

DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

February 2019

Abbott to Brooke

Abbott, Angela R; health & human sciences administration, from Multi-Sponsored Industrials, \$4,000, "Eastern Indiana Regional Planning Commission."

Ajuwon, Kolapo; animal sciences, from Biomatrix Inc, \$12,000, "Nutritional Physiology Program."

Alasti, Hadi; polytechnic, from American Society for Engineering Education, \$2,400, "Turning a Non-Collaborative Robot into Collaborative Robot: An Experimental Step Towards Meeting Industry 4.0 Requirements."

Alexander, Joshua M; speech, language & hearing sciences, from Sonova USA, Inc, \$9,990, "Speech Perception with Adaptive Non-linear Frequency Compression."

Alexeenko, Alina; aeronautics & astronautics, from Michael B or Holly Weiss, \$1,000, "Spray Freeze-Drying Research."

Alexeenko, Alina; aeronautics & astronautics, from Optima Machinery Corporation, \$10,000, "LyoHub Consortium."

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

Ambrose, Rose Prabin Kingsly; agricultural & biological engineering program, from Duquesne University, \$1,300, "High Shear Granulation & Characterization."

Bagchi, Saurabh and Sundaram, Shreyas; electrical & computer engineering, from Sandia National Laboratories, \$99,385, "Algorithms for Secure and Distributed Mobile Intelligence, Surveillance, and Reconnaissance Platforms."

Bajaj, Anil Kumar; mechanical engineering, from Cummins Business Services, \$14,000, "Cummins Assistanships."

Bareinboim, Elias; computer science, from National Science Foundation, \$99,645, "Faculty Early Career Development (CAREER): Approximate Causal Inference."

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

Basaran, Osman A; chemical engineering, from the Dow Chemical Company, \$25,000, "Purdue Process Safety and Assurance Center(P2SAC)."

Beaudoin, Stephen P; chemical engineering, from Northeastern University, \$130,000, "A Novel Method for Evaluating the Adhesion of Explosives Residues."

Beaulieu, Lionel J; Purdue Center for Regional Development, from Indiana University, \$10,000, "Increase: HH Small Business Development Center (SBDC) Multi Sponsor Account (40001193)."

Beaulieu, Lionel J; Grismer, Melinda A; Kumar, Indraneel and Gallardo, Roberto; engagement administration, Purdue Center for Regional Development, agricultural administration, from Northwest Central Indiana Comm Ptnshp, \$304,292, "Creating a Prosperous Economic Ecosystem in the Wabash Heartland – Purdue Center for Regional Development (PCRD) Supplement."

Bergeson, Scott M; biology, from Indiana Campus Compact, \$450, "Managed Forests Provide Roosting Opportunities for Indiana Bats in South-Central Indiana."

Bertino, Elisa; computer science, from IBM, \$244,406, "IBM DAIS ITA."

Bertino, Elisa; computer science, from Intel Corporation, \$65,000, "Voluntary Support – Bertino."

Bertino, Elisa; computer science, from Qualcomm Technologies Inc, \$20,000, "Voluntary Support – Bertino."

Bharadwaj, Hari M; speech, language & hearing sciences, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$376,737, "Individualized Assays of Supra-Threshold Hearing Deficits."

Bhave, Sunil A; electrical & computer engineering, from U.S. Department of Interior, \$656,172, "MCOQA: Mechanically-Driven, Coherence-Enhanced Quantum Angle Sensor."

Bhunja, Arun K; food science, from Biomatrix Inc, \$15,000, "Shuttleworth North America."

Bigelow, Cale A; horticulture & landscape architecture, from Anuvia Plant Nutrients Corporation, \$4,000, "Putting Greens Research."

Bigelow, Cale A; horticulture & landscape architecture, from Scotts, the Company, \$10,000, "MRTF Gift Account."

Boltasseva, Alexandra; electrical & computer engineering, from Northrop Grumman Corporation, \$20,000, "Voluntary Support – Boltasseva." (a Discovery Park award – Birck Nanotechnology)

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

Brooke, Jarred M; forestry & natural resources, from National Wild Turkey Federation, \$4,000, "Voluntary Support – Brooke."

Caffee to Forman

Caffee, Marc W; physics & astronomy, from National Science Foundation, \$145,848, "Collaborative Research: Synchronizing the Wais Divide and Greenland Ice Cores from 30-65 ka BP Using High-Resolution."

Cai, Hua; industrial engineering, from Sam Schwartz Consulting, LLC, \$12,000, "Proposal for Dockless Bike Share Pilot Data Analysis and Divvy Hybrid Transition."

Cappelleri, David J; mechanical engineering, from Duke Energy Indiana, Inc., \$10,000, "Voluntary Support."

Carpita, Nicholas C; botany & plant pathology, from Red Gold, Inc., \$1,000, "Carpita Voluntary Support."

Cason, Timothy N; economics, from University of Rhode Island, \$20,000, "Risk Preferences and Demand for Crop Insurance and Cover Crop Programs."

Casteel, Shaun N; agronomy, from Mosaic Crop Nutrition LLC, \$10,000, "Soybean Extension Research."

Chen, Weinong W and Meyer, Terrence R; aeronautics & astronautics, mechanical engineering, from Army Research Office, \$50,000, "Damage and Temperature Around a Propagating Dynamic Crack."

Chipman, Shannon M; field extension, from Citizens for a Drug Free Ohio Cty, \$500, "Boys Encouraging Boys Empowerment (BEBE) Program and MyEmpowerment Program 2018."

Christian, John A; comparative pathobiology, from Western University of Health Sciences, \$5,655, "Cytology Resource Center (40001198)."

Christian, John A; comparative pathobiology, from Idexx Laboratories, Inc., \$2,100, "National Cytology Resource (30001330)."

Christian, John A; comparative pathobiology, from Western University of Health Sciences, \$11,310, "Cytology Resource Center (40001198)."

Collicott, Steven H; aeronautics & astronautics, from National Aeronautics and Space Administration, \$193,750, "Zero-G Slosh Model Technology: Knowledge Payload."

Connor, Robert J and Lloyd, Jason B; civil engineering, from WY Department of Transportation, \$25,749, "Field Testing and Long-Term Monitoring of Selected High-Mast Lighting Towers."

Connor, Robert J; civil engineering, from WY Department of Transportation, \$6,437, "Field Testing and Long-Term Monitoring of Selected High-Mast Lighting Towers."

Couetil, Laurent L; Olave, Carla; Ivester, Kathleen M; Franco, Jackeline; Moore, George E; Murray, Laura M and Park, Jae Hong; veterinary clinical sciences, medicinal chemistry & molecular pharmacology, veterinary medicine administration, health sciences, from Boehringer Ingelheim Vetmedica Inc, \$15,000, "Role of Dietary Pro-Resolving Lipid Mediators in Equine Asthma."

Couture, John J; Mickelbart, Michael V and Tuinstra, Mitchell R; forestry & natural resources, horticulture & landscape architecture, agronomy, from National Institute of Food & Agriculture, \$30,000, "BTT EAGER: Utilizing High Throughput Phenotyping Approaches to Advance Plant Breeding."

Crabtree, Roberta D; field extension, from State Farm Companies Foundation, \$5,000, "Spring Session Beginners Guide to Grant Writing."

Cruz, Esmeralda; field extension, from Health Care Education-Training Inc, \$41,911, "Youth Rise! Year 4."

Csathy, Gabor A; physics & astronomy, from U.S. Department of Energy, \$131,450, "Integrated Growth and Ultra-Low Temperature Transport Study of the 2nd Landau Level of the Two-Dimensional Electron Gas."

DeBoer, Lawrence P; agricultural economics, from Indiana Soybean Alliance, \$7,500, "Economic Growth and the Indiana Property Tax."

Doucette, Suzanne C; chemistry, from U.S. Department of Energy, \$137,641, "Synthetic, Spectroscopic & Computational Studies of Redox-Active Uranium Complexes for Fundamental Organometallic."

Duffy, Vincent G; agricultural & biological engineering program, from Ford Motor Company, \$158,114, "Game Based Learning."

Duvall, John N; English, from Johns Hopkins University, \$15,282, "Journal of Modern Fiction Studies."

Ebert, David S; electrical & computer engineering, from Salesforce, \$60,000, "Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support."

Ebert, David S; electrical & computer engineering, from Infosys Technologies Ltd, \$60,000, "Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support."

Edwards, Nancy E; nursing, from Health Resources & Services Administration, \$2,139,959, "Health Center Cluster."

Ekenstedt, Kari J; basic medicine science, from PHS-NIH Office of the Director, \$125,361, "Novel Genetic Models for Vertebral Abnormalities."

Farkas, Brian E; food science, from High Bines Hop Yard LLC, \$25, "Multi Sponsored Gift Fermentation."

Farkas, Brian E; food science, from Hops to Bottle Farms LLC, \$150, "Multi Sponsored Gift Fermentation."

Felisberto Martins Ribeiro, Bruno; computer science, from Raytheon, \$85,170, "Discovering Network Processes in Time-Evolving Networks."

Field, William E; agricultural & biological engineering program, from Nancy Anderson, \$100, "Breaking New Ground."

Figueiredo, Marxa L; basic medicine science, from PHS-NIH National Institute of Arthritis and Musculoskeletal and Skin Diseases, \$338,694, "Facilitating Endogenous Bone Repair in Arthritis with Targeted IL-27 Sonodelivery."

Filley, Timothy R; agronomy, from University of Illinois at Champaign-Urbana, \$74,004, "Critical Zone Observatory for Intensively Managed Landscapes (IML-CZO)."

Forman, Michele R; nutrition science, from Multi-Sponsored Industrials, \$5,000, "Multi-Sponsor Voluntary Support."

Forman, Michele R; nutrition science, from Multi-Sponsored Industrials, \$145,485, "Corporate Affiliates Fund."

Forman, Michele R; nutrition science, from Multi-Sponsored Industrials, \$80,859, "Multi-Sponsor Voluntary Support."

Gallardo to Jiao

Gallardo, Roberto; agricultural administration, from Foundation for Rural Service, \$19,975, “Economic Impact of Broadband Infrastructure in Rural Communities.”

Gallardo, Roberto; agricultural administration, from Southeastern Indiana Reg Planning Comm, \$14,108, “State of Broadband in the Southeastern Indiana Regional Planning Council (SIRPC) Region.”

Garrison, James L; aeronautics & astronautics, from Jet Propulsion Laboratory, \$52,980, “Wideband Altimetry Using Signals of Opportunity; Amendment 4; Grant 12000182.” (a Discovery Park award – Purdue Climate Change Research Center)

Gelvin, Stanton B and **Lee, Lan-Ying**; biological sciences, from National Science Foundation, \$154,182, “BTT EAGER: Clean Genome Editing through the Use of Nonintegrating T-DNA Technology.”

Gentry, Marcia L; educational studies, from Jack Kent Cooke Foundation, \$150,000, “Project Hope+.”

Ghosh, Arun K; medicinal chemistry & molecular pharmacology, from Kumamoto University, \$129,464, “Development of Novel Nucleoside Analogs Against HIV-1s, Hepatitis B Virus, and Human Cytomegalovirus (CMV).”

Gibb, Timothy J; entomology, from Thelpack, Inc, \$1,500, “Turfgrass Research.”

Goni Cortes, Joaquin; industrial engineering, from Indiana University, \$22,032, “Center on Genetic Determinants of Alcohol Ingestion and Responses to Alcohol; Year 2 Funding; Grant 11000740.”

Gotham, Douglas J and **Preckel, Paul V**; biological sciences, agricultural economics, from Midcontinent Independent System Operator, \$176,352, “A Proposal to Provide Independent Energy and Peak Demand Forecasts to the Midcontinent System Operator (Miso).” (a Discovery Park award – West Lafayette Energy Center)

Gounder, Rajamani P; chemical engineering, from BASF Corporation, \$200,000, “Synthesis and Stability of Zeolites.”

Greeley, Jeffrey P; chemical engineering, from Argonne National Laboratory, \$100,000, “Electrochemical Reactivity of Electrified Oxide Interface Relevant to Energy Storage Systems.”

Groll, Eckhard A and **Ziviani, Davide**; education administration, mechanical engineering, from Ingersoll – Rand Co., \$63,368, “Feasibility Study on 40 kW Linear Air Compressor Technology.”

Groll, Eckhard A; mechanical engineering, from Oak Ridge National Laboratory, \$75,000, “Evaluating Adhesive Bonding of Aluminum and Copper in HVAC&R Applications, Modification2; Grant 14000294.”

Haddock, John E and **Slusher, Laura M**; civil engineering, from Indiana Department of Transportation, \$251,000, “Hazard Elimination Program for Existing Roads and Streets (HELPER).”

Haddock, John E; civil engineering, from Indiana Department of Transportation, \$219,662, “SPR-4332 Development of Volumetric Acceptance and Percent within Limits (PWL) Criteria for Stone Matrix Asphalt (SMA) Mixtures in Indiana.”

Hall, Mark C; biochemistry, from Summer Science Program, \$3,700, “Summer Science Program.”

Hassanein, Ahmed; nuclear engineering, from Multi-Sponsored Industrials, \$16, “Hamamatsu Support (30001746).”

Heidenreich, Abigail E; field extension, from Other – Industrial, \$1,582, “Orange County Extension – American Airlines Airline Tickets for the Local Team.”

Hertel, Thomas W; agricultural economics, from IMF- International Monetary Fund, \$20,435, “Global Trade Analysis Project (GTAP) Consortium.”

Hertel, Thomas W; agricultural economics, from International Trade Centre, \$3,500, “Global Trade Analysis Project (GTAP) Consortium.”

Hertel, Thomas W; agricultural economics, from National Graduate Institute for Policy Studies, \$20,435, “Global Trade Analysis Project (GTAP) Consortium.”

Hirleman, E Daniel; executive vice president for research & partnerships administration, from Ford Motor Company, \$28,886, “Ford -- Hold Account (Additional \$28,886 for Ford Project-Grant 40002597).”

Hook, Tomas O and **Archer, Angela S**; forestry & natural resources, from National Oceanographic & Atmospheric Administration, \$61,500, “2019 Knauss Fellowships.”

Hook, Tomas O and **Carlton, Joshua S**; forestry & natural resources, Indiana-Illinois Sea Grant, from Iowa State University, \$75,000, “A NCRAC-Sea Grant Partnership for Regional Aquaculture Extension.”

Horgan, Briony H; earth, atmospheric & planetary sciences, from Jet Propulsion Laboratory, \$28,000, “Using Composition to Constrain Paleoenvironments and Sites of Organic Preservation in Gale Crater, Modification8; Grant 108399.”

Hountz, Randall A; Purdue Healthcare Advisors, from Altarum Institute, \$283,723, “Compact Muon Solenoid (CMS) Macra Support for Small Practices.” (a Discovery Park award – Regenstrief Center for Healthcare Engineering)

Howarter, John A; **Erk, Kendra A** and **Martinez, Carlos J**; materials engineering, from Strategic Environmental Research & Development Program, \$108,140, “Relating the Phase, Flow, and Coalescence Behavior of Complex Shipboard Emulsions to the Physical and Chemical Properties of Model Surfactant-Oil-Water.”

Isaac-Lam, Meden F; chemistry & physics, from Indiana Academy of Science, \$3,000, “Synthesis, Characterization, and Toxicity Evaluation of Iron Nanoparticles.”

Janes, David B; electrical & computer engineering, from Colorado State University, \$10,000, “Direct Sensing Sampling Device for Detecting Submicron Mining Particles Including Coal, Silica and Nano-Sized Diesel.”

Jiao, Dan; **Jung, Byunghoo** and **Koh, Cheng-Kok**; electrical & computer engineering, from Air Force Research Laboratory, \$54,504, “Rapid Response Research (RAPID) Modeling and Analysis Framework for Full-Chip/Package/Board Layout and Parasitic-Driven and Variations-Aware.”

Johnson to Lumkes

Johnson, William G; botany & plant pathology, from FMC Corporation, \$10,000, "Weed Science Research Voluntary Support."

Johnson, William G; botany & plant pathology, from FMC Corporation, \$10,000, "Weed Science Research Voluntary Support."

Johnson, William G; botany & plant pathology, from Agrimetis, \$8,000, "Weed Science Research Voluntary Support."

Johnston, Cliff T; agronomy, from Clay Minerals Society, the, \$9,502, "Memorandum of Understanding Between Department of Agronomy Purdue University and Clay Mineral Society."

Jones, Timothy Matthew; physics & astronomy, from Advanced Research Corporation, \$65,019, "High Density Interconnect Solutions for HL-LHC."

Jun, Martin Byung-Guk; mechanical engineering, from SMEC Co, Ltd, \$205,802, "Development of Hybrid Manufacturing System for High Melting Point Alloys."

Jun, Martin Byung-Guk; mechanical engineering, from Korea Institute of Machinery & Materials, \$13,207, "Multi Sponsor."

Kak, Avinash C; electrical & computer engineering, from Applied Research Associates, Inc, \$143,424, "Creation of Operationally Realistic 3-D Environment (CORE3D)."

Kate, Aniket Pundlik; computer science, from National Science Foundation, \$86,494, "Faculty Early Career Development (CAREER): Towards Privacy and Availability of Inter-Blockchain Communication."

Key, Nicole L; mechanical engineering, from Rolls-Royce Corporation, \$307,566, "Purdue 3-Stage Commissioning of Rig Upgrades & Performance Testing."

Key, Nicole L; mechanical engineering, from Rolls-Royce Corporation, \$345,463, "CSTAR LDV Diffuser Study."

Kihara, Daisuke; biological sciences, from National Institutes of Health, \$294,970, "Structural Modeling of Multifarious Protein Complexes."

Kihara, Daisuke; biological sciences, from Virginia Technology, \$96,905, "Integrative Genomics Approach to Computational Assessment of Threats (IGACAT); Amendment 3; Grant 13000574."

Kim, Hye-Ji; horticulture & landscape architecture, from MN SDG, \$5,000, "Voluntary Support."

Kluender, Keith R; speech, language & hearing sciences, from Indiana Lions Speech and Hearing Inc., \$1,600, "2019 Increase: Clinical Support for Speech-Language-Audiology Services from the Indiana Lions Club (40001192)."

Knopik, Valerie S; human development & family studies, from Emory University, \$38,874, "The Kinship Risk Score: An Integrative Tool to Prioritize Alcohol and Drug-Addiction; Modification1; Grant 11000698."

Krogmeier, James V; electrical & computer engineering, from Silicon Valley Community Foundation, \$12,500, "Oats Center Memo Match."

Kulatunga, N Athula; engineering technology, from Multi-Sponsored Industrials, \$10, "Electric Traction Development (30001491)."

Lang, Rafael F; physics & astronomy, from U.S. Department of Energy, \$100,000, "Ua(1): The Search for Low-Mass Dark Matter in Liquid Xenon."

Latin, Richard X; botany & plant path, from BASF Corporation, \$4,000, "Turfgrass Disease Research."

Lechtenberg, Victor Louis; president administration, from Indiana University, \$10,000, "Support of Southeastern Small Business Development Center (SBDC) (2019 IU Support)."

Liceaga, Andrea M; food science, from Naoki Sugita, \$1,650, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Riverbend Foods, \$5,000, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Impossible Foods Inc., \$7,500, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from The Hain Celestial Group, Inc., \$1,500, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Naoki Sugita, \$1,650, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Impossible Foods Inc., \$10,000, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Bobos Oat Bars, \$1,500, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Lovate Health Sciences Inc, \$3,000, "Multi Sponsored Gift – Sensory."

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

Liceaga, Andrea M; food science, from Harald K Bellm, \$1,500, "Multi Sponsored Gift – Sensory."

Liceaga, Andrea M; food science, from Heartland Food Products Group, \$4,500, "Multi Sponsored Gift – Sensory."

Liu, Julie C; chemical engineering, from University of California – Davis, \$22,996, "Investigation of Proteoglycan Mimetics as Treatments for Osteoarthritis."

Liu, Sa; health sciences, from Goodelectronics, \$10,767, "Urinary Metabolites of Solvent Exposure Among Workers in Electronic Factories in Batam, Indonesia."

Liu, Zhongming; electrical & computer engineering, from Takeda Pharmaceutical International Inc US Region, \$85,536, "Evaluate Gastric Motility Changes in Rodents in Response to Dosing with Marked GI Motility Drugs (E.G. Prucalopride)."

Lucas, Jeffrey R; biological sciences, from National Science Foundation, \$47,622, "Collaborative Research: Causes of Variation in Parid Call Complexity."

Lucht, Robert P; aeronautics & astronautics, from King Abdullah University of Science and Technology, \$75,092, "Femtosecond Coherent anti-Stokes Raman Spectroscopy (CARS) Diagnostics for Oxy-Fuel Flames."

Lumkes, John H; agricultural & biological engineering program, from Ford Motor Company, \$10,000, "NFPA Gift Account."

Mahmoudian to Pitts

Mahmoudian, Nina; mechanical engineering, from National Science Foundation, \$261,597, "Faculty Early Career Development (CAREER): Autonomous Underwater Power Distribution System for Continuous Operation."

Mansfield, Charles W; agronomy, from Rubisco Seeds LLC, \$2,250, "Corn Research."

Mauer, Lisa J; food science, from Arrmaz Products, LP, \$2,500, "IFT Research Award."

McKee, Renee K; field extension, from National 4-H Council, \$9, "4-H Youth Programs."

McKee, Renee K; field extension, from National 4-H Council, \$10,058, "4-H Youth Programs."

Mei, Jianguo; chemistry, from Office of Naval Research, \$167,818, "High Temperature Organic Semiconductors."

Miller, Jeffrey T; chemical engineering, from Argonne National Laboratory, \$20,000, "Catalyst Characterization to Support Catalyst Development for Converting Biomass."

Min, Byung-Cheol; computer information technology, from National Science Foundation, \$134,959, "Faculty Early Career Development (CAREER): Adaptive Human Multi-Robot Systems."

Mishra, Dharmendra K; food science, from Heartland Food Products Group, \$10,000, "Multi Sponsored Gift."

Mishra, Dharmendra K; food science, from Hinkle Enterprise LLC, \$150, "Multi Sponsored Gift."

Mishra, Dharmendra K; food science, from Kyle Heiny, \$75, "Multi Sponsored Gift."

Monarch Mcguire, Jennifer R; field extension, from Indiana Youth Institute, \$750, "Future of Educational Technology Conference."

Morisette, Dallas T; electrical & computer engineering, from II-VI Foundation, \$165,000, "Deposited Gate Oxides for Next Generation SIC Power MOSFETs."

Morrow, Mary R; Bowers, Heather; Davis, Janet H and Eastland, Taryn; nursing administration, from Indiana Organization of Nurse Executives, \$10,000, "Influencing a Diverse Nursing Workforce to Reduce Health Disparities."

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

Mukherjee, Partha P; mechanical engineering, from Research Corp for Science Advancement, \$36,667, "Probing the Mechanistic of a Molecularly Tailored Solid/Solid Interface."

Mukherjee, Partha P; mechanical engineering, from Alfred P. Sloan Foundation, \$36,666, "E-Cobra: Eutectic Co-Deposition Based Rechargeable Anodes."

Nagy, Zoltan; chemical engineering, from International Fine Particle Research Institute Inc., \$14,000, "IFPRI Gift."

Newton, Kathryn A; engineering technology, from University of Industrial Distribution, \$10,000, "Coordination of University of Innovative Distribution Program."

Nielsen, S Suzanne; Bugusu, Betty A; Hamaker, Bruce R; Lowenberg-Deboer, James M; Bauchet, Jonathan J; Ferruzzi, Mario; Ileleji, Klein; Ricker-Gilbert, Jacob E and Woloshuk, Charles P; food science, global engineering programs, Executive Vice President for Research & Partnerships administration, consumer science, nutrition science, agricultural & biological engineering program, agricultural economics, botany & plant pathology, from DNU US Agency International Development, \$585,000, "Feed the Future Innovation Lab for Food Processing and Post-Harvest Handling."

Nowack, Robert L; earth, atmospheric & planetary sciences, from National Science Foundation, \$121,740, "Autocorrelation of Seismic Ambient Noise and P-Wave Coda for Crustal Structure."

Olek, Jan and Velay Lizancos, Maria Mirian; civil engineering, from Indiana Department of Transportation, \$134,364, "Improvement of Scaling Resistance of Pavement Concrete Using Titanium Dioxide (TiO₂) and Other Nano-Additives."

Panchal, Jitesh H; Bilonis, Ilias; Ramani, Karthik and Reid, Tahira; mechanical engineering, from National Science Foundation, \$49,998, "2019 NSF EDSE Workshop and Grantees Meeting: Positioning Engineering Design and Systems Engineering (EDSE) Research for Sustained Societal Impact."

Paniagua Perez, Guillermo; mechanical engineering, from Universidad Politecnica De Madrid, \$57,059, "UPM – Aerodynamic Upgrade of Surface Air Cooled Oil Cooler (SACOC)."

Paniagua Perez, Guillermo; mechanical engineering, from Universitat Politecnica De Valencia, \$57,059, "UPV – Aerodynamic Upgrade of Surface Air Cooled Oil Cooler (SACOC)."

Paniagua Perez, Guillermo; mechanical engineering, from NATO (N. Atlantic Treaty Organization), \$82,035, "Versatile UAV Engine Development via CVT Coupled Micro Turbofan."

Patton, Aaron J; horticulture & landscape architecture, from St. Joseph College, \$683, "Turfgrass Research."

Pekny, Joseph F; chemical engineering, from United States Military Academy, \$55,000, "Developing Best Practices in Civilian Military Educational Partnerships."

Peretin, Cassidy E; financial aid, from National Endowment for Financial Education, \$500, "Cashcourse Reimbursement Program."

Peroulis, Dimitrios; electrical & computer engineering, from BAE Systems Advanced Technologies, Inc., \$66,992, "Tunable Notch Filters for Full Spectrum Staring ES Receiver W/Instantaneous DF." (a Discovery Park award – Birck Nanotechnology)

Peroulis, Dimitrios; education administration, from Teradyne, \$84,246, "Low-Profile 24-44 GHz Tunable Filters."

Piercey, Davin G; materials engineering, from Office of Naval Research, \$150,000, "Enabling Methods in Next-Generation Energetic Materials Synthesis."

Pitts, Brandon J; industrial engineering, from Kelsey Hayes Co, \$50,000, "ZF Vehicle Automation: Cyber Threats."

Pourpoint to Scott-Moncrieff

Pourpoint, Timothee L; Gore, Jay P; Heister, Stephen D; Qiao, Li and Scalo, Carlo; aeronautics & astronautics, mechanical engineering, from Rolls-Royce, Inc., \$490,000, "University Technology Center in Advanced Thermal Management Systems at Purdue University."

Pourpoint, Timothee L; aeronautics & astronautics, from Physical Sciences, Inc., \$309,820, "Electrical Power from Thermal Energy Scavenging in High Temperature Environments."

Purcell, Lindsey A; forestry & natural resources, from Indiana Arborists Association, Inc., \$15,000, "Indiana Arborists Association, Inc. 30000951."

Pyrak-Nolte, Laura J; physics & astronomy, from U.S. Department of Energy, \$25,000, "The Physics of Swarms in Fracture Networks: Integration of Seismic Characterization and Controlled Micro-Transport."

Raghunathan, Anand; electrical & computer engineering, from Intel Corporation, \$65,000, "Emerging Technologies, Circuits & Architectures."

Rajwa, Bartlomiej P; medicinal chemistry & molecular pharmacology, from University of Utah, \$17,003, "Schistosoma Mansoni Infection During Pregnancy: Dissecting the Implications to Fetal Immunity." (a Discovery Park award – Bindley Bioscience)

Rajwa, Bartlomiej P; medicinal chemistry & molecular pharmacology, from University of Utah, \$25,587, "Schistosoma Mansoni Infection During Pregnancy: Dissecting the Implications to Fetal Immunity; Amendment 1; Grant 11000831." (a Discovery Park award – Bindley Bioscience)

Ratliff, Timothy L; comparative pathobiology, from Carroll County Cancer Association, \$25, "Cancer Research (30001610)."

Richert, Brian T; animal sciences, from Zinpro Corporation, \$20,000, "Swine Research."

Richert, Brian T; animal sciences, from Administration Animal Nutrition, \$10,000, "Swine Research."

Richert, Brian T; animal sciences, from Administration Animal Nutrition, \$20,000, "Swine Research."

Richmond, Douglas Scott; entomology, from Syngenta Crop Protection Inc., \$9,000, "Turfgrass Entomology Research."

Robicheaux, Francis J; physics & astronomy, from U.S. Department of Energy, \$100,000, "Atoms and Ions Interacting with Particles and Fields."

Rochet, Jean-Christophe and Cannon, Jason R; medical chemistry & molecular pharmacy, health sciences, from Branfman Family Foundation, \$50,000, "Role of Alpha-Synuclein-Mediated Membrane Permeabilization in the Propagation of PD Neuropathology."

Rodriguez, Catalina E; education opportunities program, from U.S. Department of Education, \$319,071, "Student Support Services."

Rodriguez, Catalina E; education opportunities program, from U.S. Department of Education, \$319,071, "Student Support Services (Year 4)."

Roy, Kaushik; electrical & computer engineering, from IBM, \$122,328, "Self-Aware Cognitive Services for Distributed Coalition Environments."

Rozhon, Atina M; field extension, from Jennings County Community Foundation, \$1,750, "Reading Made Fun – 2018."

Sa Barreto, Antonio C and Datchev, Kiril; mathematics, from National Science Foundation, \$22,501, "The Third Midwestern Microlocal Meeting: Microlocal Analysis, Inverse Problems and Resonances."

Sadeghi, Farshid; mechanical engineering, from Fag Kugelfischer Georg Schaefer Ag, \$272,799, "Computational Fluid Dynamics (CFD) Modeling & Experimental Investigation of Ball/Roller Bearing Cage Contact."

Sadeghi, Farshid; mechanical engineering, from Ford Motor Company, \$72,238, "Tribology Lab Research."

Samanta, Roopsha; computer science, from National Science Foundation, \$94,990, "Faculty Early Career Development (CAREER): Robustness of Inductive Reasoning Engines."

San Martin-Gonzalez, Maria Fernanda; food science, from Heartland Food Products Group, \$3,000, "Multi-Sponsor Gift Funds."

Sandhage, Kenneth H; materials engineering, from U.S. Department of Energy, \$400,000, "Mechanically, Thermally, and Chemically-Robust High-Temperature Ceramic Composites."

Sandhage, Kenneth H; materials engineering, from Massachusetts Institute of Technology, \$346,197, "High Temperature Pumps and Valves for Molten Salt."

Sandhage, Kenneth H; materials engineering, from U.S. Department of Energy, \$400,000, "Mitigation of Molten Salt Corrosion."

Sangid, Michael D; aeronautics & astronautics, from Northrop Grumman Space Technology, \$15,000, "Voluntary Support Sangid."

Sangid, Michael D; aeronautics & astronautics, from Magee Technologies, LLC, \$118,000, "P-8A Aircraft Support for PMA-290: in Situ Characterization of Crack Tip Mechanics for a 3-D Tortuous Small Crack in Ti-6Al-4V Produced via Selective Laser Melting."

Savaiano, Dennis A; nutrition science, from Bank of New Zealand, \$80,000, "Savaiano Voluntary Support."

Scalo, Carlo; mechanical engineering, from Army Research Office, \$75,000, "ARO-YIP: Coherent-Vorticity-Preserving (CvP) Large-Eddy Simulations (LES) of Very-High-Reynolds-Number Vortex Dynamics."

Scalo, Carlo; mechanical engineering, from Ford Motor Company, \$225,000, "Thermoacoustics Power Generation II."

Scalo, Carlo; mechanical engineering, from Air Force Office of Scientific Research, \$142,395, "Direct Numerical Simulation of Hypersonic Boundary Layer Transition Over Distributed Surface Porosity."

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

Scott-Moncrieff, Joanna C R; veterinary clinical sciences, from Surgical Referral Services Ltd, \$22,384, "Onco Residency Training Program."

Scott-Moncrieff, Joanna C R; veterinary clinical sciences, from Animal Eye Specialists, Inc, \$21,488, "Ophthalmology Residency Program."

Scott-Moncrieff to Underwood

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 Compassion First Pet Hospitals, \$22,500, "SAS Resident."

Scott-Moncrieff, Joanna C R; veterinary clinical sciences, from MSPCA Angell, \$20,657, "LAS Moroccan Residency."

Sen, Shreyas and Weinstein, Dana; electrical & computer engineering, from Air Force Research Laboratory, \$323,183, "MIDAS TOUCHES: Tiles of Unreleased Clocks for Hybrid Electronic Steering."

Sen, Shreyas; electrical & computer engineering, from Intel Corporation, \$100,000, "Multi-Sponsored Industrial."

Sen, Shreyas; electrical & computer engineering, from Georgia Institute of Technology, \$53,500, "Year 3 Funding: Self-Powered IoT Sensor Node with In-Situ Data Analytics and Energy-Aware End-to-End Real-Time Optimization (40001663)."

Sepulveda, Maria Soledad; forestry & natural resources, from Department of the Army, \$330,612, "Development of Amphibian Poly- and Perfluoroalkyl Substances Toxicity Reference Values for Use in Ecological Risk Assess."

Shashurin, Alexey; aeronautics & astronautics, from National Science Foundation, \$50,000, "System for Synthesis of Protective Graphene Coatings."

Sheehan, Amy Heck; pharmaceutical practice, from Abbvie Inc, \$158,642, "Purdue/Abbvie/FDA Medication Safety Fellowship."

Sheehan, Amy Heck; pharmaceutical practice, from PHS-Food and Drug Administration, \$40,000, "Intergovernmental Personnel Assignment (IPA) Assignment Agreement for Regulatory Pharmaceutical Fellowship – Nikki Sebahar."

Shih, Tom I-P; aeronautics & astronautics, from Dekker Vacuum Technologies, Inc., \$8,865, "Dekker Vacuum."

Shin, Yung C; mechanical engineering, from Ford Motor Company, \$224,709, "Electrical Steels with Locally Imparted Properties through Additive Manufacturing."

Slabaugh, Carson D; aeronautics & astronautics, from National Aeronautics and Space Administration, \$155,000, "Propulsion Design, Build, Test: Hydrocarbon Propellant Delivery System."

Slabaugh, Carson D; aeronautics & astronautics, from Siemens Energy & Automation Inc., \$50,000, "Combustion Instability in High Mach Number Flows: Design of Experiment."

Smith, Elisabeth L; field extension, from Heritage Fund Community Foundation, \$2,850, "Strengthening Families Program: For Parents and Youth 10-14 – Bartholomew."

Son, Steven F; Manship, Timothy D and Piercey, Davin G; mechanical engineering, materials engineering, from Naval Surface Warfare Center Crane Div, \$150,000, "Extrudable Daaf-Based Explosives: Insensitive Explosive with Small Critical Diameter."

Steinbach, Sarah M.L.; veterinary clinical sciences, from Multi-Sponsored Industrials, \$161, "Clinical Nephrology & Urology (30001625)."

Subbarayan-Shastri, Ganesh and Handwerker, Carol A; mechanical engineering, materials engineering, from Semiconductor Research Corporation, \$363,750, "CHIRP Center."

Sullivan, John P; aeronautics & astronautics, from Clemson University, \$18,000, "Development and Delivery of the Boeing AerosPACE Program for AerosPACE Multi University, Multi User Capstone Project."

Sundaram, Shreyas; electrical & computer engineering, from Griffiss Institute Inc, \$8,619, "Algorithmic Approaches to Robust Antenna Placement in Uncertain Environments."

Sutherland, John W; environmental & ecological engineering, from Ford Motor Company, \$200,000, "Value Recovery and Closed-Loop Recycling/Reuse of Rare Earth Permanent Magnets in Vehicles."

Szymanski, Daniel B; agronomy, from National Science Foundation, \$43,908, "Collaborative Research: An Integrated Experimental and Computational Approach to Discover Biomechanical Mechanisms of Leaf Epidermal Morphogenesis."

Taheripour, Farzad and Tyner, Wallace E; agricultural economics, from Agrisoma Biosciences Inc, \$10,000, "Induced Land Use Change: Case of Carinata Biodiesel."

Takahashi, George and Theademan, Laura J; research computing administration, from Cummins, Inc., \$48,243, "Cummins Engine Familiarization Training System."

Teegarden, Dorothy; Donkin, Shawn S and Wendt, Michael K; health & human sciences administration, animal sciences, medicinal chemistry & molecular pharmacology, from National Institutes of Health, \$472,530, "Obesity, Metabolism and Breast Cancer Metastasis."

Telenko, Darcy E P; botany & plant pathology, from Amvac Chemical Corporation, \$1,000, "Extension Voluntary Support."

Telenko, Darcy E P; botany & plant pathology, from BASF Corporation, \$10,500, "Extension Voluntary Support."

Telenko, Darcy E P; botany & plant pathology, from Amvac Chemical Corporation, \$1,000, "Extension Voluntary Support."

Telenko, Darcy E P; botany & plant pathology, from FMC Corporation, \$3,000, "Extension Voluntary Support."

Tesmer, John; biological sciences, from PHS-NIH National Cancer Institute, \$384,916, "GPCR – Linked RhoGEFs in Tumor Growth and Metastasis."

Tesmer, John; biological sciences, from PHS-NIH National Heart, Lung & Blood Institute, \$5, "Structure and Function of the LPLA2/LCAT Acyltransferase Family."

Thom, James Mark and Johnson, Mary E; aviation and transportation technology, from Federal Aviation Administration, \$203,522, "PAFI Phase Iia."

Titus, Michael S; materials engineering, from National Science Foundation, \$113,107, "Faculty Early Career Development (CAREER): High Temperature Strengthening via Solute-Enhanced Stacking Faults in Structural Alloys."

Underwood, Marion K; health & human sciences administration, from PHS-NIH National Institute of Child Health and Human Development, \$597, "Social Aggression: Growth, Outcomes, and Digital Communication."

Varala to Zillich

Varala, Kranthi K; horticulture & landscape architecture, from Cold Spring Harbor Laboratory, \$77,503, “RESEARCH-PGR: Living Fossils: Applying Advances in Single Molecule Sequencing to Decode Large and Complex Genomes of Ancient Plant Lineages.”

Voyles, Richard M; engineering technology, from Tupperware, \$20,000, “RoSe-HUB Membership (Members Cost Shared on 107355).”

Voyles, Richard M; engineering technology, from Alltech, Inc, \$20,000, “RoSe-HUB Membership (Members Cost Shared on 107355).”

Wahlstrom, Lynne M; field extension, from DeKalb County Community Foundation, \$300, “NAE4-HA National Conference Professional Development.”

Wendt, Michael K; medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$338,739, “Overcoming Metastatic Resistance to ErbB-Targeted Therapies.”

Wendt, Michael K; Zhang, Zhong-Yin and Lim, Seung-Oe; medicinal chemistry & molecular pharmacology, from Metavivor Research and Support Inc, \$100,000, “Enhancing Anti-Metastatic Immunity through Targeted Inhibition of SHP2 Phosphatase.”

Wilbur, Ronnie B; speech, language & hearing sciences, from Ohio State University, \$26,350, “Computational Methods for the Study of American Sign Language Nonmanuals Using Very Large Databases; Amendment 5; Grant 11000502.”

Williams, Rod N and Burgmeier, Nicholas G; forestry & natural resources, from Fort Wayne Childrens Zoo, \$6,628, “Purdue University Hellbender Husbandry Captive Rearing Improvements.”

Witkowski, Nicole L; field extension, from Indiana State Department of Agriculture, \$11,675, “Fruitful Future for Students: Munster Fruit Gardening.”

Xu, Yunlin; nuclear engineering, from State Power Inv Corp Institute (Spicri), \$60,000, “Validation and Independent Evaluation Service for Nuclear Design Code in Cosine.”

Xuan, Yi; electrical & computer engineering, from Indiana University, \$101,838, “Fabrication of Si Microneedle Arrays.” (a Discovery

Park award – Birck Nanotechnology)

Young, Bryan G; botany & plant pathology, from Lamberti USA, Inc, \$1,800, “Multi Sponsored Gift Account.”

Young, Bryan G; botany & plant pathology, from Ethox Chemicals, LLC, \$4,400, “Multi Sponsored Gift Account.”

Young, Bryan G; botany & plant pathology, from Chemorse, Ltd, \$3,500, “Multi Sponsored Gift Account.”

Yu, Wenbin; aeronautics & astronautics, from Cytec Industries Inc, \$50,000, “CDM HUB (Consortium).”

Yu, Wenbin; aeronautics & astronautics, from MSC Software, \$15,000, “CDM HUB (Consortium).”

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

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

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

Zhuang, Qianlai; earth, atmospheric & planetary sciences, from University of Colorado at Boulder, \$79,704, “Process-Level Investigation of Revised Global Methane Budget Based on in Situ and Remote Sensing of Atmospheric Composition and the Land Surface; Amendment 3; (NCE for Grant 12000218).”

Zillich, Alan J; pharmaceutical practice, from R.L. Roudebush Veterans Administration Medical Center, \$94,352, “R.L. Roudebush Veterans Administration Medical Center for Deanna Kania.”

Zillich, Alan J; pharmaceutical practice, from Department of Veterans Affairs, \$57,850, “Intergovernmental Personnel Assignment (IPA) for Khoa Nguyen.” ■

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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. ■