Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount
Geraldine Graham Upward Bound	United States Department of Education	***Project Upward Bound College Preparatory Academy.*** *Project Upward Bound will serve 120 eligible participants from Pontiac Northern High School, Pontiac Central High School, Pontiac Academy for Excellence, and Oak Park High School providing academic, social, cultural, and career enrichment. The objective is to encourage academic improvement, project retention, postsecondary enrollment, and postsecondary persistence.*	$ 566,016
Krzystof Kobus Department of Mechanical Engineering	Michigan Space Grant Consortium	***Earth Science STEM Camps, Outreach and Teacher Training.*** *This funding will support a comprehensive, hands-on, workshop based outreach and education program. This program will bring three separate populations onto the Oakland University campus focusing on earth science technology as it relates to environmental stewardship of our planet.*	$ 20,000
Lorenzo Smith School of Engineering and Computer Science	Chrysler Group LLC	***Seed Funding for CLIC-Form R&D 2012-2013.*** *This funding will support the continuation of teaching and research through the CLIC form program for the 2012-2013 period. Deliverables will be educational workshops, laboratory experiment training, career advising, and technical support for OU students, including technical reports to Chrysler.*	$ 110,264
Andrei Slavin Department of Physics	National Science Foundation	***MWN Dynamically Controlled Artificial Magnonic Materials Based on Arrays of Nano-Sized Dots.*** *This project involves further development, characterization, and investigation of dynamically controlled nano-structured artificial materials two-dimensional magnonic crystals based on arrays of interacting nano-sized magnetic dots.*	$ 110,000
Andrei Slavin Department of Physics	United States Army TACOM	***Development of a Theory of Non-Reciprocal Magnetic Metamaterials*** *. The main goal of this research program is the evaluation of the non-reciprocal splitting of collective spin waves propagating in a periodic array of magnetic nanodots.*	$ 50,000
Nelia Afonso **School of Medicine**	Filmer Memorial Charitable Trust	***Building Community Connections with Future Physicians.*** *The program objective is to prepare medical students to become socially responsible community physicians.*	$ 15,000
Tanya Christ Department of Reading and Language Arts	International Reading Association	***Emergent Readers Digital Literacy Development.*** *This study will explore emergent readers development of understandings about digital text and using digital text features to construct meaning.*	$ 3,600

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Robert VanTil Department of Industrial and Systems Engineering	Michigan Economic Development Corporation	***PLM/MSV Training and Internship Program.*** *This funding will be used to pilot a certification course on Product Lifecycle Management (PLM)/Modeling, Simulation, and Visualization (MSV) software held May 2013.*	$ 50,000
Cynthia Schellenbach Department of Sociology and Anthropology	Oakland Schools	***Regional ASQ Developmental Screening Project-Great Start Collaborative-Wayne Oakland and Macomb.*** *This project is a collaborative expansion of the use of the Ages and Stages Questionnaire and the ASQ:SE for implementation of a universal developmental screening program.*	$ 20,004
Evgeniy Khain Department of Physics	Burroughs Welcome Fund	***Role of Mechanical Stresses in Tumor Growth: Molecular Dynamics Simulations.*** *The main objective of this collaboration program is to begin employing molecular dynamics simulations in modeling of the invasive tumor growth, their effect on cell size and cell proliferation rate.*	$ 9,120
Krzystof Kobus Department of Mechanical Engineering	United States Army	***A System to Measure Window R-Values.*** *The objective of this project is to build and test an experimentation apparatus to measure the R-value of windows.*	$ 2,600
Yang Xia Department of Physics	National Institutes of Health	***Adaptability of Articular Cartilage to External Loading by Microscopic Imaging.*** *The overarching goal of this project is to detect the early changes in the in situ molecular architecture of diseased articular cartilage.*	$ 422,505
Lorenzo Smith School of Engineering and Computer Science	ESI Group	***Automatic Single-Solution Stamping Die Face Design Program: Phase 1.*** *The overall objective of this project is to deliver a fully functional prototype computer program and accompanying documentation of full description of the methodology for producing a die face solution, which is optimal for a given problem statement and unique among different users.*	$ 33,267
Zissimos Mourelatos Department of Mechanical Engineering	University of Michigan	***Simulation-Based Validation and Certification of Vehicle Tests and Designs.*** *The goal of this project is to complement current research activity at the ARC to accelerate the progress of basic research in simulation-based validation and certification of vehicle tests and designs.*	$ 23,000
Chhabi Govind Department of Biological Sciences	National Institutes of Health	***Mechanism of RSC Recruitment and Its Role in Transcription.*** *This project will explore the mechanism by which RSC is recruited to its target genes to remodel chromatin during transcription.*	$ 266,472

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Srinivasan Gopalan Department of Physics	National Science Foundation	***Liquid Phase Epitaxy of Ferromagnetic-Piezoelectrics Heterostructures and Femto-Tesla Magnetic Sensor.*** *This research program is proposed on magneto-electric (ME) composites for low-frequency, pico-Tesla, miniature, magnetic sensors and sensor arrays with potential to replace SQUID sensors for use in biomedical imaging and for an earthquake early warning system.*	$ 200,463
Hongwei Qu Department of Electrical and Computer Engineering	National Science Foundation	***Liquid Phase Epitaxy of Ferromagnetic-Piezoelectrics Heterostructures and Femto-Tesla Magnetic Sensor.*** *This research program is proposed on magneto-electric (ME) composites for low-frequency, pico-Tesla, miniature, magnetic sensors and sensor arrays with potential to replace SQUID sensors for use in biomedical imaging and for an earthquake early warning system.*	$ 144,538
John Seeley Department of Chemistry	Western Michigan University	***Studies of the Role of the Oxidation of BVOCs in SOA Production in the Southeastern U.S.*** *The goal of this collaborative project is to measure the concentration of key organic compounds in the air of the Southeastern United States in order to better understand the atmospheric chemistry of the region.*	$ 37,708
James Leidel School of Engineering and Computer Science	State of Michigan MEDC	***Energy Efficiency Student Internship Program (EESIP).*** *This project will fund two students internships for outside companies to be administered by Oakland University and OU INC.*	$ 20,000
Zissimos Mourelatos Department of Mechanical Engineering	Chrysler Company LLC	***Durability Tuning Box Initiative for Advanced Scaled Load Generation Using Surrogate Data.*** *The goal of this project is to develop an advanced scaled load factor generation method to accurately predict load data for a new vehicle using pervious data from different vehicles.*	$ 28,000
Lianxiang Yang Department of Mechanical Engineering	Auto/Steel Partnership	***Onset Necking Strain Determination for Numsheet.*** *This project is to determine onset necking strain by advanced optical method: Digital Image Correlation.*	$ 14,784
Dorothy Nelson Office of Research Administration	Michigan Economic Development Corporation	***Tech Transfer Talent Network Fellowship.*** *Funding is proposed to support a technology transfer fellow in the Office of Research Administration. The fellow is a patent attorney and faculty in the School of Engineering and Computer Science.*	$ 19,435
Osamah Rawashdeh Department of Electrical and Computer Engineering	Chrysler Company LLC	***Automotive Hardware In-the-Loop Laboratory.*** *The goal of this project is to establish a hardware in the loop simulations expertise at Oakland University.*	$ 130,000

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Brian Sangeorzan Department of Mechanical Engineering	Chrysler Company LLC	***Automotive Hardware In-the-Loop Laboratory.*** *The goal of this project is to establish a hardware in the loop simulations expertise at Oakland University.*	$	130,000
		Total	**$**	**2,426,776**