# DIMENSIONS of DISCOVERY

## **Sponsored Program Awards**

### December 2018

#### **Abbott to Chen**

**Abbott, Angela R**; health and human sciences administration, from Indiana Family & Social Services Administration, \$174,439, "Purdue Extension Approach to Preventing Substance Abuse."

**Abbott, Angela R** and **Palmer, Laura A**; health and human sciences administration, from Pennsylvania State University, \$23,045, "CYFAR Coach."

**Appenzeller, Joerg**; electrical & computer engineering, from Semiconductor Research Corporation, \$408,959, "E2CDA: Type I: Probabilistic Spin Logic for Low-Energy Boolean and Non-Boolean Computing; Amendment 2."

**Arrieta Diaz, Andres**; mechanical engineering, from Air Force Office of Scientific Res earch, \$164,896, "On-Demand Stiffness Selectivity for Morphing Systems."

**Ashcraft, Michelle L; McDole, Junia I; Bowling, Dennis J** and **Carpenter, Daniel W**; student success, from Indiana Commission for Higher Education, \$2,000, "2018-2019 Scholarcorps AmeriCorps Program."

**Atallah, Mikhail J**; computer science, from Qatar University, \$160,000, "The Garbled Computer: Towards Computing without Seeing."

**Bahr, David F**; materials engineering, from Los Alamos National Laboratory, \$45,000, "Assessing the Properties of Mock Energetic Materials."

**Bartholomew, Theodore T** and **Gundel, Brittany E**; educational studies, from Indiana Clinical & Translational Science Institute, \$7,548, "Assessment of Mental Health Among an Indiana Refugee Community."

**Beaulieu, Lionel J**; **Cruz-Porter, Annie K**; **Kumar, Indraneel**; **Zhalnin, Andriy V** and **Wilcox, Michael D**; Office of Engagement administration, agriculture administration, from Economic Development Administration, \$160,000, "Harnessing the Economic Assets of Indiana Regions and Communities: Strengthening Information, Collaboration and Innovation."

**Beckerman, Janna L**; botany & plant pathology, from Michigan State University, \$16,250, "NCR Ornamental Horticulture Projects Non Oomycete Efficacy and Crop Safety."

**Bertino, Elisa**; computer science, from IBM, \$103,854, "IBM DAIS ITA; Grant 13000618."

**Bhave, Sunil A**; electrical & computer engineering, from Cornell University, \$78,250, "Control of Mechanical Quantum States Using Diamond Spins; Amendment 3; Grant 13000544."

**Boerman, Jacquelyn P**; animal sciences, from Diamond V Mills, Inc., \$55,445, "Multi Sponsor Voluntary Support."

**Bolin, Jeffrey T**; Executive Vice President for Research & Partnerships administration, from Purdue University, \$53,270, "FY 18-19 Purdue Research Foundation (PRF) Research Grants (60000019)."

**Bolin, Jeffrey T**; Executive Vice President for Research & Partnerships administration, from Purdue University, \$22,021, "FY18-19 Purdue Research Foundation (PRF) Research Grants (60000019)."

**Bolin, Jeffrey T**; Executive Vice President for Research & Partnerships administration, from Purdue University, \$26,951, "FY18-19 Purdue Research Foundation (PRF) Research Grants (60000019)."

**Boltasseva, Alexandra**; electrical & computer engineering, from Sandia National Laboratories, \$55,000, "PO 1757154 - Near Infrared Nanophotonics through Dynamic Control of Carrier Density in Conducting Ceramics; Amendment 3; Grant 14000290."

**Braun, James E**; mechanical engineering, from Duke Energy Indiana, Inc., \$50,000, "Center for High Performance Building Consortium."

**Cai, Liping A**; hospitality & tourism management, from South China University of Technology, \$1,750, "China Research Programs."

**Cai, Liping A**; hospitality & tourism management, from South China University of Technology, \$1,750, "China Research Programs."

**Cai, Liping A**; hospitality & tourism management, from South China University of Technology, \$20,000, "China Research Programs."

**Cai, Liping A**; hospitality & tourism management, from South China University of Technology, \$1,755, "China Research Programs."

**Cai, Liping A**; hospitality & tourism management, from South China University of Technology, \$30,000, "China Research Programs."

**Cai, Liping A**; hospitality & tourism management, from South China University of Technology, \$14,750, "China Research Programs."

**Cakmak, Mukerrem** and **Rahimi, Rahim**; mechanical engineering, electrical & computer engineering, from Ford Motor Company, \$200,000, "An Investigation of Additive Manufacturing and Printed Technologies to Replace Bulky Copper Wiring Circuits in Automobiles." (a Discovery Park award – Birck Nanotechnology Center)

**Chang, Chun-Ju**; basic medicine science, from PHS-NIH National Cancer Institute, \$338,736, "Targeting Metformin-Directed Science, Technology, Engineering & Mathematics (STEM) Cell Fate in Triple Negative Breast Cancer."

Chen, Zhihong; Appenzeller, Joerg and Gupta, Sumeet Kumar; electrical & computer engineering, from Semiconductor Research Corporation, \$1,500,000, "New Limits - New Materials for Logic, Memory and Interconnects; Amendment 2; Grant 40001983." (a Discovery Park award -- Birck Nanotechnology Center)



#### Clase to Hamaker

**Clase, Kari L** and **Byrn, Stephen Robert**; agriculture& biological engineering program, pharmaceutical practice, from National Institute for Pharmaceutical Technology and Education, \$284,988, "NIPTE Education OLDP Pilot Project."

**Couetil, Laurent L; Murray, Laura M** and **Tyson, Kira N**; veterinary clinical sciences, from Nortev Ltd, \$60,213, "Efficacy and Safety of Nebulized Dexamethasone in Asthmatic Horses."

**Cruz, Christian D**; botany & plant pathology, from Foreign Agricultural Service, \$49,822, "Norman E. Borlaug International Science and Technology Fellowship Program Purdue University - Hosting Borlaug Fellow #5 from India: Wheat Blast."

**Das, Chittaranjan** and **Luo, Zhao-Qing**; chemistry, biological sciences, from PHS-NIH National Institute of General Medical Science, \$413,311, "Mechanism of Atypical Ubiquitination and Deubiquitination by Bacterial Effectors."

**Deering, Amanda J**; food science, from Greenagri Solutions, LLC, \$3,500, "Multi-Sponsored Gift Account."

**DeLaurentis, Daniel A**; aeronautics & astronautics, from Science Applications International, \$175,800, "Modification #10 - TI-203, REVE, ARTE, MCTL."

**DeWoody, James Andrew**; forestry & natural resources, from Welder, Bob & Bessie Wildlife Foundation, \$24,000, "Landscape Genetic and Genomic Approaches for the Conservation of Montezuma Quail."

**DeWoody, James Andrew**; forestry & natural resources, from Texas A&M Agrilife Research, \$34,946, "Pupfish Population Genomics."

**Dydak, Ulrike**; health sciences, from Indiana University, \$35,000, "Student Support for Emily Diller (Amendment 1 for Grant 40001919)."

**Dyke, Shirley J** and **Montoya Rodriquez, Herta P**; civil engineering, from U.S. Department of Transportation, \$5,000, "FHWA Graduate Fellowship."

**Ebert, David S; Bingham, Clifton W; Ghafoor, Arif; Mou, Shaoshuai; Xi, Bowei; Bhargava, Bharat** and **Li, Ninghui**; electrical & computer engineering, computer science, aeronautics & astronautics, statistics, from Northrop Grumman Corporation, \$705,182, "Northrop Grumman - Year 10 Funding." (a Discovery Park award – Center for Education and Research in Information Assurance and Security [CERIAS])

**Farkas, Brian E**; food science, from Beverly & Don Stephens III, \$25, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E**; food science, from Benjamin T Vonderschmitt, \$150, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E**; food science, from Liberty Hop Farm, \$100, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E**; food science, from Tim Adair, \$42, "Multi-Sponsored Gift Fermentation."

**Farkas, Brian E**; food science, from Dan Gleason, \$50, "Multi-Sponsored Gift Fermentation."

**Feng, Yaohua**; food science, from Partnership for Food Safety Education, \$10,000, "Multi-Sponsored Gift."

**Feng, Yaohua**; **Benjamin, Tamara J** and **Ellett, Jodee K**; food science, horticulture & landscape architecture, agriculture administration, from Indiana State Department of Agriculture, \$55,582, "Value-Adding Educational Program Enhancing Food Safety for Fruit and Vegetable Specialty Crop Growers."

**Filley, Timothy R** and **Chaubey, Indrajeet**; agronomy, International Programs in Agriculture, from Universidad Nacional De San Agustin, \$515,209, "UNSA NEXUS-PH II." (a Discovery Park award – Center for Environment)

**Filley, Timothy R**; International Programs in Agriculture, from Universidad Nacional De San Agustin, \$6,865,898, "UNSA NEXUS-PH II."

**Frueh, Carolin E**; aeronautics & astronautics, from Air Force Office of Scientific Research, \$125,000, "Light Curve Inversion for Characterization of Objects with Concavities."

**Garimella, Suresh V**; Executive Vice President for Research & Partnerships administration, from Eli Lilly and Company, \$6,415,068, "Lilly IB 2019."

**Garimella, Suresh V**; mechanical engineering, from Laird Technologies, \$30,000, "Cooling Technologies Research Center (CTRC) 40001184."

**Garimella, Suresh V**; mechanical engineering, from Raytheon, \$30,000, "Cooling Technologies Research Center (CTRC) 40001184."

**Garner, Allen L** and **Zhang, Cankui**; nuclear engineering, agronomy, from Syngenta Limited, \$25,000, "Assessment of Electromagnetic Fields on Microtubules."

**Gillespie, Robert B**; biology, from Agricultural Research Service, \$36,000, "Aquatic Ecology Assessment of Streams in the St. Joseph River Watershed."

**Goldenstein, Christopher S**; mechanical engineering, from National Science Foundation, \$524,989, "Faculty Early Career Development (CAREER): Modulated Infrared Laser-Induced Fluorescence for Imaging Combustion Gases."

**Goldwasser, Dan**; computer science, from Google Inc, \$100,000, "Voluntary Support Projects."

Goodsell, Johnathan Eugene; Mansson, Jan-Anders E and Pipes, R Byron; Composites Manufacturing & Simulation Center, chemical engineering, aeronautics & astronautics, from Institute for Advanced Composites Mf Innovation, \$392,725, "IACMI Task 3.2 Bp4 - Optimized Carbon Fiber Intermediate Development to Enable High Volume Manufacturing of Lightweight Automotive Composites."

**Gounder, Rajamani P**; chemical engineering, from U.S. Department of Energy, \$8,000, "Dynamic Multinuclear Active Sites Formed from Mobilized Single Atoms on Heterogeneous Supports for Selective Oxidation Catalysis."

**Guzey, Sukru**; civil engineering, from Baker Consulting Group, \$12,600, "Analysis and Design of Fixed Equipment."

**Hamaker, Bruce R**; food science, from Mondelez Global LLC, \$143,132, "Strategies for Improving Calorie-and Sugar-Reduction through Carbohydrates for Mondelez Products."

**Hamaker, Bruce R**; food science, from Novozymes North America Inc, \$186,205, "Elucidation of Corn Fiber Starch Granule-Binding Components for High Extraction Rate."

#### **Harbin to Lucht**

**Harbin, Sherry L**; biomedical engineering, from Indiana University Purdue University at Indianapolis, \$33,933, "2018-19 Joint PhD Program for Graduate Support – Jiang Yizhi."

**Heister, Stephen D** and **Slabaugh, Carson D**; aeronautics & astronautics, from Office of Naval Research, \$196,642, "Combustion in Solid Fuel Ramjets."

**Hertel, Thomas W**; agriculture economics, from University of Chicago, \$77,939, "DMUU:: Center for Robust Decision-Making Tools for Climate and Energy Policy; Amendment 7; Grant 10000964."

**Hertel, Thomas W**; agriculture economics, from U.S. International Trade Commission, \$20,435, "Global Trade Analysis Project (GTAP) Consortium."

**Hill, Catherine A**; entomology, from Bio-Gene Technology Limited, \$42,416, "Characterization of Bio-Gene Flavosone Formulation Invertebrate in Vivo Toxicity and in Vivo Pharmacological Analyses."

**Horgan, Briony H**; earth, atmospheric and planetary sciences, from Jet Propulsion Laboratory, \$20,000, "Using Composition to Constrain Paleoenvironments and Sites of Organic Preservation in Gale Crater; Modification 7; Grant 108399."

**Hountz, Randall A**; industrial engineering, from Northwestern University, \$125,621, "Midwest Small Practice Care Transformation Research Alliance – Year 3." (a Discovery Park award – Regenstrief Center for Healthcare Engineering)

**Hudmon, Karen S**; pharmaceutical practice, from Indiana University, \$60,369, "IU Simon Cancer Center – P30 Supplement for Tobacco Cessation."

**Hung, Chen-Lung**; physics & astronomy, from Office of Naval Research, \$171,170, "Ultracold Molecule Assembly with Photonic Crystals."

**Jacobs, Douglass F; Couture, John J; Hardiman, Brady S** and **McNickle, Gordon G**; forestry & natural resources, botany & plant pathology, from American Chestnut Foundation, the, \$9,951, "Below Ground Competition of American Chestnut."

**Jiang, Wen**; biological sciences, from Indiana University, \$251,652, "Atomic Models of Human Tau Filaments and Development of Tau Ligands."

**Johnson, William G**; botany & plant pathology, from Sipcam Agro USA, Inc, \$12,000, "Weed Science Research Voluntary Support."

**Johnson, William G**; botany & plant pathology, from BASF Corporation, \$22,000, "Weed Science Research Voluntary Support."

**Jones-Hall, Yava L** and **Durkes, Abigail C**; comparative pathobiology, from New River Labs, \$9,249, "Histology-Guided Mass Spectrometry of Melanocytic and Mast Cell Tumors."

**Jung, Andreas**; physics & astronomy, from Fermi National Accelerator Laboratory, \$30,306, "2019 Distinguished Researcher (DR) Awards."

**Kelly, Brian C**; sociology, from Ohio State University, \$77,500, "Cross-Substance Policy Influences on Trajectories of Youth Marijuana & Tobacco Use."

**Kenttamaa, Hilkka I**; chemistry, from ConocoPhillips, \$10,000, "Comprehensive LC/MS Analysis of Organic Compounds in Water Samples."

**Klimeck, Gerhard**; electrical & computer engineering, from Intel Corporation, \$75,000, "Network for Computational Nanotechnology (NCN) Membership (40001196)."

**Knobloch, Neil A** and **Charoenmuang, Mingla**; agriculture sciences education & communication, from University of Minnesota, \$11,354, "Developing Educational Resources on Sustainable Food Systems for High School Students."

**Krupke, Christian H**; entomology, from Ohio State University, \$10,000, "Soybean Entomology Research and Extension in the North Central Region."

**Kuang, Shihuan**; animal sciences, from Adipo Therapeutics LLC, \$65,650, "Polymeric Nanoparticles for Inductive Browning of White Adipose Tissue."

**Kurdelak, Erik S**; food science, from Indiana Design Consortium, Inc, \$500, "Pilot Plant Multi-Sponsored Gift."

**Kvam, Eric P**; materials engineering, from National Aeronautics and Space Administration, \$14,000, "Senior Design Project – MSE 430 and 440 – Development of High Temperature OD Alloys for Additive Manufacturing of Aerospace Structural Components."

**Laird, Carl D**; chemical engineering, from Sandia National Laboratories, \$119,899, "Advanced Formulations and Algorithms for Stochastic Optimization with Applications in Power Grid Management."

Lane, Sean P; Hennes, Erin P; Proctor, Robert W; Song, Xiaohui Carol and Zhao, Lan; psychological sciences, research computing administration, from PHS-NIH National Institute on Alcohol Abuse, \$715,938, "Toward a Generalized Framework and Flexible Software Environment for Power Analysis of Alcohol Treatment Randomized Controlled Trials."

**Leung, Yuk Fai**; biological sciences, from International Retinal Research Foundation, \$100,000, "Evaluation of New Drugs for Retinitis Pigmentosa with Zebrafish (41000401)."

**Li, Kai Ming**; **Krousgrill, Charles M** and **Zhang, Haiyan H**; mechanical engineering, engineering technology, from Fiat Chrysler Automobiles, \$300,000, "Prototype Development for Nvh Testing of Planetary Gear Set Sub-Assemblies."

**Liceaga, Andrea M**; food science, from Heartland Food Products Group, \$7,500, "Multi-Sponsored Gift- Sensory."

**Liceaga, Andrea M**; food science, from Ramsey Popcorn Co Inc, \$2,000, "Multi-Sponsored Gift- Sensory."

**Lindemann, Stephen R** and **Hamaker, Bruce R**; food science, from Army Research Office, \$41,402, "Complex Substrates and Microbial Interactions: Does Substrate Chemical Structure Dictate Microbial Diversity and Function?."

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

**Low, Philip S** and **Low, Stewart A**; chemistry, from Novosteo Inc, \$67,500, "Targeting Therapeutics for Accelerated Bone Fracture Repair." (a Discovery Park award – Drug Discovery administration)

**Lucht, Robert P**; **Meyer, Scott E** and **Slabaugh, Carson D**; aeronautics & astronautics, mechanical engineering, from Power Systems Manufacturing, LLC, \$78,656, "PLIF Image Testing of PSM Swozzle."

**Lucht, Robert P**; aeronautics & astronautics, from Siemens Power Generation Inc, \$175,000, "Distributed Combustion Studies in the Purdue High-Pressure Gas Turbine Combustion Test Rig."

#### Luke to Reklaitis

**Luke, Eileen M** and **Hill, Michael A**; Center for Environmental and Regulatory Information Systems (CERIS), from Animal Plant Health Inspection Service, \$88,493, "Cooperative Agricultural Pest Survey Information Services (CAPSIS) FY 19."

**MacDermid Wadsworth, Shelley**; human development & family studies, from Indiana Family & Social Services Administration, \$5,000, "Voluntary Support Projects."

**Marinero-Caceres, Esteban E**; materials engineering, from Office of Naval Research, \$300,000, "Topology and Magneto-Photonics: Novel Platform for Advanced Metasurface and Magnonic Devices."

**McCann, Maureen C**; biological sciences, from Office of Naval Research, \$576,114, "Neptune Center for Power and Energy Research."

**McKee, Renee K**; agriculture administration, from National 4-H Council, \$71,000, "4-H Healthy Habits."

**Mei, Jianguo**; chemistry, from Office of Naval Research, \$164,797, "High Temperature Organic Semiconductors."

**Meyer, Terrence R**; mechanical engineering, from Defense Threat Reduction Agency, \$300,452, "MHz-Rate Burst-Mode Spectroscopy and Imaging of Temperature and Species in Post-Detonation Fireballs."

**Mishra, Dharmendra K**; food science, from Caulette K Talbert, \$75, "Multi-Sponsored Gift."

**Mishra, Dharmendra K**; food science, from Mead Johnson Nutritionals, \$7,200, "Computational Fluid Dynamic Simulation of a Horizontal Tank with Agitator 1."

**Mishra, Dharmendra K**; food science, from Sweet Bettys Bakery LLC, \$50, "Multi-Sponsored Gift."

**Mukherjee, Partha P**; mechanical engineering, from Texas A&M University, \$114,844, "Understanding and Strategies for Controlled Interfacial Phenomena in Lithium-Ion Batteries and Beyond; Amendment 1; Grant 14000379."

**Mukherjee, Partha P**; mechanical engineering, from Office of Naval Research, \$35,000, "Mesoscale Interactions in Lithium Plating/Dendrite Formation."

**Mukherjee, Partha P**; mechanical engineering, from Sandia National Laboratories, \$90,000, "Credible Computational Meshes from Ill-Defined Geometries Using Deep Machine Learning."

**Mukherjee, Partha P**; mechanical engineering, from Texas Instruments, Inc., \$80,000, "Li-Ion Cell Cycle Life & Safety Research."

**Nagy, Zoltan**; chemical engineering, from International Fine Particle Research Institute Inc, \$12,000, "IFPRI Gift."

**Neumeister, Norbert**; physics & astronomy, from Fermi National Accelerator Laboratory, \$21,443, "2019 Distinguished Researcher Award Fermi Lab."

**Niyogi, Devdutta S**; agronomy, from National Science Foundation, \$130,280, "2018 Hurricane Season: Assessing the Role of Antecedent Land State on Hurricane Post-Landfall Rainfall."

**Ohaire, Marguerite E**; comparative pathobiology, from Indiana University, \$119,629, "Institutional Career Development Core."

**Oliver, Haley F**; food science, from Diversey, Inc, \$54,295, "Study 8.0: Development of a Model to Establish Dry Biofilms on Glass Coupons."

**Pasupathy, Raghu**; statistics, from Office of Naval Research, \$88,000, "Sampling Controlled Numerical Optimization."

**Patton, Aaron J**; horticulture & landscape architecture, from Dow Agro Sciences, \$54,000, "Service and Site Access Agreement with Dow Agro Sciences, LLC."

**Patton, Aaron J**; horticulture & landscape architecture, from Marubeni Corporation, \$7,000, "Efficacy of Hm0814 for Annual Bluegrass Control in Putting Greens."

**Pekarek, Steven D** and **Aliprantis, Dionysios**; electrical & computer engineering, from Schweitzer Engineering Lab, Inc, \$362,000, "State-Based Control of Electric Power Systems with Model Prediction."

**Pekarek, Steven D** and **Sudhoff, Scott D**; electrical & computer engineering, from Continuous Solutions, \$37,467, "Integrated Uuv Propulsion Architecture."

**Pipes, R Byron**; aeronautics & astronautics, from Applied Composites Engineering, \$54,000, "Modeling and Simulation of a Composite Fan Blade Bling."

**Pluta, Scott R**; biological sciences, from Whitehall Foundation, Inc., \$225,000, "Cortical Circuit Mechanisms for Feature Extraction During Active Touch."

**Poggie, Jonathan**; aeronautics & astronautics, from Air Force Office of Scientific Research, \$180,992, "Unsteady Separation: Mechanism and Mitigation."

**Pourpoint, Timothee L**; aeronautics & astronautics, from Naval Air Warfare Center (Aircraft Division), \$50,000, "Development of Low-Toxicity Liquid Propellant System for Orbital/Sub-Orbital."

**Powley, Terry L** and **Phillips, Robert D**; psychological sciences, theatre, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$696,920, "Autonomic Control of Body Weight and Feeding."

**Pyrak-Nolte, Laura J**; physics & astronomy, from Sandia National Laboratories, \$266,103, "Advanced Downhole Acoustic Sensing for Wellbore Integrity; Amendment 1; (NCE for Grant 14000347)."

**Qu, Ming**; civil engineering, from Oak Ridge National Laboratory, \$38,977, "Novel Heat Pump Integrated Underground Thermal Energy Storage for Shaping Electric Demand of Buildings."

**Rainey, Katherine Martin** and **Ma, Jianxin**; agronomy, from Ohio State University, \$169,597, "Increasing the Rate of Genetic Gain for Yield in Soybean Breeding Programs."

**Ramanathan, Shriram**; materials engineering, from University of California – San Diego, \$117,342, "Quantum Materials for Energy Efficient Neuromorphic Computing (Q-MEEN-C)."

**Ratliff, Timothy L**; comparative pathobiology, from Carroll County Cancer Association, \$20,000, "Cancer Research."

**Reklaitis, Gintaras V**; **Gonzalez, Marcial** and **Nagy, Zoltan**; chemical engineering, mechanical engineering, from Rutgers State University, \$700,000, "Assessment of Industry 4.0 in Advancing Continuous Pharmaceutical Manufacturing."

#### **Rhoads to Wang**

**Rhoads, Jeffrey Frederick**; mechanical engineering, from Level 6 Engineering LLC, \$20,000, "Designing a Standardized Test Protocol to Assess the Thermomechanical Response of Vibrating Polymer Bonded Composite Materials."

**Ribeiro, Fabio H**; chemical engineering, from Pioneer Oil Company, \$15,000, "Cistar Industrial Consortium (40001938)."

**Richmond, Douglas Scott**; entomology, from PBI Gordon Corp., \$8,100, "Turfgrass Entomology Research."

**Risselada, Marije**; veterinary clinical sciences, from SFC Fluidics, \$102,738, "Pilot Efficacy and Pharmacokinetics Study on Antibiotic Delivery through a Sustained Delivery Device in Dogs."

**Roy, Kaushik**; electrical & computer engineering, from IBM, \$51,980, "Self-Aware Cognitive Services for Distributed Coalition Environments."

**Roy, Kaushik**; electrical & computer engineering, from Semiconductor Research Corporation, \$6,101,859, "C-BRIC: Center for Brain-Inspired Computing Enabling Autonomous Intelligence; Amendment 5; Grant 40001859."

**Rozhon, Atina M**; field extension, from Jennings County Community Foundation, \$372, "Reading Made Fun 2018."

**Sadof, Clifford S**; entomology, from Michigan State University, \$12,500, "Managing Foliar Feeding Beetles."

**Sandhage, Kenneth H**; materials engineering, from Massachusetts Institute of Technology, \$318,223, "Ceramic Castable Cement Tanks and Piping for Molten Salt."

**Sangha, Susan**; psychological sciences, from PHS-NIH National Institute of Mental Health, \$384,662, "Neural Circuitry of Safety, Fear and Reward Cue Discrimination."

**Schoenlein, William E**; biomedical engineering, from Cook Research Incorporated, \$178,903, "Pre-Clinical Evaluation Testing Agreement Studies: CMH-TBCD, CMH-PBST, CI-REUN, CI-REUA, CMH-VTMD, CMH-TPOC, REG-HTBA, CMH-VCTL, CI-LUND, CI-REUS, CMH-PEAT, and POC."

**Schoenlein, William E**; biomedical engineering, from Cook Research Incorporated, \$78,639, "Pre-Clinical Evaluation Testing Agreement Studies: Ci-(Cmh)-Lumn, Reg-Tend, Ci-Luna, Reg-Htba, POC and Sentinels."

**Schoenlein, William E**; biomedical engineering, from Cook Research Incorporated, \$300,000, "Capital Equipment Purchase for Bme Building."

**Schultheiss, Nathan C** and **Holloway, Eric A**; chemical engineering, education administration, from Pioneer Oil Company, \$108,189, "Funding of Research Associate (Continuation)."

**Seidl, Amanda H**; speech, language & hearing sciences, from National Research Agency, \$10,000, "Mechanisms of Early Lexical Acquisition."

**Semperlotti, Fabio**; mechanical engineering, from Sandia National Laboratories, \$98,000, "Development of Metamaterial-Based Technology for Subwavelength Elastic Wave Control; Amendment 4; (Grant 14000345)."

**Shakouri, Ali**; electrical & computer engineering, from Applied Materials, \$8,750, "Consortium on Printing and Scalable Manufacturing of Aware and Responsive Thin Films (SMART)." (a Discovery Park award – Birck Nanotechnology Center)

**Shakouri, Ali**; electrical & computer engineering, from Applied Materials, \$8,750, "Consortium on Printing and Scalable Manufacturing of Aware and Responsive Thin Films (SMART)." (a Discovery Park award – Birck Nanotechnology Center

**Shannahan, Jonathan H**; health sciences, from PHS-NIH National Institute of Environment Health Science, \$249,000, "Disease-Induced Modification in Nanoparticle-Corona Identity and Toxicity."

**Skrynnikov, Nikolai R**; chemistry, from Ohio State University, \$27,157, "Structural and Dynamic Studies of Histone Tails in Chromatin by Magnetic Resonance Spectroscopy."

**Slabaugh, Carson D**; aeronautics & astronautics, from Siemens Energy & Automation Inc., \$115,000, "Siemens Premixed Combustion Instability: Phase 5."

**Telenko, Darcy E P**; botany & plant pathology, from BASF Corporation, \$15,600, "Extension Voluntary Support."

**Tsoukalas, Lefteri**; nuclear engineering, from Office of Naval Research, \$290,000, "Critical System Simulation Tool for Investigating the Resilience of a Cyberphysical Security Ecosystem."

**Turco, Ronald F**; agronomy, from Indiana Corn Marketing Council, \$15,000, "St Mary Watershed Voluntary Support (Cost Share for 20000224 / 209968)."

**Turco, Ronald F**; agronomy, from Indiana Soybean Alliance, \$15,000, "St Mary Watershed Voluntary Support (Cost Share for 20000224 / 209968)."

**Vacca, Andrea**; agriculture & biological engineering program, from Science, Technology, Engineering & Mathematics (STEM) Di Mario a Morselli, \$5,100, "Experimental Activity of a Pressure Ripple Attenuator for Hydraulic Pumps."

**Vacca, Andrea**; agriculture & biological engineering program, from NFPA Education and Technology Foundation, \$10,000, "Multi-Sponsored Gift."

**Vacca, Andrea**; agriculture & biological engineering program, from NFPA Education and Technology Foundation, \$1,000, "Multi-Sponsored Gift."

**Voyles, Richard M**; engineering technology, from Fiat Chrysler Automobiles, \$167,000, "Collaborative Robotic Installation and Inspection of Main Shaft Torlon Seals."

**Wang, Fuqiang**; physics & astronomy, from U.S. Department of Energy, \$545,000, "Study QCD Matter Under Extreme Conditions by Particle Correlation and Heavy Flavor Probes in Relativistic Heavy Ion Collisions; Amendment 4; Grant 14000238."

**Wang, Haiyan**; materials engineering, from Office of Naval Research, \$800,000, "Wang – Explore the Fundamentals for Field-Enhanced Mass Transport Phenomena in Ceramics."

**Wang, Haiyan**; materials engineering, from Office of Naval Research, \$15,000, "Wang – Strain Driven Novel Layered Oxide Thin Films with Unique Functionalities."

**Wang, He**; computer science, from Deuro Inc, \$30,000, "Multi Sponsor Voluntary Support."

#### Webb to Zillich

**Webb, Kevin J**; electrical & computer engineering, from Army Research Office, \$60,000, "The Optomechanical Response of Nanostructured Materials."

**Weiner, Andrew M**; electrical & computer engineering, from Oak Ridge National Laboratory, \$4,776, "A Quantum Interconnect for Matter Qubits Based on Frequency Encoded Photonic Qubits."

**Wharry, Janelle P**; nuclear engineering, from National Science Foundation, \$68,873, "Collaborative Research: Tunable Control of Mixed Ionic and Electronic Conductivity through Ion Irradiation in Electroceramic Materials for Energy Storage System."

**Xia, Jianlin**; mathematics, from National Science Foundation, \$10,000, "Conference on Fast Direct Solvers."

**Xu, Dongyan**; **Deng, Xinyan** and **Zhang, Xiangyu**; engineering projects in community service (EPICS), mechanical engineering, from Office of Naval Research, \$1,029,372, "A Cross-Layer Framework for Retrofitting Robotic Vehicle Controllers."

**Xu, Dongyan**; **Lee, Byoungyoung**; **Payer, Mathias J** and **Zhang, Xiangyu**; professional masters, computer science, from Office of Naval Research, \$964,512, "IoT-D: Towards Internets of Dialect-Speaking Things."

**Xu, Yunlin**; nuclear engineering, from University of Michigan, \$137,639, "Advanced Method Study of the Direct 3-D Whole-Core High-Fidelity Neutron Transport Calculation for the Numerical Nuclear Reactor."

**Ye, Peide**; electrical & computer engineering, from Applied Materials, \$48,000, "AMAT Gift." (a Discovery Park award – Discovery Park administration).

**Yih, Yuehwern**; industrial engineering, from Agency for International Development, \$500,000, "LASER Buy-In: Tusome Case Study."

**Young, Bryan G**; botany & plant pathology, from Kalo, Inc., \$5,250, "Multi-Sponsored Gift Account."

**Young, Bryan G**; botany & plant pathology, from Precision Laboratories Inc., \$21,150, "Multi-Sponsored Gift Account."

**Zhang, Haiyan H**; engineering technology, from Fiat Chrysler Automobiles, \$200,000, "Powertrain Designs for Additive Manufacturing."

**Zhang, Zhong-Yin**; medchem/molecul phar, from PHS-NIH National Cancer Institute, \$325,618, "Structure/Function of Protein Tyrosine Phosphatases."

**Zhou, Chenn Qian** and **Silaen, Armin K**; civs, from U.S. Steel Corporation, \$128,244, "USS Roughing Mill Training Simulator."

**Zhou, Chenn Qian**; mechanical & civil engineering, from Nucor Steel Corp., \$45,000, "Steel Manufacturing Visualization and Simulation Consortium (SMVSC) Membership (40001337)."

**Zhuang, Qianlai**; agronomy, from Jet Propulsion Laboratory, \$83,790, "High-Resolution Mapping of Dynamic Inundation in Boreal Wetlands for Carbon and Hydrological Studies on Seasonal to Interannual Scales."

**Zillich, Alan J**; pharmaceutical practice, from Eskenazi Health, \$584,745, "Co-Funded Position in Adult Medicine with Eskenazi Hospital." ■

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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**.