural Community Livelihoods."

Liceaga to Paniagua

Liceaga, Andrea M; food science, from Heartland Food Products Group, \$3,000, “Multi-Sponsored Gift – Sensory.”

Liceaga, Andrea M; food science, from Sola Company, \$3,000, “Multi-Sponsored Gift – Sensory.”

Liceaga, Andrea M; food science, from The Hain Celestial Group, Inc., \$1,500, “Sensory Evaluation Research.”

Liceaga, Andrea M; food science, from Impossible Foods Inc., \$4,000, “Multi-Sponsored Gift – Sensory.”

Liceaga, Andrea M; food science, from Impossible Foods Inc., \$7,000, “Multi-Sponsored Gift – Sensory.”

Lister, Matthew L; physics & astronomy, from National Aeronautics and Space Administration, \$55,000, “Wyn 3.5 M Spectroscopy of Radio-Loud Fermi Agn.”

Liu, Wanqing; Jones-Hall, Yava L and Zhang, Min; medicinal chemistry & molecular pharmacy, comparative pathobiology, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$375,396, “Fatty Acid Desaturase 1 (Fads1) Variants and Non-Alcoholic Fatty Liver Disease.”

Low, Philip S; chemistry, from Endocyte, Inc., \$700,000, “Folate Chemo: Novel, Non-Toxic, Delivery of Chemotherapeutics.” (a Discovery Park award – Drug Discovery administration)

Luke, Eileen M and Hill, Michael A; CERIS, from Animal Plant Health Inspection Service, \$34,004, “National Plant Diagnostic Network (NPDN) Analysis-Process Improvement in Making Diagnostic Lab Data Available to a Wider Audience.”

Luke, Eileen M and Hill, Michael A; CERIS, from National Institute of Food & Agriculture, \$234,635, “National Plant Diagnostic Network (NPDN) National Database/National Network of Diagnostic Centers.”

Luke, Eileen M and Hill, Michael A; CERIS, from Animal Plant Health Inspection Service, \$21,252, “Indiana FY 18 Notify Specialty Crops.”

Lundstrom, Mark S; electrical & computer engineering, from Johns Hopkins University Applied Physics, \$16,000, “Nanoscale Engineered Transductional Thermoelectronics.”

Maher, Thomas V; sociology, from Pennsylvania State University, \$33,702, “Social Movement Influence on Policy Outcomes.”

Marais, Karen and Dillman, Brian G; aeronautics & astronautics, aviation & transportation technology, from Federal Aviation Administration, \$63,465, “Project #5: Safety Analysis for General Aviation.”

Matson, Eric T; computer information technology, from Korea Institute of Machinery & Materials, \$35,000, “Development of an Integrated VR Interface Manager Program Using VRPN IO-Mappings.”

Maulding, Melissa K; nutrition science, from Survey America, \$16,150, “Survey America Gift.”

McKee, Renee K; agriculture administration, from National Institute of Food & Agriculture, \$700,000, “Military Extension Adventure Camps.”

Meilan, Richard; forestry & natural resources, from Enp Investments, \$500, “Voluntary Support Research/Development.”

Meyer, Scott E; mechanical engineering, from Rolls-Royce, Inc., \$40,000, “Rolls-Royce Injector-Integrated Air-to-Fuel Heat Exchanger Core Performance Test.”

Miller, Jeffrey T; chemical engineering, from Pacific Northwest National Laboratory, \$20,000, “The Center for Molecular Electrocatalysis.”

Miller, Margaret A; Ramos-Vara, Jose A; Scott-Moncrieff, Joanna C R and Weng, Hsin-Yi; comparative pathobiology, veterinary clinical sciences, from Anivive Lifesciences, \$21,344, “Histochemistry and Immunohistochemistry of Feline Pituitary Adenomas.”

Minton, David A; earth, atmospheric & planetary sciences, from Arizona State University, \$85,280, “Stop Hitting Yourself: Did Most Terrestrial Impactors Originate from Terrestrial Planets?; (Amendment 3), Grant 12000171.”

Mishra, Dharmendra K; food science, from Michelle L or Jeffrey A Richardson, \$75, “Multi-Sponsored Gift.”

Mishra, Dharmendra K; food science, from Sazon Mexican Cuisine LLC, \$75, “Multi-Sponsored Gift.”

Mishra, Dharmendra K; food science, from Ingenieria Procesos Termicos Qtech, \$10,000, “Low Acid Aseptic Processing of Banana Puree.”

Mohammadi, Mohsen and Goodwin, Stephen B; agronomy, botany & plant pathology, from Agricultural Research Service, \$159,884, “Identifying Genes for Resistance to Septoria Tritici Blotch and Other Diseases in Wheat.”

Morissette, Dallas T; electrical & computer engineering, from Sonrisa Research Inc, \$278,976, “Radical Innovations in SIC Power Devices.”

Neville, Jennifer L; Goldwasser, Dan and Li, Ninghui; computer science, from Defense Advanced Research Projects Agency, \$434,000, “I2DS: Intelligent Interaction Defense System.”

Nguyen, Thanh T; management, from University of Pennsylvania, \$39,862, “Pseudo Markets with Complex Constraints and Uncertainty.”

O'Donnell, Michael J; field extension, from Fennig Equipment, \$500, “O'Donnell Field Day.”

O'Donnell, Michael J; field extension, from Dawn Equipment Company, \$500, “O'Donnell Field Day.”

O'Donnell, Michael J; field extension, from Salford Group Inc, \$500, “O'Donnell Field Day.”

O'Donnell, Michael J; field extension, from Pipeline Foods, LLC, \$750, “O'Donnell Field Day.”

O'Donnell, Michael J; field extension, from Global Industrial, \$250, “O'Donnell Field Day.”

O'Donnell, Michael J; field extension, from Farm Power Implements, Inc, \$500, “O'Donnell Field Day.”

Paniagua Perez, Guillermo; mechanical engineering, from Binational Science Foundation, \$29,700, “Energetic Modulation of the Thermal Boundary Layer Evolution.”

Paniagua Perez, Guillermo; mechanical engineering, from Rolls-Royce Corporation, \$436,000, “Rolls-Royce Small Turbine Aerothermal Research Rig (STARR).”

Patton to Roy

Patton, Aaron J; horticulture & landscape architecture, from Texas A&M Agrilife Research, \$186,046, "Research and Extension to Address Herbicide Resistance Epidemic in Annual Bluegrass in Managed Turf Systems."

Patton, Aaron J; horticulture & landscape architecture, from Illinois Turfgrass Foundation Inc., \$750, "Patton Multi-Sponsored #2 (Orig 301226)."

Patton, Aaron J; horticulture & landscape architecture, from Midwest Regional Turf Foundation, \$21,316, "Midwest Regional Turf Foundation."

Phillips, Rhonda G and **Feng, Yaohua;** agriculture administration, food science, from Agricultural Marketing Service, \$386,556, "Purdue Extension Farm Connect."

Pipes, R Byron; materials engineering, from The National GEM Consortium, \$20,000, "GEM Consortium – Jorge Ramirez."

Pogranichniy, Roman M and **Ragland, Darryl;** comparative pathobiology, veterinary clinical sciences, from Foreign Agricultural Service, \$38,993, "Biosecurity for African Swine Fever Virus."

Pothen, Alex; computer science, from Pacific Northwest National Laboratory, \$60,597, "Exagraph: Combinatorial Methods for Enabling Exascale Applications; Modification 2, Grant 14000319."

Pourpoint, Timothee L; aeronautics & astronautics, from Frontier Aerospace Corporation, \$63,169, "Properties Investigation of High-Mon Oxidizers for Use in Deep Space Exploration."

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

Prezzi, Monica and **Salgado, Rodrigo;** civil engineering, from Indiana Department of Transportation, \$230,000, "Verification of MSE Wall Foundation Bearing Capacity Based on the CPT and DCPT."

Radcliffe, John Scott; animal sciences, from Agricultural Research Service, \$4,500, "The Role of Stress on Swine Welfare."

Radcliffe, John Scott and **Richert, Brian T;** animal sciences, from Azomite Mineral Products Inc, \$38,053, "Effects of Azomite Indiana Nursery Pigs."

Radcliffe, John Scott; animal sciences, from Agricultural Research Service, \$14,000, "The Role of Stress on Swine Welfare."

Rainey, Katherine Martin; agronomy, from United Soybean Board, \$688,206, "Modifying Soluble Carbohydrates in Soybean Seed for Enhanced Nutritional Energy Meal Year 3."

Rainey, Katherine Martin; agronomy, from Agricultural Research Service, \$3,496, "Characterization of the High Stearic Acid Soybean Oil Trait."

Rapoport, Anatoli; curriculum & instruction, from U.S. Department of State, \$250,000, "2019 Benjamin Franklin Transatlantic Fellows Summer Institute."

Rathfon, Ronald A; forestry & natural resources, from Bayer Crop-science, \$4,500, "Bayer Vol Support."

Redick, Thomas S; psychological sciences, from Indiana Univer-

sity, \$36,600, "Behavioral Disinhibition in Early-Onset Alcoholism; Amendment 4; (Grant 11000425)."

Reed, Janet Marie; field extension, from Legacy Foundation, Inc., \$2,000, "Beginners Guide to Grant Writing Workshop."

Rhoads, Jeffrey Frederick; mechanical engineering, from Air Force Research Laboratory, \$150,000, "Exploring the Thermomechanics of Energetic and Mock Energetic Composite Materials Under Quasi-Static and Near-Resonant Excitations."

Ribeiro, Fabio H and **Farmus, Cristina D;** chemical engineering, from National Science Foundation, \$51,340, "Supplement to EEC-1647722, ERC Administrative Directors 2018 Retreat."

Ribeiro, Fabio H; chemical engineering, from MEC Fuels & Chemicals, LLC, \$1,250, "CISTAR Industrial Consortium (40001938)."

Richert, Brian T; animal sciences, from Archer Daniels Midland Co, \$10,000, "Swine Research."

Richmond, Douglas Scott; entomology, from Syngenta Crop Protection Inc., \$14,000, "Turfgrass Entomology Research."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$300, "Reaching Out to Help Vulnerable Populations: A Nursing Student Project."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$300, "Reaching Out to Help Vulnerable Populations: A Nursing Student Project."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$300, "Reaching Out to Help Vulnerable Populations: A Nursing Student Project."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$300, "Reaching Out to Help Vulnerable Populations: A Nursing Student Project."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$300, "Reaching Out to Help Vulnerable Populations: A Nursing Student Project."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$2,250, "Preparing Students to Impact Health Disparities in NWI: a Service Learning Project."

Robbins, Cindy L; nursing administration, from Indiana Campus Compact, \$300, "Reaching Out to Help Vulnerable Populations: A Nursing Student Project."

Robinson, Joseph Paul and **Rajwa, Bartlomiej P;** basic medicine science, from Boston University, Trustees of, \$80,214, "High-Throughput High-Content Single Cell Analysis by Multi-channel Stimulated Raman Flow Cytometry; Amendment 1, Grant 11000656."

Rossmann, Michael G and **Kuhn, Richard J;** biological sciences, from Washington University, \$333,920, "Antibody-Based Protection Against Flaviviruses."

Roy, Kaushik; electrical & computer engineering, from Office of Naval Research, \$266,921, "Spiking-Neural Computing: Devices, Circuits, and Fabrication."

Sadof to Spencer

Sadof, Clifford S; entomology, from Arbor America Inc, \$101, “Multi Sponsor.”

Sadof, Clifford S; entomology, from U.S. Forest Service, \$65,000, “Emerald Ash Borer (EAB) University: Using Web-Based Seminars Cooperatively to Provide Information About Emerald Ash Borer (EAB) and Other Invasive Forest Health Issues to Targeted Audiences.”

Sadof, Clifford S; Johnson, William G; Beckerman, Janna L; Egel, Daniel S; Foster, Ricky E; Given, Krispn J; Krupke, Christian H; Obermeyer, John Lyon; Patton, Aaron J and Richmond, Douglas Scott; entomology, botany & plant pathology, horticulture & landscape architecture, from National Institute of Food & Agriculture, \$298,609, “Advancing Integrated Pest Management (IPM) in Indiana – Entomology and Botany (Parent).”

Salazar, Kara A; forestry & natural resources, from University of Wisconsin-Madison, \$45,000, “Thinkwater II: Growing Knowledge to Solve Water Problems.”

Sangid, Michael D; aeronautics & astronautics, from Sandia National Laboratories, \$8,631, “Illumination of Damage within High-Strength Alloys in Abnormal Mechanical Environments.”

Saraswat, Dharmendra and Bossaer, Gregory J; agricultural & biological engineering program, agriculture administration, from Indiana Soybean Alliance, \$10,000, “Development of Infield Advanatge Web Application for Enhanced User Experience.”

Saraswat, Dharmendra and Bossaer, Gregory J; agricultural & biological engineering program, agriculture administration, from Indiana Corn Marketing Council, \$5,000, “Development of Infield Advanatge Web Application for Enhanced User Experience.”

Savran, Cagri A; mechanical engineering, from Savran Technologies Inc, \$60,000, “Voluntary Support.”

Schmitt, Sara A and Purpura, David J; human development & family studies, from Oregon State University, \$31,353, “Red Light, Purple Light! Developing a Self-Regulation Intervention for Children at-Risk for School Difficulty; Amendment 3; (Grant 19100043).”

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

Scott-Moncrieff, Joanna C R; veterinary clinical sciences, from North Central Veterinary Emergency Center LLC, \$3,750, “ECC Residency Training Program.”

Scott-Moncrieff, Joanna C R; veterinary clinical sciences, from North Central Veterinary Emergency Center, \$3,750, “ECC Residency Training Program.”

Scott-Moncrieff, Joanna C R; veterinary clinical sciences, from Compassion First Pet Hospitals, \$22,500, “SAS Resident.”

Seleem, Mohamed; comparative pathobiology, from National Academy of Sciences, \$3,660, “Development of Next Generation Arythiazoles for Combating Methicillin & Vancomycin-Resistant Staphylococcus Aureus.”

Sen, Shreyas and Weinstein, Dana; electrical & computer engineering, from Air Force Research Laboratory, \$150,000, “Midas Touches: Tiles of Unreleased Clocks for Hybrid Electronic Steering.”

Sepulveda, Maria Soledad; forestry & natural resources, from University of Southern Mississippi, \$37,520, “Integrating Teleost Transcriptomes to Identify Ecologically Meaningful Responses Following Oil Exposure.”

Shah, Amisha D; civil engineering, from University of Illinois at Chicago, \$49,351, “Reactive Electrochemical Membrane (REM) Reactors for the Ex Situ Oxidation of Perfluoroalkyl Compounds in Groundwater.”

Sharp, Nathan D and Goodsell, Johnathan Eugene; Composites Manufacturing & Simulation Center, aeronautics & astronautics, from University of Tennessee, \$60,000, “Comprehensive, Detailed Simulation of Infusion Process for Fabricating Thick Spar Caps.”

Shaver, Gregory M; mechanical engineering, from Indiana Department of Transportation, \$353,000, “Develop and Deploy a Safe Truck Platoon Testing Protocol for the Purdue ARPA-E Project in Indiana.”

Shaver, Gregory M; DeLaurentis, Daniel A and Vyn, Tony J; mechanical engineering, aeronautics & astronautics, agronomy, from John Deere Agricultural US, \$895,532, “Autonomous Systems Development Tools.”

Sheehan, Amy Heck; pharmaceutical practice, from Eli Lilly and Company, \$118,642, “FDA/Purdue/Eli Lilly and Company Advertising and Promotion Pharmaceutical Fellowship.”

Slabaugh, Carson D and Anderson, William E; aeronautics & astronautics, from Space Exploration Technologies Corp, \$58,293, “Oxygen-Methane Combustion Stability Testing at High Pressure.”

Smith, Rachael D; field extension, from Ripley County Community Fnd, \$500, “Strengthening Families Program: For Parents and Youth 10–14.”

Solomon, Kevin V; agricultural & biological engineering program, from Purdue Research Foundation, \$128,634, “Microbial Enhanced Oil Recovery in the Illinois Basin via in Situ Activation of Native Microbes with Custom Nutrient Formulations.”

Son, Steven F; mechanical engineering, from University of Notre Dame, \$132,500, “Shock Wave Processing of Advanced Reactive Materials Experiments; Mod 11 [Grant 14000227].”

Son, Steven F; mechanical engineering, from University of Michigan, \$131,250, “Theory and Experiment of Cocrystals: Principles, Synthesis and Properties.”

Son, Steven F; mechanical engineering, from University of Michigan, \$40,000, “Theory and Experiment of Cocrystals: Principles, Synthesis and Properties; Amendment 7; for Grant 13000359.”

Son, Steven F; mechanical engineering, from Northeastern University, \$75,000, “Small-Scale Characterization of Homemade Explosives (HMES).”

Spencer, David A and Alexeenko, Alina; aeronautics & astronautics, from Rocco, LLC, \$8,500, “Drag Sail Aerodynamics Analysis.”

Spencer, David A; aeronautics & astronautics, from Jet Propulsion Laboratory, \$122,929, “Mars Dust Transport Modeling and Simulation.”

Stahelin to Weaver

Stahelin, Robert V; medicinal chemistry & molecular pharmacy, from PHS-NIH National Institute of General Medical Science, \$218,750, "Development of a Real Time Cellular Tool to Monitor a Previously Untraceable Lipid."

Stewart, Kara R; animal sciences, from Agricultural Research Service, \$75,000, "Assisted Reproductive Technologies for Heritage Swine Breeds."

Stewart, Kara R; animal sciences, from Mait LLC, \$6,700, "Swine Research."

Stewart, Kara R; animal sciences, from Mait LLC, \$6,700, "Swine Research."

Strachan, Alejandro H; materials engineering, from Sandia National Laboratories, \$93,688, "Atomistic Simulations of Reactive Al/Co Laminates." (a Discovery Park award – Network for Computational Nanotechnology)

Straw, Mark L and Byers, Candy S; animal sciences, from Agricultural Marketing Service, \$45,000, "Cool Audits – 2018."

Taleyarkhan, Rusi P; nuclear engineering, from Savannah River Nuclear Solutions LLC, \$200,000, "Development of Alpha-Tmfd Sensor Technology."

Tan, Hong Z; electrical & computer engineering, from Google Inc, \$60,000, "Google."

Tarko, Andrew P and Romero, Mario A; civil engineering, from Indiana Department of Transportation, \$145,383, "SPR-4302: Using Emerging and Extraordinary Data Sources as Means to Improve Traffic Safety."

Tay, Sien Chieh; psychological sciences, from University of Pennsylvania, \$24,219, "The Humanities and Human Flourishing: A Multi-Disciplinary Collaboration for Understanding, Cultivating, and Assessing Well-Being; Amendment, Grant 40001793."

Taylor, Lynne S; industrial & physical pharmacy, from Bill & Melinda Gates Foundation, \$500,000, "Chemistry, Manufacturing and Control Pilot Project to Evaluate Novel Drug Product Manufacturing Technologies."

Taylor, Lynne S; industrial & physical pharmacy, from Virginia Technology, \$356,082, "Pfi-Rp Sustainable-Based, High Performance Polymers for Amorphous Solid Dispersion (ASD) of Drug."

Telenko, Darcy E P; botany & plant pathology, from E.I. DuPont de Nemours and Company, \$10,000, "Extension Voluntary Support."

Tesmer, John; biological sciences, from University of Pittsburgh Medical Center, \$49,449, "New Mechanisms for Modulating the Malt1 Oncoprotein."

Thompson, Aaron W; horticulture & landscape architecture, from U.S. Forest Service, \$37,045, "Ecobuffers: Part of the GRI System of Solutions for Building Healthy Working Landscapes."

Topp, Elizabeth M; pharmaceutical practice, from Steven L. & Lisa I Nail (Individual Donor), \$5,000, "Support for Iris Cho."

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

Tormoehlen, Roger L; agricultural & biological engineering program, from Multi-Sponsored Industrials, \$2,500, "Multi-Sponsored Gift."

Ukkusuri, Satish V and Kulkarni, Milind; civil engineering, electrical & computer engineering, from U.S. Department of Energy, \$949,984, "Multi-Modal Energy-Optimal Trip Scheduling in Real-Time (METS-R) for Transportation Hubs."

Ursem, Michael D; Polytechnic Institute administration, from American Lightweight Materials Manufacturing Innovation Institute, \$90,000, "Makerminded in Indiana: Connecting to and Engaging the Next Generation of Manufacturing Leaders."

Varma, Amit H; civil engineering, from Westinghouse Electric Corporation, \$19,125, "Pushout Tests to Classify and Evaluate Shear Connectors in Composite Walls."

Verma, Mohit S; agricultural & biological engineering program, from Merck Sharp & Dohme Corp, \$52,412, "Paper Based Device for Conducting Biologic Immunoassays."

Voyles, Richard M; engineering technology, from Tupperware, \$15,000, "Rose-Hub Membership (Members Cost Shared on 107355)."

Wachs, Juan P; industrial engineering, from PHS Agency for Healthcare Research & Quality, \$235,445, "Gestureclean: A Touchless Interaction Language for the Operating Room."

Wachs, Juan P; Aggarwal, Vaneet; Goldwasser, Dan and Voyles, Richard M; industrial engineering, computer science, engineering technology, from U.S. Department of Defense, \$1,285,500, "A Fundamental Theory for Dexterous Surgical Skills Transfer to Medical Robots."

Wagner, Robert G and Woeste, Keith E; forestry & natural resources, from U.S. Forest Service, \$37,303, "Genetic Analysis of American Elm."

Walker, Tammy L and Simpson, Vicki L; field extension, nursing, from Indiana Clinical & Translational Science Institute, \$25,000, "Get Healthy Scott County Recovery Happens Data Hub."

Wang, Haiyan; materials engineering, from Office of Naval Research, \$88,977, "Wang – Strain Driven Novel Layered Oxide Thin Films with Unique Functionalities (13000455)."

Wassgren, Carl R; mechanical engineering, from Procter & Gamble Company, \$12,500, "P and G Voluntary Support."

Weatherman, Kara Duncan; pharmaceutical practice, from Northstar Medical Radioisotopes, LLC, \$163,162, "Northstar – Radiogenix Radiolabeling Test Plan."

Weaver, Connie M; nutrition science, from Indiana University, \$64,662, "Indiana Core Center for Clinical Research in Musculoskeletal Health."

Weaver, Connie M and Story, Jon A; nutrition science, from Indiana University Purdue University at Indianapolis, \$121,274, "Clinical and Translational Sciences Institute (CTSI) – Training Grant Year 6." (a Discovery Park award – Bindley Bioscience Center)

Weiner to Zhou

Weiner, Andrew M; Kais, Sabre and **Qi, Minghao**; electrical & computer engineering, chemistry, from National Science Foundation, \$1,000,000, “RAISE:TAQS: High Dimensional Frequency Bin Entanglement – Photonic Integration and Algorithms.”

Weiner, Andrew M; electrical & computer engineering, from Army Research Laboratory, \$60,000, “Frequency and Polarization Entanglement for Quantum Networks.”

Wilker, Jonathan J; chemistry, from Office of Naval Research, \$97,054, “Biomimetic Adhesives Delivered Underwater, with Charges, and from Renewable Resources.”

Witt, Michael C; libraries administration, from American Geophysical Union, \$29,992, “Enabling Fair Data Repository Recommendation Tool.”

Wlodarczyk, Jaroslaw; mathematics, from Binational Science Foundation, \$7,360, “Strong Semistable Reduction.”

Woodcox, Stephanie G; health & human sciences administration, from Substance Abuse/Mental Health Services Administration, \$320,624, “Multi-State OUD Training and Education Outreach.”

Xu, Dongyan and **Zhang, Xiangyu**; computer science, from Sandia National Laboratories, \$89,205, “Automated Threat Modeling for Cyber Security Analytics and Emulation; Amendment 1; (NCE for Grant 14000342).”

Xu, Dongyan; Lee, Byoungyoung; Payer, Mathias J and **Zhang, Xiangyu**; computer science, from Office of Naval Research, \$100,000, “IoT-D: Towards Internets of Dialect-Speaking Things (Increase 13000660).”

Xu, Jin-Rong and **Cai, Guohong**; botany & plant pathology, from Agricultural Research Service, \$29,070, “Soybean Sudden Death Syndrome: Infection Process and Phytotoxins.”

Xu, Jin-Rong; botany & plant pathology, from Agricultural Research Service, \$51,555, “Distinct Regulatory Functions of the TRI6 and TRI10 Genes in Don Biosynthesis.”

Ye, Peide; electrical & computer engineering, from National Science Foundation, \$30,000, “Supplement to NSF EFRI 2DARE Phosphorene Project.” (a Discovery Park award – Birck Nanotechnology Center)

Yeo, Yoon; Ratliff, Timothy L and **Lyle, Ladawn T**; industrial & physical pharmacy, comparative pathobiology, from PHS-NIH

National Cancer Institute, \$355,506, “Chemotherapy Delivery with Nanoparticles for Targeted Induction of Immunogenic Cell Death.”

Young, Bryan G and **Johnson, William G**; botany & plant pathology, from BASF Corporation, \$51,750, “BASF Off-Target Movement of Engenia.”

Young, Bryan G; Johnson, William G and **Widhalm, Joshua R**; botany & plant pathology, horticulture & landscape architecture, from United Soybean Board, \$330,086, “Investigations of Off-Target Movement of Dicamba.”

Youngblood, Jeffrey P; materials engineering, from Arcelormittal USA, \$7,734, “Stretch-Wrap Film Characterization.”

Yu, Denny; industrial engineering, from Intuitive Surgical Inc, \$50,000, “Sensor-Based Assessment and Data-Driven Training for Non-Technical Skills in Robotic-Assisted Surgeries.”

Zhang, Zhong-Yin; medicinal chemistry & molecular pharmacy, from Wayne State University, \$36,636, “Wsu Support for Graduate Student at Purdue.”

Zhao, Kejie; mechanical engineering, from Oak Ridge National Laboratory, \$51,995, “Novel Liquid/Ologomer Hybrid Electrolyte with High Li Ion Transference Number (Hi-LiT) for Extreme Fast Charging.”

Zhou, Chenn Qian and **Silaen, Armin K**; Center for Innovation through Visualization and Simulation, from Dwyer Instruments, Inc., \$20,090, “Computational Fluid Dynamics (CFD) Analysis on the Insertion Magmeter.”

Zhou, Chenn Qian; mechanical & civil engineering, from AK Steel, \$45,000, “Steel Manufacturing Visualization and Simulation Consortium (SMVSC) Membership.”

Zhou, Chenn Qian; mechanical & civil engineering, from Stelco, \$25,000, “Steel Manufacturing Visualization and Simulation Consortium (SMVSC) Membership.”

Zhou, Zhi; civil engineering, from Water Quality Association, \$50,000, “Emerging Contaminant Removal and Microbial Growth in Membrane Filtration and Activated Carbon Point-of-Use System.” ■

Notice Regarding Sponsored Program Awards

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