

Agendum
Oakland University
Board of Trustees Formal Session
February 12, 2013

**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY
FOR THE PERIOD OF NOVEMBER 1, 2012 THROUGH DECEMBER 31, 2012**
A Recommendation

1. **Division and Department:** Academic Affairs/Office of Research Administration
2. **Introduction:** Oakland University contributes to our national agenda as a contributor to the nation's scientific and technological progress, both through the generation of new knowledge and ideas and the education and training of its students. Grants and contracts awarded to Oakland University play a critical role in the advancement of new research findings, and current research trends gives emphasis to inter-disciplinary, technology-driven, and product-oriented team efforts.

The Board of Trustees (Board) has authorized the President, or his or her designee, to receive and acknowledge grants and contracts to the University, but such grants and contracts must be reported to the Board not less often than quarterly for acceptance on behalf of the University.

At this time, we request that the Board accept the grants and contracts reported on the attached Grants and Contracts Report, Attachment A, for the period of November 1, 2012 through December 31, 2012.

3. **Previous Board Action:** The Board accepts grants and contracts to Oakland University on a regular basis at its Formal Sessions.
4. **Budget Implications:** Grants and contracts contribute to the University through the recovery of direct and indirect expense incurred in support of research projects.
5. **Educational Implications:** Grants and contracts enhance the training and education of students.
6. **Personnel Implications:** Grants and contracts awards may provide salary support for faculty, post-doctoral fellows, undergraduate and graduate students, technicians, lab managers, and other personnel, as required by the funded research project or program.

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7. **University Reviews/Approvals:** All grants and contracts are reviewed by the Office of Research Administration prior to submission to the Board to ensure compliance with federal and state laws and regulations and University policies and procedures, when applicable, and with assistance from the Office of Legal Affairs when requested.

8. **Recommendation:**


RESOLVED, that the Board of Trustees accept grants and contracts to Oakland University identified in the attached Grants and Contracts Report, Attachment A, for the period of November 1, 2012 through December 31, 2012.

9. **Attachments:** A. Grants and Contracts Report.

Submitted to the President
on 2/7, 2013 by


Susan M. Awbrey
Interim Senior Vice President for
Academic Affairs and Provost

Recommended on 2/7, 2013
to the Board for approval by


Gary D. Russi
President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Bradley Roth Department of Physics	Henry Ford Health System	Graduate Student Support for Medical Physics Research at Henry Ford Hospital. <i>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.</i>	\$ 22,722	\$ 155,326
Mohammad Siadat Department of Computer Science & Engineering	William Beaumont Hospital	Urinary Continence Index for Prediction of Urinary Incontinence in Older Women. <i>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.</i>	\$ 132,703	\$ 267,805
Lorenzo Smith School of Engineering and Computer Science	Ford Motor Company	Design Tool for Electrohydraulic Forming Technology Material Model. <i>The goal is to develop a design tool for EHF technology based upon numerical modeling.</i>	\$ 255,000	\$ 1,041,000
Osamah Rawashdeh Department of Electrical and Computer Engineering	Chrysler LLC	Automotive HVAC Control Performance Improvement using Internet Data. <i>The goal of this project is to assess possible improvements on traditional HVAC automatic temperature control (ATC) systems.</i>	\$ 47,652	\$ 47,652
Xiangqun Zeng Department of Chemistry	Michigan State University	Autonomous Electrochemical Gas Sensor Detection Microsystem for Mine Safety. <i>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.</i>	\$ 168,226	\$ 653,990
Lorenzo Smith School of Engineering and Computer Science	ESI Group	Automatic Single Solution Stamping Die Face Design Program Phase I. <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.</i>	\$ 33,267	\$ 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. <i>This six-month project is to develop a mathematical tool to predict the minimum required energy to close an automotive side door.</i>	\$ 31,500	\$ 31,500

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Kristin Landis Piwowar School of Health Sciences	American Society of Clinical Laboratory Science	Defining the Molecular Mechanisms of Gold-Based Peptidomimetics. <i>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.</i>	\$ 5,000	\$ 5,000
Sayed Nassar Department of Mechanical Engineering	United States Army TACOM	Root Cause Analysis and Testing of Transparent Composites. <i>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.</i>	\$ 786,766	\$ 1,631,034
Gary Barber Department of Mechanical Engineering	Mississippi State University	Automotive Tribology Center. <i>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.</i>	\$ 48,216	\$ 1,475,149
Lianxiang Yang Department of Mechanical Engineering	Auto/Steel Partnership	AS-7001 Nonlinear Strain Path. <i>The goal of this project is to perform and record DIC strain history measurements of the DP600 and TRIP780 steel specimens.</i>	\$ 15,000	\$ 15,000
Roman Dembinski Department of Chemistry	American Chemical Society	Effective, Catalyzed Reactions Leading to Diversely Substituted Fluoro-Heteroaromatics. <i>Catalytic reactions will be investigated for the synthesis of highly and diversely substituted fluoro-heteroaromatics.</i>	\$ 65,000	\$ 65,000
Misa Mi School of Medicine	University of Illinois	Community Assessment for Health Information Outreach Programs to Vulnerable and Underserved Populations. <i>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.</i>	\$ 2,500	\$ 2,500
Xiangqun Zeng Department of Chemistry	University of Michigan	Innovative Ionic Liquid Gas Sensor Technology for Air Pollution Monitoring. <i>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.</i>	\$ 52,652	\$ 52,652

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Marshall Kitchens Department of Writing and Rhetoric	National Writing Project	SEED Teacher Leadership Development Grant. <i>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.</i>	\$ 40,000	\$ 40,000
Zissimos Mourelatos Department of Mechanical Engineering	United States Army TACOM	Accelerated Testing Innovation Grant - Senior Subject Matter Expert. <i>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.</i>	\$ 10,000	\$ 10,000
Reginald McCloud Department of Pre-College Programs	Detroit Area Pre-College Engineering Program (DAPCEP)	Detroit Area Pre-College Engineering Program. <i>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.</i>	\$ 3,700	\$ 3,700
Dyanne Tracy Department of Teacher Development and Educational Studies	Macomb Intermediate School District	Emaths. <i>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.</i>	\$ 4,769	\$ 4,769
Total			\$ 1,724,673	\$ 5,535,344