

DIMENSIONS *of* DISCOVERY

Sponsored Program Awards

October 2009

Abel, Steven R; pharmacy practice, from Community Physicians of Indiana, \$122,500, "Co-Funded Pharmacy Position."

Abel, Steven R; pharmacy practice, from Wishard Memorial Foundation, \$33,328, "A Work Process Design Strategy to Reduce Bar Code Medication Administration (BCMA) Side Effect for Improved Patient Safety."

Abramowitz, Harvey; mechanical engineering—Calumet campus, from American Iron & Steel Institute, \$5,000, "3-D Visualization of Ternary Diagrams."

Abu-Omar, Mahdi M; chemistry, from U.S. Department of Energy, \$155,000, "Oxo Catalysts for the Conversion of Lingocellulosic Biomass."

Abu-Omar, Mahdi M; chemistry, from Purdue Research Foundation: XR Grant, \$16,750, "Center for the Catalytic Conversion of Biomass to Bioenergy (C3Bio)."

Adeola, Olayiwola; animal sciences, from Danisco Animal Nutrition, \$41,609, "Digestibility Trial of Lipase in Broilers."

Agrawal, Rakesh and Hillhouse, Hugh W; Energy Center, from U.S. Department of Education, \$130,656, "09/10 GAANN Fellowship - Energy Education in Chemical Engineering." (a Discovery Park award — Energy Center)

Ajuwon, Kolapo and Adeola, Olayiwola; animal sciences, from AB Enzymes GmbH, \$39,000, "Effect of Yeast Products on Growth and Immune-Modulation Parameters in Chicks."

Allain, Jean P; nuclear engineering, from Materials Modification Inc., \$125,000, "Nano-Tungsten for ITER Divertor Plate."

Anderson, William E; Merkle, Charles L; Heister, Stephen D and Schneider, Steven P; aeronautical & astronautical engineering, from University of Maryland, \$86,613, "Constellation University Institutes Project FY10."

Applegate, Bruce M and Morgan, Mark T; food science, from Trask Trust Fund, \$49,975, "Prototype Development of a Rapid, Easy to Use, Highly Cost-Effective Test for Visual Detection of E.Coli O157:H7 Contamination in Food and Water Sample."

Applegate, Todd J; animal sciences, from Biomin America Inc., \$4,000, "Pyhtase in Poultry."

Applegate, Todd J; animal sciences, from Iowa State University, \$38,641, "Determination of Ileal Digestibility of Amino Acids from Feed Ingredients for Laying Hens."

Ariyur, Kartik B; mechanical engineering, from Purdue Research Foundation: XR Grant, \$16,750, "Introducing Energy Methods in Biology: System Level Dynamic Models for Diagnosis, Prediction & Control."

Bagchi, Saurabh; electrical & computer engineering, from Purdue Research Foundation: XR Grant, \$16,750, "NEES Operations."

Barker, Gail A; student services—North Central campus, from U.S. Department of Education, \$290,468, "Student Support Services."

Bayley, William G; chemistry, from Sheridan Community Schools, \$600, "Instrumentation Van Project."

Bayley, William G; chemistry, from Clinton Prairie School Corporation, \$300, "Instrumentation Van Project."

Bayley, William G; chemistry, from Lafayette Catholic Schools, \$300, "Instrumentation Van Project."

Beard, Jane A; field extension education, from Daviess County, \$4,300, "Davies County Learning Network Coordinator Support 2009."

Beaudoin, Stephen P; chemical engineering, from U.S. Department of Education, \$261,312, "09/10 Graduate Assistance in Areas of National Need (GAANN) Program."

Becker, James W; field extension education, from National 4-H Council, \$4,000, "Food News: the Origin and Culture of Foods—A Digital Storytelling Project."

Bethel, James S and Mikhail, Edward M; civil engineering, from Digitalglobe Inc., \$88,166, "CSM Compliant Sensor Model Development."

Beyrouthy, Craig A and DeVillez, Philip L; agronomy, from Indiana Soybean Alliance, \$13,000, "Farmer Nominated Program through Purdue Soybean Performance Trials."

Blatchley, Ernest R; civil engineering, from KWR Watercycle Research Institute, \$9,999, "Quantification of Photochemical Reactor Behavior by Lagrangian Actinometry."

Boltasseva, Alexandra and Shalaev, Vladimir M; electrical and computer engineering, from Army Research Office, \$50,000, "Searching for Better Plasmonic Materials." (a Discovery Park award — birck nanotechnology Center)

Bouman, Charles A; electrical & computer engineering, from Army Research Office, \$47,661, "Analysis and Detection of High Dimensional Signals Using the Sparse Matrix Transform."

Boutin, Mireille and Delp, Edward J; electrical & computer engineering, from Next Wave Systems, \$151,988, "Hand Held Reader."

Bowen, Brenda B; earth & atmospheric sciences, from Indiana University, \$19,538, "Depositional and Diagenetic Heterogeneities of the Mt. Simon Sandstone and Eau Claire Formation—Amendment 2."

Bracke, Paul J; library administration, from University of Illinois, \$33,980, "Metasearch Technologies for the NSDL Distributed Community—Amendment 2."

Bridges, Glen A; animal sciences, from Select Sires, \$13,214, "Select Grant."

Brophy, Sean and **DeLaurentis, Daniel A**; engineering education, aeronautical & astronautical engineering, from National Science Foundation, \$149,958, "Supporting Innovative Design Decisions (SIDD) through Cyber-Enabled Learning Environments."

Cabot, Ryan A; animal sciences, from Cooperative State Research Service, \$315,000, "Developmental Requirements of Importin Alpha Mediated Nuclear Trafficking in the Porcine Embryo."

Caffee, Marc W; physics, from National Science Foundation, \$526,883, "Collaborative Research: Cosmogenic Radionuclides in the Deep WAIS Divide Core."

Caffee, Marc W; physics, from Rutgers State University, \$22,000, "Isotopic Studies of Extraterrestrial Materials."

Cain, Steven A and **Borron, Abigail S**; agricultural communication, from Cooperative State Research Service, \$485,000, "EDEN Homeland Security Initiative V: Strengthening EDEN's Role in Homeland Security, Food and Ag Defense, and All-Hazard Education."

Calais, Eric; earth & atmospheric sciences, from University of Texas at Austin, \$10,000, "CBTH Project."

Carlstedt, Bruce C; pharmacy practice, from Regenstrief Institute for Health Care, \$16,421, "Regenstrief Institute Health Carepro."

Carvajal, Teresa M; industrial & physical pharmacy, from French Government, \$9,600, "Masters in Drug Science."

Chapple, Clint C and **Friedman, Alan M**; biochemistry, biological sciences, from Stanford University, \$627,411, "Amendment No. 3 to Agreement No. 21062420-41712-a Grant 203445." (a Discovery Park award — Bindley Bioscience Center)

Chapple, Clint C and **Bonawitz, Nicholas D**; biochemistry, from Life Sciences Research Foundation, \$12,000, "Bonawitz Fellowship - BAHD Acyltransferases as a Means to Manipulate Lignin Biosynthesis and Optimize Cellulosic Bioethanol Production."

Chaubey, Indrajeet and **Engel, Bernard A**; agricultural & biological engineering, from Cooperative State Research Service, \$300,000, "Impact of Biofeedstock Production on Hydrology/Water Quality in Midwest and Southeast USA."

Choi, Chan K; nuclear engineering, from University Research Alliance, \$366, "09/10 University Research Alliance Fellow."

Choi, Kyoung-Shin; chemistry, from California Institute of Technology, \$155,000, "Powering the Planet: A Chemical Bonding Center in the Direct Conversion of Sunlight into the Chemical Fuel—Amendment 1."

Collicott, Steven H; aeronautical & astronautical engineering, from Purdue Research Foundation: XR Grant, \$16,750, "EAGER: Critical Gap-Wetting Experiments in the Emerging Commercial Rocket Industry's Low-Gravity Research Environment."

Conger, Judith C; psychological sciences, from RHI Foundation, Inc., \$8,472, "Fellowship."

Cooklev, Todor V; engineering & technology administration—Fort Wayne campus, from Ball State University, \$29,999, "New Digital Signal Processing Techniques in Multicarrier Modulation."

Cooks, Robert G and **Chappell, William J**; chemistry, electrical & computer engineering, from Office of Naval Research, \$300,000, "Desorption Electrospray Ionization."

Cooks, Robert G and **Chappell, William J**; chemistry, electrical & computer engineering, from Office of Naval Research, \$40,300, "Desorption Electrospray Ionization."

Cordes, Samuel M; office of engagement, from Ivy Technology State College, \$11,667, "Support of Southeastern SBDC."

Cramer, William A; **Simpson, Garth J**; **Chen, Jue**; **Jiang, Wen**; **Stauffer, Cynthia V** and **Yernool, Dinesh A**; biological sciences, chemistry, from PHS-NIH National Institute of General Medical Science, \$656,767, "Innovative Methods in Membrane Protein Production for Structure Determination." (a Discovery Park award — Bindley Bioscience Center)

Davidson, Terry L; **Powley, Terry L** and **Swithers, Susan E**; psychological sciences, from PHS-NIH National Institute of Child Health and Human Development, \$95,500, "Energy Dysregulation: Behavioral and Biological Signals."

DeBoer, Lawrence P; agricultural economics, from Indiana Soybean Alliance, \$23,824, "The Cost of Community Services and the Impact of Economic Development for Indiana Counties."

Delgass, W N; **Caruthers, James M**; **Abu-Omar, Mahdi M**; **Ribeiro, Fabio H** and **Thomson, Kendall T**; chemical engineering, chemistry, from U.S. Department of Energy, \$780,000, "Catalyst Design by Discovery Informatics." (a Discovery Park award — Energy Center)

Dyke, Shirley J; civil engineering, from University of Oklahoma, \$8,649, "FPGA + Microprocessor-Based Smart Wireless Sensing with Embedded Nonlinear Algorithms for Structural Health Monitoring."

Dyke, Shirley J; civil engineering, from National Science Foundation, \$40,031, "Nonlinear Model Updating Using Ambient Responses for Damage Diagnosis in Concrete Structures."

Ebert, David S; electrical and computer engineering, from U.S. Department of Homeland Security, \$100,000, "VACCINE: Visual Analytics for Command, Control, Interoperability, National Security and Emergencies." (a Discovery Park award — Purdue University Regional Visualization and Analytics Center)

Ebert, David S; **Savikhin, Anna**; **Cason, Timothy N** and **Hummels, David L**; electrical & computer engineering, management, economics, from National Science Foundation, \$376,984, "TLS-Applied Visual Analytics for Economic Decision-Making."

Einstein, Mark E; animal sciences, from Michigan State University, \$3,500, "North Central Regional Aquaculture Center (NC-RAC)."

Ejeta, Gebisa; agronomy, from United Sorghum Checkoff Program Board, \$51,785, "Marker Assisted Introgression of Cold Tolerance into Elite Sorghum Inbred Lines."

Elicker, James G; child development & family studies, from Indiana Family and Social Services Administration, \$31,319, "Contract to Collect Evidence and Produce, 'Head Start in Indiana: the Success Story'."

Engel, Bernard A; **Campanella, Osvaldo H** and **Mohtar, Rabi H**; agricultural & biological engineering, from University of Illinois, \$14,625, "Bioenergy and Biological Systems Engineering; An Educational Consortium for A Sustainable Agriculture."

Eroglu, Abdullah; engineering—Fort Wayne campus, from Oak Ridge National Laboratory, \$13,800, "Complete Simulation Model of Arc Localization for Plasma Systems."

Farnsworth, Richard L; forestry & natural resources, from National Oceanographic & Atmospheric Administration, \$110,600, "Increase of Award for Grant 100881."

Ferris, Virginia R; entomology, from Bayer CropScience LP (Environmental Science), \$9,000, "Cyst Nematode Program."

Field, William E; agricultural & biological engineering, from Cooperative State Research Service, \$550,500, "National Agrability Project."

Fleet, James C; foods & nutrition, from PHS-NIH National Institute of Environment Health Science, \$376,864, "Diet by Gene Interactions Affecting Calcium and Bone Metabolism."

Flores, Joseph I; Education Opportunities Program—Calumet campus, from Indiana Department of Education, \$4,847, "Residential Upward Bound Food Service Program."

Freeman, Lynetta; veterinary clinical science, from Collie Health Foundation, \$20,995, "Clinical Evaluation of NOTES Gastropexy as a Prophylactic Procedure for Prevention of Gastric Dilatation and Volvulus in Collie Dogs."

Garimella, Suresh V; mechanical engineering, from Intel Corporation, \$30,000, "CTRC Membership."

Garimella, Suresh V; mechanical engineering, from Eaton, \$30,000, "CTRC."

Garrison, James L; aeronautical & astronautical engineering, from National Aeronautics and Space Administration, \$30,000, "Tracking of Radio Occultation Signals Employing BOC Modulation."

Geahlen, Robert L; medicinal chemistry & molecular pharmacology, from PHS-NIH National Cancer Institute, \$265,350, "Tyrosine Protein Kinases and Lymphocyte Activation."

Gentry, Marcia L; De Oliveira, Luciana; Maeda, Yukiko; Mann, Eric L; Mann, Rebecca L; Peterson, Jean P and Samarapungavan, Ala; educational studies, curriculum and instruction, from U.S. Department of Education, \$448,052, "Developing Talents and Improving Student Achievement Among Traditionally Underrepresented Populations." (a Discovery Park award — Discovery Learning Research Center)

Gerard, Peggy S; nursing—Calumet campus, from University of Illinois, \$12,700, "Bridges to the Doctorate of Nursing Students—Amendment 2."

Gerber, Corey K; agronomy, from Crop Production Services, \$5,000, "DTC Summer Workshop - Crop Production Services - July 16, 2009."

Gerber, Corey K; agronomy, from Indiana Certified Crop Advisors, \$5,000, "DTC Summer Workshop - Indiana Certified Crop Advisors - Aug 11 & 12, 2009."

Gillespie, Andrew R; International Programs, from Tsinghua University, \$16,356, "Tsinghua University Training Program."

Golden, Barbara L; biochemistry, from Case Western Reserve University, \$20,000, "Characterizing RNA-Metal Binding by Raman Spectroscopy."

Granger, Darryl E; earth & atmospheric sciences, from National Science Foundation, \$126,458, "An Isochron Method for Burial Dating with Cosmogenic Nuclide: Application to River Incision in Southern Africa—Amendment 1."

Green, Mark A; industrial and physical pharmacy, from IU School of Medicine, \$18,575, "Indiana Clinical and Translational Science Institute."

Gunsher, Jeffrey A; Vice President for Research, from Indiana Office of Energy & Defense Development, \$93,652, "Wind Indiana Conference—Windiana."

Han, Qingyou; mechanical engineering technology, from HansTechnology, \$10,000, "Casting and Microstructure Characterization of Aluminum Metal."

Hasegawa, Paul M; horticulture & landscape architecture, from Binational Agricultural Research & Development, \$146,000, "Calcium-Regulated Transcription Factors Mediating Carbon Metabolism and Partitioning in Respect to Drought."

Heinz, Michael G; biomedical engineering, from PHS-NIH National Institute on Deafness and Other Communication Disorders, \$456,306, "Effects of Sensorineural Hearing Loss on Robust Speech Coding."

Heister, Stephen D and Son, Steven F; aeronautical & astronautical engineering, mechanical engineering, from IN Space, LLC, \$153,620, "Development of Composite Solid Propellants Using Dicyclopentadiene Binder."

Hertel, Thomas W; agricultural economics, from Food & Agriculture Organization of the United Nations, \$19,675, "GTAP Consortium."

Hertel, Thomas W; agricultural economics, from Research Institute of Economy, Trade and Industry Iai (RIETI), \$19,675, "GTAP Consortium."

Hirleman, E D; mechanical engineering, from Morgridge Institute for Research Inc., \$176,000, "Voluntary Support."

Hogan, Daniel F and Green, Henry W; veterinary clinical science, from Morris Animal Foundation, \$45,163, "Feline Arterial Thromboembolism: the Clopidogrel vs. Aspirin Trial."

Hogenesch, Harm and Hem, Stanley L; comparative pathobiology, industrial & physical pharmacy, from PATH, \$108,475, "Formulation and Testing of BPL-Killed Pneumococcal Vaccine with Aluminum Adjuvant."

Holland, Jeffrey D; entomology, from Egyptian Cultural and Educational Bureau, \$24,289, "09/10 Egyptian Cultural and Education Bureau Fellowship."

Hooser, Stephen B; animal disease diagnostic laboratory, from Animal Plant Health Inspection Service, \$42,658, "Classical Swine Fever Surveillance, Pseudorabies Surveillance, and a Negative Cohort Study for Foot and Mouth Disease."

Huber, Matthew; earth & atmospheric sciences, from The Weather Underground Inc., \$9,748, "AMP Consortium."

Hundley, Gregory S; management, from U.S. Department of Education, \$13,300, "CIBER."

Hwang, Inseok; aeronautical & astronautical engineering, from Mosaic ATM Inc., \$104,980, "Amend 1 to Grant 103510."

Ileleji, Klein; agricultural & biological engineering, from Archer Daniels Midland Co., \$10,000, "Multi - Sponsored Gift Account."

Ileleji, Klein; agricultural & biological engineering, from Indiana Corn Marketing Council, \$30,000, "Granulation of Distillers Dried Grains with Solubles (DDGS) to Produce Spherical Pellets."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$6,311, "Task Order 8: TRACE Code Models and Correlations Development—Mod 1."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$20,000, "Task Order 7: TRACE Interfacial Area Transport Model Development."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$101,423, "NRC Task 5 Subcontract—Amendment 2."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$44,123, "Task Order 7: TRACE Interfacial Area Transport Model Development—Modification 1."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$9,515, "Thermal-Hydraulic Experimental and Model Development Support for the TRACE Code - NRC Task 1—Modification 4."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$40,000, "Task Order 8: TRACE Code Models and Correlations Development."

Ishii, Mamoru; nuclear engineering, from Nuclear Regulatory Commission, \$21,962, "Thermal Hydraulic Experimental and Model Development Support for the TRACE Code-NRC Task 2—Modification 4."

Ivantysynova, Monika; agricultural & biological engineering, from AM General, \$89,814, "Acquiring Vehicle Drive Cycle with Fleet Data."

Ivantysynova, Monika; agricultural & biological engineering, from AM General, \$10,004, "Development of a Hydraulic Hybrid Power Train for Post Office Vehicles."

Ivantysynova, Monika; agricultural & biological engineering, from Komatsu Ltd., \$56,486, "Displacement Controlled Actuator for Mobile Application."

Ivantysynova, Monika; agricultural & biological engineering, from Parker Hannifin Corp., \$6,100, "Efficiency Measurements of the Hydraulic Motors."

Ivantysynova, Monika; agricultural & biological engineering, from Trask Trust Fund, \$56,420, "Mechanical Implementation of Waved Surface and Waved Piston Technologies."

Jackson, Scott A; agronomy, from University of Wisconsin-Madison, \$122,226, "Evolutionary Genomics of a Rice Centromere—Amendment 3."

Jackson, Scott A; agronomy, from New York University, \$325,367, "GEPR: the Evolutionary Genomics of Rice Domestication—Amendment 2."

Jacobi, Judith N; alumni affairs—North Central campus, from Unity Foundation of Laporte County, \$2,000, "Sinai Forum Presented by Purdue University North Central - 2009 Season."

Jafvert, Chad T; civil engineering, from NiSource Corporate Services Company, \$65,000, "Evaluating in Situ Permeable Caps as a Remedial Action Alternative for River Sediments - Phase 3: Continued Field Test Cell Monitoring." (a Discovery Park award — Center for the Environment)

Janle, Elsa M and **Kritchevsky, Janice E**; foods & nutrition, veterinary clinical science, from University of Kansas, \$56,753, "Analytical Methods for Investigation of Peptide Transport."

Joern, Brad C; agronomy, from Natural Resources Conservation Service, \$200,000, "Cooperative Agreement Between Purdue University and the USDA Nrcs for Tactical Planning and Recordkeeping Software Development."

Joern, Brad C; agronomy, from Natural Resources Conservation Service, \$100,000, "Cooperative Agreement Between Purdue University and the USDA Nrcs for Tactical Planning and Recordkeeping Software Development."

Johnson, Keith D; agronomy, from Bayer Cropscience LP (Environmental Science), \$5,000, "Test Crop Purchase Agreement."

Johnston, Cliff T; agronomy, from Tetra Technology EM, Inc., \$29,000, "Task Order 88: Evaluation of Sorption Material."

Jovanovic, Igor; nuclear engineering, from Lawrence Livermore National Laboratory, \$50,000, "Fieldable Neutron Time Projection Chamber."

Kenttamaa, Hilka I; chemistry, from ExxonMobile Research Engineering Company, \$85,000, "ExxonMobile Research."

Kenttamaa, Hilka I; chemistry, from Purdue Research Foundation: XR Grant, \$16,750, "Center for the Catalytic Conversion of Biomass to Bioenergy (C3Bio)."

Kim, Chang H and **Hogenesch, Harm**; comparative pathobiology, from PHS-NIH National Institute of Allergy and Infectious Diseases, \$335,674, "Migration and Function of Th17 Cells in the Gut."

Kim, Kee Hong and **Cheng, Ji-Xin**; food science, biomedical engineering, from Cooperative State Research Service, \$463,742, "Preventive Function of Curcumin in Adipocyte Development and its Associated Inflammation."

Kincaid, Wendy G; electrical & computer engineering, from Ruhr University Bochum, \$10,887, "Graduate Student Support."

Klimeck, Gerhard; electrical & computer engineering, from University of New South Wales, \$50,972, "QCCM - Solid State Quantum Computer in Silicon - Australian CQCT."

Klimeck, Gerhard; electrical & computer engineering, from Ruhr University Bochum, \$756, "Graduate Student Support."

Klimeck, Gerhard; electrical & computer engineering, from Ruhr University Bochum, \$6,040, "Graduate Student Support."

Knapp, Deborah W; veterinary clinical science, from American Kennel Club Health Foundation, \$48,650, "Finding the Mutations that Increase Susceptibility To Transitional Cell Carcinoma in the Scottish & West Highland White Terrier, and Shetland Sheepdog."

Konopelko, Alexander K; physics, from National Aeronautics and Space Administration, \$80,000, "A Joint XMM-Newton, GLAST, MAGIC, VERITAS Broadband Observation Campaign of One High-Energy Blazar in a Major Outburst."

Krane, Matthew J; materials engineering, from National Science Foundation, \$279,049, "GOALI: the Origin of Slag-Metal Interface Defects in Electros slag Remelting."

Kuhn, Richard J; **Cushman, Mark S** and **Post, Carol B**; biological sciences, medicinal chemistry & molecular pharmacology, from University of Chicago, \$150,000, "Inhibitors of Flavivirus Replication and Assembly."

Lantz, Gary C; **Austin, Brenda R** and **Van Alstine, William G**; veterinary clinical science, comparative pathobiology, from Cook Biotech, Inc., \$140,735, "Small Intestine Submucosa (SIS) and Polypropylene Mesh Composite Graft for Reconstruction of Abdominal Body Wall Defects: A Feasibility Study."

Lee, Linda S and **Rao, P Suresh C**; agronomy, civil engineering, from Cooperative State Research Service, \$400,000, "Dynamics of Hormone Loads & Attenuation in Ditches and Streams Draining Agricultural Fields Receiving Animal Manure Applications." (a Discovery Park award — Center for the Environment)

Lelievre, Sophie A and **Leary, James F**; basic medical science, from U.S. Army Medical Research Acquisition Activity, \$110,557, "Channeling Nanoparticles for Detection and Targeted Treatment of Breast Cancerous Lesions."

Loew, Tamara F; Student Health Center, from Coalition for a Drug Free Tippecanoe County, \$2,606, "2009-10 Social Marketing Campaign: Marijuana Use."

Loew, Tamara F; Student Health Center, from Coalition for a Drug Free Tippecanoe County, \$2,614, "2009-10 Social Marketing Campaign: Illegal Use of Prescription Drugs."

Longas, Maria O; chemistry & physics—Calumet campus, from Alzheimer's Disease Research Foundation, \$253,602, "Reversing Alzheimers Disease."

Lundstrom, Mark S and **Luisier, Mathieu**; electrical & computer engineering, network for computational nanotechnology, from Intel Corporation, \$160,000, "Performance Analysis and Optimization of III-V FETs through Comprehensive Numerical Simulation."

Lundstrom, Mark S; electrical & computer engineering, from National Science Foundation, \$59,940, "2009 NSF NSE Grantees Conference." (a Discovery Park award — Network for Computational Nanotechnology)

Maier, Dirk E; agricultural & biological engineering, from OpiSystems, \$1,700, "Crop Drying Project."

Marshall, Maria I; agricultural economics, from National Science Foundation, \$417,583, "Small Business Demise and Recovery after a Natural Disaster."

Marshall, Maria I and Fulton, Joan R; agricultural economics, from Cooperative State Research Service, \$2,008, "SBIR Phase II Commercialization Education."

Matter, Kathryn C; University bands, from Tippecanoe Arts Federation, \$3,624, "2010 Purdue Jazz Festival—Revised."

Maynard, Elizabeth T; horticulture & landscape architecture, from Syngenta Seeds, Inc., \$500, "Research for 1995 Vegetable Variety Trial Program."

Maynard, Elizabeth T; horticulture & landscape architecture, from Siegers Seed Co., \$600, "Research for 1995 Vegetable Variety Trial Program."

Maynard, Elizabeth T; horticulture & landscape architecture, from Crookham Company, \$600, "Research for 1995 Vegetable Variety Trial Program."

Maynard, Elizabeth T; horticulture & landscape architecture, from Stokes Seed Company, \$600, "Research for 1995 Vegetable Variety Trial Program."

Maynard, Elizabeth T; horticulture & landscape architecture, from Johnny's Selected Seeds, \$200, "Research for 1995 Vegetable Variety Trial Program."

Maynard, Elizabeth T; horticulture & landscape architecture, from Seedway, \$300, "Research for 1995 Vegetable Variety Trial Program."

Maynard, Elizabeth T; horticulture & landscape architecture, from Harris Moran Seed Company, \$900, "Research for 1995 Vegetable Variety Trial Program."

McCrory, Megan A; Mobley, Stacey L; Boushey, Carol J and Ferruzzi, Mario; foods & nutrition, food science, from PHS-NIH National Institute Diabetes, Kidney Dis, \$547,592, "Biomarkers of Dietary Variables Commonly Misreported."

McGlothlin, James D; health sciences, from OraSure Technologies Inc., \$6,000, "Ergonomics."

McGlothlin, James D; health sciences, from PHS-CDC National Institute of Occupation, Safety, Health, \$25,000, "Successful Applications of Prevention through Design Principles to Eliminate Hazards and Minimize Risks to Engineered Nanomaterials." (a Discovery Park award — Birck Nanotechnology Center)

McKee, Renee K; youth development and agricultural education, from Cooperative State Research Service, \$356,000, "4-H Military Internship Program."

McKinley, Steven K; youth development & agricultural education, from Kansas State University, \$100,000, "Operation: Military Kids."

Meyer, Scott E; aeronautical & astronautical engineering, from Pratt & Whitney Rocketdyne Inc., \$67,700, "PWR GOX-H2 Thruster Testing with Vacuum."

Michler, Charles H; forestry & natural resources, from North Carolina State University, \$15,250, "Center for Tree Genetics - NCSU—Amendment 2."

Mickelbart, Stacey L; convocations & lectures, from Tippecanoe Arts Federation, \$14,034, "IAC Annual Operating Support for Purdue Convocations."

Mislan, Richard P; computer & information technology, from Mantech International Corp., \$10,000, "Cell Phone Library."

Morgan, Mark T; food science, from PROVE IT LLC, \$10,000, "Food Science Research."

Mroczek, Daniel K; child development & family studies, from Pennsylvania State University, \$18,398, "Daily Stress and Well-Being During Adulthood Period of Performance."

Narsimhan, Ganesan; agricultural & biological engineering, from Army Natick Research and Development Laboratory, \$42,000, "Investigation of the Effect of Interaction of Model Polypeptides with Titania on Their Conformation Using Molecular Dynamics Simulation."

Novak, Robert E; speech, language & hearing sciences, from PHS-NIH National Institute of Deafness and Other Communication Disorders, \$519,665, "Electrophysiological Indices of Attention in Language Processing."

Nyenhuis, John A; electrical & computer engineering, from Medtronic, Inc., \$11,000, "Amendment 1 to MRI Testing of Vascular Implants."

Nyenhuis, John A; electrical & computer engineering, from Medtronic, Inc., \$20,000, "MRI Testing of Medtronic Cardiac Implants."

Owens, Phillip R; agronomy, from Natural Resources Conservation Service, \$35,309, "Soil-Landscape Investigations of MLRA 115B/120 Loess and Loess Veneer Benchmark Catenas."

Paarlberg, Philip L; agricultural economics, from Animal Plant Health Inspection Service, \$125,000, "Incorporation of Cross Border North American Livestock and Meat Supply Chain Specialization for Poultry and Pork in the Paarlberg Economic Model."

Pak, William L; biological sciences, from PHS-NIH National Eye Institute, \$343,125, "Molecular Genetic Dissection of Photoreceptor Function."

Paladino, Frank V; biology —Fort Wayne campus, from Earthwatch, \$97,580, "Costa Rican Sea Turtles."

Park, Kinam; biomedical engineering, from Daiichi Sankyo Co., Ltd 3-5-1, \$20,000, "Kuno Yoshio Tokyo Vol. Support."

Peeta, Srinivas; civil engineering, from Purdue Research Foundation: XR Grant, \$16,750, "NEXTRANS: Integrated Solutions for Mobility, Safety, & Infrastructure Renewal."

Pendleton, Kyle A; Dean of Students, from Coalition for a Drug Free Tippecanoe County, \$3,325, "Fraternity and Sorority Server Education and Training Program."

Peroulis, Dimitrios; Martinez, Edgar J; Murthy, Jayathi Y and Sadeghi, Farshid; electrical and computer engineering, College of Engineering, mechanical engineering, from Defense Advanced Research Projects Agency, \$131,379, "IMPACT - Center for Advancement of MEMS/NEMS VLSI." (a Discovery Park award — Birck Nanotechnology Center)

Pijanowski, Bryan C; Chaubey, Indrajeet; Hook, Tomas O and Troy, Cary D; forestry and natural resources, civil engineering, from U.S. Department of Education, \$174,208, "09/10 GAANN Fellowship Program in Ecology and Environmental Engineering." (a Discovery Park award — Center for the Environment)

Pizlo, Zygmunt; psychological sciences, from National Science Foundation, \$53,951, "Collaborative Research: Recovery of 3-D Shapes from Single Views."

Post, Carol B; medicinal chemistry & molecular pharmacology, from PHS-NIH National Institute of General Medical Science, \$162,183, "NMR Structure of Peptide and Protein Complexes."

Pressler, Barrak M; veterinary clinical science, from Pharmaco Photonics LLC, \$94,083, "Non-Invasive Optical Determination of GFR."

Pujol, Santiago and Sozen, Mete A; civil engineering, from NEHRP Consultants Joint Venture, \$100,850, "Testing of the Collapse Potential of Reinforced Concrete Structures."

Pyrak-Nolte, Laura J; physics, from ExxonMobile Research Engineering Company, \$50,000, "ExxonMobil Voluntary Support."

Qiao, Li; aeronautical & astronautical engineering, from National Science Foundation, \$175,000, "BRIGE: Burning Rate, Chemistry and Transport Properties of Alternative Fuels."

Quagraine, Kwamena K; agricultural economics, from Agricultural Marketing Service, \$60,500, "Developing Markets for Fresh-on-Ice Farmed Fish Products in the North Central Region."

Ramachandran, P V; chemistry, from Johns Manville, \$1,000, "Multi Sponsored Industrial."

Ramkrishna, Doraiswami; chemical engineering, from University of Minnesota, \$68,107, "Modeling Pheromone Induced Drug Resistance Transfer in *Enterococcus Faecalis*—Amendment 2."

Ratliff, Timothy L; Amass, Sandra F; Burgess, Wilella D; Davis, Kauline S; Gentry, Marcia L; Mann, Rebecca L and Staver, John R; comparative pathobiology, School of Veterinary Medicine—Administration, Discovery Learning Research Center, educational studies, curriculum and instruction, from PHS-NIH National Center for Research Resource, \$266,495, "Fat Dogs and Coughing Horses: Animal Contributions Towards a Healthier Citizenry." (a Discovery Park award — Discovery Learning Research Center)

Reed-Rhoads, Teri; Imbrie, Peter K and Strobel, Johannes; engineering education, from National Science Foundation, \$754,667, "Collaborative Research: CiHub, a Virtual Community to Support Research, Development, and Dissemination of Concept Inventories."

Regnier, Fred E; chemistry, from PHS-NIH National Cancer Institute, \$344,400, "APT: the Analytical Proteomics Team Administrative Supplement." (a Discovery Park award — Bindley Bioscience Center)

Reicher, Zachary J; agronomy, from Valent U.S.A. Corporation, \$2,500, "Turfgrass Weed Management Research Programs."

Reifenberger, Ronald G and Raman, Arvind; physics, mechanical engineering, from NaugaNeedles, \$69,317, "The Design and Fabrication of Ultra-Soft Scanning Probes for Use in the Study of Biological Samples Under Liquids." (a Discovery Park award — Birck Nanotechnology Center)

Reklaitis, Gintaras V; Blau, Gary E and McLennan, Michael J; chemical engineering, industrial engineering, Rosen Center for Advanced Computing, from National Science Foundation, \$1,932,768, "CDI-Type II: Cyber-Enabled Engineering of Pharmaceutical Products."

Ribeiro, Fabio H; Baertsch, Chelsey D; Delgass, W N and Stach, Eric A; chemical engineering, materials engineering, from Argonne National Laboratory, \$430,000, "Institute for Atom-Efficient Chemical Transformations (IACT)." (a Discovery Park award — Energy Center)

Riggs, Eric M; earth & atmospheric sciences, from National Science Foundation, \$785,985, "Sharing the Land: Fostering Further Success in Building Tribal Earth Science Expertise: Track 2."

Rochon, Gilbert L; Rosen Center for Advanced Computing, from Americaview Inc., \$17,364, "Indianaview."

Sadof, Clifford S; entomology, from Indiana Department of Natural Resources, \$75,000, "Plan of Work for 2009-2010: Exotic Forest Pest Education Program."

Sadof, Clifford S; entomology, from Indiana Department of Natural Resources, \$90,000, "Plan of Work for 2009-2010: Information and Education Program for Emerald Ash Borer."

Sadof, Clifford S; entomology, from E.I. DuPont de Nemours and Company, \$2,100, "Ornamental Insect Research."

Sands, Timothy D; materials engineering, from University of California—Santa Cruz, \$50,000, "Nanostructured Metal/Semiconductor Materials for Thermoelectric Generators." (a Discovery Park award — Birck Nanotechnology Center)

Schendel, Dan E; department of management, from Strategic Management Society, \$1,748, "Strategic Management Society."

Schendel, Dan E; department of management, from Strategic Management Journal, \$10,000, "Strategic Management Journal."

Schoenlein, William E; biomedical engineering, from Medicine Institute, Incorporated, \$38,174, "Prototype Vascular Stent Testing Study CI-POC Grant 203133—Amendment/Continuation 17."

Schoenlein, William E; biomedical engineering, from Medicine Institute, Incorporated, \$11,841, "Testing Prototype Stents in the Porcine Vascular Model (Study CI-F535)—Amendment 16—Grant 203133."

Schoenlein, William E; biomedical engineering, from Medical Engineering and Development Institute Inc., \$33,959, "Prototype Vascular Stent Testing (CI-PFO)—Amendment 15."

Schoenlein, William E and Van Alstine, William G; biomedical engineering, comparative pathobiology, from Medicine Institute, Incorporated, \$25,429, "Lung Volume Reduction Therapy CBI-LVRF."

Schutz, Michael M; Emanuel, Curt D; Cain, Steven A and Shelton, Brad W; animal sciences, field extension education, agricultural communication, from Cooperative State Research Service, \$39,735, "Enhancing Agresecurity Preparedness."

Scott-Moncrieff, Joanna C; veterinary clinical science, from Mitokine Bioscience LLC, \$95,956, "SBIR — Canine Studies to Restore Endogenous Insulin."

Seidl, Amanda H; speech, language & hearing sciences, from National Science Foundation, \$342,348, "The Effects of Acoustic-Category Definition on the Learning of Phonological Classes; Corpora Analyses, Behavioral Studies and Modeling Experiments."

Sherman, Louis A; biological sciences, from Washington University, \$221,590, "Development of Cyanothecae as a New Model Organism for Biological Hydrogen Production—Amendment 1."

Shipsey, Ian P; physics, from Fermi National Accelerator Laboratory, \$118,184, "FERMI-LAB: GAD Salary of LPC Coordinator 2009."

Siegmund, Thomas H; Bolton, J S and Cipra, Raymond J; mechanical engineering, from Air Force Office of Scientific Research, \$57,840, "Macroscale Meta-Materials: from Manufacturing to Multifunctional Properties."

Singleton, Timothy J; WBAA, from Corporation for Public Broadcasting, \$18,129, "Corporation for Public Broadcasting—2009 Digital Radio Conversion Fund."

Sivasankar, Mahalakshmi; speech, language & hearing sciences, from McGill University, \$58,283, "Design, Construction, and Evaluation of Biomaterials for Vocal Fold Reconstruction—Amendment I."

Smith, Mjt; electrical & computer engineering, from Air Force Office of Scientific Research, \$75,000, "The 6th Annual U.S./Australia Joint Workshop on Defense Applications of Signal Processing (DASP)."

Smith, Mjt; graduate school administration, from National Science Foundation, \$333,333, "NSF Stimulus Graduate Fellowship Research Program 2009-2012."

Smith, Richard S; food science, from Mrs. Fields Original Cookies, \$9,000, "Sensory Evaluation Research."

Son, Steven F; mechanical engineering, from Army Engineer Research & Development Center, \$99,923, "Development of Innovative Nanoscale Composites for Multifunctional Energetic Materials Applications."

Spafford, Eugene H; computer science, from Mitre Corporation, \$60,000, "CERIAS Voluntary Support."

Stanley, David L; Lopp, Denver W and Thom, James M; aviation technology, from Wright-Patterson Air Force Base, \$1,356,000, "Development and Implementation of the National Test Facility for Fuels and Propulsion."

Stott, Diane E; agronomy, from Agricultural Research Service, \$7,500, "Acquisition of Goods and Services."

Streveler, Ruth A; engineering education, from National Science Foundation, \$88,910, "Collaborative Research: Integrating Models of Cognition and Measurement with Conceptual Knowledge: Establishing the Validity and Diagnostic Capacity."

Tarko, Andrew P; civil engineering, from Indiana Criminal Justice Institute, \$115,000, "Proposal to Assist Indiana Criminal Justice Institute in the Identification of Indianas Traffic Safety Problems -FY 2009-2010."

Tomar, Vikas; aeronautical & astronautical engineering, from University of Notre Dame, \$100,000, "(YIP-09) Understanding Nanoscale Thermal Conduction and Mechanical Strength Correlation in High Temperature Ceramics with Improved Thermal Shock Resistance for Aerospace Applications."

Tomar, Vikas; aeronautical & astronautical engineering, from National Science Foundation, \$60,130, "Microstructural Engineering of SIC-Si3N4 Nanocomposites Using a Combination of Classical Molecular Dynamics and Cohesive Finite Element Methods."

Tseng, Charles C; biological sciences—Calumet campus, from Cooperative State Research Service, \$437,243, "Water Quality: Development of Genome Scan and Optical Scattering Imaging Technologies for Microbial Source Tracking."

Tucker, Mark A; youth development & agricultural education, from Ohio State University, \$146,926, "Integrating Social and Biological Sciences to Enhance Adoption of Vegetable Safety Behaviors from Farm to Table."

Tuinstra, Mitchell R; Johal, Gurmukh S and Mickelbart, Michael V; agronomy, botany & plant pathology, horticulture & landscape architecture, from Cooperative State Research Service, \$348,321, "Drought Tolerance and Funtional Staygreen in Maize."

Tyner, Wallace E; agricultural economics, from Indiana Corn Marketing Council, \$30,000, "Economic Analysis of Harvesting Corn Cobs for Biofuel Production."

Tyner, Wallace E; agricultural economics, from Economic Research Service, \$30,000, "Incorporating Cellulosic Feedstocks into the FARM Model."

Tyner, Wallace E and Hertel, Thomas W; agricultural economics, from Cooperative State Research Service, \$933,883, "Analysis of the Global Impacts of Second Generation Biofuels in the Context of Other Energy Technologies and Alternative Economic and Climate Change."

Varma, Arvind; chemical engineering, from Center for Coal Technology Research, \$59,596, "The Potential for Underground Coal Gasification in Indiana."

Vierling, Richard A; agronomy, from Indiana Crop Improvement Association, \$2,000, "Multi Sponsored."

Viswanathan, Chandramouli; engineering—Calumet campus, from University of Kentucky, \$12,500, "Developing HSPF Model and Performing Watershed Simulations for Canerum Fecal TMDL."

Vyn, Tony J; agronomy, from Fluid Fertilizer Foundation, \$6,000, "Agricultural Cropping Systems."

Waddell, Peter J; Anderson, John N and Barton, Erik S; biological sciences, from PHS-NIH National Library of Medicine, \$271,777, "Comparative Bioinformatics and TP53 Expression."

Wanner, Barry L; Gribskov, Michael R and Kihara, Daisuke; biological sciences, from PHS-NIH National Institute of General Medical Science, \$500,000, "Comprehensive Mapping and Annotation of the E. Coli Transcriptome."

Wasserman, Adam; chemistry, from American Chemical Society, \$100,000, "Density Functional Resonance Theory of Metastable Negative Ions."

Watts, Val J and Chester, Julia A; medicinal chemistry & molecular pharmacology, psychological sciences, from Narsad Research Grants Program, \$100,000, "In Vitro and in vivo PKC Activation Induces D3 and D1 Dopamine Receptor Heteromers."

Weaver, Connie M; Kuhn, Richard J; Boushey, Carol J; Campbell, Wayne W; Rebar, Alan H; Story, Jon A; Wodicka, George R; Leary, James F; McCabe, George P; Turek, John J; Byrn, Stephen R; Freeman, Lynetta; Mattes, Richard D; Mobley, Stacey L; Moore, George E; Teegarden, Dorothy; Van Alstine, William G and Witz, Steven M; foods and nutrition, biological sciences, vice president for research, graduate school administration, biomedical engineering, basic medical sciences, College of Science—Administration, industrial and physical pharmacy, veterinary clinical sciences, comparative pathobiology, Regenstrief Center for Healthcare Engineering, from IU School of Medicine, \$750,091, "Indiana CTSI (Clinical and Translational Science Institute) Year 2." (a Discovery Park award — Bindley Bioscience Center)

Webb, Kevin J; electrical & computer engineering, from National Science Foundation, \$344,505, "Towards Deep Tissue Imaging of Fluorescence Resonance Energy Transfer Parameters."

Wei, Alexander; chemistry, from PHS-NIH National Cancer Institute, \$500,000, "Investigating Tumor Growth Dynamics Using Multimodal Contrast Agents and Optical Coherence Elastography."

Weiser, Irwin H; College of Liberal Arts—Administration, from United Student Aid Funds, Inc., \$12,500, "USA Funds-Scholarships - CLA."

Wereley, Steven T; mechanical engineering, from University of California-Irvine, \$48,000, “Microfluidics Focus on Fundamentals.” (a Discovery Park award — Birck Nanotechnology Center)

Wereley, Steven T; mechanical engineering, from University of California-Irvine, \$19,356, “Microfluidics Focus on Fundamentals.” (a Discovery Park award — Birck Nanotechnology Center)

Williams, Frederick C; Educational Opportunities Program—Calumet campus, from U.S. Department of Education, \$366,968, “Student Support Services Program.”

Wilson, Steven R; communication, from Community & Family Resource Center, \$20,972, “CAPE Research Program—Amendment 3.”

Wodicka, George R; biomedical engineering, from Institute of Electrical Electronics Engineers, \$10,000, “Electronic Archives for the Engineering in Medicine and Biology Society.”

Woeste, Keith E; forestry & natural resources, from Colorado State University, \$6,000, “Screening of Juglans and Carya for Resistance to the 1000 Cankers Disease and Evaluation of Insecticidal Controls for Use in Management.”

Woodall, Jerry M; electrical & computer engineering, from Trask Trust Fund, \$50,000, “Control and Delivery of On-Demand Hydrogen Gas.”

Xu, Dongyan; computer science, from National Science Foundation, \$36,250, “CSR-EHS: Collaborative Research H-Media: the Holistic-Multistream Environment for Distributed Immersive Applications—Amendment 3.”

Yang, Fenggang; sociology & anthropology, from John Templeton Foundation, \$1,998,426, “Chinese Spirituality and Society Program: a Research and Training Initiative.”

Ye, Peide; electrical & computer engineering, from OmniPV Inc., \$110,000, “Characterization of Semiconductor Thin Films and Devices for Solar Applications.”

Zentall, Sydney S; educational studies, from Purdue Research Foundation: XR Grant, \$16,750, “Preschoolers at Risk for ADHD & Aggression Learn to Focus Attention on Subtle Emotions.”

Zhang, Dabao; statistics, from Cook Incorporated, \$12,999, “Cook Medicine Institute.”

Zhang, Min; statistics, from Indiana University, \$66,163, “Early Cancer Detection and Prognosis through Glycomics.”

Zhou, Chenn Q; mechanical engineering—Calumet campus, from AIST Foundation, \$50,000, “Integration of Computational Fluid Dynamics Simulation and Virtual Reality Visualization for Iron and Steel Making Processes.”

Zhou, Chenn Q; mechanical engineering—Calumet campus, from BP America Inc., \$10,000, “Hydrogen Reformer Combustion Model Study.”

Zhou, Chenn Q; mechanical engineering—Calumet campus, from U.S. Department of Energy, \$4,757,500, “The Center for Computational Simulation and Visualization Project.”

Zoltowski, Michael D; electrical & computer engineering, from National Science Foundation, \$94,309, “Future Directions in Signal Processing, Communications, Information Theory and Physical Layer Networking.” □

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