

# DIMENSIONS *of* DISCOVERY

## Sponsored Program Awards

September 2011

**Abraham, John**; mechanical engineering, from National Science Foundation, \$24,752, "Catalyzing New International Collaboration: Two-Phase Solar Reactor Development by the Novel Application of Advanced Laser Diagnostics and Modeling."

**Adams, Douglas E**; mechanical engineering, from Materials Sciences Corporation, \$70,948, "Composite Missile Case Structural Health Monitoring."

**Adams, George B and Ramani, Karthik**; mechanical engineering, from National Science Foundation, \$100,000, "EAGER: A Prototype Network Architecture for Advanced Manufacturing Built with ManufacturingHub.Org and US Ignite." (a Discovery Park award — Network for Computational Nanotechnology)

**Adams, Robin S**; engineering education, from Ross Graduate Fellowship-Assistantship, \$239, "Mondisa, Joi-Lynn."

**Adeola, Olayiwola**; animal sciences, from Danisco Animal Nutrition, \$95,410, "Effect of Danisco Enzymes on Growth Performance and Total Tract Nutrients Digestibility of Growing Pigs Fed Wheat & Wheat Bran-Based or Corn & Dorn Dry Distillers Grains with Solubles (DDGS) Based Diets."

**Agrawal, Rakesh; Capobianco, Brenda M; Hillhouse, Hugh W and Tyner, Wallace E**; chemical engineering, curriculum & instruction, agricultural economics, from National Science Foundation, \$625,000, "Integrative Graduate Education and Research Traineeship: The Solar Economy (SEIGERT); Amendment 2." (a Discovery Park award — Energy Center)

**Agrawal, Rakesh**; chemical engineering, from U.S. Department of Energy, \$300,000, "New Design Methods and Algorithms for High Energy -Efficient and Low-Cost Distillation Processes, Modification 9."

**Alix, Mitchell S**; biological sciences — North Central campus, from Flora Richardson Foundation, \$10,000, "R. Scribailo, 2011 Flora Richardson Foundation Fellowship — Genetic Variation and Conservation of the Globally Rare Charophyte Chara Brittonii."

**Allebach, Jan P and Bouman, Charles A**; electrical & computer engineering, from Hewlett Packard SBY PO Payment Request, \$725,000, "Print Quality Improvement Program."

**Anderson, William E; Merkle, Charles L; Heister, Stephen D and Schneider, Steven P**; aeronautical & astronautical engineering, from University of Maryland, \$307,800, "Studies and Support of Project Constellation, Modification R."

**Applegate, Todd J**; animal sciences, from Maple Leaf Farms Inc., \$5,000, "Duck Research."

**Avramova, Larisa V**; biological sciences, from Antech Diagnostics, \$31,776, "Scale Up Recombinant Protein Expression for the BioCD." (a Discovery Park award — Bindley Bioscience Center)

**Balakrishnan, Venkataramanan**; electrical & computer engineering, from Winifred B. Bilsland Endowment, \$173, "Kumar, Karthik."

**Barron, John M**; economics, from Purdue Doctoral Program, \$13,686, "Totty, Evan."

**Bayley, William G**; chemistry, from Annette M Maier, \$1,000, "Instrumentation Van Project."

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

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

**Bayley, William G**; chemistry, from Annette M Maier, \$1,000, "Instrumentation Van Project."

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

**Bayley, William G**; chemistry, from Annette M Maier, \$600, "Instrumentation Van Project."

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

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

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

**Bayley, William G**; chemistry, from Annette M Maier, \$600, "Instrumentation Van Project."

**Bayley, William G**; chemistry, from Annette M Maier, \$1,000, "Instrumentation Van Project."

**Bayley, William G**; chemistry, from Annette M Maier, \$900, "Instrumentation Van Project."

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

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

**Beaudoin, Stephen P**; chemical engineering, from Intel Corporation, \$68,598, "Intel Corporation Fellowship - Pathak, Abhinav."

**Beckerman, Janna L**; botany & plant pathology, from Michigan State University, \$9,500, "Analysis of a New Canker Disease in LindaMac and Other New Mac Cultivars."

**Benedicto, Elena E and Banks, Jo A**; English, botany & plant pathology, from Purdue University, \$50,001, "A First Approach to Cultural & Linguistic Ethnobotany in the Mayangna Traditional Territory."

**Benedicto, Elena E**; English, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$16,795, "The Acquisition of Syntax by Korean-English Bilingual Children."

**Bigelow, Cale A**; agronomy, from Agrotain International LLC, \$4,250, "Putting Greens Research."

**Boltasseva, Alexandra; Narimanov, Evgueni E and Shalaev, Vladimir M**; electrical & computer engineering, from Army Research Office, \$100,000, "Unlocking New Physics with Improved Plasmonic Materials." (a Discovery Park award — Birck Nanotechnology Center)

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from American Foundation for Pharmaceutical Education, \$6,500, "AFPE Fellowship-Amanda Wolf."

**Bouman, Charles A**; electrical & computer engineering, from Xerox Corp, \$20,000, "Context Dependent Image and Document Processing."

**Bowen, Gabriel J;** earth & atmospheric sciences, from Eli Lilly and Company, \$1,191, "Stable Isotope Analysis of Pharmaceutical Materials."

**Bowman, Keith J;** materials engineering, from Ross Graduate Fellowship-Assistantship, \$18,146, "Amaya, Jairo Diaz."

**Bowman, Keith J;** materials engineering, from Purdue University F N Andrews Fellowship, \$11,000, "Johnston, Michael."

**Bracke, Paul J;** library administration, from Agricultural Research Service, \$2,999, "Agriculture Network Information Center."

**Braun, James E;** mechanical engineering, from National Institute of Standards & Technology, \$100,000, "Development of an Evaluation System for Fault Detection and Diagnosis Tools Applied to Vapor Compression Air-Conditioning Systems."

**Brightman, Andrew O;** biomedical engineering, from Indiana University Purdue University at Indianapolis, \$32,478, "2011-12 Joint PhD Program for Graduate Support – Rennie, Keith."

**Broady, Carl A;** youth development & agricultural education, from Rural Development, \$10,000, "National Institute on Cooperative Education (NICE) Youth Conference."

**Bullock, Darcy M;** civil engineering, from Edward C Levy Co, \$3,168, "Joint Transportation Research Program (JTRP) Supplementary Research Account."

**Byrn, Stephen R;** industrial & physical pharmacy, from Argonne National Laboratory, \$6,923, "Synthesis, Characterization and Properties of Fast Acting Amorphous Drugs."

**Byrn, Stephen R;** industrial & physical pharmacy, from Science Applications International Corp, \$12,000, "SAIC PO 10054011 Modification 5 – Grant 104859."

**Caffee, Marc W;** physics, from U.S. Geological Survey, \$41,800, "Lab Analysis Utilizing Accelerator Mass Spectrometry (AMS) Methods."

**Calais, Eric;** earth & atmospheric sciences, from Voila Foundation, \$51,000, "2011 Viola Foundation Fellowship."

**Caldwell, Barrett S;** industrial engineering, from Multi-Sponsored Industrials, \$1,000, "Indiana Space Grant Consortium (INSGC) Affiliate Dues."

**Caldwell, Barrett S;** industrial engineering, from Multi-Sponsored Industrials, \$1,000, "Indiana Space Grant Consortium (INSGC) Affiliate Dues."

**Caldwell, Barrett S;** industrial engineering, from Multi-Sponsored Industrials, \$1,000, "Indiana Space Grant Consortium (INSGC) Affiliate Dues."

**Caldwell, Barrett S;** industrial engineering, from Multi-Sponsored Industrials, \$1,000, "Indiana Space Grant Consortium (INSGC) Affiliate Dues."

**Caldwell, Barrett S;** industrial engineering, from Multi-Sponsored Industrials, \$250, "Indiana Space Grant Consortium (INSGC) Affiliate Dues."

**Caldwell, Barrett S;** industrial engineering, from National Aeronautics and Space Administration, \$575,000, "Indiana Space Grant Consortium (INSGC) Five Year Renewal Proposal for Activity Years 20-24 (March 15, 2010 - March 14, 2015) Supplement 2."

**Cardella, Monica E;** engineering education, from National Science Foundation, \$438,969, "CAREER: Mathematics as a Gatekeeper to Engineering: The Interplay Between Mathematical Thinking and Design Thinking."

**Casteel, Shaun N;** agronomy, from Southern Illinois University, \$7,000, "Cultural Practice Evaluation for Canola Production Under Indiana Conditions."

**Casteel, Shaun N;** agronomy, from Monsanto Company, \$5,600, "Soybean Extension Research."

**Casteel, Shaun N;** agronomy, from Monsanto Company, \$200, "Soybean Extension Research."

**Catlin, Ann C;** Rosen Center for Advanced Computing, from Foundation for Thymic Cancer Research, \$51,475, "Statement of Work (SOW) for an Interactive International Thymic Malignancy Interest Group (ITMIG) Thymic Database."

**Chappell, William J;** electrical & computer engineering, from Air Force Research Laboratory, \$100,000, "Concurrent Multifunction Transmit and Receive Functionality in a Single Antenna Aperture, Modification 3."

**Chapple, Clint C;** biochemistry, from U.S. Department of Energy, \$136,810, "Regulation of Carbon Allocation to Phenylpropanoid Metabolism."

**Chapple, Clint C;** biochemistry, from U.S. Department of Energy, \$32,000, "Phenylpropanoid Metabolism in Arabidopsis: the Role of REF4 Regulation of Carbon Allocation to Phenylpropanoid Metabolism."

**Charavarthi Madhavan, Krishna P; Vorvoreanu, Mihaela; Elmqvist, Niklas E and Wankat, Phillip C;** engineering education, computer graphics technology, electrical & computer engineering, chemical engineering, from National Science Foundation, \$1,041,891, "Collaborative Research: Deep Insights Anytime, Anywhere (DIA2) - Central Resource for Characterizing the TUES Portfolio through Interactive Knowledge Mining and Visualizations."

**Charavarthi Madhavan, Krishna P;** engineering education, from National Science Foundation, \$160,000, "CAREER: Advancing Engineering Education through Learner-Centric, Adaptive Cyber-Tools and Cyber-Environments."

**Chen, Jue;** biological sciences, from Howard Hughes Medical Institute, \$15, "The Howard Hughes Medical Institute (HHMI) Supply Account."

**Chen, Weinong W;** aeronautical & astronautical engineering, from Army Research Office, \$98,139, "Pressure Chambers for the Development of Novel Dynamic Triaxial Testing Capabilities."

**Chen, Weinong W;** aeronautical & astronautical engineering, from Army Engineer Research & Development Center, \$20,000, "Dynamic Mechanical Properties of Innovative Cementitious Materials Under Impact and Blast Loading, Modification 4."

**Chen, Yong P;** physics, from U.S. Department of Homeland Security, \$431,086, "Graphene Based Sensors for Detecting Special Nuclear Materials." (a Discovery Park award — Birck Nanotechnology Center)

**Cheng, Ji-Xin;** biomedical engineering, from Loreal USA, \$25,000, "Multimodal Nonlinear Optical Imaging of Skin Reconstruct as a Function of Treatment."

**Chiu, George T;** mechanical engineering, from National Science Foundation, \$2,547, "NSF Institutional Proposal (IP) Assignment."

**Chiu, George T and Allebach, Jan P;** mechanical engineering, electrical & computer engineering, from Lexmark International Inc, \$85,000, "Media Project."

**Choi, Kyoung-Shin;** chemistry, from U.S. Department of Energy, \$175,000, "Construction of High-Performance, Low-Cost Photoelectrodes with Controlled Polycrystalline Architectures."

**Clark, Jason V;** electrical & computer engineering, from Carnegie-Mellon University, \$108,203, "CDI-Type II: Building a Virtual Micro/Nanosystems Design Community, Amendment 2." (a Discovery Park award — Birck Nanotechnology Center)

**Coda, Elena and Lawton, Benjamin R;** foreign language & literature, from Purdue University, \$27,314, "Revisioning Terrorism."

**Connor, Robert J;** civil engineering, from Virginia Technology, \$8,527, "Fracture-Critical System Analysis for Steel Bridges."

**Cooks, Robert G;** chemistry, from Eastman Chemical Company, \$1,500, "Eastman Chemical Travel for Livia Eberlin."



**Cooks, Robert G;** chemistry, from Oak Ridge Institute for Science & Education, \$10,500, “2011 ORISE Fellowship.”

**Cox, Monica F;** engineering education, from Norfolk State University, \$51,216, “2011 - Integrative Graduate Education and Research Traineeship (IGERT) Fellowship Integrative Graduate Education and Research Traineeships Program in Magnetic and Nanostructured Materials; Amendment 1.”

**Creswell, Tom C and Ruhl, Gail E;** botany & plant pathology, from National Institute of Food & Agriculture, \$48,202, “Diagnostic Image Series Development for Supporting Integrated Pest Management (IPM) in the North Central Region.”

**Crossley, William A;** aeronautical & astronautical engineering, from Avid LLC, \$25,000, “Coupled Viscous/Inviscid Analysis of Powered-Lift Airfoils and Wings.”

**Cui, Wei K;** physics, from National Aeronautics and Space Administration, \$80,000, “Gamma-Ray Production in Cygnus X-3: a Multi-Wavelength Perspective.”

**Culurciello, Eugenio;** biomedical engineering, from Department of the Navy, \$120,000, “Development of a Scalable Hyperbaric (0-500 Psig) Multichannel Instrumentation (Plana Patch Clamp) for High-Throughput, Single-Cell Analysis of the Pharmacological Modulation of Macroscopic Ionic Conductances by Diving-Related Breathing Mixes.”

**Culurciello, Eugenio;** biomedical engineering, from National Science Foundation, \$215,360, “Instrument Development for Biological Research (IDBR): High-Throughput Instrumentation for Lipid Bilayers and Patch-Clamp.”

**Danielli-Garofalo, Donatella;** mathematics, from National Science Foundation, \$146,650, “Analytic and Geometric Properties of Variational Inequalities and Partial Differential Equations (PDEs).”

**Davis, Jerry K;** comparative pathobiology, from PHS-Food and Drug Administration, \$195,668, “FDA Assignment-Intergovernmental Personnel Agreement.”

**Delp, Edward J;** electrical & computer engineering, from Indiana University Purdue University at Indianapolis, \$13,588, “Center for Advanced Renal Microscopic Analysis, Amendment 4 to Subaward 90586PU.”

**Doerge, Rebecca W;** statistics, from Medicine Institute, Incorporated, \$27,312, “Cook Medicine Institute.”

**Doerge, Rebecca W;** statistics, from George Washington Carver Fellowship, \$1,187, “Britt, Angelitta M.”

**Doerge, Rebecca W;** statistics, from Orion Genomics LLC, \$20,000, “Orion Enterprises, Inc.”

**Donkin, Shawn S;** animal sciences, from Archer Daniels Midland Co, \$450,000, “Effects of Optibalance Supplementation in High and Low Protein Diets on Performance and Nutrient Supply of Lactating Cows.”

**Donkin, Shawn S;** animal sciences, from Zinpro Corporation, \$15,000, “Ruminant Research.”

**Duchatelet, Martine;** management — Calumet campus, from Multi-Sponsored Industrials, \$5,000, “Northwest Indiana Small Business Development Center 2011- IUN Cash Match Support.”

**Dydak, Ulrike;** health sciences, from IU School of Medicine, \$16,296, “Support for Shalmali Dharmadhikari from Dr.Gary Hutchins.”

**Dydak, Ulrike; Rosenthal, Frank S and Zheng, Wei;** health sciences, from PHS-NIH National Institute of Environment Health Science, \$534,677, “Neuroimaging for Early Diagnosis of Manganese Toxicity in Humans and Rodents.”

**Egel, Daniel S;** botany & plant pathology, from Michigan State University, \$8,000, “Interregional Research Project #4 Minor Crop Pest Management Program.”

**Eggler, Aimee;** biological sciences, from PHS-NIH National Cancer Institute, \$56,854, “Investigating NF-E2-related factor 2 (Nrf2) Phosphorylation in the Mechanism of Cancer Prevention Agents.”

**Eisenhauer, Mary Jane;** education — North Central campus, from Indiana Campus Compact, \$5,000, “The Impact of Early Childhood Service Learning: Measuring Ripples & Waves.”

**Elicker, James G;** child development & family studies, from Indiana Family and Social Services Administration, \$35,316, “Evaluation of the Indiana Child Care Quality Rating – Contract 2.”

**Engel, Bernard A; Campanella, Osvaldo H and Mohtar, Rabi H;** agricultural & biological engineering, from University of Illinois, \$35,226, “Bioenergy and Biological Systems Engineering: An Educational Consortium for a Sustainable Agriculture, Amendment 1.”

**Engel, Bernard A;** agricultural & biological engineering, from State of Minnesota, \$6,500, “Driftwatch Maintenance-Minnesota.”

**Engel, Bernard A; Chaubey, Indrajeet and Cherkauer, Keith A;** agricultural & biological engineering, from U.S. Geological Survey, \$100,000, “The Great Lakes Tributary Modeling Program 516(E): Work Plan for Purdue University and Michigan State University.”

**Esters, Levon T;** youth development & agricultural education, from Purdue Doctoral Program, \$17,096, “Voigt, Melssa A.”

**Fekete, Donna M;** biological sciences, from National Institutes of Health, \$46,535, “Gene Transfer Tools for Delivery and Investigation of Inner Ear Microras.”

**Fernandez-Juricic, Esteban;** biological sciences, from Animal Plant Health Inspection Service, \$60,758, “Effects of Radar on Bird Behavior.”

**Ferruzzi, Mario;** food science, from MH Zeigler & Sons LLC, \$4,500, “Hills Pet Nutrition, Inc.”

**Ferruzzi, Mario;** food science, from MH Zeigler & Sons LLC, \$900, “Hills Pet Nutrition, Inc.”

**Ferruzzi, Mario;** food science, from Mead Johnson & Company, \$132,745, “Assessment of Natural Levels and Variation in Phytonutrient Composition of Human Milk and Infant Formula.”

**Field, William E;** agricultural & biological engineering, from Occupational Safety & Health Administration, \$189,092, “Grain Safety Education and Training.”

**Filley, Timothy R;** earth & atmospheric sciences, from National Science Foundation, \$211,295, “Collaborative Research: Linking the Chemical Structure of Black Carbon to its Biological Degradation and Transport Dynamics in a Northern Temperate Forest Soil.” (a Discovery Park award — Purdue Climate Change Research Center)

**Finley, John P;** physics, from Smithsonian Astrophysical Observatory, \$6,500, “VERITAS Operations Contract Supplement. Supplemental Modification of Contract SV1-71004- FY 11.”

**Flores, Joseph I;** Educational Opportunities Programs — Calumet campus, from U.S. Department of Education, \$527,387, “Upward Bound Program, Amendment 4.”

**Flores, Joseph I;** Educational Opportunities Programs — Calumet campus, from Indiana Department of Education, \$1,912, “Residential Upward Bound Food Service Program.”

**Foster, Kenneth A;** agricultural economics, from Ross Graduate Fellowship-Assistantship, \$411, “Davis, Clay D.”

**Foster, Ricky E and Johnson, William G;** entomology, botany & plant pathology, from National Institute of Food & Agriculture, \$240,249, “Coordination and Support for Indianas Extension Integrated Pest Management Program.”

**Freed, Andrew M;** earth & atmospheric sciences, from National Aeronautics and Space Administration, \$100,000, “Basin Tectonics and Volcanism on Mercury, Supplement 1.”

**French, Doran C**; child development & family studies, from Purdue University F N Andrews Fellowship, \$2,259, “Hur, Jinhee.”

**French, Richard M**; mechanical engineering technology, from Butler County Community College, \$65,842, “Faculty Professional Development in Design, Construction, Assembly and Analysis of a Solid Body Electric Guitar, Amendment 2.”

**Fulton, Joan R and Olynk, Nicole J**; agricultural economics, from University of Minnesota, \$10,000, “Economic Based Decision Support to Promote Sustainable Livestock Enterprises.”

**Ghafoor, Arif**; electrical & computer engineering, from Enurga, Inc., \$9,000, “Voluntary Support.”

**Ghosh, Arun K**; chemistry, from Japan Science Foundation, \$191,595, “Design and Synthesis of Small-Molecule CCR5 Antagonists.”

**Ghosh, Arun K**; chemistry, from Multi-Sponsored Industrials, \$200, “Multi Sponsored - A Ghosh.”

**Giordano, Nicholas J**; physics, from Purdue Doctoral Program, \$17,096, “Reuter,Cassie,A.”

**Gore, Jay P and Rankin, Brent A**; mechanical engineering, from Innovative Scientific Solutions, Inc., \$12,892, “Inverse Infrared Radiation Diagnostics of Unsteady Turbulent Exhaust Plumes.”

**Grama, Ananth Y**; computer science, from National Science Foundation, \$360,000, “Collaborative Research: CDI-TypeII: Probing Complex Dynamics of Small Interfering RNA (siRNA) Transfection by Petascale Simulations and Network Analysis.”

**Grant, Richard H**; agronomy, from MACTECH Engineering and Consulting, Inc., \$6,440, “Subcontract - MACTECH.”

**Gregg, Angela R**; Office of Diversity & Multicultural Affairs — Fort Wayne campus, from U.S. Department of Education, \$242,250, “Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound Program Expansion to Generate Success Beyond High School, Amendment 13.”

**Gregg, Angela R**; Office of Diversity & Multicultural Affairs — Fort Wayne campus, from U.S. Department of Education, \$242,250, “Indiana University-Purdue University Fort Wayne (IPFW) Upward Bound Program Expansion to Generate Success Beyond High School, Amendment 10.”

**Groll, Eckhard A**; mechanical engineering, from Trane Residential Systems, \$35,000, “Voluntary Support - Trane Residential Systems.”

**Haase, Jennifer S**; earth & atmospheric sciences, from Schlumberger Foundation, \$25,000, “Faculty for the Future Program Fellowship.”

**Harding, Melvyn D**; Educational Opportunities Program — Calumet campus, from Legacy Foundation, Inc, \$1,000, “Reaching New Students and Parents through PUCs College Readiness Program.”

**Harilal, Sivanandan and Hassanein, Ahmed**; 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.” (a Discovery Park award — Energy Center)

**Harper, William A**; health & kinesiology, from Indiana Department of Education, \$67,063, “Purdue Athletes Life Success Program 2011.”

**Harriger, Bradley C**; mechanical engineering technology, from El Camino College, \$57,272, “Advanced Aerospace Manufacturing Education and Training Initiative; Year 2”

**Hassanein, Ahmed and Nie, Huiling**; nuclear engineering, health sciences, from Nuclear Regulatory Commission, \$300,000, “NRC Faculty Development Program - Purdue University 2011.”

**Heister, Stephen D**; aeronautical & astronautical engineering, from IN Space, LLC, \$45,000, “Support for the NASA Propulsion Technical Discipline Team.”

**Hertel, Thomas W**; agricultural economics, from Multi-Sponsored Industrials, \$19,675, “Global Trade Analysis Project (GTAP) Consortium - 2011.”

**Hertel, Thomas W**; agricultural economics, from Multi-Sponsored Industrials, \$19,675, “Global Trade Analysis Project (GTAP) Consortium - 2011.”

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

**Hertel, Thomas W**; agricultural economics, from Multi-Sponsored Industrials, \$19,675, “Global Trade Analysis Project (GTAP) Consortium - 2011.”

**Hosking, Antony L**; computer science, from Association Internationale Pour Les Technology Objet, \$5,000, “European Conference on Object-Oriented Programming (ECOOP) 2012 Conference.”

**Howe, Katherine M**; botany & plant pathology, from U.S. Forest Service, \$30,000, “Mid-Atlantic Regional Cooperative Weed Management Area (CWMA) Training Workshops.”

**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.”

**Huber, Matthew**; earth & atmospheric sciences, from National Science Foundation, \$210,187, “Collaborative Research: Improved Cenozoic Paleoelevation Estimates for the Sierra Nevada, California: Linking Geodynamics with Atmospheric Dynamics.”

**Hutcheson, John S**; agriculture - administration, from Economic Development Administration, \$99,647, “Race to the Future: Integrating Central Indianas Motorsports and Vehicle Design and Manufacturing Assets into a Motorsports and Vehicle Production (MVP) Network.”

**Hutzel, William J**; mechanical engineering technology, from ASHRAE, Inc., \$5,000, “American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Heat Recovery Demo.”

**Irazoqui, Pedro**; biomedical engineering, from ViriCor, \$300,000, “Intra-Cardiac Human Pressure Sensor.”

**Irudayaraj, Joseph M**; agricultural & biological engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, “Indo-US Grant.”

**Ivantysynova, Monika; Lumkes, John H and Martini, Ashlie M**; agricultural & biological engineering, mechanical engineering, from University of Minnesota, \$639,600, “NSF Engineering Research Center (ERC) for Compact, Clean and Efficient Fluid Power Systems.” (a Discovery Park award — Energy Center)

**Jamieson, Leah H**; engineering administration engineering experiment, from Sandia National Laboratories, \$40,000, “Sandia National Laboratories/Purdue University Excellence in Science and Engineering Research Program.”

**Jamieson, Leah H**; engineering administration engineering experiment, from Sandia National Laboratories, \$40,000, “Sandia National Laboratories/Purdue University Excellence in Science and Engineering Research Program.”



**Jensen, Robin**; communication, from Purdue University, \$21,543, "Barren: How the Rhetoric of Fertility Changed the United States & Europe in the Twentieth Century."

**Jiang, Qing and Cooper, Bruce R**; foods & nutrition, Bindley Bioscience Center, from National Institutes of Health, \$308,000, "Investigation of Anti-Inflammatory Mechanisms and Pharmacokinetics of Novel Metabolites of Vitamin E Forms."

**Jiang, Yiwei**; agronomy, from O J Noer Research Foundation, \$3,500, "Turf Research – O J Noer."

**Johnson, William G**; botany & plant pathology, from Du Pont Crop Protection, \$23,000, "Weed Research."

**Johnson, William G**; botany & plant pathology, from Du Pont Crop Protection, \$48,600, "Weed Research."

**Julien, Isidore A**; biological sciences, from Indiana University, \$4,000, "Shoring Up Science, Technology, Engineering & Mathematics (STEM) Education."

**Kenttamaa, Hilkka I**; chemistry, from PHS-NIH National Institute of General Medical Science, \$19,158, "Mass Spectrometry Studies on Radical Reactions of DNA."

**Key, Nicole L**; mechanical engineering, from Duke University, \$149,434, "The Experimental Characterization of Embedded Stage Unsteady Aerodynamic Forcing Functions and Rotor Resonant Response for a Multi-stage Compressor."

**Kihara, Daisuke; Park, Chiwook and Tao, Weiguo A**; biological sciences, medicinal chemistry & molecular pharmacology, biochemistry, from PHS-NIH National Institute of General Medical Science, \$279,677, "Identification of Protein-Metabolite Interactome."

**Kim, Chang H**; comparative pathobiology, from Purdue University F N Andrews Fellowship, \$17,161, "Gu, Bon-Hee."

**Kim, Yonsoo**; foreign language & literature, from Purdue University, \$32,487, "Enhancing Research in the Humanities through an Integrated Knowledge Management System."

**Kirkpatrick, Jane M**; nursing, from PHS-NIH National Center for Health Resources and Services Administration, \$35,000, "North Central Nursing Clinics (NCNC)."

**Kirkpatrick, Jane M; Aaltonen, Pamela M; Coddington, Jennifer A and Oneil, Elizabeth A**; nursing, from PHS-NIH National Center for Health Resources and Services Administration, \$100,000, "Quality Improvement Using Health Information Technology Aligned with Beacon Community Objectives."

**Klenosky, David B**; health & kinesiology, from Land Trust Alliance, \$500, "Survey of NICHES Members and Non-Members."

**Klimeck, Gerhard**; electrical & computer engineering, from National Science Foundation, \$39,772, "Petascale Computing Resource Allocations (PRAC) – Accelerating Nano-Scale Transistor Innovation." (a Discovery Park award — Network for Computational Nanotechnology.)

**Klimeck, Gerhard**; electrical & computer engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, "Accelerating Nano-Scale Transistor Innovation through Petascale Simulation."

**Koltick, David S and Hassanein, Ahmed**; physics, nuclear engineering, from National Science Foundation, \$397,861, "Autoregressive Integrated Moving Average (ARIMA): Development of High Rate, Excellent Energy Resolution, Radiation Damage Insensitive, Liquid Krypton Gamma Ray Detector for Use in High Radiation Environments."

**Konieczny, Stephen F**; biological sciences, from Phi Beta Psi Sorority, \$51,755, "The Importance of Rnd2 to Pancreatic Cancer Initiation and Progression."

**Kreger, Michael E**; civil engineering, from Purdue Doctoral Program, \$18,346, "Digelmann, Lindsey M."

**Krupke, Christian H**; entomology, from Amvac Chemical Corporation, \$4,800, "Krupke – Entomology – Research."

**Krupke, Christian H**; entomology, from Amvac Chemical Corporation, \$5,000, "Krupke – Entomology – Research."

**Kuhn, Richard J**; biological sciences, from PHS-NIH National Institute of General Medical Science, \$299,277, "Molecular Basis of Alphavirus Assembly."

**Latin, Richard X**; botany & plant pathology, from Syngenta Crop Protection Inc., \$10,000, "Turfgrass Disease Research."

**Latin, Richard X**; botany & plant pathology, from Syngenta Crop Protection Inc., \$3,000, "Turfgrass Disease Research."

**Latin, Richard X**; botany & plant pathology, from Syngenta Crop Protection Inc., \$2,400, "Turfgrass Disease Research."

**Laux, Chad; Homkes, Rick L; Keener, Kevin M; Dunlap, Duane D and Connolly, Patrick E**; industrial technology, computer & information technology, food science, State-wide Technology Administration, computer graphics technology, from National Science Foundation, \$154,013, "Engineering Technology Pathways: the Food and Foodstuff Supply Chain."

**Lempert, Laszlo**; mathematics, from Purdue Doctoral Program, \$3,412, "Pengitore, Mark."

**Liceaga, Andrea M**; food science, from Multi-Sponsored Industrials, \$200, "Multi-Sponsored Gift Funds."

**Liu, Judy**; civil engineering, from American Institute of Steel Construction, Inc., \$25,000, "Practical Design Considerations for Steel Slit Panel Frames."

**Liu, Xiaoqi**; Cancer Research Center, from PHS-NIH National Cancer Institute, \$251,347, "Plk1 in Chemo-Resistance of Cancer."

**Lopez, Roberto G**; horticulture & landscape architecture, from Michigan State University, \$4,000, "Herbaceous Branching."

**Lopez, Roberto G**; horticulture & landscape architecture, from American Floral Endowment, \$22,600, "American Floral Endowment."

**Lucht, Robert P and Meyer, Scott E**; mechanical engineering, from Siemens Power Generation Inc, \$28,000, "Distributed Combustion Studies in the Purdue High-Pressure Gas Turbine Combustion Test Rig."

**Lundstrom, Mark S**; electrical & computer engineering, from National Science Foundation, \$34,189, "Challenges in Photovoltaic Science, Technology, and Manufacturing: A Workshop on the Role of Theory, Modeling, and Simulation." (a Discovery Park award — Energy Center)

**Lundstrom, Mark S**; electrical & computer engineering, from Multi-Sponsored Industrials, \$75,000, "Network for Computational Nanotechnology (NCN) Membership." (a Discovery Park award — Birk Nanotechnology Center)

**Lundstrom, Mark S**; electrical & computer engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, "Network for Computational Nanotechnology."

**Lundstrom, Mark S**; electrical & computer engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, "Network for Computational Nanotechnology."

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

**Lyrantzis, Anastasios S**; aeronautical & astronautical engineering, from Purdue Doctoral Program, \$74, "Wiest, Heather K."

**Lyrantzis, Anastasios S**; aeronautical & astronautical engineering, from Purdue Doctoral Program, \$74, "Mares, Jesus."

**Lyrantzis, Anastasios S;** aeronautical & astronautical engineering, from Ross Graduate Fellowship-Assistantship, \$69, “Black, Alden.”

**Ma, Jianxin and Hughes, Teresa J;** agronomy, botany & plant pathology, from Dow Agro Sciences, \$288,812, “Soybean New Rps Gene Discovery and Marker Development.”

**Ma, Jianxin;** agronomy, from Ag Alumni Seed Improvement Association, \$7,500, “Plant Genetics & Genomics Research.”

**MacDermid Wadsworth, Shelley;** child development & family studies, from U.S. Department of Labor, \$7,000, “Stand Down.”

**Main, Russell P;** biomedical engineering, from Purdue Doctoral Program, \$19,420, “Rotari, Veronica.”

**Mansfield, Charles W;** agronomy, from Bayer Cropscience LP, \$7,000, “Corn Research.”

**Marsh, Dawn G;** history, from Purdue University, \$29,877, “Prophetstown Revisited: Regional Native American History and its Global Legacy.”

**Mason, Linda J;** graduate school administration, from Ross Graduate Fellowship-Assistantship, \$411, “Williams, Scott.”

**Mathur, Aditya P;** computer science, from Purdue Doctoral Program, \$173, “Cordova-Sanchez, Mariheida.”

**Maynard, Elizabeth T;** horticulture & landscape architecture, from Sakata Seed America Inc., \$2,340, “Research for 1995 Vegetable Variety Trial Program.”

**McCrary, Megan A;** foods & nutrition, from Dry Bean Health Research Program, \$20,000, “Dry Bean Health Research Program (DBHRP).”

**McCullough, Robert G;** anthropology — Fort Wayne campus, from Indiana Department of Natural Resources, \$223,600, “Rose Island Archaeological Investigation.”

**McCullough, Robert G;** anthropology — Fort Wayne campus, from Indiana Department of Transportation, \$400,000, “On Call Archaeological Services Throughout the State of Indiana.”

**McGlothlin, James D;** health sciences, from Teleflex Medical, \$20,000, “Evaluation and Control of Waste Anesthetic Gas (Nitrous Oxide) in the Post Anesthesia Care Unit (PACU).”

**McKee, Renee K;** CES-Engagement, from National Institute of Food & Agriculture, \$1,363,636, “Military Community, Family and Youth Extension Program.”

**McNamara, Kevin T;** agricultural economics, from University of California - Davis, \$43,556, “A Project for Strengthening Extension Skills of Young Professionals in Afghanistan and Pakistan.”

**McNamara, Kevin T; Bugusu, Betty A; Foster, Ricky E; Oliver, Haley F and Vemulapalli, Ramesh;** agricultural economics, food science, entomology, comparative pathobiology, from Foreign Agricultural Service, \$2,175,242, “Afghanistan Agricultural Sanitary and Phytosanitary (SPS) Project.”

**McNamara, Kevin T;** agricultural economics, from Indiana National Guard, \$57,162, “Indiana National Guard September 12th-16th Training.”

**McReynolds, David B;** mathematics, from National Science Foundation, \$145,999, “Geometric Submanifolds of Manifolds.”

**Meckl, Peter H;** mechanical engineering, from PHS-CDC National Institute of Occupational Safety & Health, \$3,000, “Educating the Engineer of 2020 Workshop.”

**Melosh, Henry J;** physics, from National Aeronautics and Space Administration, \$68,230, “Deep Impact: Implications of the Early Hot Plume for Comet Structure.”

**Merwade, Venkatesh M and Brophy, Sean;** civil engineering, engineering education, from National Science Foundation, \$111,850, “Collaborative Research: Cyber Enabled Data and Modeling Driven Curriculum Modules for Hydrology Education.” (a Discovery Park award — Center for the Environment)

**Meyer, Scott E;** mechanical engineering, from Sandia National Laboratories, \$24,000, “SNL Fracking Propellant Testing.”

**Meyer, Scott E;** mechanical engineering, from Delphi Delco, \$4,000, “Experiment for Battery Pack Enclosure with Cell Venting.”

**Michalski, Greg M;** earth & atmospheric sciences, from Environmental Protection Agency, \$17,000, “EPA Fellowship- Michael King.”

**Michler, Charles H;** forestry & natural resources, from U.S. Forest Service, \$71,618, “Hardwood Tree Improvement and Regeneration Center.”

**Mickelbart, Michael V;** horticulture & landscape architecture, from Michigan State University, \$6,000, “Interregional Research Project #4 Minor Crop Pest Management Program.”

**Monteith, Margo J;** psychological sciences, from National Science Foundation, \$24,029, “Implicit Stereotyping and Prejudice: Strategies and Processes of Change, Amendment 3.”

**Morgan, Mark T;** food science, from Ross Graduate Fellowship-Assistantship, \$173, “Kaur, Simran.”

**Mosier, Nathan S;** agricultural & biological engineering, from Environmental Protection Agency, \$16,993, “EPA Star Fellowship for Isaac Emery.”

**Mroczek, Daniel K;** child development & family studies, from PHS-NIH National Institute on Aging, \$424,208, “Personality and Well-Being Trajectories in Adulthood.”

**Murray, Michael D;** pharmacy practice, from Indiana University, \$53,127, “NCRR Administrative Supplement to Advance Translational (T1 & T2) Research CI Net.”

**Murray, Michael D;** pharmacy practice, from Regenstrief Institute Inc, \$27,059, “Regenstrief Center for Healthcare Improvement and Research (RCHIR) Project.”

**Murray, Michael D;** pharmacy practice, from Indiana University, \$66,170, “Indiana Prospect.”

**Nakatsu, Cindy H; Stott, Diane E and Schulze, Darrell G;** agronomy, from Foreign Agricultural Service, \$28,934, “Hosting Borlaug Fellow from Southern Africa.”

**Neary, Michael and Tower, Jason E;** animal sciences, Southern Indiana-Purdue Agricultural Center, from Midwest Veterinary Services, Inc., \$16,396, “Dose Confirmation of Monepantel (Formulation A-20072 B) for the Control of the Immature (L4) Stage of Gastro-Intestinal Nematodes in Caprine (Goat).”

**Nice, Glenn R;** botany & plant pathology, from Dow Agro Sciences, \$200, “Glenn Nice Gift Account.”

**Nicoletti, Kimber J;** youth development & agricultural education, from Texas Migrant Council Inc, \$2,000, “Agreement Between Mesa and Texas Migrant Council, Inc.”

**Nielsen, Robert L;** agronomy, from Agrelia Genetics, \$200, “Corn & Soybean Production.”

**Nies, Loring F;** civil engineering, from Environmental Protection Agency, \$9,044, “Leila Nyberg 11/12 Fellowship.”

**Nohadani, Omid;** industrial engineering, from Purdue Doctoral Program, \$19,420, “Dunn, Jocelyn.”

**Norris, Meghan E;** consumer science & retail, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, “Understanding How the Human Eye Focuses on Information on a Page and on a Computer Screen: Can Corporations Hide in Plain Sight?”

**Nyenhuis, John A;** electrical & computer engineering, from Cordis Corporation, \$5,000, “Magnetic Resonance Imaging (MRI) Evaluation of a Vena Cava Implant.”



**Nyenhuis, John A;** electrical & computer engineering, from Cordis Corporation, \$12,000, “Magnetic Resonance Imaging (MRI) Testing of Cordis Vascular Implant SRS.”

**Nyenhuis, John A;** electrical & computer engineering, from Cordis Corporation, \$8,000, “Magnetic Resonance Imaging (MRI) Tests and Analysis of Stent S1.”

**Oakes, William C;** engineering education, from Multi-Sponsored Industrials, \$11,200, “Engineering Projects in Community Service (EPICS).”

**Oakes, William C; Buzzanell, Patrice M and Zoltowski, Carla B;** engineering education, communication, engineering projects in community service, from National Science Foundation, \$312,109, “Collaborative Research: Assessing Individual Ethical Reasoning and Team Ethical Climate: Understanding Their Relationship in Undergraduate Design Teams.”

**Oakes, William C;** engineering education, from Multi-Sponsored Industrials, \$3,000, “Engineering Projects in Community Service (EPICS).”

**Oakes, William C;** engineering education, from Multi-Sponsored Industrials, \$9,800, “Engineering Projects in Community Service (EPICS).”

**Ohm, Herbert W;** agronomy, from United Soybean Board, \$25,000, “2011 United Soybean Board Fellowship - Trulie Campbell.”

**Ohm, Herbert W;** agronomy, from Agricultural Research Service, \$123,052, “Dissecting the Molecular Mechanisms of Fusarium Head Blight Resistance.”

**Ohm, Herbert W;** agronomy, from PepsiCo Inc./ World Trading Co., \$7,500, “Oat Improvement.”

**Ohm, Herbert W;** agronomy, from Agricultural Research Service, \$35,700, “Utilization of Genetics, Breeding and DNA Technologies to Develop Wheat that is Resistant to Multiple Disease and Pests.”

**Ohm, Herbert W;** agronomy, from Agricultural Research Service, \$52,000, “Mechanisms of Resistance and Susceptibility in Wheat/Hessian Fly Interactions.”

**Ouyang, Zheng; Cooks, Robert G and Tao, Weiguo A;** biomedical engineering, chemistry, biochemistry, from PHS-NIH National Center for Research Resource, \$16,953, “Paper Spray Ionization Mass Spectrometry Device for Direct Analysis of Biofluid Samples.” (a Discovery Park award — Bindley Bioscience Center)

**Owens, Phillip R;** agronomy, from Natural Resources Conservation Services, \$10,000, “Rapid Response Research (RAPID) Carbon Assessment Project Sample Preparation and Analysis.”

**Paarlberg, Philip L;** agricultural economics, from Animal Plant Health Inspection Service, \$60,000, “Disease Related Cross Border Measures in an Integrated North American Livestock and Meat Industry.”

**Panitch, Alyssa;** biomedical engineering, from Purdue Doctoral Program, \$173, “Scott, Rebecca A.”

**Parker, Laurie L;** medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$63,904, “Biosensor Design for Detection and Analysis of Complex Signal Patterns in Cancer.”

**Patton, Aaron J;** agronomy, from Dow Agro Sciences, \$5,000, “Multi-Sponsored.”

**Patton, Aaron J;** agronomy, from Dow Agro Sciences, \$3,500, “Multi-Sponsored.”

**Patton, Aaron J;** agronomy, from Midwest Regional Turf Foundation, \$10,000, “Turf-grass Research.”

**Patton, Aaron J;** agronomy, from University of Florida, \$3,000, “Test Zoysiagrass Germplasm for Adaptation in Indiana.”

**Peroulis, Dimitrios;** electrical & computer engineering, from Defense Advanced Research Projects Agency, \$199,312, “DARPA-Evanescent-Mode Cavity Seedling.”

**Peroulis, Dimitrios;** electrical & computer engineering, from University of California - San Diego, \$12,500, “Long-Term Creep Characterization and Analysis on High Power Radio Frequency (RF) Microelectromechanical System (MEMS) Switches Modification 3.” (a Discovery Park award — Birk Nanotechnology Center)

**Pijanowski, Bryan C;** forestry & natural resources, from Environmental Protection Agency, \$17,000, “Sarah Dumyahn 11/12 EPA Star Fellowship - Year 2.”

**Popescu, Voicu S;** computer science, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$16,375, “Camera Model Design for Effective Data Visualization.”

**Porterfield, D. M;** agricultural & biological engineering, from National Aeronautics and Space Administration, \$128,358, “Sporesat Mission: Investigating Biophysical Mechanisms of Plant Gravisensing Using a Lab-on-a-Chip Approach; Supplement 1.” (a Discovery Park award — Bindley Bioscience Center)

**Prabhakar, Sunil K;** computer science, from The National GEM Consortium, \$8,333, “2011-12 GEM Fellowship for O. Oluwatimi.”

**Prabhakar, Sunil K;** computer science, from Purdue Doctoral Program, \$17,096, “Cordova-Sanchez, Mariheida.”

**Prabhakar, Sunil K;** computer science, from Purdue Doctoral Program, \$17,096, “Cordova-Sanchez, Mariheida.”

**Prabhakar, Sunil K;** computer science, from Amideast - Fulbright, \$19,160, “Fulbright Foreign Student Program- Ahmed Abdelhamid.”

**Prakash, Arun and Dyke, Shirley J;** civil engineering, mechanical engineering, from National Science Foundation, \$900,000, “CPS: Medium: Collaborative Research: Cybermech, a Novel Run-Time Substrate for Cyber-Mechanical Systems.”

**Pujol, Santiago;** civil engineering, from ERICO International Corporation, \$30,000, “Multi Voluntary Support Account.”

**Purzer, Senay;** engineering education, from National Science Foundation, \$450,212, “CAREER: a Study of How Engineering Students Approach Innovation.”

**Qi, Minghao;** engineering administration engineering experiment, from University of Nevada Las Vegas, \$100,000, “Magnetic Resonance Imaging (MRI): Development of a Highly Scalable and Reconfigurable Testbed in Support of Future Many-Core and System On-Chip Research and Design Exploration.” (a Discovery Park award — Birk Nanotechnology Center)

**Ratliff, Timothy L and Cheng, Ji-Xin;** Vice President for Research, Cancer Research Center, from Indiana University Purdue University at Indianapolis, \$10,000, “IU-Purdue Prostate Spore Development.”

**Raymond, Leigh S; Clawson, Rosalee A and Gramig, Benjamin M;** political science, agricultural economics, from Economic Research Service, \$55,000, “Why Do Farmers Adopt Offset-Eligible Practices? An Experimental Investigation of Framing Effects.” (a Discovery Park award — Purdue Climate Change Research Center)

**Ready, Donald F;** biological sciences, from PHS-NIH National Eye Institute, \$308,000, “Cytoskeletal Mechanisms of Retinal Development.”

**Reklaitis, Gintaras V;** chemical engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, “Commercializing of Continuous Pharmaceutical Manufacturing Technology.”

**Richert, Brian T;** animal sciences, from Fleischmanns Yeast Inc., \$25,000, “Swine Research.”

**Rickus, Jenna L**; agriculture - administration, from Trask Trust Fund, \$50,000, "Bioshell Islets to Treat Type I Diabetes." (a Discovery Park award — Bindley Bioscience Center)

**Robinson, Joseph P**; veterinary medicine - administration, from Battelle, Columbus Division, \$50,000, "Animal Models for Tularemia Countermeasures Development: Evaluation and Identification of Pathogens." (a Discovery Park award — Bindley Bioscience Center)

**Robinson, Joseph P and Davisson, Vincent J**; basic medical science, medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$414,004, "Specific Detection of Cervical Cancers Using Cytometry-Based Molecular Diagnostics." (a Discovery Park award — Bindley Bioscience Center)

**Ropp, Timothy D and Mick, Philip J**; aviation technology, from The Boeing Company, \$26,358, "Autonomous Ground Operations 2011 Integration Testing."

**Rossmann, Michael G**; biological sciences, from PHS-NIH National Institute of Allergy and Infectious Diseases, \$27,720, "Structure and Function of Flaviviruses, - Supplement."

**Sadof, Clifford S**; entomology, from Indiana Department of Natural Resources, \$86,505, "Indiana Emerald Ash Borer Workplan."

**Sadowski, Mary A**; technology - administration, from National Science Foundation, \$199,988, "Conducting a Delphi Study at the First Step in Developing a Concept Inventory for Engineering Design Graphics."

**Saeedifard, Maryam**; electrical & computer engineering, from National Science Foundation, \$119,000, "Collaborative Research: Development of a New Power Electronics Curriculum Relevant to Tomorrows Power Engineering Challenges."

**Saha, Shubin K**; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$1,500, "Multi-Sponsored Gift Account."

**Saha, Shubin K**; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$250, "Multi-Sponsored Gift Account."

**Samarapungavan, Ala**; educational studies, from Purdue Doctoral Program, \$18,094, "Satsangi, Rajiv."

**San Martin-Gonzalez, Maria F**; food science, from Mexico National Council of Science and Technology (CONACYT), \$18,900, "2011-2012 CONACYT Fellow - Year 3 - Rodriguez-Martinez, V."

**Sands, Laura P**; nursing, from University of California - San Francisco, \$55,985, "Pathophysiology of Postoperative Delirium in Older Patients, Amendment 2."

**Savikhin, Sergei F**; physics, from U.S. Department of Energy, \$183,759, "Novel Photoprotection Mechanisms in Closely Packed Photosynthetic Antenna Complexes and in Artificial Light-Harvesting (Bacterio) Chlorophyll Aggregate."

**Schaffer, Scott P**; curriculum & instruction, from National Science Foundation, \$116,171, "NSF Intergovernmental Personnel Assignment (IPA)."

**Scharf, Michael E**; entomology, from National Institute of Food & Agriculture, \$536,329, "Functional Characterization of Novel Target Sites for Reduced-Impact Biopesticides in the Gut of the Termite *Reticulitermes flavipes*."

**Schneider, Steven P**; aeronautical & astronautical engineering, from Ross Graduate Fellowship-Assistantship, \$69, "Abney, Andrew Daniel."

**Schoenlein, William E and Van Alstine, William G**; biomedical engineering, comparative pathobiology, from Medical Engineering & Development Institute Inc., \$19,991, "Enteric Device Testing Study: CBI-PRC3 (Amendment/Continuation 4 Grant 202362)."

**Schulz, Burkhard**; horticulture & landscape architecture, from National Science Foundation, \$800,000, "Plant Organ Size and Identity Controlled by Brassinosteroids."

**Schwab, Arthur P**; agronomy, from Lynn Interdisciplinary Graduate Fellowship, \$17,161, "Choi, Younjeong."

**Scofield, Steven R**; agronomy, from Agricultural Research Service, \$40,040, "Acquisition of Goods and Services."

**Sedlock, Darlene A**; health & kinesiology, from Purdue University Special Initiative Program, \$173, "He, Feng."

**Seidl, Amanda H**; speech, language, and hearing sciences, from Educational Research Institute of America, \$655, "Brigance Norming Testing."

**Seipel, Justin E**; mechanical engineering, from National Science Foundation, \$279,989, "Dynamics of Elastic-Load Legged Locomotion."

**Sepulveda, Maria S**; forestry & natural resources, from U.S. Fish and Wildlife Service, \$59,000, "The Presence of Endocrine Disrupting Compounds, Pharmaceuticals, and Personal Care Products on the Baca National Wildlife Refuge and Their Effect on Two Species of Imperiled Fish."

**Shih, Tom I**; aeronautical & astronautical engineering, from The National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM), \$4,167, "J. Rodriguez - 2011-12 GEM Fellowship Year 2."

**Shin, Yung C**; mechanical engineering, from GE Aviation, \$160,000, "Laser Assisted Machining of Ceramics."

**Simpson, Garth J; Das, Chittaranjan and Qi, Minghao**; chemistry, electrical & computer engineering, from PHS-NIH National Center for Research Resource, \$24,414, "Nonlinear Optical Imaging for Guiding Protein Structure Determination." (a Discovery Park award — Bindley Bioscience Center)

**Slamovich, Elliott B**; materials engineering, from Government of Kazakhstan, \$1,614, "Fall 2011 Bolashak Scholarship for Sergey Suslov."

**Smith, Alan L**; health & kinesiology, from University of Vermont, \$167,386, "A Translational Approach to Evaluating the Effects of Physical Activity on Attention Deficit Hyperactivity Disorder (ADHD), Amendment 2."

**Smith, Mjt**; graduate school administration, from Purdue University Special Initiative Program, \$16,500, "Bisland Strategic Initiatives Fellowship to Add \$1500 Other S&E to Award."

**Smith, Richard S**; food science, from Hinsdale Farms Ltd, \$15,000, "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."

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

**Smith, Richard S**; food science, from Hinsdale Farms Ltd, \$1,500, "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, \$3,000, "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 Alcoa Inc, \$2,500, "Food Science Research."

**Snow, Lowell D**; Technology Assistance Program, from Indiana Economic Development Corporation, \$279,703, "Manufacturing Extension Partnership FY 2012."

**Song, Xiaohui C**; Rosen Center for Advanced Computing, from University of Florida, \$80,958, "Extenci: Extending Science through Enhanced National Cyberinfrastructure, Amendment 2."



**Stanciu, Lia A;** materials engineering, from PHS-NIH National Institute of Neurological Disorders and Stroke, \$160,790, "Metal-Induced Structural Transformations During Alpha-Synuclein Aggregation."

**Stantz, Keith M;** health sciences, from PHS-NIH National Institute of Biomedical Imaging and Bioengineering, \$220,050, "In-Vivo Imaging and Therapeutic Targeting of Hypoxic-Niche Associated with CSCs."

**Stefancik, Jennifer L;** field extension educators, from Daviess-Marin REMC Community Fund Inc, \$300, "Professor Popcorn Daviess County."

**Sun, Dengfeng;** aeronautical & astronautical engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, "Contrail Impact on Air Traffic Flow Management."

**Sun, Dengfeng;** aeronautical & astronautical engineering, from The Innovation Laboratory, Inc, \$15,000, "Collaborative, Open Source Air Traffic Management Research Platform."

**Sutherland, John W;** environmental & ecological engineering, from Fred M. Fehsenfeld, Sr., \$15,000, "Fehsenfeld Student Research Support."

**Swihart, Robert K;** forestry & natural resources, from University of Illinois at Champaign-Urbana, \$143,825, "Cooperative Agreement with EPA Great Lakes National Program Office."

**Swihart, Robert K;** forestry & natural resources, from Indiana Arborists Association, Inc., \$8,750, "Indiana Arborists Association, Inc."

**Takeda, Shuichiro;** mathematics, from National Science Foundation, \$106,937, "Theta Correspondences and Related Problems in Automorphic Representations."

**Talavage, Thomas M;** biomedical engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, "Predictive Modeling of Cognitive Impairment from Head Trauma in Collegiate Football Players."

**Tao, Weiguo A; Geahlen, Robert L; McLuckey, Scott A and Vitek, Olga;** biochemistry, medicinal chemistry & molecular pharmacology, chemistry, statistics, from PHS-NIH National Institute of General Medical Science, \$297,744, "New Proteomic Technologies for the Analysis of Tyrosine Kinase Signaling Pathways." (a Discovery Park award — Oncological Sciences Center)

**Tomar, Vikas;** aeronautical & astronautical engineering, from National Science Foundation, \$10,030, "Catalyzing US-India Collaboration: Mechanics of Materials in Extreme Environments."

**Turco, Ronald F;** agronomy, from Wabash River Enhancement Corp, \$82,640, "Region of the Great Bend of the Wabash Water Quality Monitoring Bridging Grant."

**Tyner, Wallace E;** agricultural economics, from Monsanto Company, \$58,229, "Analysis of the Economics of Cover Crops with Alternative Levels of Corn Stover Removal."

**Tyner, Wallace E;** agricultural economics, from Argonne National Laboratory, \$30,000, "Analysis of the Impact of Ethanol Use on U.S. Crude Oil and Gasoline Prices."

**Tzempelikos, Athanasios;** civil engineering, from Chappelle, \$173, "Rastogi, Parag."

**Ukkusuri, Satish V;** civil engineering, from National Science Foundation, \$371,378, "Collaborative Research: From Warnings to Evacuation in Hurricanes: A Holistic Investigation Using an Interdisciplinary Approach."

**Umulis, David M;** agricultural & biological engineering, from University of Minnesota, \$50,591, "Dynamic Pattern in Chemically Reacting Systems, Amendment 1."

**Vacca, Andrea;** agricultural & biological engineering, from Casappa SpA, \$78,538, "Modeling of the Axial Balance of Lateral Bushes and Development of Innovative Solutions for External Gear Machines."

**Van Fleet, Mark L;** international programs, from Greater Lafayette Commerce (GLC), \$9,000, "Global Business Engagement with GLC."

**Varma, Amit H;** civil engineering, from Indiana Department of Transportation, \$50,000, "Slip Form Barrier in Lieu of Moment Slabs for Concrete Barrier, SPR-3406."

**Vemulapalli, Tracy H;** comparative pathobiology, from Akina, Inc. Business & Technology Center, \$29,871, "Testing Implantation and Long-Term Retention of Polymers for Potential as Chronic Drug Delivery Devices."

**Vitek, Jan; Adams, Douglas E; Grama, Ananth Y and Jagannathan, Suresh;** computer science, mechanical engineering, from National Science Foundation, \$1,600,000, "CPS: Medium: Robust Distributed Wind Power Engineering."

**Vyn, Tony J;** agronomy, from Fluid Fertilizer Foundation, \$100, "Agricultural Cropping Systems."

**Vyn, Tony J and West, Terry D;** agronomy, from Deere & Company, \$10,000, "Shallow Vertical Tillage Effects on Surface Residue, Seedbed Quality and Corn Response."

**Vyn, Tony J;** agronomy, from Fluid Fertilizer Foundation, \$10,000, "Agricultural Cropping Systems."

**Vyn, Tony J;** agronomy, from Fluid Fertilizer Foundation, \$700, "Agricultural Cropping Systems."

**Walmsley, Terrie L;** agricultural economics, from U.S. International Trade Commission, \$126,215, "ITC Extension Paper."

**Wang, Nien-Hwa L;** chemical engineering, from Argonne National Laboratory, \$79,315, "Development of Simulated Moving Bed Chromatography for the Separation of Rare-Earth Elements from Americium from Curium."

**Wang, Nien-Hwa L;** chemical engineering, from Savannah River Remediation LLC, \$82,934, "Modeling Engineered Titanates."

**Watson, William R;** curriculum & instruction, from Stevens Institute of Technology, \$116,301, "Experience Accelerator."

**Weaver, Connie M; Kuhn, Richard J; Boushey, Carol J; Campbell, Wayne W; Rebar, Alan H; Story, Jon A; Wodicka, George R; Leary, James F; McCabe, George P; Turek, John J; Byrn, Stephen R; Freeman, Lynetta; Mattes, Richard D; Moore, George E; Murray, Michael D; Teegarden, Dorothy; Van Alstine, William G and Witz, Steven M;** foods & nutrition, biological sciences, Vice President for Research, Graduate School Administration, biomedical engineering, basic medical science, science - administration, industrial & physical pharmacy, veterinary clinical science, comparative pathobiology, pharmacy practice, Bindley Bioscience Center, from Indiana University School of Medicine, \$792,197, "Indiana Clinical and Translational Science Institute (CTSI) - Year 4 Funding." (a Discovery Park award — Bindley Bioscience Center)

**Weaver, Connie M;** foods & nutrition, from Amorphical Ltd, \$561, "The Effect of Amorphous Calcium Carbonate on Rat Bone Strength."

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

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

**Weaver, Connie M;** foods & nutrition, from PHS-NIH National Institute of Child Health and Human Development, \$31,912, "Calcium Metabolism in Mexican American Adolescents-Diversity Supplement."

**Weiner, Andrew M; Chakrabarti, Raj; Chen, Yong P and Elliott, Daniel S;** electrical & computer engineering, chemical engineering, physics, from National Science Foundation, \$273,347, "Acquisition of Self-Referenced Frequency Comb for Atomic-Molecular-Optical Physics and Optical Signal Processing Research."

**Weiss, William J;** civil engineering, from Indiana Department of Transportation, \$105,651, "Performance of More Sustainable Cements that Include Interground Limestone Additions of Up to 15 Percent."

**Weller, Stephen C;** horticulture & landscape architecture, from Dow Agro Sciences, \$12,000, "Volatility and Particle Drift Studies with 2,4-D."

**Wenthold, Paul G;** chemistry, from National Science Foundation, \$429,000, "Negative Ion Photoelectron Spectroscopy Studies of Spin-State Dependent Substituent Effects on Aromatic Nitrenes."

**Whitford, Fred;** botany & plant pathology, from Professional Landcare Network Inc, \$1,500, "Purdue Pesticide Programs."

**Whitford, Fred;** botany & plant pathology, from Professional Landcare Network Inc, \$1,595, "Purdue Pesticide Programs."

**Whitford, Fred;** botany & plant pathology, from Professional Landcare Network Inc, \$600, "Purdue Pesticide Programs."

**Wild, Robert E;** chemistry, from Vietnam Education Foundation, \$28,000, "2011 Vietnam Education Foundation (VEF) for Nguyen, Anh Tue."

**Wild, Robert E;** chemistry, from Purdue Doctoral Program, \$17,096, "Durand, Kirt L."

**Wilker, Jonathan J;** chemistry, from National Science Foundation, \$147,000, "Novel Carbon Rich Organometallics Based on Iso-Triacetylene: Effects of Cross Conjugation."

**Wirth, Mary J;** chemistry, from PHS-NIH National Institute of General Medical Science, \$281,891, "New Materials for High Efficiency Protein Separations."

**Wise, Kiersten A;** botany & plant pathology, from E.I. Du Pont de Nemours and Company, \$13,500, "Wheat Disease Research."

**Wise, Kiersten A; Krupke, Christian H and Woloshuk, Charles P;** botany & plant pathology, entomology, from National Institute of Food & Agriculture, \$86,759, "Integrating Management Plans for Western Bean Cutworm and Gibberella Ear Rot."

**Wise, Kiersten A; Krupke, Christian H and Woloshuk, Charles P;** botany & plant pathology, entomology, from National Institute of Food & Agriculture, \$61,997, "Integrating Management Plans for Western Bean Cutworm and Gibberella Ear Rot."

**Wise, Kiersten A;** botany & plant pathology, from E.I. Du Pont de Nemours and Company, \$7,500, "Wheat Disease Research."

**Wise, Kiersten A;** botany & plant pathology, from E.I. Du Pont de Nemours and Company, \$3,500, "Wheat Disease Research."

**Wise, Kiersten A;** botany & plant pathology, from E.I. Du Pont de Nemours and Company, \$5,400, "Wheat Disease Research."

**Witkoske, Teresa J;** field extension educators, from Wabash County United Fund, \$500, "Strengthening Early Literacy in Wabash County."

**Witt, Jessica K;** psychological sciences, from National Science Foundation, \$120,421, "Actions Effect on Perception, Amendment 2."

**Yaninek, John S and Bledsoe, Larry W;** entomology, from Indiana Department of Natural Resources, \$63,417, "Financial Plan for Infrastructure: CAPS 2011 2nd Half."

**Yao, Yuan;** food science, from Phytoption LLC, \$1,882, "Product Tests."

**Yau, David K;** computer science, from National Science Foundation, \$30,910, "NeTS: Medium: Collaborative Research: Building an Intelligent, Uncertainty-Resilient Detection and Tracking Sensor Network, Amendment 2."

**Yernool, Dinesh A;** biological sciences, from PHS-NIH National Institute of General Medical Science, \$288,736, "Structure and Function of Sodium-Calcium Exchangers."

**Yi, Ji Soo;** industrial engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,059, "A Natural Interface for Image Navigation in the Operating Room."

**Youngblood, Jeffrey P; Martinez, Carlos J; Moon, Robert J and Zavattieri, Pablo D;** materials engineering, civil engineering, from U.S. Forest Service, \$300,000, "Engineering Cellulose Based Structures for Advanced Composites."

**Zanotti, Laura C;** anthropology, from Kinley Trust, \$19,556, "Market-Integration and Natural Resource Management: A Gendered Analysis of Change and Well-Being in an Inupiat Whaling Community."

**Zavattieri, Pablo D;** civil engineering, from General Motors Corp, \$14,052, "A Computational Study of the Dynamic Response of SMP Based Variable Geometry Cellular Materials."

**Zhang, Min;** statistics, from Indiana University, \$54,163, "Early Cancer Detection and Prognosis through Glycomics."

**Zhou, Daoguo;** biological sciences, from PHS-NIH National Institute of Allergy and Infectious Diseases, \$19,278, "Host Actin Cytoskeleton Rearrangements Induced by Salmonella."

**Zhuang, Qianlai;** agronomy, from U.S. Department of Energy, \$360,000, "Collaborative Research: Quantifying Climate Feedbacks of the Terrestrial Biosphere Under Thawing Permafrost Conditions in the Arctic."

**Ziaie, Babak;** electrical & computer engineering, from IU School of Medicine, \$9,622, "Uplink: Urinary Pressure Wireless Link." (a Discovery Park award — Birck Nanotechnology Center). ■

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