DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

December 2012

Aguilar, Ruben C; biological sciences, from Indiana University School of Medicine, $10,000, "Lowe Syndrome and Rhogtpase Signaling Abnormalities: Therapeutic Opportunities."

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

Anderson, William E; aeronautical & astronautical engineering, from Indiana Space, LLC, $58,498, "Testing of Feed System Effects on Oxygen / Hydrocarbon Liquid Rocket Element Combustion Stability."

Ashur, Suleiman A and **Alhassan, Mohammad A**; engineering — Fort Wayne campus, from Indiana Department of Transportation, $45,086, "SPR-3723 Selection of Pedestrian Crossing Treatments (Mid Block and Roundabouts, ADA)."

Bahr, David F; materials engineering, from Krell Institute, $37,025, "Krell Fellowship for Samantha Lawrence."

Basaran, Osman A; chemical engineering, from Chevron Research Company, $254,500, "Two-Fluid Drop Coalescence."

Beaudoin, Stephen P; chemical engineering, from Rutgers State University, $28,000, "Engineering Research Center on Structural Organic Composits--Fellowship for Nyah Zarate."

Beckerman, Janna L; botany & plant pathology, from Iowa State University, $24,649, "Implementing New Integrated Pest Management (IPM) Strategies for the Summer Disease Complex of Apples."

Beckerman, Janna L; botany & plant pathology, from Iowa State University, $35,149, "Implementing New Integrated Pest Management (IPM) Strategies for the Summer Disease Complex of Apples."

Bergmann, Michael A and **Brower, Jeffrey E**; philosophy, from Purdue University, $18,234, "Philosophy of Religion Conferences."

Bertino, Elisa; **Bingham, Clifton W**; **Li, Ninghui** and **Spafford, Eugene H**; computer science, from University of Maryland, $95,270, "A Framework for Managing the Assured Information Sharing Lifecycle; Amendment 7."

Bobet, Antonio; civil engineering, from Indiana Department of Transportation, $177,896, "Correlation Between Resilience Modulus (MR) of Soil, Light Weight Deflectometer, and Falling Weight Deflectometer (FWD)."

Bouman, Charles A and **Comer, Mary L**; electrical & computer engineering, from Innovative Science Solutions, LLC, $20,000, "Spectroscopic Absorption Sensine of High Velocity Flow Fields."

Boustany, Karim C; biomedical engineering, from Indiana University, $30,000, "Providing Industrial Engineering Expertise to the Innovation and Implementation Science Initiative (IISI)."

Brightman, Andrew O; biomedical engineering, from Indiana University Purdue University at Indianapolis, $25,077, "2012-13 Joint MDPhD Program for Graduate Support — Silvia Canelon."

Bugusu, Betty A; **Okos, Martin R** and **Hamaker, Bruce R**; food science, agricultural & biological engineering, from American Soybean Association, $20,997, "Incorporating Soy into Staple Food Products Using a Small-Scale Extruder Technology Applicable to Africa."

Caffee, Marc W; physics, from U.S. Geological Survey, $3,990, "Lab Analysis Utilizing Accelerator Mass Spectrometry (AMS)."

Cain, Steven A; agricultural communication, from National Institute of Food & Agriculture, $305,000, "Extension Disaster Education Network (EDEN) Security Initiative VI: Strengthening EDENs Role in Homeland Security, Food and Ag Defense, and All-Hazard Education."

Campbell, Noll L; pharmacy practice, from Indiana University School of Medicine, $18,352, "Optimistic."

Cardella, Monica E; engineering education, from Science Museum of Minnesota, $77,650, "(Rest of Year 1 Funding) — GSE/RES- Gender Research on Adult-Child Discussions within Informal Engineering Environments (Gradient) [Grant 105883]."

Chen, Weinong W; aeronautical & astronautical engineering, from Office of Naval Research, $60,000, "Ballistic Energy Dissipation through the Failure of Dyneema; Modification 2 for Grant 105401."

Chen, Weinong W; aeronautical & astronautical engineering, from Rogers Group Inc., $28,859, "Dynamic Compressive Behavior of Pre-Compressed Soft Polymers Materials."

Chen, Weinong W; aeronautical & astronautical engineering, from US Army Research, Development and Engineering Command (RDECOM), $67,600, "Dynamic Mechanical Properties of High-Performance Fibers; Amendment 4 for Grant 104930."

Cheng, Ji-Xin; biomedical engineering, from Coulter Foundation, $170,000, "A Micelle Approach to Early Nerve Repair after Spinal Cord Injury — Phase 2."

Choi, Jong Hyun and **Mao, Chengde**; mechanical engineering, chemistry, from Office of Naval Research, $111,669, "Photo-Regulated DNA Nanomotors that Walk Along a Single-Walled Carbon Nanotube; Modification 5 for Grant 105330." (a Discovery Park award — Bindley Bioscience Center)

Ciftci, Ayse; educational studies, from Kinley Trust, $3,860, "Non-Laboratory Research Equipment Application."

Clark, Ann M and **Bracke, Paul J**; political science, library administration, from Purdue University, $57,834, "Human Rights Texts for Digital Research: Archiving & Analyzing Amnesty Internationals Historic Urgent Action Bulletins at Purdue University."

Clark, Ann M; political science, from Purdue University, $15,122, "Human Rights Texts for Digital Research: Archiving & Analyzing Amnesty Internationals Historic Urgent Action Bulletins at Purdue University."

Cleveland, William S; statistics, from Stanford University, $34,618, "D&R for Large Complex Data."

Cox, Monica F; engineering education, from Purdue University Special Initiative Program, $9,830, "Sambamurthy, Nikitha."

Crossley, William A; **Bane, Sally P**; **Blaisdell, Gregory A** and **DeLaurentis, Daniel A**; aeronautical & astronautical engineering, from Boeing Commercial Airplanes Group, $595,610, "The Merging of Aerodynamic Data Experimental and Simulation."

De Hoop, Maarten V; mathematics, from Multi-Sponsored Industrials, $80,000, "Geo-Mathematical Imaging Group (GMIG) Consortium."

DeLaurentis, Daniel A and **Crossley, William A**; aeronautical & astronautical engineering, from University of Maryland, $66,712, "Air Connectivity Index."

Dong, Suchuan; mathematics, from Office of Naval Research, $49,863, "Wall-Bounded Turbulence in the Presence of Liquid-Gas Interface: A Phase Field-Based Method and Computation Algorithms; Modification 5 for Grant 105030."

Donkin, Shawn S and **Schoonmaker, Jon**; animal sciences, from Zinpro Corporation, $250,000, "Determine Effect of Chromium Methionine Source on Enhancement in Insulin Sensitivity in Growing Heifers."

Eicher-Miller, Heather A; foods & nutrition, from Indiana State Department of Health, $88,000, "Indianas Emergency Food Resource Network."

Elliott, Stephen J; technology — administration, from U.S. Department of Homeland Security, $165,000, "Advances in the Human Biometric Sensor Interaction Model — Mobile Biometrics and Operator Training."

Engel, Bernard A and **Theller, Lawrence O**; agricultural & biological engineering, from Environmental Protection Agency, $50,000, "Pollinator Mapping Mobile Application: an Approach to Protect Pollinators from Pesticide Drift."

Ericson, Karen L; chemistry — Fort Wayne campus, from Wyle Laboratories, $18,379, "Pyridoxic Acid Analysis PO T71686 Change Orders 8."

Fekete, Donna M; biological sciences, from National Institutes of Health, $46,967, "Gene Transfer Tools for Delivery and Investigation of Inner Ear Micrornas."

Fisher, Timothy and **Xu, Xianfan**; mechanical engineering, from Office of Naval Research, $50,000, "Cross-Interface Coupling of Electrons and Phonons; Modification 1 for Grant 106065." (a Discovery Park award — Birck Nanotechnology Center)

Frosch, Robert J and **Kreger, Michael E**; civil engineering, from Indiana Department of Transportation, $300,000, "Guardrails for Use on Historic Bridges."

Garimella, Suresh V; mechanical engineering, from Office of Naval Research, $100,000, "Microscale Void Fraction Measurement and Two-Phase Flow Regime Transition Models — Modification 5 for Grant 104774."

Garimella, Suresh V; mechanical engineering, from Multi-Sponsored Industrials, $30,000, " Cooling Technologies Research Center (CTRC) 2012-2013 Membership — Memo Match for 106029."

Garrison, James L; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, $20,000, "Remote Sensing of Ice and Snow with Ku/Ka Band Satellite Communication Signals."

Gerber, Corey K; agronomy, from Dow Agro Sciences, $9,900, "Diagnostic Training and Research Center — Dow Agro Sciences LLC."

Gerber, Corey K; agronomy, from Dow Agro Sciences, $9,900, "Diagnostic Training and Research Center — Dow Agro Sciences LLC 2."

Han, Qingyou; **French, Richard M**; **Hagovsky, Thomas C** and **Sanger, Phillip A**; mechanical engineering technology, aviation technology, electrical & computer engineering technology, from Northern Indiana Public Service Co, $9,900, "Defect Analysis and Mechanical Property of Used Steel Natural Gas Pipeline."

Hastak, Makarand; construction engineering & management, from Construction Industry Institute, $128,665, "Mitigating Threats of Counterfeit Materials in the Capital Projects (RT 307)."

Heeg, Marlene O; pharmacy — administration, from Pfizer Inc, $178,100, "Request for Proposal (RFP) Smoking Cessation Smoke Free Giant Eagle - Driving Smoking Cessation Among Customers of a Regional Supermarket Chain."

Heeg, Marlene O; pharmacy — administration, from Novartis Pharmaceuticals Corporation, $122,630, "Improving Outcomes in Patients with Cushing's Disease: An Expert Review of Updates and Implication to Clinical Practice."

Heinz, Michael G; Speech, Language & Hearing Science, from National Institutes of Health, $52,190, "Postdoc Fellowship for Kenneth Henry — Effects of Noise-Induced and Metabolic Hearing Losses on Temporal Coding in Noise."

Hertel, Thomas W; agricultural economics, from Multi-Sponsored Industrials, $39,300, "Global Trade Analysis Project (GTAP) Consortium."

Hertel, Thomas W; agricultural economics, from Multi-Sponsored Industrials, $58,788, "Global Trade Analysis Project (GTAP) Consortium."

Hertel, Thomas W; agricultural economics, from Multi-Sponsored Industrials, $19,650, "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 and **Ishii, Mamoru**; nuclear engineering, from Institute of Nuclear Safety Systems,Inc, $80,000, "Evaluation of Prediction Capability of Computer Code for Two-Phase Flow Phenomena — Phase 2."

Hogenesch, Harm and **Johnston, Cliff T**; veterinary medicine — administration, agronomy, from Vaxform, LLC, $44,061, "Development of a Recombinant Vaccine Against Streptococcus Pyogenes Infection and Disease."

Hooser, Stephen B; animal disease diagnostic laboratory, from Indiana Department of Natural Resources, $1,500, "Indiana Department of Natural Resources/Wildlife Disease Diagnostic."

Huber, Jessica E; Speech, Language & Hearing Science, from National Institutes of Health, $42,232, "2011 NIH Ruth Kirstein Predoctoral Fellowship for Megan Darling - Enhancing Speech Naturalness Using Respiratory Treatment in Parkinson's Disease."

Hwang, Inseok; aeronautical & astronautical engineering, from University of Maryland, $54,000, "Deep Dive - Cost-Benefit of Throughput Factors in Aviation."

Ivantysynova, Monika; agricultural & biological engineering, from Evonik Oil Additives, $72,218, "Effect of Various Oils on the Efficiency of a Series Hydraulic Hybrid Transmission."

Jiao, Dan; electrical & computer engineering, from Office of Naval Research, $48,294, "Rigorous and Fast Physics-Based Co-Simulation of Device-Structure-Material Interactins in Complex, Nonlinear, and Time-Variant Mixed Signal Circuits; Modification 12 for Grant 104405."

Johnston, Cliff T; agronomy, from Clay Minerals Society, the, $10,000, "Memorandum of Understanding Between Department of Agronomy Purdue University and Clay Mineral Society."

Johnston, Cliff T; agronomy, from Clay Minerals Society, the, $10,000, "Memorandum of Understanding Between Department of Agronomy Purdue University and Clay Mineral Society."

Johnston, Cliff T; agronomy, from Clay Minerals Society, the, $5,363, "Memorandum of Understanding Between Department of Agronomy Purdue University and Clay Mineral Society."

Kihara, Daisuke; biological sciences, from Lilly Research Laboratories, $244,969, "Designing New Ligands for New Targets through Novel Computational Methods for Binding Site Characterization."

Kildishev, Alexander V; electrical & computer engineering, from Raytheon, $9,200, "Nanolens Fabrication." (a Discovery Park award — Birck Nanotechnology Center)

Klimeck, Gerhard; **Madhavan, Krishna**; **McLennan, Michael J**; **Zentner, Lynn K** and **Zentner, Michael G**; engineering administration engineering experiment, engineering education, academic technologies, electrical & computer engineering, from National Science Foundation, $2,900,000, "Network for Computational Nanotechnology — Cyber Platform." (a Discovery Park award — Network for Computational Nanotechnology)

Kluender, Keith R; Speech, Language & Hearing Science, from Indiana Lions Speech and Hearing Inc., $2,000, "Clinical Support for Speech-Language-Audiology Services from the Indiana Lions Club."

Kranz, Sibylle; foods & nutrition, from Kellogg Foundation, $3,500, "Nutrition Research on the Association Between Fiber and Whole Grain Intakes and Risk for Chronic Diseases."

Kuhn, Richard J; biological sciences, from Sanofi Pasteur Biologics Co, $75,017, "RepliVax Particle (VLP) Structure Analysis."

Ladisch, Michael R and **Ximenes, Eduardo A**; agricultural & biological engineering, Laboratory of Renewable Resource Engineering, from General Mills, Inc., $39,274, "Test Agreement on Food Characterization."

Lechtenberg, Victor L; Office of Engagement, from U.S. Department of Health and Human Services, $421,543, "Purdue University Establishment of the Indiana Health Information Technology Extension Center; Amendment for Grant 104472."

Li, Jianming; center for paralysis research, from Medtric LLC, $15,770, "Medtric Match to Nciia to Proposal 12119279."

Li, Zhiyuan; computer science, from Intel Corporation, $30,000, "Intel — Dynamic Dependence."

Lin, Hui-Mei; food science, from Multi-Sponsored Industrials, $2,000, "Multi-Sponsored Gift."

Loew, Tamara F; student health center, from Indiana Collegiate Action Network, $1,900, "The Campus Improvement Team: Sustaining a Coalition by Implementing Environmental Strategies."

Lowenberg-Deboer, James M and **Murdock, Larry L**; International Programs in Agriculture, entomology, from Gates Foundation, $277,832, "Encouraging Regional Trade with Hermetic Storage for Cowpea in West and Central Africa."

Luo, Zhao-Qing; biological sciences, from Purdue Research Foundation — XR Grants, $17,287, "Biochemical Characterization of Legionella Proteins Involved in Modulating Host Cell Death."

Lyn, Dennis A; civil engineering, from Indiana Department of Transportation, $107,977, "Bank Stabilization Alternatives to Riprap."

Lyutikov, Maxim Y; physics, from National Aeronautics and Space Administration, $25,000, "The Electromagnetic Model of Short GRBs and the Nature of Prompt Tails."

Malis, Oana; physics, from National Science Foundation, $400,000, "Faculty Early Career Development (CAREER): Nonpolar Vertical-Transport III-Nitride Devices for Near-Infrared Applications." (a Discovery Park award — Birck Nanotechnology Center)

Manfra, Michael J; physics, from Universtiy of Copenhagen, $495,000, "Optimization of Shallow 2DEGs for Spin Qubits." (a Discovery Park award — Birck Nanotechnology Center)

Mao, Chengde; chemistry, from Arizona State University, $60,271, "DNA Based Three-Dimensional Nanofabrication; Amendment 6."

Mao, Chengde; chemistry, from Office of Naval Research, $86,787, "Assembly of Complex DNA Nanostructures through Structural Transformation; Modification 6 for Grant 105323."

Matson, Eric T; **Dietz, James E** and **Smith, Anthony H**; computer & information technology, from Korean Government, $50,000, "International Cooperation Project Supporting Program for Firefighting Robots."

Mauer, Lisa J and **Deering, Amanda J**; food science, from Geo Specialty Chemicals, $26,949, "Determining the Efficacy of Glycine for the Microbial Reduction of Background and Pathogenic Bacteria to Increase the Shelf Life of Fresh Produce."

McCrory, Megan A; **Campbell, Wayne W**; **Buhman, Kimberly K** and **Talavage, Thomas M**; foods & nutrition, electrical & computer engineering, from the Egg Nutrition Center, $215,231, "Relative Effects of Chronic Consumption of Egg Protein at Breakfast with and without Fiber on Brain Neural Activation, Appetite, Glycemic and Lipemic Control and Self-Selected Energy Intake."

McKinley, Steven K and **Wynkoop, Ryan D**; youth development & agricultural education, from Kansas State University, $44,825, "Indiana 2013 Operation Military Kids (OMK) Grant."

McKinley, Steven K; youth development & agricultural education, from National 4-H Council, $2,000, "2013 4-H Volunteer Congress."

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

Ogg, James G; earth & atmospheric sciences, from James E. & Betty Jane Ogg (Individual Donor), $10,000, "Digital Time Scale."

Ohland, Matthew W and **Cardella, Monica E**; engineering education, from National Science Foundation, $271,081, "Measuring the Effects of Precollege Engineering on the Experience of Engineering Students."

Ouyang, Zheng; **Cooks, Robert G** and **Chappell, William J**; biomedical engineering, chemistry, electrical & computer engineering, from National Aeronautics and Space Administration, $239,329, "Miniature Mass Spectrometer Capable of In-Situ Detection of Organic Compounds on Mars, Titan and Other Planetary Bodies; Supplement 1 for Grant 105742." (a Discovery Park award — Bindley Bioscience Center)

Panchal, Jitesh H; mechanical engineering, from National Science Foundation, $302,437, "Faculty Early Career Development (CAREER): Collective Innovation — Transforming the Realization of Complex Engineering Systems."

Park, Kinam and **Cheng, Ji-Xin**; biomedical engineering, from PHS-CDC Centers for Disease Control, $149,682, "Adaptable Polymer Micelles for Tumor Targeting."

Patton, Aaron J; agronomy, from Midwest Regional Turf Foundation, $14,500, "300073."

Peroulis, Dimitrios; electrical & computer engineering, from Flowserve Corp, $7,000, "Flowserve."

Peterson, John R; physics, from Large Synoptic Survey Telescope Corp, $110,000, "Large Synoptic Survey Telescope (LSST) Image Simulations."

Pipes, R Byron; aeronautical & astronautical engineering, from The Boeing Company, $174,091, "Certification of Short Fiber Molded Composite Structures." (a Discovery Park award — Institute for Defense Initiatives)

Pourpoint, Timothee L; aeronautical & astronautical engineering, from Orbital Technologies Corporation, $9,000, "Testing of a Laboratory-Scale Test-Bed Thruster System."

Prokopy, Linda S; forestry & natural resources, from Environmental Defense Fund, $36,000, "Collaborative Landscape Level Conservation Efforts: Identifying Watersheds with Social Capacity."

Quagrainie, Kwamena K; agricultural economics, from Oregon State University, $163,120, "Supplementary Funding for Supporting Training in Ghana and Tanzania Under the Aquafish CRSP Africa Project with Purdue University."

Ramirez, Julio A; civil engineering, from National Science Foundation, $13,300,000, "Network for Earthquake Engineering Simulation (NEES) Operations: FY 2010-FY2014; Amendment 19 for Grant 104025." (a Discovery Park award — Cyber Center)

Ramkrishna, Doraiswami; chemical engineering, from Abbott Laboratories, $25,000, "Modeling of Crystal Morphology and Polymorphs."

Rankine, Patrice D; foreign language & literature, from Purdue University, $31,700, "Slavery & the Book."

Rayburn, Rachel L; public environmental affairs - fort wayne campus, from Indiana Campus Compact, $225, "Point in Time Count."

Rebar, Alan H; Vice President for Research, from US Russia Foundation, $151,405, "The Yegor Gaidar Annual Leadership Program." (a Discovery Park award — Discovery Park Administration)

Reklaitis, Gintaras V; **Taylor, Lynne S**; **Litster, James D**; **Venkatasubramanian, Venkat** and **Wassgren, Carl R**; chemical engineering, industrial & physical pharmacy, mechanical engineering, from Rutgers State University, $994,000, "Engineering Research Center on Structural Organic Composits."

Rocheford, Torbert R; agronomy, from HarvestPlus, $150,000, "Genetic Research to Enhance Breeding for Higher Levels of Pro-Vitamin A in Maize Grain."

Rodriguez, Jorge H; physics, from Defense Threat Reduction Agency, $146,976, "Ab-Initio & Semiempirical Investigation of Deinococcus Radiodurans Resistance to Ionizing & UV Radiation."

Sadeghi, Farshid; mechanical engineering, from Sentient Corporation, $32,000, "Developing and Validating a Model to Understand Mixed Lubrication Regions for Fluid-Film Bearings."

Sadof, Clifford S; entomology, from Indiana Department of Natural Resources, $31,863, "Plan of Work for 2012-2013: Exotic Forest Pest Education Program."

San Martin-Gonzalez, Maria F; food science, from Mexico National Council of Science and Technology (CONACYT), $18,900, "20130-Mexico National Council of Science and Technology (CONACYT) — Mexico Fellowship for Veronica Rodriguez-Martinez."

Schulze, Darrell G; agronomy, from University of North Carolina at Chapel Hill, $15,868, "Soil Degradation and Household Well-Being in Rural Uganda."

Sepulveda, Maria S; **Goforth, Reuben R** and **Mahapatra, Cecon T**; forestry & natural resources, from Indiana Department of Natural Resources, $112,126, "A Reconnaissance of Pathogens of Silver and Bighead Carp (Hypopthalmichthys Spp.) in the Wabash River Watershed, Indiana."

Shi, Riyi; basic medical science, from Indiana State Department of Health, $117,660, "Novel Potassium Channel Blockers to Restore Impulse Conduction in Science."

Sivasankar, Mahalakshmi; Speech, Language & Hearing Science, from Vanderbilt University, $30,743, "Molecular Pathophysiology of Acute Phonotrauma; Amendment 2."

Slaten, Christopher D; educational studies, from Kinley Trust, $2,500, "Non-Laboratory Equipment Proposal."

Sloan, Mary Anne; Technical Assistance Program, from Multi-Sponsored Industrials, $1,360, "Multi-Sponsor Account I-HITEC."

Snow, Lowell D; Technical Assistance Program, from Indiana Department of Transportation, $50,000, "Striping Truck Utilization at Crawfordsville and Greenfield."

Son, Steven F; mechanical engineering, from Center for Coal Technology Research, $7,500, "Center for Coal Technology Research (CCTR) Proposal to Provide Indiana Coal Education and Outreach Programming." (a Discovery Park award — Energy Center)

Spafford, Eugene H; **Bagchi, Saurabh** and **Eugster, Patrick T**; Center for Education and Research in Information Assurance and Security (CERIAS), electrical & computer engineering, computer science, from Northrop Grumman Space Technology, $367,952, "NGIT Cybersecurity Research Consortium (Year 4)."

Stephenson, Marcia C; foreign language & literature, from Purdue University, $25,168, "Natural & Unnatural Histories of Andean Camelids in the Transoceanic World, 1568-1970."

Straw, Mark L; animal sciences, from Agricultural Marketing Service, $23,598, "State Surveillance."

Strobel, Johannes and **Gajdzik, Elizabeth A**; engineering education, from ETA hand-2mind, $76,000, "Project Grissom: Science, Technology, Engineering & Mathematics (STEM) Curriculum Development."

Swihart, Robert K; forestry & natural resources, from Walnut Council, $17,541, "Walnut Council."

Swihart, Robert K; forestry & natural resources, from Indiana Forestry & Woodland Owners Association, $17,541, " Indiana Forest Woodlands Owners Associations (IFWOA)."

Switzer, Beth R; field extension educators, from Hendricks College Network, $6,289, "Hendricks College Network Amendment 1."

Taleyarkhan, Rusi P; nuclear engineering, from Texas A&M University, $437,151, "Prototype Demonstration of Gamma-Blind Tensioned Metastable Fluid Neutron /Multiplicity/Alpha Detector — Real Time Methods for Advanced Fuel Cycle Applications."

Tao, Weiguo A; biochemistry, from Tymora Analytical Operations, LLC, $5,000, "Novel Soluble Nanopolymers for the Enrichment of Low Abundant Phosphoproteins."

Tao, Weiguo A; biochemistry, from Tymora Analytical Operations, LLC, $5,000, "Multiplexed Detection and Imaging of Protein Phosphorylation Based on Soluble Nanopolymers."

Tarko, Andrew P; civil engineering, from Indiana Department of Transportation, $50,000, "2012 Five Percent Report."

Tarko, Andrew P and **Romero, Mario A**; civil engineering, from Indiana Department of Transportation, $150,000, "Performance Assessment of Road Barriers in Indiana."

Taylor, Lynne S and **Simpson, Garth J**; industrial & physical pharmacy, chemistry, from National Institute for Pharmaceutical Technology and Education, $85,000, "Nonlinear Optical Imaging for Sensitive Detection of Crystallinity in Amorphous Formulations."

Taylor, Lynne S; industrial & physical pharmacy, from Eli Lilly and Company, $222,029, "High Energy Solids to Enhance and Maximize Biological Exposure of Poorly-Water Soluble Compunds."

Vacca, Andrea; agricultural & biological engineering, from Dae Jin Hydraulic Machinery Co Ltd, $150,000, "Development of a Gasoline Engine Driven Ultra High Pressure Hydraulic Pump."

Vacca, Andrea and **Adams, George B**; agricultural & biological engineering, electrical & computer engineering, from Midwest Precision LLC, $9,000, "Design and Modeling of a Compact Electrical Hydraulic Actuation System."

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

Watts, Susan G; management, from Purdue University F N Andrews Fellowship, $12,126, "Cassella, Stefano."

Yen, Jui-Hung; medical education — Fort Wayne campus, from Indiana University, $495,400, "FY 2012-2013 and FY 13-14 Indiana University School of Medicine (IUSM) Fort Wayne Dr. Yen Start Up Fund."

Zhang, Xiangyu and **Xu, Dongyan**; computer science, from Defense Advanced Research Projects Agency, $408,963, "Safe, Reuse-Oriented Reverse Engineering of Functional Components from X86 Binaries; Modification 6 for Grant 105700."

Zhou, Chenn Q; Center for Innovation through Visualization & Simulation, from Mittal Steel Company, $28,384, "Thermal and Cooling Water Flow Modeling of Arcelormittal IH7 Tuyere Nose Using Computational Fluid Dynamics (CFD)."

Ziaie, Babak; electrical & computer engineering, from Indiana University School of Medicine, $10,000, "UpLink: Urinary Pressure Wireless LINK." (a Discovery Park award — Birck Nanotechnology Center)

Zimmer, Michael I; biological sciences — Calumet campus, from Indiana Academy of Science, $2,402, "Characterization of the Lipid-Binding Functions of the Antimicrobial Peptide Granulysin." ■

Notice Regarding Sponsored Program Awards

The Sponsored Program Awards list is generated by Sponsored Program Administration. Questions concerning the information contained in the *Dimensions of Discovery* Awards pages should be directed to Stephanie Willis at **swillis@purdue.edu.** ■