DIMENSIONS of DISCOVERY

Sponsored Program Awards

March 2012

Abbott, Angela R; foods & nutrition, from Kansas State University, \$546,191, "Mobilizing Rural Communities to Assess and Improve the Ecological Environment to Prevent Childhood Obesity."

Adams, Douglas E; mechanical engineering, from Innovative Design & Technology, \$19,994, "Aircraft Gross Weight and Center of Gravity Estimation."

Adams, Douglas E; Bolton, J S; Davies, Patricia and Rhoads, Jeffrey F; mechanical engineering, from North Carolina State University, \$400,000, "Semiwave Multidisciplinary University Research Initiative (MURI): Sound and Electromagnetic Interacting Waves; Modification 6."

Adeola, Olayiwola; animal sciences, from Danisco Animal Nutrition, \$30,000, "Danisco."

Alam, Muhammad A; electrical & computer engineering, from Texas Instruments, Inc., \$50,000, "Texas Instruments Gift."

Alexeenko, Alina; aeronautical & astronautical engineering, from National Institute for Pharmaceutical Technology and Education, \$45,000, "Variation in Pressure within the Drying Chamber and Impact on Freeze-Drying Design Space: A Combination Theoretical and Experimental Study."

Anderson, Joseph M; agronomy, from University of Illinois, \$83,957, "Nested Association Mapping to Identify Yield Qtl in Diverse High Yielding Elite Soybean Lines."

Appenzeller, Joerg and Yang, Chen; electrical & computer engineering, chemistry, from Army Research Office, \$95,792, "Tunneling Devices from III-V Nanowire Heterostructures for High Frequency, Low-Powered Radio Frequency (RF) Applications; Modification 3 for Grant

104569." (a Discovery Park award — Birck Nanotechnology Center)

Applegate, Todd J; animal sciences, from Maple Leaf Farms Inc., \$10,000, "Duck Research."

Applegate, Todd J; animal sciences, from Winifred B. Bilsland Endowment, \$8,737, "Jiang, Zhengyu."

Bajaj, Anil K; mechanical engineering, from Cummins Business Services, \$24,000, "Cummins Assistanships."

Barnes, Shelly D; financial aid — North Central campus, from TCU Foundation, \$5,000, "Scholarship for One Student, 2011-2013."

Bayley, William G; chemistry, from Annette M Maier, \$300, "Instrumentation Van Project."

Bertino, Elisa; computer science, from Sypris Electronics, \$90,000, "Security Techniques for Smart Mobile Devices."

Biddings-Muro, Regina D; Chancellor — Calumet campus, from Foundations of East Chicago, \$50,000, "FEC12-503/Lake County Latino Success Grant."

Bigelow, Cale A; agronomy, from Agrotain International LLC, \$5,000, "Putting Greens Research."

Bouman, Charles A; electrical & computer engineering, from Army Research Office, \$49,334, "Analysis and Detection of High Dimensional Signals Using the Sparse Matrix Transform; Modification 3 for Grant 104193."

Bouman, Charles A; electrical & computer engineering, from UES Inc., \$25,000, "Model-Based Haadf-Science, Technology, Engineering & Mathematics (STEM) Tomography."

Bowen, Brenda B; earth & atmospheric sciences, from Exxon Mobil Exploration Company, \$5,000, "Exxon Mobils Global Geoscience Recruiter Nominated Grant for Tommy Lovell."

Brady, Thomas F; technology — North Central campus, from Center for Coal Technology Research, \$40,000, "Indiana Coal Corridor Infrastructure Analysis."

Bullock, Darcy M; civil engineering, from Office of Federal Highway Administration, \$34,000, "2012 Eisenhower Graduate Fellowship for Steve Remias."

Bullock, Darcy M; civil engineering, from Office of Federal Highway Administration, \$34,000, "2012 Eisenhower Graduate Fellowship for Alexander Hainen."

Cai, Liping A; consumer & family sciences, from Liping A Cai (Individual Donor), \$24,952, "China Research Programs."

Calais, Eric and Freed, Andrew M; earth & atmospheric sciences, from National Science Foundation, \$128,863, "Postseismic GPS Survey, Modeling, and Education Following the M7.0 January 12, 2010 Earthquake in Haiti; Amendment 1 for Grant 105191."

Campbell, Wayne W and Rosen, Arthur D; foods & nutrition, biological sciences, from National Pork Board, \$110,701, "Effects of Pork Vs. Chicken/Fish in a Dash Diet on Blood Pressure Regulation in Older Adults with Hypertension."

Cardella, Monica E; engineering education, from WGBH, \$262,424, "Informal Pathways to Engineering: Using Social Cognitive Career Theory to Understand How Informal Engineering Programs Can Support Children's Sustained Interest and Participation in Engineering."

Carlson, Donald E; Jacobs, Douglass F; Kraushar, Matthew S and Leuck, Jon D; forestry & natural resources, pinney-purdue agricultural center, from Mary S. Rice Farm Estate, \$11,000, "Equipment Request for Invasive Species Control in Natural Areas Managed by the Forestry and Natural Resources Department."

Carvajal, Teresa M; agricultural & biological engineering, from Multi-Sponsored Industrials, \$9,400, "Multi-Sponsored Gift Fund."



Cassens, Daniel L; forestry & natural resources, from Vance Publishing Corporation, \$8,500, "Multi-Sponsored."

Casteel, Shaun N; agronomy, from Monsanto Company, \$2,000, "Soybean Extension Research."

Casteel, Shaun N; agronomy, from Monsanto Company, \$8,000, "Soybean Extension Research."

Casteel, Shaun N; agronomy, from Monsanto Company, \$2,625, "Soybean Extension Research."

Casteel, Shaun N; agronomy, from Monsanto Company, \$358, "Soybean Extension Research."

Chakravarty, Sugato; consumer science & retail, from Purdue Research Foundation (PRF) Summer Research Grants, \$2,636, "2011 GS SRG - Computer Systems Research (CSR)."

Chapple, Clint C; biochemistry, from National Science Foundation, \$8,201, "Research Experience for Undergraduates (REU) Supplement: Arabidopyrones: a New Group of Specialized Plant Metabolites from Arabidopsis."

Chapple, Clint C; biochemistry, from Dow Chemical Company Foundation, \$3,000, "Dow Agro Sciences Aid-to-Education."

Chen, Jun; mechanical engineering, from Sandia National Laboratories, \$53,823, "Development of Advanced Algorithms for Digital Holography."

Chen, Qingyan; mechanical engineering, from Boeing Commercial Airplanes Group, \$80,000, "Investigation of Person-to-Person Particle Transfer and Risk Assessment for Airborne Infectious Disease Transmission in an Aircraft Cabin."

Chen, Weinong W; aeronautical & astronautical engineering, from PPG Industries, \$69,414, "Dynamic Response of Innovative Transparent Materials at Various Temperatures."

Clendenning, Amanda M; financial aid, from National Endowment for Financial Education, \$700, "Cashcourse Reimbursement Program."

Cleveland, William S; Neville, Jennifer L and Ward, Mark D; statistics, computer science, from Ohio State University, \$97,500, "Stochastic Control of Multi-Scale Networks: Modeling, Analysis, and Algorithms; Modification 6."

Colby, David A; Rochet, Jean-Christophe; Ferruzzi, Mario and Janle, Elsa M; medicinal chemistry & molecular pharmacology, food science, foods & nutrition, from PHS-NIH National Institute on Aging, \$186,688, "Anthocyanins and Structural Derivatives for Drug Discovery in Age-Related Neurode."

Collicott, Steven H; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$26,212, "Generating Experience in Student Sub-Orbital Experiments with Commercial Launchers; Amendment 1."

Connor, Robert J; civil engineering, from Virginia Technology, \$24,718, "Fracture-Critical kSystem Analysis for Steel Bridges; Modification 1."

Connor, Robert J; civil engineering, from Valmont Structures, \$15,000, "Valmont Structures Gift."

Constable, Peter D; veterinary clinical science, from Embassy of the Arab Republic of Egypt, \$25,000, "Fellowship: Ameer Ahmed Abdelhamee (ECEB)."

Constable, Peter D; veterinary clinical science, from Circle City Veterinary Specialty & Emergency Hospital LLC, \$10,000, "Small Animal Medicine Residency Support."

Cooks, Robert G and Ouyang, Zheng; chemistry, biomedical engineering, from Defense, U.S. Department of, \$298,410, "Portable Desorption Electrospray Ionization (DESI) Mass Spectrometer." (a Discovery Park award — Bindley Bioscience Center)

Cooky, Cheryl A; health & kinesiology, from Kinley Trust, \$19,435, "Sports, Physical Activity, and the Well-Being of Rural and Urban Girls."

Cramer, William A; biological sciences, from PHS-NIH National Institute of General Medical Science, \$33,244, "Problems in Membrane Protein Crystallography: Hetero-Oligomeric Cytochrome b6f-Amendment Year 24 Grant 103641."

Culurciello, Eugenio; biomedical engineering, from Johns Hopkins University, \$71,620, "Figure-Ground Processing, Saliency and Guided Attention for Analysis of Large Natural Scenes."

Dadarlat, Marius D; mathematics, from National Science Foundation, \$106,442, "Operator Algebras and Topological Invariants; Amendment 1 for Grant 105262."

Del Caro, Adrian; foreign language & literature, from Purdue Research Foundation (PRF) Summer Research Grants, \$18,450, "2011 SRG Foreign Languages."

Dierking, Emily C; agronomy, from Multi-Sponsored Industrials, \$750, "Multi-Sponsored."

Dunning, John B and **Homoya, Wesley T**; forestry & natural resources, from Amos W. Butler Audubon Society, Inc., \$2,000, "Continuing Studies of American Golden-Plovers in the Wind-Energy Regions of West Central Indiana."

Durbin, Stephen M; physics, from U.S. Department of Energy, \$106,730, "Picosecond X-Ray Detector for Synchrotrons; Modification 2 for Grant 104562."

Duval-Couetil, Nathalie A and **Rebar, Alan H**; technology — administration, Vice President for Research, from Eurasia Foundation, \$1,500, "Development of a Joint Leadership, Entrepreneurship, and Intercultural Competence Program for Students." (a Discovery Park award — Discovery Park Administration)

Duvall, John N; English, from Johns Hopkins University, \$284,250, "Journal of Modern Fiction Studies."

El-Azab, Anter A; nuclear engineering, from Idaho National Laboratory, \$201,058, "EFRC Center for Material Science of Nuclear Fuels."

Eremenko, Alexandre and **Gabrielov, Andrei**; mathematics, from National Science Foundation, \$116,805, "Meromorphic Functions and Their Applications; Amendment 1 for Grant 105234."

Eugster, Patrick T; computer science, from U.S. Department of Interior, \$200,000, "A Methodology for Devloping Complex Event-Based Software; Amendment 2."

Farlow, James O; geosciences — Fort Wayne campus, from National Geographic Society, \$17,022, "Dinosaur Tracksites of the Paluxy River Valley, Dinosaur Valley State Park, Glen Rose, Texas."

Fekete, Donna M; biological sciences, from National Institutes of Health, \$368,121, "Development Studies of the Inner Ear."

Field, William E; agricultural & biological engineering, from Kossuth Street Baptist Church, \$50, "Breaking New Ground."

Figueroa-Lopez, Jose E; statistics, from National Science Foundation, \$81,258, "Faculty Early Career Development (CAREER): Bridging High-Frequency Data Analysis and Continuous-Time Features of Levy Models."

Foster, Ricky E and **Obermeyer, John L**; entomology, from Mary S. Rice Farm Estate, \$2,400, "Maintaining Continuity of Statewide Insect Surveillance Network."

Francis, Alexander L and Alexander, Joshua M; speech language and hearing science, from Kinley Trust, \$20,000, "Do Older Adults Attend to Speech Differently Than Younger Adults?"

Frankel, Steven H; mechanical engineering, from High Performance Technologies Inc, \$47,630, "Modification No. 001 to Task Order No. 001 PP-Computational Fluid Dynamics (CFD)-KY02-105-P3."

Frankenberger, Jane R; agricultural & biological engineering, from Natural Resources Conservation Services, \$138,455, "USDA Science Advisor — Water Quality Initiatives."

Garimella, Suresh V; mechanical engineering, from Multi-Sponsored Industrials, \$30,000, "Cooling Technolgies Research Center (CTRC) 2011 Membership."

Garimella, Suresh V; mechanical engineering, from Indiana Department of Workforce Development, \$300,000, "Energy Storage Degree Grant."

Garimella, Suresh V; mechanical engineering, from Multi-Sponsored Industrials, \$15,000, "Cooling Technolgies Research Center (CTRC) 2011 Membership."

Gerard, Peggy S; nursing — Calumet campus, from University of Illinois at Chicago, \$22,000, "Bridges to the Doctorate for Nursing."

Gore, Jay P; mechanical engineering, from Valbruna Slater Stainless Steel Inc, \$52,500, "A Technical and Economic Feasibility Study of Furnaces Downstream Heat Recovery."

Gulich, Michael J; university sustainability, from Recyclemania, Inc., \$300, "Recyclemania Promotional Tournament Funding."

Harbin, Sherry L; biomedical engineering, from Indiana Clinical & Translational Science Institute, \$21,388, "Tunable Hybrid Collagen-Dicalcium Phosphate Dihydrate Scaffolds for Improved Craniofacial Bone Repair." (a Discovery Park award — Bindley Bioscience Center)

Harbor, Jonathan M and Lifton, Nathaniel A; earth & atmospheric sciences, from National Geographic Society, \$24,450, "Spatial Patterns of Past Glacier Variations in the Tianshan Mountains, Kyrgyzstan."

Harding, Melvyn D; Educational Opportunities Program — Calumet campus, from Walmart Foundation, \$1,000, "WMT 2818 Application: Purdue Calumet Educational Talent Search College Readiness Initiative."

Harilal, Sivanandan; nuclear engineering, from PHS-NIH National Center for Research Resource, \$18,291, "Development of Efficient Table-Top Laser-Produced Plasma Sources for Water-Window Microscopy for Grant 104278."

Harshvardhan; earth & atmospheric sciences, from National Aeronautics and Space Administration, \$112,653, "Study of the Evolution and Transport of Biomass Burning Smoke Plumes in Varying Environmental Conditions with Numerical Modeling; Supplement 2 for Grant 104655."

Hassanein, Ahmed; nuclear engineering, from U.S. Department of Energy, \$170,000, "Impact of Disruptions and ELMs on Liquid Lithium Surfaces in National Spherical Torus Experiment (NSTX) and Mitigation/Extrapolation to ITER Revelent Conditions; Modification 4 for Grant 103137."

Heeg, Marlene O; pharmacy practice, from Forest Laboratories, Inc., \$285,000, "IBS News Tonight: a Satellite Symposium at DDW 2012 and On-Demand Webcast."

Hertel, Thomas W; agricultural economics, from Multi-Sponsored Industrials, \$19,650, "Global Trade Analysis Project (GTAP) Consortium — 2011."

Hibel, Leah C and **Posada, German E**; child development & family studies, from PHS-NIH National Institute of Child Health and Human Development, \$219,515, "Inter-Parental Conflict, Maternal Behavior, and Mother-Child Physiology."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$50, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$50, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$100, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$50, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$100, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$100, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$50, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$60, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$100, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$50, "Katherine Howe Gift Fund."

Howe, Katherine M; botany & plant pathology, from Multi-Sponsored Industrials, \$30, "Katherine Howe Gift Fund."

Huber, Jessica E; speech language and hearing science, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$356,008, "Use of External Cueing to Treat Hypophonia in Parkinsons Disease."

Hunt, Greg J; entomology, from University of Georgia, \$57,691, "Sustainable Solutions to Problems Affecting Health of Managed Bees."

Hwang, Inseok; aeronautical & astronautical engineering, from Sypris Electronics, \$90,000, "A Cyber-Secure Autopilot Architecture for Unmanned Systems."

Hwang, Inseok; aeronautical & astronautical engineering, from National Science Foundation, \$80,000, "Faculty Early Career Development (CAREER): Real-Time Hybrid Estimation and Control for Networked Embedded Hybrid Systems; Amendment 004 Grant 102941."

Irudayaraj, Joseph M; Kirchmaier, Ann L; Lelievre, Sophie A and Lossie, Amy C; agricultural & biological engineering, biochemistry, basic medical science, animal sciences, from W.M. Keck Foundation, \$1,000,000, "Live Single Cell Epigenetic Profiling and Regulation at Single Molecule Resolution."

Ishii, Mamoru; Hibiki, Takashi and Liu, Yang; nuclear engineering, from Bechtel Bettis, Inc., \$49,952, "Implementation of Interfacial Area Transport Equation into 3-D Computational Fluid Dynamics (CFD) Code."

Jenkins, Michael A; forestry & natural resources, from U.S. Forest Service, \$7,800, "Carbon Sequestration in the Central Hardwood Region: What Are the Relative Contributions of Primary and Managed Secondary Forests?."

Jiang, Keyuan; computer information technology — Calumet campus, from Harmony Link, Inc., \$4,882, "Rapid Response Research (RAPID) Platform Development."

Jiang, Qing; Gibbs, Richard A and Snyder, Paul W; foods & nutrition, medicinal chemistry & molecular pharmacology, comparative pathobiology, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$167,475, "The Role of a Novel Vitamin E Metabolite in Colon Cancer Prevention and Therapy."

Johnson, Keith D; agronomy, from Mary S. Rice Farm Estate, \$12,000, "Enhancing Forage and Bio-Fuels Research & Education through the Acquisition of Forage Harvest Equipment."

Jones, Timothy M and **Bortoletto, Daniela**; physics, from University of Notre Dame, \$3,500, "QuarkNet at Purdue University."

Julien, Isidore A; biological sciences, from Indiana University, \$6,000, "Shoring Up Science, Technology, Engineering & Mathematics (STEM) Education."

Kais, Sabre; chemistry, from Army Research Office, \$30,000, "Physics: Finite Size Scaling and Quantum Criticality of Quantum Gases Amend 003 Grant 103845." (a Discovery Park award — Birck Nanotechnology Center)

Kak, Avinash C and **Park, Johnny**; electrical & computer engineering, from Applied Research Associates, Inc, \$15,000, "IARPA Finder 2011."

Keener, Kevin M; food science, from Insinkerator Division, \$91,869, "Examination of the Fat, Oil, and Grease (FOG) Formation Under Laboratory Conditions."

Keener, Kevin M; food science, from Griffith Laboratories, \$100, "Multi-Sponsored Gift."

Keener, Kevin M and **Oliver, Haley F**; food science, from Auburn University, \$136,397, "Virtual Food Systems Training Consortium."

Kelly, Daniel R; philosophy, from Indiana Humanities, \$1,000, "Moral Psychology Research Group Workshop."

Kim, Chang H and Hogenesch, Harm; comparative pathobiology, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$290,179, "Therapeutic Delivery of FoxP3+ T Cells to the Intestine."

Koh, Cheng-Kok and Lu, Yung-Hsiang; electrical & computer engineering, from National Science Foundation, \$50,000, "CI-ADDONEW: Collaborative Research: Development of DARwin Humanoid Robots for Research, Education, and Outreach; Amendment 3 for Grant 104388."

Konieczny, Stephen F; biological sciences, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$308,761, "Pancreas Transcription Factors and Disease Model Systems."

Krupke, Christian H; entomology, from Pioneer Hi-Bred International, Inc., \$14,000, "Purdue 2012 University Corn Rootworm Dual Pyramid Efficacy & Yield Evaluation."

Kubis, Tillmann C; Datta, Supriyo; Klimeck, Gerhard and Povolotskyi, Mykhailo; electrical & computer engineering, from Semiconductor Research Corporation, \$95,628, "Assessment of Silicon-Free Transport in Realistic Nanoscale Devices with NEMO5." (a Discovery Park award — Network for Computational Nanotechnology.)

Lang, Rafael F; physics, from National Science Foundation, \$163,896, "Search for Dark Matter with Xenon100."

Lechtenberg, Victor L; Office of Engagement, from Multi-Sponsored Industrials, \$6,000, "Multi-Sponsored Account Purdue Center for Regional Development (PCRD)."

Lelievre, Sophie A; basic medical science, from Purdue University Discovery Park Seed Grant Program, \$26,200, "Conveying Multidisciplinary Training in Global Public Health Issues." (a Discovery Park award — Discovery Learning Center)

Leuck, Jon D; Jiang, Yiwei; Johnson, William G; Maynard, Elizabeth T and Meilan, Richard; Pinney-Purdue Agricultural Center, agronomy, botany & plant pathology, horticulture & landscape architecture, forestry & natural resources, from Mary S. Rice Farm Estate, \$12,000, "Proposal for Rice Grant Funding to Acquire an Irrigation Hose Reel & Watering Boom at PinPAC for Overhead Irrigation."

Li, Zhiyuan; computer science, from Intel Corporation, \$40,000, "Intel — Dynamic Dependence."

Linder, Nathan L; Foster, Ricky E; Gibson, Kevin D and **Young, Jay C**; Throckmorton-Purdue University Agricultural Center, entomology, botany & plant pathology, from Mary S. Rice Farm Estate, \$4,500, "Hydraulic Post Pounder."

Linder, Nathan L; Foster, Ricky E; Hoagland, Lori A; Weller, Stephen C and Young, Jay C; Throckmorton-Purdue University Agricultural Center, entomology, horticulture & landscape architecture, from Mary S. Rice Farm Estate, \$10,000, "Small Plot Weighing System."

Liu, Wanqing; medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$204,652, "An Integrated Genomic and Lipidomic Approach to Human Hepatic Fat Accumulation."

Lloyd, Lyle L; educational studies, from John M or Helen H Arvidson (Individual Donor), \$100, "AAC Program Support."

Lopez, Roberto G; Martin, Chad A and Ballard, Roy W; horticulture & landscape architecture, agricultural & biological engineering, field extension educators, from Indiana State Department of Agriculture, \$32,078, "Energy Efficiency and Educational Modules Series for Indiana Garden Centers, Greenhouse and Nursery Growers."

Lopez, Roberto G; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$2,000, "Multi-Sponsored Gift Account."

Lopez, Roberto G; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$100, "Multi-Sponsored Gift Account."

Love, Dreama P; child development & family studies, from University of Nebraska-Lincoln, \$45,000, "Child Care and Youth Training and Technical Assistance Project - State Extension Liaisons - Indiana Human Development Extension Specialist, Department of Child Development and Family Studies at Purdue."

Low, Philip S; chemistry, from PHS-NIH National Institute of General Medical Science, \$442,474, "Studies of Erythrocyte Membrane Structure."

Lundstrom, Mark S; electrical & computer engineering, from Multi-Sponsored Industrials, \$37,500, "Network for Computational Nanotechnology (NCN) Membership." (a Discovery Park award — Birck Nanotechnology Center)

Lynall, Matthew D; management, from Purdue University, \$2,500, "Krannerts Experiential Learning Initiative (ELI)."

Lynall, Matthew D; management, from Purdue University, \$2,500, "Krannerts Experiential Learning Initiative (ELI)."

Ma, Jianxin; agronomy, from University of Georgia, \$140,687, "SoyMapII: Leveraging Untapped Genetic Diversity in Soybean."

Ma, Jianxin; agronomy, from M&M Mars, \$30,000, "Mars Transposable Element Analysis."

Malis, Oana and Manfra, Michael J; physics, from Kyma Technologies Inc, \$100,000, "III-Nitride Quantum Cascade Laser Development at Lambda 1.55 Micrometers Based on Native GaN Substrates and Strain-Compensation Heterostructure Engineering." (a Discovery Park award — Birck Nanotechnology Center)

Manfra, Michael J; physics, from Alcatel-Lucent, \$50,000, "Optimization of Gallium Arsenide (GaAs) Heterostructure Design for 5/2 Physics." (a Discovery Park award — Birck Nanotechnology Center)

Martini, Ashlie M and Youngblood, Jeffrey P; mechanical engineering, materials engineering, from Air Force Office of Scientific Research, \$150,000, "Thermal and Mechanical Properties of Nanocellulosic Materials: Integrated Models and Experiments; Modification 1 for Grant 10542."

Mattes, Richard D; foods & nutrition, from University of Georgia, \$30,000, "Peanut CRSP."

Maylath, Nancy S; student health center, from Indiana State Department of Health, \$84,850, "Indiana Campus Sexual Assault Primary Prevention Project."

McKinley, Steven K; youth development & agricultural education, from Kansas State University, \$28,486, "2012 Operation Military Kids (OMK) Camp Grant."

McLuckey, Scott A; chemistry, from Merck & Company Inc., \$20,000, "Structural Characterization of Nucleic Acids."

McLuckey, Scott A; chemistry, from PHS-NIH National Institute of General Medical Science, \$223,785, "Instrumentation for Analysis of High Mass Biomolecules."

McNamara, Kevin T and Bralts, Vincent F; agricultural economics, agricultural & biological engineering, from Indiana National Guard, \$4,423, "Agriculture Development Team (ADT) Training — May 9th, 2012 — Irrigation and Hydrology."

McNamara, Kevin T; agricultural economics, from Indiana National Guard, \$2,653, "Agriculture Development Team (ADT) Training: Primitive Storage-May 11th, 2012."

McNamara, Kevin T and Neary, Michael; agricultural economics, animal sciences, from Indiana National Guard, \$2,038, "Agriculture Development Team (ADT) Training: Animal Health and Livestock Production — March 14th 2012."

McNamara, Kevin T; agricultural economics, from Indiana National Guard, \$2,653, "Agriculture Development Team (ADT) Training: April 17th 2012 — Primitive Storage."

McNamara, Kevin T and Bralts, Vincent F; agricultural economics, agricultural & biological engineering, from IN National Guard, \$4,423, "Agriculture Development Team (ADT) Training — March 13th, 2012 —Irrigation and Hydrology."

Mengiste, Tesfaye D; botany & plant pathology, from National Science Foundation, \$43,000, "Histone Modifications and Mediator Complex in Plant Innate Immunity to Necrotrophic Fungi; Amendment 1 for Grant 105358."

Milasheuski, Henadzi V and Hassanein, Ahmed; nuclear engineering, from Defense Threat Reduction Agency, \$152,786, "Predictive Simulations of Thermodynamic and Optical Properties of Warm Dense Matter; Modification 2 for Grant 105406."

Mitchell, Cary A; horticulture & landscape architecture, from Hoosier Energy, \$10,000, "Hoosier Energy — Match Grant 105089."

Monroe, James S; field extension educators, from VitAG Corp, \$9,704, "VitAG Watermelon Study."

Motevalli, Vahid; mechanical engineering technology, from Multi-Sponsored Industrials, \$50,000, "Center for Technology Development Consortium (CTD)."

Motevalli, Vahid; mechanical engineering technology, from Multi-Sponsored Industrials, \$10,000, "Center for Technology Development Consortium (CTD)."

Motevalli, Vahid; mechanical engineering technology, from Multi-Sponsored Industrials, \$50,000, "Center for Technology Development Consortium (CTD)."

Mourad, George S and Marshall, Jordan M; biology — Fort Wayne campus, from Pro Products, LLC, \$7,537, "Comparison of Fertilizers on Turfgrass Above- and Below-Ground Growth."

Mustillo, Sarah A and Ferraro, Kenneth F; sociology, from Kinley Trust, \$20,000, "Womens Health Limitations and Poverty Risk."

Neary, Michael and Tower, Jason E; animal sciences, Southern Indiana-Purdue Agricultural Center, from Midwest Veterinary Services, Inc., \$6,100, "Dose Confirmation of Monepantel (Formulation a-20072 B) for the Control of the Immature (L4) Stage of Gastro-Intestinal."

Neary, Michael and Tower, Jason E; animal sciences, Southern Indiana-Purdue Agricultural Center, from Midwest Veterinary Services, Inc., \$5,262, "Dose Confirmation of Monepantel (Formulation a-20072 B) for the Control of the Immature (L4) Stage of Gastro-Intestinal."

Nennich, Tamilee D; Tower, Jason E; Mosiman, Amanda M and Schmitz, Hans F; animal sciences, Southern Indiana-Purdue Agricultural Center, field extension educators, from Mary S. Rice Farm Estate, \$9,000, "Use of Shade Stuctures to Improve Dairy Heifer Performance in Rotational Grazing Systems."

Neumeister, Norbert; Bortoletto, Daniela; Hacker, Thomas J and Shipsey, Ian P; physics, computer & information technology, from Princeton University, \$371,283, "U.S. Compact Muon Solenoid (CMS) Operations at LHC."

Niyogi, Devdutta S; agronomy, from National Science Foundation, \$132,311, "Faculty Early Career Development (CAREER): Assessing the Role of Land Surface Processes on the Climatic Changes in the Heavy Rain and Convection Over the Indian Monsoon Region Grant 103579; Amendment 003."

Nyenhuis, John A; electrical & computer engineering, from St. Jude Medical, \$90,000, "Evaluation of Heating of Active Implantable Devices During Magnetic Resonance Imaging (MRI)."

Nyenhuis, John A; electrical & computer engineering, from Biomet Inc., \$10,500, "Magnetic Resonance Imaging (MRI) Evaluation of Biomet Implant Sp1."

Oakes, William C; engineering education, from Multi-Sponsored Industrials, \$400, "Engineering Projects in Community Service (EPICS)."

Oakes, William C; engineering education, from Multi-Sponsored Industrials, \$300, "Engineering Projects in Community Service (EPICS)."

Ogas, Joseph P; biochemistry, from National Science Foundation, \$12,000, "Research Experience for Undergraduates (REU) Supplement-Dissecting the Relationship Between a CHD3 Chromatin Remodeler and the Repressive Epigenetic Mark H3K27me3 in Arabidopsis."

Ohm, Herbert W; agronomy, from KWS UK Limited, \$161,187, "Effects of a Tiller Inhibition (tin) Gene in Winter Wheat."

Olek, Jan; civil engineering, from Compass Minerals, \$30,441, "Characterization of Concrete with Dolomitic Aggregate Exposed to Deicing Chemicals."

Oliver, Haley F; food science, from American Meat Institute Foundation, \$99,000, "Evaluation of Control Strategies for Listeria Monocytogenes in Retail Deli Environments with Evidence of High Prevalence."

Panitch, Alyssa and Park, Kinam; biomedical engineering, from PHS-NIH National Heart, Lung & Blood Institute, \$379,354, "Improved Therapeutics for Drug Eluting Stents."

Park, Kinam; biomedical engineering, from PHS-NIH National Institute of General Medical Science, \$287,584, "Hydrogel Template Method for Protein Microencapsulation."

Park, Kinam; biomedical engineering, from Indiana University School of Medicine, \$72,008, "Exercise, Diabetes, & Coronary Smooth Muscle Ca2+."

Patton, Aaron J; agronomy, from Dow Agro Sciences, \$3,000, "Multi Sponsored."

Patton, Aaron J; agronomy, from Midwest Regional Turf Foundation, \$10,000, "Turfgrass Research."

Patton, Aaron J; agronomy, from Dow Agro Sciences, \$1,200, "Multi Sponsored."

Patton, Aaron J; agronomy, from Dow Agro Sciences, \$10,400, "Multi Sponsored."

Patton, Aaron J; agronomy, from Midwest Regional Turf Foundation, \$10,000, "MRTF Extension & Research."

Peeta, Srinivas; engineering administration — Engineering Experiment Station, from U.S. Department of Transportation, \$3,500,000, "Nextrans — Integrated and Sustainable Transportation Solutions: From Concepts to Deployment." (a Discovery Park award — Discovery Park Administration.)

Peroulis, Dimitrios; electrical & computer engineering, from BAE Systems Advanced Technologies, Inc., \$109,654, "Purdue/BAE Subcontract 707544; Modification 7." (a Discovery Park award — Birck Nanotechnology Center)

Peroulis, Dimitrios; electrical & computer engineering, from University of California - San Diego, \$37,500, "Long-Term Creep Characterization and Analysis on High Power Radio Frequency (RF) Microelectromechanical System (MEMS) Switches; Modification 4." (a Discovery Park award — Birck Banotechnology Center)

Peroulis, Dimitrios and Martinez, Carlos J; electrical & computer engineering, materials engineering, from Qualcomm Incorporated, \$75,000, "High Quality Factor Inductor on High Resistivity Substrate Research Engagement." (a Discovery Park award — Birck Nanotechnology Center)

Peroulis, Dimitrios; electrical & computer engineering, from Flowserve Corp, \$10,000, "Flowserve." (a Discovery Park award — Birck Nanotechnology Center)

Pipes, R Byron; materials engineering, from The Boeing Company, \$115,000, "Certification of Short Fiber Molded Composite Structures." (a Discovery Park award — Institute for Defense Initiatives)

Post, Carol B; medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute of General Medical Science, \$314,392, "Nuclear Magnetic Resonance (NMR) Structure of Peptide and Protein Complexes."

Powley, Terry L and **Phillips, Robert J**; psychological science, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$317,613, "Gastrointestinal Tract Innervation: Patterns of Aging."

Prakash, Arun; civil engineering, from Indiana Department of Transportation, \$163,059, "Efficient Load Rating and Quantification of Life-Cycle Damage of Indiana Bridges for Overweight Loads."

Pujol, Santiago; civil engineering, from Consortium of Universities for Research in Earthquake Engineering, \$25,090, "Ground Motion and Building Performance Data from the 2010 Chile Earthquake." (a Discovery Park award — Cyber Center)

Pujol, Santiago and **Sozen, Mete A**; civil engineering, from First Energy Nuclear Operating Co., \$159,283, "Investigation on the Capacity of Lap Splices of No. 11 Reinforcing Bars after Formation of Laminar Cracks in the Plane of The Bars."

Pujol, Santiago; civil engineering, from Concrete Reinforcing Steel Institute, \$30,000, "CRSI Fellowship for Brian Richter: Research Program to Investigate the Strength of Lap Splices of Deformed Bars in Thin Reinforced Concrete Members Subjected to Tension."

Qi, Minghao and **Xu, Xianfan**; electrical & computer engineering, mechanical engineering, from Massachusetts Institute of Technology, \$460,000, "Membrane Technology and 3-D Photonic-Crystal Devices; Amendment 5." (a Discovery Park award — Birck nanotechnology Center)

Qiao, Li; aeronautical & astronautical engineering, from Army Research Office, \$49,697, "Ignition and Burning Behavior of Fuel Droplets with Energetic Nanoparticle Addition; Modification 2 for Grant 104633."

Qiao, Li; aeronautical & astronautical engineering, from Caterpillar Inc., \$102,608, "Pre-Chamber Jet Visualization Study."

Rajwa, Bartlomiej P; basic medical science, from PhRMA Foundation, \$60,000, "PhRMA Foundation Research Starter Grant: Algorithms for Automated Detection of Sample Signature Changes in High-Throughput Cytometry-Based Drug-Discovery Assays." (a Discovery Park award — Bindley Bioscience Center)

Ramirez, Julio A; civil engineering, from National Science Foundation, \$20,567, "Development of a Web-Based Poster Display and Archival Tool." (a Discovery Park award — Cyber Center)

Ramirez, Julio A; Eigenmann, Rudolf; Brophy, Sean; Hacker, Thomas J; Pujol, Santiago; Bagchi, Saurabh and Irfanoglu, Ayhan; civil engineering, electrical & computer engineering, engineering education, computer & information technology, from National Science Foundation, \$12,717,782, "Network for Earthquake Engineering Simulation (NEES) Operations: FY 2010-FY2014 - Amend 14 for Grant 104025." (a Discovery Park award — Cyber Center)

Rathfon, Ronald A; Tower, Jason E; Neary, Michael and Fei, Songlin; forestry & natural resources, southern indiana-purdue agricultural center, animal sciences, from Mary S. Rice Farm Estate, \$8,550, "Prescribed Grazing Using Goats for Integrated Management of Non-Native Invasive Vegetation."

Ribeiro, Fabio H and **Delgass, W N**; chemical engineering, from Vertellus Specialties Inc, \$242,287, "Catalysis on Pyridine-Related Compounds."

Richert, Brian T; animal sciences, from Fleischmanns Yeast Inc., \$17,500, "Swine Research."

Richert, Brian T; animal sciences, from Fleischmanns Yeast Inc., \$20,000, "Swine Research."

Rokhinson, Leonid P; physics, from National Science Foundation, \$104,611, "Eager:Multifunctional Devices Based on Coupled Phase Transitions in Antiferromagnetic Semiconductors."

Ruan, Xiulin and Fisher, Timothy; mechanical engineering, from Air Force Office of Scientific Research, \$238,801, "Predictive Simulations of Thermal Transport in CNT-Metal Networks and Photonically Enhanced Flow; Modification 1 for Grant 105299." (a Discovery Park award — Birck Nanotechnology Center)

Sadeghi, Farshid; mechanical engineering, from Tecumseh Compressor Group, \$180,000, "Tribology Lab Research."

Sadeghi, Farshid; mechanical engineering, from FAG Kugelfischer Georg Schäefer AG, \$521,775, «Virtual Rolling Contact Fatigue.»

Saha, Shubin K and Egel, Daniel S; horticulture & landscape architecture, botany & plant pathology, from Illiana Watermelon Association, \$6,000, "Male Flower Production and Health of Diploid Cultivars Used for Seedless Watermelon Production."

Saha, Shubin K; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$1,750, "Multi-Sponsored Gift Account."

Saha, Shubin K; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$500, "Multi-Sponsored Gift Account."

Saha, Shubin K; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$2,500, "Multi-Sponsored Gift Account."

Saha, Shubin K; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$750, "Multi-Sponsored Gift Account."

Saha, Shubin K; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$750, "Multi-Sponsored Gift Account."

Sands, Laura P; Thomas, Joseph and Craig, Bruce A; nursing, pharmacy practice, statistics, from PHS-NIH National Institute on Aging, \$298,116, "Prognostic Significance of Insufficient Activity of Daily Living (ADL) Help on Health Outcomes/Utilization."

Scharenberg, Rolf P; physics, from U.S. Department of Energy, \$700,000, "The Experimental Study of the Phase Structure of Hadronic Matter; Modification 31 for Grant 103542."

Schoenlein, William E and Van Alstine, William G; biomedical engineering, comparative pathobiology, from Medical Engineering & Development Institute Inc., \$123,738, "Stent Testing Agreement Studies: Ci-Vena, Ci-Veny, Ci-Ven3, Ci-Ven6, and Ci-Veno Amendment to Grant 203133."

Schoenlein, William E and Van Alstine, William G; biomedical engineering, comparative pathobiology, from Medicine Institute, Incorporated, \$27,340, "Lung Volume Reduction Therapy: Addendum to Grant # 204160 Project Cbi-Vlr1."

Schoenlein, William E and Van Alstine, William G; biomedical engineering, comparative pathobiology, from Medical Engineering & Development Institute Inc., \$31,988, "Intravascular Testing Agreement: Study CI-VCCF and CI-VCCP Addendum to Grant 203133."

Schoenlein, William E; biomedical engineering, from Medical Engineering & Development Institute Inc., \$12,406, "Prototype Vascular Stent Testing Study: CI-TDA Grant # 203133 Addendum."

Schreckengast, Stewart W; Lu, Chien-Tsung; Lopp, Denver W and Tan, Yihua; aviation technology, civil engineering, from Woolpert LLP, \$81,310, "Evaluating Methods for Counting Aircraft Operations at Non-Tower Airports."

Seidl, Amanda H; speech language and hearing science, from Educational Research Institute of America (ERIA), \$360, "Brigance Norming Testing."

Shakouri, Ali; electrical & computer engineering, from University of Michigan, \$106,553, "Dynamics of Thermal Transport at Interfaces Between Dissimilar Materials." (a Discovery Park award — Birck Nanotechnology Center)

Shalaev, Vladimir M; Boltasseva, Alexandra and Narimanov, Evgueni E; electrical & computer engineering, from Duke University, \$245,292, "Transformation Optical Metamaterials; Amendment 2." (a Discovery Park award — Birck Nanotechnology Center)

Shalaev, Vladimir M and Boltasseva, Alexandra; electrical & computer engineering, from University of Pennsylvania, \$91,000, "Large-Area, 3-D Optical Metamaterials with Tunability and Low Loss; Amendment 4." (a Discovery Park award — Birck Nanotechnology Center)

Shaver, Gregory M; mechanical engineering, from U.S. Department of Energy, \$57,500, "Hoosier Heavy Hybrid Center of Excellence Hoosier Heavy Hybrid Center of Excellence (H3CoE) Modification 4 for Grant 105726."

Shen, Jie; mathematics, from Air Force Office of Scientific Research, \$131,314, "Sparse Spectral Methods and Applications to Kinetic Equations; Modification 1 for Grant 105683."

Shields, Cleveland G and Christ, Sharon L; child development & family studies, from PHS-NIH National Cancer Institute, \$494,219, "Social and Behavioral Influences on Clinical Communication and Pain Management."

Shoffner, Melanie; English, from National Council of Teachers of English, \$2,000, "Latino/a Families - English Educators Partnerships for the Literacy Development of Underrepresented Youth."

Shukle, Richard H; entomology, from Agricultural Research Service, \$12,617, "Acquisition of Goods and Services — Jacob Shreve."

Shukle, Richard H; entomology, from Agricultural Research Service, \$6,293, "Acquisition of Goods and Services."

Smith, Alan L; health & kinesiology, from University of Vermont, \$122,212, "A Translational Approach to Evaluating the Effects of Physical Activity on Attention Deficit Hyperactivity Disorder (ADHD), Amendment 3."

Smith, Mjt; graduate school administration, from National Science Foundation, \$200,000, "2007-2012 NSF Graduate Fellowship Program; Amendment 5."

Smith, Mjt; graduate school administration, from National Science Foundation, \$631,417, "2007-2012 NSF Graduate Fellowship Program; Amendment 4."

Smith, Mjt; graduate school administration, from National Science Foundation, \$149,399, "2007-2012 NSF Graduate Research Fellowship Program (GRFP); Amendment 7."

Smith, Mjt; graduate school administration, from National Science Foundation, \$831,267, "NSF Graduate Research Fellowship Program (GRFP)."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$6,000, "Sensory Evaluation Research."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$4,000, "Sensory Evaluation Research."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$1,000, "Sensory Evaluation Research."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$1,000, "Sensory Evaluation Research."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$1,000, "Sensory Evaluation Research."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$1,000, "Sensory Evaluation Research."

Smith, Richard S; food science, from Hinsdale Farms Ltd, \$2,000, "Sensory Evaluation Research."

Snow, Lowell D; Technology Assistance Program, from Indiana Department of Workforce Development, \$872,625, "Front-Line Worker — Green Skills Development."

Snow, Lowell D; Technology Assistance Program, from Indiana Office of Energy & Defense Development, \$200,000, "Save Energy Now Indiana; Amendment 2; Grant 204121."

Snow, Lowell D; Technology Assistance Program, from Vincennes University, \$150,000, "The Continuance and Expansion of the Technical Assistance Program Office in Jasper, Indiana."

Son, Steven F; mechanical engineering, from Center for Coal Technology Research, \$60,000, "Center for Coal Technology Research (Cctr) Proposal to Provide Indiana

Coal Education and Outreach Programming through June 30, 2012." (a Discovery Park award — Energy Center)

Spafford, Eugene H; computer science, from John Wiley & Sons Limited England, \$60,000, "Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support."

Spafford, Eugene H; Center for Education and Research in Information Assurance and Security (CERIAS), from John Wiley & Sons Limited England, \$60,000, "Center for Education and Research in Information Assurance and Security (CERIAS) Voluntary Support."

Staiger, Christopher J; biological sciences, from U.S. Department of Energy, \$170,000, "Regulation of Actin Filament Ends: the Role of Capping Protein in Plant Growth and Lipid Signaling Amendment 8, Grant 104760."

Starkey, John M; mechanical engineering, from Innovative Scientific Solutions, Inc., \$20,000, "Small Engine Research Laboratory 2011-2012 Capstone Project: Waste Heat Recovery for Small Engine Applications."

Stefanov, Plamen D; mathematics, from National Science Foundation, \$93,701, "Scattering and Traveltime Tomography; Amendment 4 for Grant 10346."

Strachan, Alejandro H and Son, Steven F; materials engineering, mechanical engineering, from Defense Threat Reduction Agency, \$364,699, "Multi-Resolution Modeling and Experiments of Nanostructured Reactive Materials; Modification 2 for Grant 105025."

Stroshine, Richard L; agricultural & biological engineering, from Multi-Sponsored Industrials, \$1,000, "Multi-Sponsored Gifts."

Sudhoff, Scott D and **Pekarek, Steven D**; electrical & computer engineering, from Florida State University, \$180,391, "Electric Ship Research and Development Consortium FY 2012."

Sun, Chin-Teh; aeronautical & astronautical engineering, from Air Force Office of Scientific Research, \$150,000, "Development and Application of Acoustic Metamaterials with Locally Resonant Microstructures; Modification 2 for Grant 104430."

Swaminathan, Vishwanathan; statistics, from Yahoo Inc., \$5,000, "Yahoo Inc.."

Swihart, Robert K; forestry & natural resources, from Indiana Arborists Association, Inc., \$3,750, "Indiana Arborists Association, Inc."

Tao, Weiguo A; biochemistry, from PHS-NIH National Institute of General Medical

Science, \$29,810, "New Proteomic Technologies for the Analysis of Tyrosine Kinase Signaling Pathways." (a Discovery Park award — Oncological Sciences Center)

Topp, Elizabeth M; industrial & physical pharmacy, from National Institute for Pharmaceutical Technology and Education, \$100,000, "Analytical Methods for Subvisible Protein Aggregates in Biologics."

Trice, Rodney W and Strachan, Alejandro H; materials engineering, from Air Force Office of Scientific Research, \$190,845, "Design of High Emissivity Rare-Earth Oxides for Hypersonic Performance Informed by Atomistic Simulations; Modification 1 for Grant 105342."

Tricoche, Xavier M; computer science, from National Science Foundation, \$513,789, "Faculty Early Career Development (CAREER): Efficient Structural Analysis of Multivariate Fields for Scalable Visualization."

Tucker, Tristand E; Hirst, Peter M; Linder, Nathan L and Whitford, Fred; Throckmorton-Purdue University Agricultural Center, horticulture & landscape architecture, botany & plant pathology, from Mary S. Rice Farm Estate, \$3,600, "Chemical Inductor and Meter for Pesticide Facility."

Ukkusuri, Satish V; civil engineering, from The City College of New York, \$47,849, "A Decision Support Model to Understand Route Choice Decisions and Siting of Facilities in Emergency Evacuations."

Ukkusuri, Satish V; civil engineering, from The City College of Ny, \$60,976, "The Use of Large Scale Datasets for Understanding Traffic Network State."

Urcuioli, Peter J; psychological science, from PHS-NIH National Institute of Child Health and Human Development, \$146,492, "Basic Processes in the Development of Stimulus Classes and Emergent Behavior."

Vacca, Andrea; agricultural & biological engineering, from Multi-Sponsored Industrials, \$5,000, "Multi-Sponsored Gift."

Vacca, Andrea; agricultural & biological engineering, from CASAPPA SpA, \$8,300, "Design Optimization of a Three-Way Flow Priority Valve."

Varma, Amit H; civil engineering, from American Iron & Steel Institute, \$15,000, "American Iron & Steel Institute."

Vyn, Tony J; agronomy, from Fluid Fertilizer Foundation, \$20,000, "Agricultural Cropping Systems."

Vyn, Tony J; agronomy, from John Deere Agricultural US, \$80,027, "Ammonia Applicator: Prospect for Sustainable Corn Yield Gains."

Vyn, Tony J; agronomy, from Fluid Fertilizer Foundation, \$5,000, "Agricultural Cropping Systems."

Walmsley, Terrie L; agricultural economics, from U.S. International Trade Commission, \$100,000, "ITC Extension Paper."

Weaver, Connie M; foods & nutrition, from Kraft Foods Global, Inc, \$6,000, "Corporate Affiliates Fund."

Weaver, Connie M; foods & nutrition, from Kraft Foods Global, Inc, \$75, "Corporate Affiliates Fund."

Weaver, Connie M; foods & nutrition, from General Mills, Inc., \$10,000, "Yoplait Webinar."

Weaver, Connie M; foods & nutrition, from Kraft Foods Global, Inc, \$6,000, "Corporate Affiliates Fund."

Weiss, William J and Tao, Bernard Y; civil engineering, agricultural & biological engineering, from Indiana Soybean Alliance, \$75,000, "The Investigation of Soy Methyl Ester Concrete Sealant Applied at Early Ages to High Porosity Concretes."

Weller, Stephen C; Foster, Ricky E and Okos, Martin R; horticulture & landscape architecture, entomology, agricultural & biological engineering, from Mary S. Rice Farm Estate, \$12,000, "Electric Line Hookup for Meigs Farm High Tunnels."

Wereley, Steven T; mechanical engineering, from MedTG, LLC, \$6,000, "Using Ion-Selective Electrodes to Measure Blood Chemistry." (a Discovery Park award — Birck Nanotechnology Center)

West, Terry R; earth & atmospheric sciences, from Terry R. & Shirley West (Individual Donor), \$300, "AEG Travel."

Whitford, Fred; botany & plant pathology, from Professional Landcare Network Inc, \$2,200, "Purdue Pesticide Programs."

Whitford, Fred; botany & plant pathology, from Professional Landcare Network Inc, \$200, "Purdue Pesticide Programs."

Williams, Rod N; forestry & natural resources, from Lucille Stickel Award, \$1,000, "Molecular Characterization of Eastern Box Turtle (Terrapene Carolina Carolina) Breeding Biology."

Wise, Kiersten A; botany & plant pathology, from E.I. du Pont deNemours and Company, \$1,400, "Voluntary Support Account."

Wise, Kiersten A; botany & plant pathology, from E.I. du Pont deNemours and Company, \$1,000, "Voluntary Support Account."

Woloshuk, Charles P; botany & plant pathology, from O3 Company, \$500, "Mycotoxin Research."

Xu, Dongyan and **Spafford, Eugene H**; computer science, from Air Force Office of Scientific Research, \$150,000, "An Integrated Architecture for Automatic Indication, Avoidance and Profiling of Kernel Rootkit Attacks; Modification 2 for Grant 104442."

Xu, Dongyan; computer science, from TT Government Solutions Inc., \$48,000, "Modification No.3 to Grant 105356 Subcontract # 20015133."

Yaninek, John S and Bledsoe, Larry W; entomology, from Indiana Department of Natural Resources, \$109,858, "Indiana Agricultural Pest Surveys (CAPS) Work Plans and Budgets."

Young, Jay C and Linder, Nathan L; Throck-morton-Purdue University Agricultural Center, from Mary S. Rice Farm Estate, \$8,500, "An Automated Hydraulic Soil Probe for TPAC."

Zhang, Haiyan H; mechanical engineering technology, from Caterpillar Inc., \$48,076, "Optimized Assembly Procedure of Caterpillar C175 Exhaust Log Manifold Joints."

Zhang, Haiyan H; mechanical engineering technology, from Caterpillar Inc., \$59,603, "Mathematical Modeling for Sealing Optimization in Full Marmon with and without Gasket and Half Marmon."

Zhang, Xiangyu; computer science, from National Science Foundation, \$85,000, "Faculty Early Career Development (CAREER): Scalable Dynamic Program Reasoning; Amendment 3 for Grant 103593."

Zheng, Wei and Pushkar, Yulia N; health sciences, physics, from PHS-NIH National Institute of Environment Health Science, \$391,992, "Choroid Plexus as a Target in Metal-Induced Neurotoxicity."

Zhou, Chenn Q; Visualization Center, from Dofasco, Inc., \$27,096, "Computational Fluid Dynamics (CFD) Simulation of the Injection of Natural Gas and PCI."

Zhou, Chenn Q; Visualization Center, from U.S. Steel Corporation, \$36,221, "Development of Uss Blast Furnace Virtual Training System."

Zhou, Chenn Q; Visualization Center, from EQ Engineers, LLC, \$6,000, "Computational Fluid Dynamics (CFD) Modeling of an Existing Flooded Disc Scrubber — Phase 1B: a Baseline Case Study: Flow Analysis of Gas and Particulate."

Zoltowski, Michael D; electrical & computer engineering, from Air Force Office of Scientific Research, \$99,915, "Multidimensional Diverse Waveform Design for Multiantenna Sensing and Surveillance Systems; Modification 2 for Grant 105021." ■

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