Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount
Bradley Roth Department of Physics	Henry Ford Health System	***Graduate Student Support for Medical Physics Research at Henry Ford Hospital.*** *The objective of this funding is to support Biomedical Sciences. This support allows many of our best and brightest graduate students to work in the world-class laboratory of Distinguished Professor Michael Chopp and his colleagues, many of whom are adjunct faculty in our Physics Department.*	$ 22,722
Mohammad Siadat Department of Computer Science & Engineering	William Beaumont Hospital	***Urinary Continence Index for Prediction of Urinary Incontinence in Older Women.*** *The objective of this project is to estimate a urinary incontinence index for older women to predict whether a subject is likely to develop incontinence in the future.*	$ 132,703
Lorenzo Smith School of Engineering and Computer Science	Ford Motor Company	***Design Tool for Electrohydraulic Forming Technology Material Model.*** *The goal is to develop a design tool for EHF technology based upon numerical modeling.*	$ 255,000
Osamah Rawashdeh Department of Electrical and Computer Engineering	Chrysler LLC	***Automotive HVAC Control Performance Improvement using Internet Data.*** *The goal of this project is to assess possible improvements on traditional HVAC automatic temperature control (ATC) systems.*	$ 47,652
Xiangqun Zeng Department of Chemistry	Michigan State University	***Autonomous Electrochemical Gas Sensor Detection Microsystem for Mine Safety.*** *The objective of this project is to develop new, miniaturized technology for sensing multiple gases that is capable of strategic dispersion throughout an underground coal mine.*	$ 168,226
Lorenzo Smith School of Engineering and Computer Science	ESI Group	***Automatic Single Solution Stamping Die Face Design Program Phase I.*** *The objective of the overall project is to deliver a fully functional prototype computer program and accompanying documentation for producing a die face solution.*	$ 33,267
Zissimos Mourelatos Department of Mechanical Engineering	Upwind Technology, Inc.	***Development of an Analytical Tool to Estimate the Closing Effort of an Automotive Side Door.*** *This six-month project is to develop a mathematical tool to predict the minimum required energy to close an automotive side door.*	$ 31,500
Kristin Landis Piwowar School of Health Sciences	American Society of Clinical Laboratory Science	***Defining the Molecular Mechanisms of Gold-Based Peptidomimetics.*** *The goals of this project are to evaluate and identify the cellular uptake, molecular targets, and anti-cancer effects of gold-dithiocarbamate anti-cancer agents that possess a novel oligopeptide.*	$ 5,000

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Sayed Nassar Department of Mechanical Engineering	United States Army TACOM	***Root Cause Analysis and Testing of Transparent Composites.*** *The objective of this project is to study failure modes and identify delamination root cause in transparent layered thick composites under various static and dynamic thermo-mechanical loads and environmental conditions.*	$ 786,766
Gary Barber Department of Mechanical Engineering	Mississippi State University	***Automotive Tribology Center.*** *The Automotive Tribology Center is an academic research unit within the Mechanical Engineering department at OU. The center will perform fundamental and applied research that lowers frictional energy losses, and enhances reliability and durability of automotive components.*	$ 48,216
Lianxiang Yang Department of Mechanical Engineering	Auto/Steel Partnership	***AS-7001 Nonlinear Strain Path.*** *The goal of this project is to perform and record DIC strain history measurements of the DP600 and TRIP780 steel specimens.*	$ 15,000
Roman Dembinski Department of Chemistry	American Chemical Society	***Effective, Catalyzed Reactions Leading to Diversely Substituted Fluoro-Heteroaromatics.*** *Catalytic reactions will be investigated for the synthesis of highly and diversely substituted fluoro-heteroarmatics.*	$ 65,000
Misa Mi School of Medicine	University of Illinois	***Community Assessment for Health Information Outreach Programs to Vulnerable and Underserved Populations.*** *The investigators of this project will collaborate with the South Oakland Shelter to conduct a needs assessment for vulnerable and underserved populations in Oakland County.*	$ 2,500
Xiangqun Zeng Department of Chemistry	University of Michigan	***Innovative Ionic Liquid Gas Sensor Technology for Air Pollution Monitoring.*** *The goal is to advance the technology to a stage allowing beta testing at potential customer and partner sites for the innovative Ionic Liquid Gas Sensor Technology for Air Pollution Monitoring.*	$ 52,652
Marshall Kitchens Department of Writing and Rhetoric	National Writing Project	***SEED Teacher Leadership Development Grant.*** *The Meadow Brook Writing Project will use funding for scholarships to attend the Invitational Summer Institute for Teacher Development and also incentive stipends for 20 Teacher Leaders to meet throughout the 2012-2013 academic year.*	$ 40,000

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Zissimos Mourelatos Department of Mechanical Engineering	United States Army TACOM	***Accelerated Testing Innovation Grant - Senior Subject Matter Expert.*** *The primary objective is to provide TARDEC with subject matter assistance in expanding TARDEC's Physical Simulation Team's capabilities in a manner that allows them to develop field-accurate vehicle models and to adequately predict in-field performance using accelerating testing approaches.*	$ 10,000
Reginald McCloud Department of Pre-College Programs	Detroit Area Pre-College Engineering Program (DAPCEP)	***Detroit Area Pre-College Engineering Program.*** *This funding will provide 37 pre-college students the opportunity to attend five weeks of sessions to learn about physics experiments and projects relating to motion, light, and electricity.*	$ 3,700
Dyanne Tracy Department of Teacher Development and Educational Studies	Macomb Intermediate School District	***Emaths.*** *Embracing Mathematics and Technology in High School provides professional development to teachers in Michigan teaching high school algebra and geometry. A sample of teachers and their students are taking assessments to indicate the effectiveness of the professional development which integrates technology.*	$ 4,769
		Total	**$ 1,724,673**