

# DIMENSIONS *of* DISCOVERY

## Sponsored Program Awards

August 2012

**Abraham, John**; mechanical engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "Computational Investigations of the Trade-Off Between Pollutant Formation & Lift-Off Height in Diesel Jets."

**Adams, George B**; electrical & computer engineering, from Imaginestics, LLC, \$19,999, "Purdue Manufacturinghub.Org." (a Discovery Park award — Network for Computational Nanotechnology)

**Adeola, Olayiwola**; animal sciences, from Danisco Animal Nutrition, \$50,000, "Danisco."

**Agnew, Christopher R**; psychological science, from Purdue University Special Initiative Program, \$1,500, "Scherer, Kelly."

**Agnew, Christopher R**; psychological science, from Purdue University F N Andrews Fellowship, \$2,172, "Breit, Kristen."

**Agnew, Christopher R**; psychological science, from Ross Graduate Fellowship-Assistantship, \$922, "Griffin, Sarah."

**Agrawal, Rakesh**; chemical engineering, from Purdue University F N Andrews Fellowship, \$221, "Walker, Bryce C."

**Agrawal, Rakesh; Alam, Muhammad A and Lundstrom, Mark S**; chemical engineering, electrical & computer engineering, from U.S. Department of Energy, \$25,999, "Development of Low-Cost Technology for the Next Generation of High Efficiency Solar Cells; Modification 3 for Grant 105663." (a Discovery Park award — Energy Center)

**Anderson, Joseph M**; agronomy, from Dow Chemical Company Foundation, \$2,500, "Distinguished Lectureship."

**Anderson, William E**; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$66,000, "Computational and Experimental Investigation of Liquid Propellant Rocket Combustion Instability."

**Applegate, Todd J**; animal sciences, from JBS United Inc, \$18,000, "Pyhtase in Poultry."

**Applegate, Todd J**; animal sciences, from Agricultural Research Service, \$23,078, "Effects of Heat Stress on Farm Animal Well-Being."

**Balakrishnan, Venkataramanan**; electrical & computer engineering, from Winifred B. Bilsland Endowment, \$19,394, "Gu, Jiangliang."

**Barrick, Debra K and Rumsey, Suzanne K**; cooperative education — Fort Wayne campus, English & linguistics — Fort Wayne campus, from Indiana Campus Compact, \$2,250, "Indiana University-Purdue University Fort Wayne (IPFW) Faculty Fellows."

**Barron, John M**; economics, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "The Impact of Peers on Effort Choice & Student Performance."

**Bauman, Patricia E and Phillips, Daniel**; mathematics, from National Science Foundation, \$229,502, "Analysis of Partially Ordered Materials; Amendment 1."

**Bayley, William G**; chemistry, from Annette M Maier, \$20, "Instrumentation Van Project."

**Beaudoin, Stephen P**; chemical engineering, from International Business Machines Corp, \$30,000, "IBM Fellowship for Kathryn Smith."

**Beaudoin, Stephen P**; chemical engineering, from Purdue Doctoral Program, \$19,468, "Rostro, Lizbeth."

**Beaudoin, Stephen P**; chemical engineering, from Purdue University F N Andrews Fellowship, \$18,263, "Miskin, Caleb K."

**Bhunia, Arun K and Vemulapalli, Ramesh**; food science, comparative pathobiology, from University of Notre Dame, \$63,763, "A Rapid and High-Throughput Pathogen RNA Detection System for Dairy Products."

**Bhunia, Arun K**; food science, from Embassy of the Arab Republic of Egypt, \$8,000, "Bench Fees — Maha Moahmed Usama."

**Bigelow, Cale A**; agronomy, from Agrotain International LLC, \$10,000, "Putting Greens Research."

**Blatchley, Ernest R**; civil engineering, from Winifred B. Bilsland Endowment, \$19,394, "Weng, Shih-Chi."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Purdue University F N Andrews Fellowship, \$22,644, "Chen, Chen."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Ross Graduate Fellowship-Assistantship, \$22,644, "Tapaszi, Stephen."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Purdue Doctoral Program, \$21,894, "Bauer, Todd."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Winifred B. Bilsland Endowment, \$9,939, "Kuntz, Charles P."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Winifred B. Bilsland Endowment, \$9,939, "Hsu, Chih-Chao."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Ross Graduate Fellowship-Assistantship, \$22,644, "Yang, Ying."

**Borch, Richard F**; medicinal chemistry & molecular pharmacology, from Ross Graduate Fellowship-Assistantship, \$22,644, "Ren, Qianwei."

**Boudouris, Bryan W**; chemical engineering, from Space and Naval Warfare Systems Center, \$150,000, "Radical Polymers for Nanostructured, Next Generation Thermoelectric Devices."

**Bouman, Charles A**; electrical & computer engineering, from Northeastern University, \$150,000, "Model-Based Iterative Reconstruction for Scanned Baggage Security."

**Bowling, Laura C;** agronomy, from Agricultural Research Service, \$59,556, "Quantify Hydrologic Attributes Affecting Chemical Loading to Runoff Water."

**Bowman, Mark D;** civil engineering, from Indiana Department of Transportation, \$79,043, "Review of Load Rating and Posting Procedures and Requirements."

**Braile, Lawrence W;** earth & atmospheric sciences, from National Science Foundation, \$89,000, "Research Experience for Undergraduates (REU) Site: Addition of a Geothermal Research and Education Focus to Enhance the SAGE (Summer of Applied Geophysical Experience) REU Program."

**Braun, James E;** mechanical engineering, from American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Inc., \$10,000, "12-13 American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Grant in Aid, "Donghun Kim."

**Brightman, Andrew O; Kisselburgh, Lorraine G; Krane, Matthew J and Zoltowski, Carla B;** biomedical engineering, communication, materials engineering, engineering projects in community service (epics)), from National Science Foundation, \$300,000, "Engaging Engineers in Ethical Reasoning with Online Interactive Learning Modules."

**Brown, Paul B and Rode, Robert A;** forestry & natural resources, from Michigan State University, \$3,050, "Evaluate Phase II Production of Bluegill Sunfish Comparing a Least-Cost Diet Utilized in the Phase I Verification Study Compared to an "Industry Standard" for One Production Cycle."

**Brzezinski, Michael A; Trumble, Kevin P; Han, Qingyou; Johnson, David R and Krane, Matthew J;** international programs, materials engineering, mechanical engineering technology, from Shandong Nanshan Aluminum Co Ltd, \$700,000, "Purdue School of Materials Engineering — Nanshan Aluminum Research Plan."

**Buckius, Richard O;** vice president for research, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "1213 XR: Indiana University Purdue University at Indianapolis (IUPUI)-ET, Likun Zhu, Identification of Lithium Ion Battery Electrode Structural Inhomogeneity & its Effect on Battery Performance."

**Buescher, Elizabeth M and Dilkes, Brian;** horticulture & landscape architecture, from National Institute of Food & Agriculture, \$130,000, "Maize Endosperm Development is Affected by Small RNA in Interploidy Crosses."

**Bugel, Talia A;** international language & culture — Fort Wayne campus, from Indiana Campus Compact, \$2,250, "The Fort Wayne Hispanic Community as the Language Laboratory for the Class of Spanish 204."

**Butzke, Christian E and Stewart, Amanda C;** food science, from State of Florida, \$18,000, "Yeast Assimilable Nitrogen Survey and Amino Acid Profiles in Hybrid and Muscadine Wine Grapes."

**Buzzanell, Patrice M;** liberal arts — administration, from Regenstrief Institute Inc, \$4,000, "Innovative Interdisciplinary Collaborative Research."

**Byrn, Stephen R;** industrial & physical pharmacy, from Pfizer Inc, \$55,000, "Pfizer Gift."

**Cai, Hubo;** civil engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "Formalizing Four Dimensional Topology for Construction Planning."

**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 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."

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**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."

**Cannon, Jason R;** health sciences, from PHS-NIH National Institute of Environment Health Science, \$36,978, "New Approaches to Gene-Environment Interaction Modeling in Parkinsons Disease."

**Carlstedt, Bruce C;** pharmacy practice, from Regenstrief Institute for Health Care, \$15,841, "Regenstrief Institute Support of Bruce Carlstedt."

**Casteel, Shaun N;** agronomy, from Monsanto Agriculture Company, \$3,780, "Seed Treatment Disease and Insect Management in Soybean."

**Chandrasekar, Srinivasan;** industrial engineering, from Winifred B. Bilsland Endowment, \$19,394, "Yeung, Ho."

**Chandrasekar, Srinivasan;** industrial engineering, from National Science Foundation, \$360,144, "Grant Opportunities for Academic Liaison with Industry (GOALI): Engineering of Functionality Graded Magnesium Composite Surfaces."

**Chapple, Clint C; Doudareva, Natalia and Morgan, John A;** biochemistry, horticulture & landscape architecture, chemical engineering, from U.S. Department of Energy, \$1,086,110, "Modeling and Manipulating Phenylpropanoid Pathway Flux for Bioenergy."

**Chen, Weinong W;** aeronautical & astronautical engineering, from University of Delaware, \$40,000, "High-Rate Multi-Scale Characterization of Polymers and Composites."

**Chen, Yong P;** physics, from Intel Corporation, \$55,486, "Luis Jauregui - Intel PhD Fellowship Program."

**Cheng, Gary J;** industrial engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, "Hu, Yaowu."

**Cheng, Gary J;** industrial engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, "Deng, Biwei."

**Cheng, Ji-Xin and Robinson, Joseph P;** biomedical engineering, basic medical science, from PHS-NIH National Institute of General Medical Science, \$192,500, "Label-Free Multichannel Spectral Cytometry Based on Stimulated Raman Scattering."

**Chiu, George T;** mechanical engineering, from National Science Foundation, \$203,458, "NSF Institutional Proposal (IP) Assignment."

**Christian, John A;** comparative pathobiology, from Western University of Health Sciences, \$1,885, "Cytology Resource Center."

**Christmon, Kenneth C**; diversity and multicultural affairs — Fort Wayne campus, from U.S. Department of Education, \$250,000, “Indiana University-Purdue University Fort Wayne (IPFW) — Upward Bound 1.”

**Christmon, Kenneth C**; diversity and multicultural affairs — Fort Wayne campus, from U.S. Department of Education, \$250,000, “Indiana University-Purdue University Fort Wayne (IPFW) — Upward Bound 2.”

**Clark, Jason V**; electrical & computer engineering, from Carnegie-Mellon University, \$112,145, “CDI-Type II: Building a Virtual Micro/Nanosystems Design Community; Amendment 3.” (a Discovery Park award — Birck Nanotechnology Center)

**Cleveland, William S; Liu, Chuanhai and Xi, Bowei**; statistics, from National Science Foundation, \$314,995, “Statistical Theory and Methods for D&R Analysis of Large Complex Data.”

**Clupper, Stacy A**; field extension educators, from Indiana’s Family of Farmers Agricultural Research, \$1,500, “Blackford AG Outreach.”

**Collicott, Steven H and Kelley, Todd R**; aeronautical & astronautical engineering, industrial technology, from National Aeronautics and Space Administration, \$224,025, “Science, Technology, Engineering & Mathematics (STEM) Educational Impacts Delivered through an Original Undergraduate Science Experiment in ISS.”

**Comer, Douglas E**; computer science, from National Science Foundation, \$215,826, “FIA: Collaborative Research: NEBULA: a Future Internet that Supports Trustworthy Cloud Computing; Amendment 2 for Grant 104898.”

**Constable, Peter D**; veterinary clinical science, from VCA Antech Inc, \$37,858, “Radiology Residency Support.”

**Constable, Peter D**; veterinary clinical science, from North Central Veterinary Emergency Center LLC, \$5,400, “ECC Residency Training Program.”

**Constable, Peter D**; veterinary clinical science, from VCA Antech Inc, \$18,598, “Radiology Residency Support.”

**Cooks, Robert G and Ouyang, Zheng**; chemistry, biomedical engineering, from The Coca Cola Company, \$53,023, “Ambient Ionization Mass Spectrometry for Pesticide Residue and 4-MEI Analysis.” (a Discovery Park award — Bindley Bioscience Center)

**Cooks, Robert G**; chemistry, from Oak Ridge Institute for Science & Education, \$10,500, “Joshua Wiley ORISE Fellowship Year 3.”

**Cooks, Robert G and Ouyang, Zheng**; chemistry, biomedical engineering, from Biomérieux, Inc., \$120,430, “Paper Spray Mass Spectrometry: A New Platform Technology for Rapid Response Research (RAPID) Trace Chemical Analysis.” (a Discovery Park award — Bindley Bioscience Center)

**Coppoc, Gordon L**; medical education, from Indiana University Purdue University at Indianapolis, \$1,000, “FY11-12 Indiana University School of Medicine (IUSM) — Lafayette Student and Faculty Recruitment & Retention.”

**Cordova, France A; Moghadam, Valentine M; Pawley, Alice L and Reed, Dorothy A**; president, sociology, engineering education, education – administration, from National Science Foundation, \$14,471, “Purdue Center for Faculty Success-Grant: 103359.” (a Discovery Park award — Discovery Learning Center)

**Cox, Monica F**; engineering education, from Purdue University Special Initiative Program, \$1,500, “London, Jeremi S.”

**Cox, Monica F and Maeda, Yukiko**; engineering education, educational studies, from National Science Foundation, \$200,000, “Implementation of a Multidimensional Assessment Tool to Explore the Impacts of Pedagogy on Undergraduate Student Learning.”

**Crawford, Melba M**; civil engineering, from National Aeronautics and Space Administration, \$110,000, “An Advanced Learning Framework for High Dimensional Multi-Sensor Remote Sensing Data.”

**Crawford, Melba M**; engineering administration engineering experiment, from Sandia National Laboratories, \$40,000, “Marat Kulakhmetov 2012 Sandia National Laboratories Fellowship - Grant 106090.”

**Crawford, Melba M**; engineering administration engineering experiment, from Lynn Interdisciplinary Graduate Fellowship, \$17,287, “Pignotti, Garrett W.”

**Crawford, Melba M**; engineering administration engineering experiment, from Sandia National Laboratories, \$40,000, “Sandia Fellowships for Raymond Bond and Marat Kulakhmetov.”

**Daugherty, Jenny L**; industrial technology, from Black Hills State University, \$105,713, “An Examination of Science and Technology Teachers Conceptual Learning through Concept-Learning Based Engineering Professional Development; Amendment 1.”

**Davis, Susan B**; Office of Engagement, from Indiana Economic Development Corporation, \$35,000, “CY 2013 Hoosier Heartland SBA Proposal.”

**Dehr, Karol A and Kim, Il-Hee**; English & linguistics — Fort Wayne campus, educational studies — Fort Wayne campus, from National Writing Project, \$20,000, “2012-2013 Title II SEED Professional Development in a High-Need School Grant Program.”

**Delgass, W N; Abu-Omar, Mahdi M; Caruthers, James M; Ribeiro, Fabio H and Thomson, Kendall T**; engineering administration engineering experiment, chemistry, chemical engineering, from U.S. Department of Energy, \$700,000, “Catalyst Design by Discovery Informatics.” (a Discovery Park award — Energy Center)

**Diclementi, Jeannie D**; psychology — Fort Wayne campus, from U.S. Department of Health and Human Services, \$91,444, “Indiana University-Purdue University Fort Wayne (IPFW) Project Compass: Community Partners Against Student Suicide.”

**Doerge, Rebecca W**; statistics, from Purdue University F N Andrews Fellowship, \$17,287, “Lee, Hyoeun.”

**Doerge, Rebecca W**; statistics, from Ross Graduate Fellowship-Assistantship, \$17,287, “Qui, Yixuan.”

**Doucette, Suzanne C**; chemistry, from U.S. Department of Energy, \$300,000, “Synthetic, Spectroscopic, and Computational Studies of Redox-Active Uranium Complexes for Fundamental Organometallic Reactions.”

**Duval-Couetil, Nathalie A**; industrial technology, from National Collegiate Inventors & Innovators Alliance, \$5,000, “Synthesis for Student Institutional Proposal (IP) Best Practices and Policy Development.”

**Dyke, Shirley J**; civil engineering, from National Science Foundation, \$30,000, “Collaborative Research: SI2-SSI: Empowering the Scientific Community with Streaming Data Middleware: Software Integration into Complex Science Environments.”

**Eckhardt, Christopher I**; psychological science, from Georgia State University, \$284,999, “Mechanisms of Alcohol-Facilitated Intimate Partner Violence.”

**Elicker, James G**; child development & family studies, from Kaboom!, \$25,000, “Childrens Social Competence and Engineering Play Behaviors in the Imagination Playground.”



**Elmqvist, Lars Niklas E** and **Ramani, Karthik**; electrical & computer engineering, mechanical engineering, from National Science Foundation, \$200,000, "EAGER: SkWiki - a Sketch-Based Wiki."

**Engel, Bernard A**; agricultural & biological engineering, from Agricultural Research Service, \$11,349, "Simulation of Conservation Practice Effects on Erosion and Water Quality Under Current and Future Climate Scenarios."

**Fernandez-Juricic, Esteban**; biological sciences, from Animal Plant Health Inspection Service, \$61,585, "Evaluation of the Effects of Radar Energy on Bird Behavior."

**Fernandez-Juricic, Esteban**; biological sciences, from National Science Foundation, \$89,951, "EAGER: Collaborative Research: the Perceptual Basis of Collective Behavior in a Model Vertebrate."

**Field, William E**; agricultural & biological engineering, from National Institute of Food & Agriculture, \$162,000, "Indiana AgrAbility Project."

**Fisher, Timothy** and **Xu, Xianfan**; mechanical engineering, from Office of Naval Research, \$50,000, "Cross-Interface Coupling of Electrons and Phonons." (a Discovery Park award — Birck Nanotechnology Center)

**Fleet, James C** and **Replogle, Rebecca A**; foods & nutrition, from National Institute of Food & Agriculture, \$37,500, "R. Replogle 2012 National Institute of Food and Agriculture (NIFA) Predoctoral Fellowship - Genetic Approaches to Identify Gene X Diet Interactions Affecting Serum 1,25 Dihydroxyvitamin D Levels in Response to Dietary Calcium Restriction."

**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."

**Frankel, Steven H**; mechanical engineering, from Indiana University Purdue University at Indianapolis, \$163,186, "Cavopulmonary Assist: Circulatory Support for the Univentricular Fontan Circulation: Amendment 4."

**French, Doran C**; child development & family studies, from Purdue Doctoral Program, \$65, "Robinson, Chanele D."

**French, Doran C**; child development & family studies, from Purdue University F N Andrews Fellowship, \$2,181, "Hur, Jinhee."

**Gabrielov, Andrei** and **Basu, Saugata**; mathematics, from National Science Foundation,

\$100,000, "Semi-Monotone Sets and Triangulation of Definable Families."

**Garimella, Suresh V**; mechanical engineering, from Multi-Sponsored Industrials, \$7,500, "Cooling Technologies Research Center (CTRC) 2011 Membership."

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

**Garimella, Suresh V**; mechanical engineering, from Toyota Motor Manufacturing Inc., \$135,502, "Advanced Two-Phase Cooling Technology for High Heat Flux Application."

**Garimella, Suresh V**; mechanical engineering, from Multi-Sponsored Industrials, \$7,500, "Cooling Technologies Research Center (CTRC) 2011 Membership."

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

**Garrison, James I**; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$66,000, "Incorporation of Global Navigation Satellite System (GNSS) Multipath to Improve Autonomous Rendezvous, Docking, and Proximity Operations in Space NASA Space Technology Research Fellowships (NSTRF) for Benjamin Ashman."

**Ghiselli, Richard F**; hospitality & tourism, from Nanjing Institute of Tourism & Hospitality, \$11,500, "Collaborative Activity Between Nanjing Institute of Tourism and Hospitality and School of Hospitality and Tourism Management of Purdue University."

**Gibson, Kevin D**; botany & plant pathology, from Laspau, \$17,704, "2012-13 Becas Francisco Jose de Caldas Fellowship, Year 3."

**Gibson, Kevin D**; **Alexander, Corinne E**; **Beckerman, Janna I**; **Hallett, Steven G**; **Hoagland, Lori A**; **Kaplan, Ian**; **Kladivko, Eileen J**; **Marshall, Maria I** and **Sadof, Clifford S**; botany & plant pathology, agricultural economics, horticulture & landscape architecture, entomology, agronomy, from Mary S. Rice Farm Estate, \$118, "Increasing Capacity for Research on Organic Agriculture."

**Ginzel, Matthew D**; entomology, from National Institute of Food & Agriculture, \$98,409, "Enhanced Detection Methods for the Walnut Twig Beetle and Thousand Cankers Disease."

**Goldsbrough, Peter B**; **Creswell, Tom C**; **Ruhl, Gail E**; **Gibb, Timothy J** and **Sadof, Clifford S**; botany & plant pathology, entomology, from Michigan State University, \$40,000, "National Plant Pest Diagnostic Network."

**Govindaraju, Rao S**; civil engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "Resilience, Reliability & Vulnerability Studies for Midwestern Watersheds."

**Granger, Darryl E**; earth & atmospheric sciences, from National Science Foundation, \$127,990, "Collaborative Research: Beryllium-10 in Detrital Magnetite as a New Tool in Erosion and Weathering Studies; Amendment 1 for Grant 105979."

**Grant, Richard H**; agronomy, from Mactech Engineering and Consulting, Inc., \$6,440, "CASTNET IV Contract EP-W-09-028 – Dry Deposition Monitoring at Vincennes, Indiana (Previously Sponsor Was Called MACTECH) [Grant 104789]."

**Groll, Eckhard A**; mechanical engineering, from American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Inc., \$10,000, "12-13 American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Grant-In-Aid – Caskey, Stephen."

**Haase, Jennifer S** and **Garrison, James I**; earth & atmospheric sciences, aeronautical & astronautical engineering, from National Science Foundation, \$33,025, "Collaborative Research: Investigating the Characteristics of Lower Tropospheric Airborne GPS Radio Occultation Observations; Amendment 3 for Grant 104650."

**Haikal, Ghadir**; civil engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "An Interface-Driven Multi-Scale Framework for Assessing the Resilience of Civil Engineering Assemblies Against Natural Hazards."

**Hambrusch, Susanne E**; computer science, from National Science Foundation, \$239,721, "Intergovernmental Personnel Assignment (IPA) – Hambrusch, Susanne."

**Hamilton, Roy L**; Education Opportunities Program — Calumet campus, from Legacy Foundation, Inc, \$10,766, "Purdue University Calumet Educational Talent Search."

**Handwerker, Carol A**; materials engineering, from Foresite Inc, \$50,000, "Foresite Tin Whiskers Research."

**Harris, Dale A**; **Matson, Eric T** and **Mohler, James L**; engineering education, computer & information technology, technology — administration, from Pohang University of Science & Technology, \$684,000, "Pohang University Of Science & Technology (POSTECH) Fellowship-Graduate Degree Collaboration."

**Hartman, Nathan W**; computer graphics technology, from General Motors Foundation, \$15,000, “Product Lifecycle Management (PLM) Center of Excellence.”

**Hassanein, Ahmed** and **Jenkins, Jere H**; nuclear engineering, from U.S. Department of Energy, \$1,276,812, “Significant Upgrade and Safety Enhancement of the Instrumentation and Control Systems of the Purdue University Reactor, Pur-1.”

**Hassanein, Ahmed**; nuclear engineering, from National Academy for Nuclear Training, \$25,000, “National Academy for Nuclear Training Fellowship Program.”

**Heinz, Michael G**; speech, language & hearing science, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$394,478, “Effects of Sensorineural Hearing Loss on Robust Speech Coding.”

**Heister, Stephen D**; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$66,000, “Valveless Detonation Concepts for Space Exploration-NASA Space Technology Research Fellowships (NSTRF) Fellowship for Brandon Kan.”

**Heister, Stephen D**; aeronautical & astronautical engineering, from American Society for Engineering Education, \$11,000, “2012-13 National Aeronautics and Space Administration (NASA) Aeronautics Scholarship Fellows - Year 2.”

**Hertel, Thomas W**; agricultural economics, from Multi-Sponsored Industrials, \$58,975, “Global Trade Analysis Project (GTAP) Consortium.”

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

**Hibiki, Takashi**; nuclear engineering, from Winifred B. Bilsland Endowment, \$19,394, “Miwa, Shuichiro.”

**Hirsch, Andrew S**; physics, from Argonne National Laboratory, \$35,931, “Deep Virtual Compton Scattering (DVCS) on He-4 Nucleus.”

**Holland, Donna D**; sociology — Fort Wayne campus, from National Science Foundation, \$21,845, “Resilience and Recovery from Environmental Disaster in Remote Alaska.”

**Holland, Jeffrey C**; field extension educators, from Winifred B. Bilsland Endowment, \$10,261, “Abdel Moniem, Hossam.”

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

**Howe, Katherine M**; botany & plant pathology, from U.S. Forest Service, \$10,000, “Midwest Invasive Plant Network Cooperative Cost Share with the U.S. Forest Service.”

**Howell, Kathleen**; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$66,000, “A Hybrid Systems Strategy to Support Autonomous Spacecraft Trajectory Design and Optimization in Multiple Dynamical Regimes Fellowship for Jeffrey Stuart.”

**Howell, Kathleen**; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$66,000, “Mission Design and Orbit Maintenance Strategies in the Earth-Moon System-NASA Space Technology Research Fellowships (NSTRF) for Tom Pavlak.”

**Hu, Changdeng; Elzey, Bennett D; Poulson, Jean M** and **Zhang, Dabao**; Cancer Research Center, comparative pathobiology, veterinary clinical science, statistics, from Army Medical Research Acquisition Activity, \$559,270, “Targeting PRMT5 as a Novel Radiosensitization Approach for Primary and Recurrent Prostate Cancer Treatment.”

**Huber, Jessica E** and **Jones, James T**; speech, language & hearing science, biomedical engineering, from Alfred Mann Institute for Biomedical Development at Purdue (AMI-Purdue), \$8,932, “Hypophonia Therapy Device Superficial Femoral Artery (SFA).”

**Hummels, David L**; economics, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, “Income Elasticity of Demand & Volatility.”

**Ileleji, Klein**; agricultural & biological engineering, from Foreign Agricultural Service, \$24,916, “Cochran Fellowship Program for Thailand on U.S. Distillers Dried Grain and Solubles.”

**Irazaqui, Pedro**; biomedical engineering, from Howard Hughes Medical Institute, \$100,000, “Micrometer Scale IOP Sensor for Glaucoma Research in Mice.”

**Irazaqui, Pedro**; biomedical engineering, from Howard Hughes Medical Institute, \$20,000, “Micrometer Scale IOP Sensor for Glaucoma Research in Mice.”

**Irifanoglu, Ayhan**; civil engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, “Rapid & Robust Structural Damage & Reserve Capacity Estimation Using Actual Building Earthquake Response Data.”

**Irudayaraj, Joseph M; Lossie, Amy C** and **Thimmapuram, Jyothi**; agricultural & biological engineering, animal sciences, computer science, from National Aeronautics and Space Administration, \$100,000, “Defining Epigenetic Programming During Flight Expeditions in Differentiating Embryonic Stem Cells.” (a Discovery Park award — Bindley Bioscience Center)

**Irudayaraj, Joseph M**; agricultural & biological engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, “Indo-US Grant.”

**Ishii, Mamoru**; nuclear engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, “Chatzidakis, Stylianos.”

**Ishii, Mamoru**; nuclear engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, “Zhao, Yang.”

**Ishii, Mamoru; Hibiki, Takashi** and **Yang, Won Sik**; nuclear engineering, from Battelle Engery Alliance LLC, \$871,100, “Investigation of Natural Circulation Instability and Transients in Passively Safe Small Modular Reactors.”

**Ivantysynova, Monika**; agricultural & biological engineering, from Triumph Aerospace Systems, \$313,390, “Evaluation and Design Improvements for a Hydraulic Pump.”

**Jacobs, Douglass F**; forestry & natural resources, from U.S. Forest Service, \$30,000, “Chemical Repellents to Deter Herbivory of Planted Forest Trees.”

**Jenkins, Michael A**; forestry & natural resources, from U.S. Forest Service, \$24,999, “The Response of Oak Seedling Regeneration to Harvesting, Herbicide Treatments, and Burning.”

**Jenkins, Michael A**; forestry & natural resources, from U.S. Forest Service, \$10,001, “The Response of Oak Seedling Regeneration to Harvesting, Herbicide Treatments, and Burning.”

**Jiang, Qing** and **Cooper, Bruce R**; foods & nutrition, biological sciences, from National Institutes of Health, \$298,822, “Investigation of Anti-Inflammatory Mechanisms and Pharmacokinetics of Novel Metabolites of Vitamin E Forms.”

**Joern, Brad C**; agronomy, from Ross Graduate Fellowship-Assistantship, \$17,287, “Martin, Joseph M.”

**Johnson, William G**; botany & plant pathology, from Monsanto Company, \$10,000, “Monsanto-Weed Management Systems.”



**Jones, Yava L;** comparative pathobiology, from Indiana University Purdue University at Indianapolis, \$4,500, "Histological Evaluation of Atherosclerotic Specimens in Mice."

**Jung, Byunghoo;** electrical & computer engineering, from Samsung Electronics Co., Ltd, \$30,000, "Voluntary Gift Support."

**Kannan, Karthik N;** management, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, "Bundling & Renting of Information Goods."

**Kaplan, Ian;** entomology, from Purdue University F N Andrews Fellowship, \$20,894, "Garvey, Michael A."

**Kaplan, Ian;** entomology, from Laspau, \$18,079, "2012-13 - Becas Francisco Jose de Caldas Fellowship, Year 3."

**Kappock, Thomas J;** biochemistry, from Kappock, Thomas J (III) & Barbara S, \$12,000, "Kappock Research."

**Karpicke, Jeffrey D;** psychological science, from National Science Foundation, \$135,575, "Faculty Early Career Development (CAREER): Retrieval-Enhanced Learning of Foundational Conceptual Knowledge; Amendment 1 for Grant 105939."

**Keener, Kevin M;** food science, from Griffith Laboratories, \$5,000, "Multi-Sponsored Gift."

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

**Keener, Kevin M;** food science, from Griffith Laboratories, \$50, "Multi-Sponsored Gift."

**Keener, Kevin M;** food science, from Griffith Laboratories, \$75, "Multi-Sponsored Gift."

**Kildishev, Alexander V;** electrical & computer engineering, from Raytheon, \$20,000, "Developing Model and Simulation Tools for Quantifying Control Over Spatial and Temporal Dispersion in Dielectric Metamaterial Layers." (a Discovery Park award — Birck Nanotechnology Center)

**Kirkpatrick, Jane M;** nursing, from Indiana State Department of Health, \$160,571, "Family Health Clinic of Carroll County: Increasing Access for Rural Populations Supplement."

**Klimeck, Gerhard; Fonseca, James E; Kubis, Tillmann C; Povolotskyi, Mykhailo and Sellier, Jean Michel D;** electrical & computer engineering, from University of Illinois, \$75,000, "Petascale Computing Resource Allocations (PRAC) — Accelerating Nano-Scale Transistor Innovation OCI- 0832623." (a Discovery Park award — Network for Computational Nanotechnology)

**Knapp, Deborah W;** veterinary clinical science, from Poynter, Robert and Donna (Indiv Donors), \$5,000, "Cancer Treatment Program."

**Knipp, Gregory T;** industrial & physical pharmacy, from Catalent Pharma Solutions, \$17,043, "Comparison of Dissolution Times Between Contrast Filled Vegi-Capsules and Gel Capsules via Computed Tomography (CT) Scan in the Porcine Model."

**Ko, Jeff C;** veterinary clinical science, from New Paradigm Concepts LLC, \$19,245, "In Vivo Testing of Hemoguide in the Pig."

**Kobza, Cara L;** field extension educators, from Jay County Drug Prevention Coalition, \$1,200, "Red Ribbon Week and Project LEAD."

**Koltick, David S;** physics, from Rapiscan Laboratories, Inc., \$38,400, "Purdue/Rapiscan Laboratories Neutron Generator Project."

**Kompella, Ramana Rao and Xu, Dongyan;** computer science, from National Science Foundation, \$300,000, "NeTS: Small: Towards Exposing and Mitigating End-to-End TCP Performance and Fairness Issues in Data Center Networks."

**Kong, Nan;** biomedical engineering, from National Science Foundation, \$180,000, "Grant Opportunities for Academic Liaison with Industry (GOALI)/Collaborative Research: Warehouse Integration in Enterprise-Wide Supply Chain Planning Under Uncertainty."

**Kreger, Michael E;** civil engineering, from Purdue University F N Andrews Fellowship, \$21,550, "Laughery, Lucas A."

**Kreger, Michael E;** civil engineering, from David M. Knox Endowment, \$19,394, "Sanders, Laura."

**Kreger, Michael E;** civil engineering, from Purdue University F N Andrews Fellowship, \$18,263, "Bunting, Gregory."

**Kreger, Michael E;** civil engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, "Pollastrini, Andrew Stephen."

**Kreger, Michael E;** civil engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, "Freer, Joshua Richard."

**Krupke, Christian H and Holland, Jeffrey D;** entomology, from National Institute of Food & Agriculture, \$97,321, "Quantifying the Intersections Between Neonicotinoid Insecticide Use for Seed Treatments and Foraging Honey Bees."

**Kuang, Shihuan;** animal sciences, from University of Louisville, \$25,392, "TAK1/TRAF6 Signaling in Skeletal Muscle; Amendment 1."

**Kuang, Shihuan;** animal sciences, from Ross Graduate Fellowship-Assistantship, \$18,797, "Wang, Chao."

**Kuhn, Richard J;** biological sciences, from Purdue University F N Andrews Fellowship, \$17,287, "Morman, Rosemary."

**Labi, Samuel;** civil engineering, from Purdue Doctoral Program, \$11,373, "Lavrenz, Steven Michael."

**Landry, Steven J;** industrial engineering, from Winifred B. Bilsland Endowment, \$19,394, "Ramamohan, Varun."

**Landry, Steven J;** industrial engineering, from National Aeronautics and Space Administration, \$200,871, "Comprehensive Analysis of Uncertainties in the National Airspace System."

**Lang, Rafael F;** physics, from Columbia University, \$70,440, "The XENON1T Dark Matter Project: a Project Proposal from the US Institutions of the XENON Collaboration."

**Leary, James F;** basic medical science, from Korea Institute of Science & Technology, \$30,000, "Korea Institute of Science & Technology (KIST):Purdue Collaboration - Supplemental Fund." (a Discovery Park award — Bindley Bioscience Center)

**Leary, James F;** veterinary medicine — administration, from Dow Agro Sciences, \$185,617, "Development of a Rapid Targeting Cell Based Assay for Maize and Soybean Using Enrichment by Fluorescent Activated Cell Sorting." (a Discovery Park award — Birck Nanotechnology Center)

**Lechtenberg, Victor L;** president, from Indiana Economic Development Corporation, \$15,000, "Small Business Development through the Jobs Act."

**Lee, Chun-Sing G;** electrical & computer engineering, from National Science Foundation, \$20,000, "RI Small: on Robot Motor Capability for Skill Learning."

**Lee, Linda S;** agronomy, from Purdue University Special Initiative Program, \$1,500, "Grady, Caitlin A."

**Lelievre, Sophie A;** basic medical science, from PHS-NIH National Cancer Institute, \$29,097, "NuMa Function in Nonmalignant and Malignant Breast Cells."

**Lelievre, Sophie A and Vidi, Pierre-Alexandre;** basic medical science, from PHS-NIH National Cancer Institute, \$89,900, "Interplay Between Tissue Architecture and Nuclear Organization in the DNA Damage Response."

**Letcher, Mark**; English and philosophy — Calumet campus, from National Writing Project, \$20,000, “Northwest Indiana Writing Project 2012-2013 SEED Professional Development in a High-Need School.”

**Leverenz, Larry J**; health & kinesiology, from Winifred B. Bilsland Endowment, \$16,170, “Dorsch, Travis.”

**Levine, Michael**; statistics, from National Science Foundation, \$31,650, “Collaborative Research: Estimation, Inference, and Computation for Finite Nonparametric Mixtures.”

**Lill, Markus A**; medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute of General Medical Science, \$202,003, “Novel Computational Methods for Modeling Cytochrome P450 Mediated Drug Metabolism.”

**Lister, Matthew L**; physics, from National Aeronautics and Space Administration, \$195,000, “The Very Long Baseline Array (VLBA) 2cm Mojave/Fermi Program.”

**Litster, James D**; chemical engineering, from Procter & Gamble Company, \$50,000, “Litster Research from P&G.”

**Liu, Lu**; industrial engineering, from National Science Foundation, \$208,505, “Collaborative Research: the Next-Generation Electricity Capacity and Transmission Expansion Model with Large-Scale Energy Storage and Renewable Resources.”

**Liu, Wanqing**; medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$94,078, “An Integrated Genomic and Lipidomic Approach to Human Hepatic Fat Accumulation.”

**Liu, Xiaoqi**; Cancer Research Center, from PHS-NIH National Cancer Institute, \$250,860, “Plk1 in Chemo-Resistance of Cancer.”

**Longuski, James M**; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$60,000, “Magnetically Actuated Six Degree of Freedom Spacecraft Control Using Magnetic Torque Coils and Short Electrodynamical Tethers NASA Space Technology Research Fellowships (NSTRF) for Michael Mueterthies.”

**Lopez, Roberto G**; horticulture & landscape architecture, from Michigan State University, \$5,000, “Herbaceous Branching of Calibrachoa, Lantana, Geranium, Echinacea, and Perovskia.”

**Lopez, Roberto G**; horticulture & landscape architecture, from Multi-Sponsored Industrials, \$3,300, “Multi-Sponsored Gift Account.”

**Lyrantzis, Anastasios S**; aeronautical & astronautical engineering, from Ross Graduate Fellowship-Assistantship, \$48, “Black, Alden.”

**Marais, Karen**; aeronautical & astronautical engineering, from Federal Aviation Administration, \$45,828, “End Around Taxiway Environmental Optimization.”

**Mattes, Richard D**; foods & nutrition, from PHS-NIH National Institute of Diabetes and Digestive and Kidney Diseases, \$84,772, “Interdisciplinary Training in Signals Controlling Ingestion and Obesity.”

**Mauer, Lisa J; Bhunia, Arun K; Ladisch, Michael R; Applegate, Bruce M and Iru-dayaraj, Joseph M**; agriculture — administration, food science, agricultural & biological engineering, from Agricultural Research Service, \$1,038,578, “Food Safety OSQR.”

**McComb, Sara A and Kirkpatrick, Jane M**; nursing, from National Science Foundation, \$150,000, “Research Initiation Grant: Examining the Impact of Situated Learning on Undergraduate Student Cognitive Complexity and Motivation to Learn.”

**McCullough, Bobby G**; construction engineering & management, from Indiana Department of Transportation, \$5,000, “Snow and Ice Removal Standards - Optimizing Winter Operations, Project Expansion SPR-3204.”

**McCullough, Bobby G**; construction engineering & management, from Trask Trust Fund, \$36,655, “Trask Initiative 3iD.”

**McGlothlin, James D**; health sciences, from Multi-Sponsored Industrials, \$10,000, “Ergonomics.”

**McKee, Renee K and Orvis, Kathryn S**; youth development & agricultural education, from National 4-H Council, \$1,000, “2012 USA Science & Engineering Festival: Teens Teaching Youth Biotechnology.”

**McKee, Renee K**; youth development & agricultural education, from Indiana State Department of Health, \$355,994, “Afternoons Recreation, Object lessons, Culture and values and Knowledge (ROCK) in Indiana.”

**McNamara, Kevin T; Baributsa, Dieudonne and Foster, Ricky E**; agricultural economics, international programs in agriculture, entomology, from University of California - Davis, \$896,396, “Building a New Partnership: MAIL Extension Services Engage the Afghan Farmer.”

**Merwade, Venkatesh M and Song, Xiaohui C**; civil engineering, academic technologies, from University of North Carolina at Chapel Hill, \$43,380, “An Interactive Software Infrastructure for Sustaining Collaborative Community Innovation in the Hydrologic Sciences (A Subcontract to UNC Chapel Hill).”

**Meyer, Scott E and Anderson, William E**; mechanical engineering, aeronautical & astronautical engineering, from Space Exploration Technologies Corp, \$77,885, “SpaceX Single Element Testing.”

Meyer, Scott E and Anderson, William E; mechanical engineering, aeronautical & astronautical engineering, from Blue Origin, LLC, \$325,000, “Single Element Combustion Testing.”

**Michler, Charles H**; forestry & natural resources, from U.S. Forest Service, \$46,500, “Hardwood Tree Improvement and Regeneration Center.”

**Mickelbart, Michael V**; horticulture & landscape architecture, from Indiana Nursery and Landscape Association, \$5,000, “Indiana Nursery & Landscape Association.”

**Monroe, James S**; field extension educators, from Vincennes University, \$1,218, “Horticulture Class at Vincennes.”

**Morgan, Mark T**; food science, from Taylor Farms California Inc, \$15,000, “Food Science Research.”

**Mroczek, Daniel K**; child development & family studies, from PHS-NIH National Institute on Aging, \$387,837, “Personality and Well-Being Trajectories in Adulthood.”

**Murdock, Larry L and Huesing, Joseph E**; entomology, from Foreign Agricultural Service, \$24,310, “Plant Sciences Borlaug Fellow from Burkina Faso.”

**Murray, Michael D**; pharmacy practice, from Regenstrief Institute Inc, \$27,797, “Regenstrief Center for Healthcare Improvement and Research (RCHIR) Project.”

**Murthy, Jayathi Y; Grama, Ananth Y; Peroulis, Dimitrios; Sameh, Ahmed H and Xiu, Dongbin**; mechanical engineering, computer science, electrical & computer engineering, from Purdue Research Foundation: Special Incentive Research Grant (SIRG), \$57,788, “Office of the Vice President for Research (OVPR) Special Incentive Research Grant (SIRG): Murthy, J. C/S on 103080, Year 5 of 5.” (a Discovery Park award — Birck Nanotechnology Center)

**Nauman, Eric A**; mechanical engineering, from Purdue University Special Initiative Program, \$20,894, “Zakrajsek, Anne.”



**Nie, Huiling and Zheng, Wei;** health sciences, from PHS-CDC National Institute of Occupational Safety & Health, \$232,175, "Development and Validation of a Novel in Vivo Neutron Activation Analysis Technology for Noninvasive Quantification of Maganese in Bone."

**Nies, Loring F;** civil engineering, from Environmental Protection Agency, \$19,763, "Leila Nyberg 10/11 EPA Fellowship; Amendment 3 for Grant 104942."

**Nita-Rotaru, Cristina and Killian, Charles E;** computer science, from National Science Foundation, \$250,000, "TWC: Small: Automatic Detection of Protocol Manipulation Attacks in Large Scale Distributed Systems Implementations."

**Nita-Rotaru, Cristina and Neville, Jennifer L;** computer science, from Johns Hopkins University, \$151,231, "Toward Intrusion Tolerant Clouds; Amendment No. 1."

**Niyogi, Devdutta S;** agronomy, from National Aeronautics and Space Administration, \$30,000, "Institutional Proposal (IP) Schmid 2012 National Aeronautics and Space Administration (NASA) Earth System Science (ESS) Fellowship Investigating the Impacts of Land-Surface Heterogeneity and Urban Aerosols on Thunderstorms Using Numerical Models and Multipla."

**Niyogi, Devdutta S;** agronomy, from National Aeronautics and Space Administration, \$30,000, "Role of Antecedent Soil Moisture Conditions on the Reintensification of Tropical Systems with Aid of Remotely Sensed Data and Model Verification."

**Nnanna, Agbai A;** mechanical engineering - calumet campus, from American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Inc., \$4,994, "Refrigeration and Heat Pump Teaching System."

**Nof, Shimon Y; Lee, Seokcheon and Mathur, Aditya P;** industrial engineering, computer science, from Kimberly-Clark Corp., \$180,000, "Next Level Decisions."

**Nohadani, Omid;** industrial engineering, from Purdue University F N Andrews Fellowship, \$21,550, "Wang, Dawei."

**Nyenhuis, John A;** electrical & computer engineering, from Medtronic, Inc., \$18,000, "Magnetic Resonance Imaging (MRI) Evaluation of Stent SE."

**Oakes, William C;** engineering education, from Motorola Foundation, \$150,000, "Motorola Solutions Foundation."

**Odden, Harold L;** anthropology — Fort Wayne campus, from Indiana Campus Compact, \$2,250, "Burmese Adolescent Well-Being in Fort Wayne, Indiana."

**Ohland, Matthew W;** engineering education, from National Science Foundation, \$320,745, "Characterizing and Modeling the Experience of Transfer Students in Engineering; Amendment 3 for Grant 104873."

**Ohland, Matthew W;** engineering education, from National Science Foundation, \$405,162, "SMARTER Teamwork: System for Management, Assessment, Research, Training, Education, and Remediation for Team; Amendment 5 for Grant 103308."

**Ohland, Matthew W;** engineering education, from National Science Foundation, \$405,764, "Characterizing and Modeling the Experience of Transfer Students in Engineering; Amendment 2 for Grant 104873."

**Ohm, Herbert W;** agronomy, from Agricultural Research Service, \$57,897, "Investigations for Improving Disease Resistance in Wheat."

**Ohm, Herbert W;** agronomy, from United Soybean Board, \$25,000, "2012-13 United Soybean Board Fellowship - Year 3."

**Ohm, Herbert W;** agronomy, from Agricultural Research Service, \$50,191, "New Modes of Wheat Resistance Against Hessian Fly."

**Olek, Jan;** civil engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, "Tokpatayeva, Raikhan."

**Paarlberg, Philip L;** agricultural economics, from Animal Plant Health Inspection Service, \$75,000, "Assessing Current Model Validity for Economic Analysis of Livestock Disease Market Shocks."

**Park, Kinam;** biomedical engineering, from Lynn Interdisciplinary Graduate Fellowship, \$17,209, "Lee, Heui Chang."

**Parker, Chris F;** field extension educators, from Indiana's Family of Farmers Agricultural Research, \$750, "Farmers Day Morgan County."

**Parker, Laurie L and Geahlen, Robert L;** medicinal chemistry & molecular pharmacology, pharmacy — administration, from Purdue University, \$15,000, "Multicolor, Time-Resolved Fluorescence Biosensors for Kinase Activities in Non-Hodgkins Lymphoma."

**Parker, Laurie L;** medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$232,965, "Biosensor Design for Detection and Analysis of Complex Signal Patterns in Cancer."

**Patton, Aaron J;** agronomy, from Midwest Regional Turf Foundation, \$3,825, "Midwest Regional Turf Foundation."

**Pekarek, Steven D and Sudhoff, Scott D;** electrical & computer engineering, from National Aeronautics and Space Administration, \$158,446, "NRI-Small: Actuators for Safe, Strong, and Efficient Humanoid Robots."

**Peroulis, Dimitrios and Chappell, William J;** electrical & computer engineering, from BAE Systems Advanced Technologies, Inc., \$150,000, "Mod. 2 to Grant 105912 Subcontract Miniature Broadband Tunable Filters for EW Receivers."

**Peterson, Nancy J;** English, from Purdue University Special Initiative Program, \$20,894, "Peck, William."

**Peterson, Nancy J;** English, from Purdue University Special Initiative Program, \$20,894, "Pinkert, Laurie."

**Pijanowski, Bryan C;** forestry & natural resources, from University of Illinois, \$8,500, "TippingPointPlanner and AgIndicator Decision Support Development Part 1."

**Pijanowski, Bryan C;** forestry & natural resources, from Environmental Protection Agency, \$17,000, "Sarah L. Dymyahn 10/11 EPA Star Fellowship; Amendment 2 for Grant 104872."

**Pipes, R Byron;** aeronautical & astronautical engineering, from The Boeing Company, \$29,566, "Certification of Short Fiber Molded Composite Structures." (a Discovery Park award — institute for defense initiatives)

**Prabhakar, Sunil K;** computer science, from The National GEM Consortium, \$4,167, "2012-13 GEM Fellowship - Year 2."

**Prabhakar, Sunil K;** computer science, from Amideast - Fulbright, \$21,301, "2012-13 Amideast Fellowship - Year 2."

**Prakash, Arun;** civil engineering, from National Science Foundation, \$39,122, "Collaborative Research: Validated Multiscale Simulation Framework for Large-Strain Thermo-Mechanical Response; Amendment 2 for Grant 104824."

**Prezzi, Monica;** civil engineering, from Lynn Interdisciplinary Graduate Fellowship, \$17,287, "Lim, Jeehee."

**Pushkar, Yulia N;** physics, from U.S. Department of Energy, \$124,114, "Validations of Time-Resolved X-Ray Emission Spectroscopy for Analysis of Mn-Based Natural and Artificial Sunlight-to-Energy Assemblies."



**Qiao, Li**; aeronautical & astronautical engineering, from US Army Research, Development and Engineering Command (RDECOM), \$98,302, “High Speed Infrared Camera to Research Novel Nanofluid Fuels.”

**Raghunathan, Vijay**; electrical & computer engineering, from National Science Foundation, \$88,617, “Faculty Early Career Development (CAREER): a Hardware-Software Approach to Enabling In-Situ Visibility and Control in Wireless Embedded Systems; Amendment 2 for Grant 104353.”

**Ramani, Karthik**; mechanical engineering, from National Science Foundation, \$340,164, “A-DRIVE: Affordable Design by Realistic Interactions for Virtual Explorations.”

**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, \$1,250,000, “Network for Earthquake Engineering Simulation (NEES) Operations: FY 2010-FY2014; Amendment 18 for Grant 104025.” (a Discovery Park award — Cyber Center)

**Ramkrishna, Doraiswami**; chemical engineering, from University of Minnesota, \$90,016, “Modeling Pheromone Induced Drug Resistance Transfer in *Enterococcus Faecalis*.”

**Rao, Sanjay G**; electrical & computer engineering, from National Science Foundation, \$80,000, “Faculty Early Career Development (CAREER): Towards Automated and Assurable Enterprise Network Migration; Amendment 4 for Grant 104340.”

**Rao, Sanjay G and Tawarmalani, Mohit**; electrical & computer engineering, management, from National Science Foundation, \$95,689, “Computer Systems Research (CSR): Medium: Collaborative Research: Architecting Performance Sensitive Applications for the Cloud.”

**Raskin, Rose E**; comparative pathobiology, from Phoenix Central Laboratory, \$1,083, “Immunochemical Expression of CD3 in Veterinary Hemolymphatic Cytologic Specimens.”

**Ratliff, Timothy L and Amass, Sandra F**; comparative pathobiology, school of veterinary medicine - administration, from PHS-NIH National Center for Research Resource, \$252,939, “Fat Dogs and Coughing Horses: Animal Contributions Towards a Healthier Citizenry.” (a Discovery Park award — Discovery Learning Center)

**Rayburn, Rachel L**; public environmental affairs — Fort Wayne campus, from Indiana Campus Compact, \$5,000, “Experiences of Women Living in Transitional Housing.”

**Ren, Tong**; chemistry, from National Taiwan University, \$67,500, “Surface Modification and Nanojunction Fabrication with Molecular Metal Wires; Amendment 1.”

**Reuer, Jeffrey J**; management, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, “External Investments in Technology Start-Ups.”

**Rhoads, Jeffrey F and Mohammadi, Saeed**; mechanical engineering, electrical & computer engineering, from National Science Foundation, \$360,053, “Investigating the System-Level Dynamics of Fully-Integrated CMOS-SOI Nanoresonators.” (a Discovery Park award — Birck Nanotechnology Center)

**Ribeiro, Fabio H and Delgass, W N**; chemical engineering, from University of Notre Dame, \$150,000, “Passive NO<sub>x</sub> Removal Catalyst Research; Amendment 2.”

**Ribeiro, Fabio H**; chemical engineering, from Cummins Inc, \$127,000, “Understanding the Role of Platinum on Lean NO<sub>x</sub> Traps and Modelling of Ammonia Selective Catalytic Reduction (SCR) Catalysts.”

**Richardson, James E**; earth & atmospheric sciences, from National Aeronautics and Space Administration, \$50,000, “Investigating the Production and Distribution of Secondary Craters as a Function of Primary Crater Production on Planetary Surfaces; Supplement 1 for Grant 105527.”

**Ridgway, Kenneth D**; earth & atmospheric sciences, from National Science Foundation, \$81,755, “Collaborative Project:Track 2, METALS: Minority Education through Traveling and Learning in the Sciences; Amendment 3 for Grant 104516.”

**Rogers, Marcus K**; computer & information technology, from Multi-Sponsored Industrials, \$9,000, “Forensic Seminars.”

**Rokhinson, Leonid P**; physics, from U.S. Department of Energy, \$275,000, “Engineering Topological States of Matter and Search for Majorana Fermions.”

**Rose, Peggy**; nursing — North Central campus, from Indiana Campus Compact, \$2,250, “Community Partnership as a Key to Adolescent Health.”

**Ruan, Weihua**; mathematics, computer science & statistics — Calumet campus, from Simons Foundation, \$35,000, “Degenerate Parabolic and Hyperbolic Partial Differential Equations.”

**Rundell, Ann E**; biomedical engineering, from Chappelle, \$12,909, “Hamilton, Mark.”

**Sadof, Clifford S**; entomology, from Michigan State University, \$12,500, “Interregional Research Project #4 Minor Crop Pest Management Program.”

**Sanger, Phillip A**; electrical & computer engineering technology, from Western Carolina University, \$35,025, “Exciting Senior Capstone Projects Solving US Air Force Challenges.”

**Sangid, Michael D**; aeronautical & astronautical engineering, from Rolls-Royce Corporation, \$50,000, “RR Proposal for Fatigue Modeling of RR1000.”

**Schneider, Steven P**; aeronautical & astronautical engineering, from American Society for Engineering Education, \$11,000, “2012-13 National Aeronautics and Space Administration (NASA) Aeronautics Scholarship Fellows — Year 2.”

**Schoenlein, William E and Van Alstine, William G**; biomedical engineering, comparative pathobiology, from Medical Engineering & Development Institute Inc., \$140,465, “Enteric Device Testing: Study: CBI-MYO, CBI-MYO6, and CBI-MYOR Addendum to Grant 202362.”

**Schoenlein, William E and Van Alstine, William G**; biomedical engineering, comparative pathobiology, from Medical Engineering & Development Institute Inc., \$51,017, “Enteric Device Testing Study: CBI-GHGP Addendum to Grant 202362.”

**Sheehan, Amy H**; pharmacy practice, from PHS-Food and Drug Administration, \$45,000, “Joint FDA/Industry/Academia Regulatory Pharmaceutical Fellowship-FDA Portion.”

**Shepson, Paul B**; chemistry, from University of Southern California, \$97,087, “Airborne Microwave Observatory of Subcanopy and Subsurface (AirMOSS).”

**Shepson, Paul B**; chemistry, from National Science Foundation, \$232,259, “Collaborative Research: The O-Buoy Network of Chemical Sensors in the Arctic Ocean; Amendment 2.”

**Shin, Yung C and Cheng, Gary J**; mechanical engineering, industrial engineering, from National Science Foundation, \$479,367, “Synthesis of Gradient Biomaterials for Implants by Laser Direct Deposition and Sintering.”

**Shively, Gerald E**; agricultural economics, from Tufts University, \$78,130, “Nutrition Collaborative Research Support Programs (CRSP), Focus on Africa.”

**Shively, Gerald E**; agricultural economics, from Tufts University, \$78,130, “Nutrition Collaborative Research Support Programs (CRSP), Focus on Asia.”

**Si, Luo**; computer science, from International Business Machines Corp, \$30,000, “Dan Zhang - IBM Ph.D. Fellowship.”

**Siegmund, Thomas H**; mechanical engineering, from Army Medical Res & Development Command, \$50,000, “Mechanics of Multiscale Energy Dissipation in Topologically Interlocked Materials-STIR.”

**Siegmund, Thomas H; Bolton, J S; Cipra, Raymond J; Ramani, Karthik and Zavattieri, Pablo D**; mechanical engineering, civil engineering, from Air Force Office of Scientific Research, \$236,562, “A Multiphase Material 3-D-Printing System.”

**Simpson, Vicki L and McComb, Sara A**; nursing, from National League for Nursing (NLN), \$15,000, “The Next Generation Nursing Clinical Scholars-Enhancing Clinical Education with Systems Engineering.”

**Smith, Jenna M**; field extension educators, from Indiana’s Family of Farmers Agricultural Research, \$202, “How Does It Grow.”

**Smith, Mjt**; graduate school administration, from Purdue University Special Initiative Program, \$7,906, “Kulesza, Christopher F.”

**Smith, Mjt**; graduate school administration, from Interdisciplinary Assistantships, \$24,855, “Meijome, Natalia.”

**Smith, Mjt**; graduate school administration, from Interdisciplinary Assistantships, \$24,855, “Ozanich, Holly.”

**Smith, Mjt**; graduate school administration, from Purdue University Special Initiative Program, \$10,767, “Ge, Zhenhao.”

**Smith, Mjt**; graduate school administration, from Purdue University Special Initiative Program, \$25,888, “Lucietto, Anne M.”

**Smith, Mjt**; graduate school administration, from Interdisciplinary Assistantships, \$24,855, “McBride, Zachary.”

**Smith, Mjt**; graduate school administration, from Purdue University Special Initiative Program, \$8,095, “Harris, Constance A.”

**Smith, Mjt and Breedlove, Evan L**; graduate school administration, biomedical engineering, from National Science Foundation, \$668,250, “NSF Graduate Research Fellowship Program (GRFP)”

**Smith, Mjt**; graduate school administration, from Interdisciplinary Assistantships, \$24,855, “McCoy, Rachel.”

**Smith, Richard S**; food science, from Alcoa Inc, \$3,000, “Food Science Research.”

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

**Smith, Richard S**; food science, from Hinsdale Farms Ltd, \$5,000, “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, \$1,012, “Sensory Evaluation Research.”

**Smith, Richard S**; food science, from Hinsdale Farms Ltd, \$500, “Sensory Evaluation Research.”

**Smith, Richard S**; food science, from Hinsdale Farms Ltd, \$2,275, “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, \$4,000, “Sensory Evaluation Research.”

**Smith, Richard S**; food science, from Hinsdale Farms Ltd, \$9,000, “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, \$3,000, “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, \$3,000, “Sensory Evaluation Research.”

**Snow, Lowell D**; technical assistance program, from Indiana Economic Development Corporation, \$335,644, “Manufacturing Extension Partnership FY 2012-13.”

**Sojka, Paul E and Meyer, Scott E**; mechanical engineering, from Rolls-Royce Corp — Libertyworks, \$299,670, “Atomization Rigs and Tests for Air Force Research Laboratory (AFRL) Rules and Tools Project.”

**Spoljoric, Diane E**; nursing — North Central campus, from Indiana Campus Compact, \$2,250, “Nutrition Education to Low Income Pre-School Children Attending Head Start.”

**Springer, John A and Brewer, Jeffrey L**; computer & information technology, from Indiana University Purdue University at Indianapolis, \$195,652, “Virtual Tissue Bank Project — Additional Funding.”

**Stanciu, Lia A**; materials engineering, from PHS-NIH National Institute Neurological Disorders and Stroke, \$161,064, “Metal-Induced Structural Transformations During Alpha-Synuclein Aggregation.”

**Stantz, Keith M**; health sciences, from PHS-NIH National Institute of Biomedical Imaging and Bioengineering, \$173,250, “In Vivo Imaging and Therapeutic Targeting of Hypoxic-Niche Associated with CSCs.”

**Stevenson, Steven A**; chemistry — Fort Wayne campus, from National Science Foundation, \$279,775, “RUI: Investigations of Newly Discovered OxoMetallic Clusters Inside Fullerene Cages.”

**Strachan, Alejandro H**; materials engineering, from University of Illinois at Champaign-Urbana, \$81,367, “Shock Wave Energy Dissipation (SWED) by Mechanochemically-Active Nanoporous Materials.” (a Discovery Park award — Birck Nanotechnology Center)

**Streveler, Ruth A**; engineering education, from National Science Foundation, \$97,890, “Collaborative Research: Integrating Models of Cognition and Measurement with Conceptual Knowledge; Amendment 3 for Grant 103995.”

**Strobel, Johannes**; engineering education, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, “Integrative Graduate Education and Research Traineeship (IGERT): the Solar Economy Integrative Graduate Education and Research Traineeship (SEIGERT).”

**Subbarayan-Shastri, Ganesh and Handwerker, Carol A**; mechanical engineering, materials engineering, from Washington State University, \$50,000, “Reliability of Copper Pillar/Via Microbumps.”

**Sudhoff, Scott D and Pekarek, Steven D**; electrical & computer engineering, from Office of Naval Research, \$90,000, “ESRDC Power Supply Characterization Effort: Purdue Tasks.”

**Sun, Chin-Teh**; aeronautical & astronautical engineering, from Egyptian Ministry of Defense, \$30,268, “2012-13 Defense Office, Embassy of Arab Republic Fellowship — Year 3.”



**Sun, Hao**; English & linguistics — Fort Wayne campus, from Indiana Campus Compact, \$2,250, “Strengthening the Community through ESL Service Learning.”

**Sypher, Howard E**; communication, from Purdue University Special Initiative Program, \$1,500, “Long, Ziyu.”

**Sypher, Howard E**; communication, from Purdue University Special Initiative Program, \$1,500, “Shorter, Shavonne R.”

**Talavage, Thomas M**; **Leverenz, Larry J** and **Nauman, Eric A**; electrical & computer engineering, health & kinesiology, mechanical engineering, from Massachusetts Institute of Technology Lincoln Lab, \$35,000, “Multi-Model Early Detection Interactive Classifier (MEDIC) System for Mild Traumatic Brain Injury (TBI) Assessment.”

**Tao, Bernard Y** and **Wilker, Jonathan J**; agricultural & biological engineering, chemistry, from Indiana Corn Marketing Council, \$51,851, “Bio-Based Super Adhesives Based on Starch.”

**Tawarmalani, Mohit**; management, from National Science Foundation, \$226,172, “Collaborative Research: Novel Tighter Relaxations for Complementarity Constraints with Applications to Nonlinear and Bilevel Programming.”

**Thomas, Joseph**; pharmacy practice, from Pfizer Inc, \$100,592, “Health Care Resource Use and Expenditures.”

**Tomar, Vikas**; aeronautical & astronautical engineering, from U.S. Department of Energy, \$160,000, “An Investigation into the Effects of Interface Stress and Interfacial Arrangement on Temperature Dependent Thermal Properties of a Biological and a Biomimetic Material.”

**Tuinstra, Mitchell R**; agronomy, from Purdue University F N Andrews Fellowship, \$17,287, “Lindsey, Raymond S.”

**Tzempelikos, Athanasios**; civil engineering, from Purdue Research Foundation: Office of the Vice President for Research (OVPR), \$17,287, “Analysis of Semi-Transparent Building-Integrated Photovoltaic Materials to Enable Net-Zero Energy Buildings.”

**Vacca, Andrea**; agricultural & biological engineering, from Triumph Aerospace Systems, \$77,000, “Evaluation and Improvement of Proprietary Gear Pump.”

**Vacca, Andrea**; agricultural & biological engineering, from Casappa Spa, \$95,000, “Advances in Modeling External Spur Gear Machines and Development of Innovative Solutions.”

**Van Gelder, Boudewijn H**; civil engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, “Miller, Megan MG.”

**Varma, Arvind**; chemical engineering, from Carnegie-Mellon University, \$41,126, “Agreement for Student Support – Koswara, A.”

**Vitek, Jan**; computer science, from National Science Foundation, \$246,635, “Computer Systems Research (CSR): CC: Small: Collaborative Research: Language and Runtime Support for Large-Scale Data Analytics.”

**Volenc, Jeffrey J**; agronomy, from Purdue Doctoral Program, \$17,209, “Smith, Ronald.”

**Vyn, Tony J** and **Omonode, Rex A**; agronomy, from National Corn Growers Association, \$36,362, “Integrating Modern Technologies to Improve Nitrogen Use Efficiency and Reduce Nitrous Oxide Emissions in Corn Production: Year 2.”

**Wachs, Juan P**; industrial engineering, from Purdue Doctoral Program, \$19,695, “Sullivan, Siobhan.”

**Walker, William S**; **Eichinger, David C** and **Smith, Steven C**; science — administration, biological sciences, earth & atmospheric sciences, from Metropolitan School District of Decatur Township, \$22,003, “Science through Inquiry: the Next Steps; Amendment 1 Revised.”

**Wassgren, Carl R** and **Muliadi, Ariel R**; mechanical engineering, chemical engineering, from National Science Foundation, \$299,596, “Mechanical Dispersion of Viscous Liquids in Sheared Particulate Systems.”

**Weatherman, Kara D**; pharmacy practice, from Indiana University School of Medicine, \$2,000, “Teaching Nuclear Medicine Technology Course at IU.”

**Weaver, Connie M**; foods & nutrition, from Purdue University F N Andrews Fellowship, \$17,287, “Barnard, Alle.”

**Weaver, Connie M**; foods & nutrition, from Lynn Interdisciplinary Graduate Fellowship, \$17,287, “Herdzina-Huss, Lyndsey.”

**Weaver, Connie M**; foods & nutrition, from Purdue Doctoral Program, \$8,672, “Wright, Breanne N.”

**Weaver, Connie M**; foods & nutrition, from Purdue Doctoral Program, \$17,322, “Wright, Breanne N.”

**Weaver, Connie M**; foods & nutrition, from Chappelle, \$19,394, “Baker, Selena.”

**Weaver, Connie M**; foods & nutrition, from Ross Graduate Fellowship-Assistantship, \$17,287, “Kim, Juhae.”

**Weaver, Connie M**; foods & nutrition, from Kraft Foods Global, Inc, \$200,000, “Kraft Foods Calcium Intake & Vascular.”

**Weaver, Connie M**; foods & nutrition, from Lynn Interdisciplinary Graduate Fellowship, \$17,287, “Redan, Benjamin.”

**Weaver, Connie M**; foods & nutrition, from Lynn Interdisciplinary Graduate Fellowship, \$17,287, “Dhillon, Jaapna.”

**Wereley, Steven T**; mechanical engineering, from Hummingbird Precision Machine, \$2,271, “Design and Fabrication of Microfluidic Chips for In-Situ (Scanning) Transmission Electron Microscopy (S)TEM Observations in Liquids.” (a Discovery Park award — Birck Nanotechnology Center)

**Widhalm, Joshua R**; horticulture & landscape architecture, from Life Sciences Research Foundation, \$168,000, “Fellowship: Widhalm Salicylic Acid Biosynthesis in Plants: Enzyme Discovery and Exploring Pathway Dynamics.”

**Wild, Robert E**; chemistry, from Vietnam Education Foundation, \$28,000, “Anh Tue Nguyen - 2011 Vietnam Education Foundation (VEF) Fellowship.”

**Williams, Sharon R**; anthropology, from Harvard University, \$6,206, “Longitudinal Aging Biomarker Study in India (LASI-Biomarker).”

**Wise, Kiersten A**; botany & plant pathology, from Ross Graduate Fellowship-Assistantship, \$17,394, “Noveroske, Anna.”

**Wise, Kiersten A**; botany & plant pathology, from DuPont, E.I. Denemours and Company, \$59,000, “Voluntary Support Account.”

**Wolfe, Britton D**; **Kim, Beomjin** and **Sedlmeyer, Robert L**; computer science — Fort Wayne campus, from Ball State University, \$29,980, “Evaluating Visualization Techniques for Command and Control Applications Using Stereoscopic Vision in a 3-D Virtual Environment.”

**Xia, Yu**; chemistry, from National Science Foundation, \$130,000, “Development of Gas-Phase Biomolecule Ion / Radical Reactions on a Linear Ion Trap Mass Spectrometer.”

**Xu, Dongyan**; computer science, from TT Government Solutions Inc., \$49,452, “Modification No. 4 to Grant 105356 Subcontract #20015133.”

**Yang, Won Sik**; nuclear engineering, from Ross Graduate Fellowship-Assistantship, \$18,263, “Min, Kyungjean.”

**Yau, David K**; computer science, from National Science Foundation, \$89,985, “TC: Medium: Collaborative Research: Towards Formal, Risk Aware Authorization; Amendment 3 for Grant 104647.”

**Ye, Peide**; electrical & computer engineering, from BAE Systems Advanced Technologies, Inc., \$9,000, “Purdue BAE System Joint Project: Atomic Layer Deposition (ALD) High-k on GaN.” (a Discovery Park award — Birck Nanotechnology Center)

**Yeo, Yoon**; industrial & physical pharmacy, from Embassy of the Arab Republic of Egypt, \$30,400, “2012-13 Fellowship – Year 2.”

**Zavattieri, Pablo D** and **Moon, Robert J**; civil engineering, materials engineering, from U.S. Forest Service, \$12,278, “Development and Validation of a Mesoscale Model for Cellulose Nanocrystals.”

**Zentner, Michael G** and **McLennan, Michael J**; academic technologies, from National Science Foundation, \$49,948, “The Science Gateway Institute (SGW-I) for the Democratization and Acceleration of Science.”

**Zhang, Lingsong**; statistics, from Veterans Bio-Medical Res Institute Inc, \$8,842, “Integrative Physiology of Gulf War Illness: Role of Autonomic Function, Central Neural Processing, and Sleep.”

**Zhang, Xiangyu**; computer science, from National Science Foundation, \$44,845, “Software and Hardware Foundations (SHF):Computer Systems Research (CSR):Small: Collaborative Research: Automated Model Synthesis of Library and System Functions for Program-Environment Co-Analysis.”

**Zhao, Lan**; academic technologies, from University of Utah, \$63,183, “Collaborative Research: Integrated Training for Continental Ecology (ITCE): Bridging Scales and Systems with Isotopes.”

**Zhou, Chenn Q**; Center for Innovation through Visualization & Simulation, from Northwest Indiana Regional Development Authority, \$12,294, “Northwest Indiana RDA Projects.”

**Zhou, Chenn Q**; Center for Innovation through Visualization & Simulation, from BP America Inc., \$24,150, “Further Development of FCC Rise and Regenerator Models.”

**Zhou, Chenn Q**; Center for Innovation through Visualization & Simulation, from BP Whiting Refinery, \$4,681, “A Computational Fluid Dynamics (CFD) Study of the Effects of Orifice Plate Reversal.”

**Zhou, Chenn Q**; Center for Innovation through Visualization & Simulation, from U.S. Steel Corporation, \$19,011, “Numerical Optimization of a QBOP Vessel for Minimizing Kidney Formation.”

**Zhou, Chenn Q**; Center for Innovation through Visualization & Simulation, from Daily Thermetrics, \$31,655, “Daily Thermetrics EZ-Pad Heater Tube Skin Thermocouple Computational Fluid Dynamics (CFD) Model.”

**Zhu, Yu Michael**; statistics, from National Science Foundation, \$103,326, “Collaborative Research: Spatial Model-Based Methods for RNA-Seq Analysis; Amendment 2 for Grant 104935.”

**Zwier, Timothy S**; chemistry, from National Science Foundation, \$220,000, “Single-Conformation Spectroscopy of Isolated Peptides and Synthetic Foldamers.” ■

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