

Agendum  
Oakland University  
Board of Trustees Formal Session  
October 31, 2011

**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY  
FOR THE PERIOD OF JULY 1, 2011 THROUGH SEPTEMBER 30, 2011**

**A Recommendation**

1. **Division and Department:** Academic Affairs/Office of Grants, Contracts and Sponsored Research.

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 July 1, 2011 through September 30, 2011.

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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July 1, 2011 through September 30, 2011  
Oakland University  
Board of Trustees Formal Session  
October 31, 2011  
Page 2


7. **University Reviews/Approvals:** All grants and contracts are reviewed by the Office of Grants, Contracts and Sponsored Research 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:**

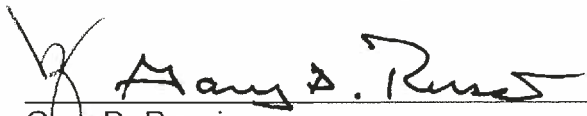
RESOLVED, that the Board of Trustees accept grants and contracts to Oakland University identified in the attached Grants and Contracts Report, Attachment A, for the period of July 1, 2011 through September 30, 2011.

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

Submitted to the President  
on Oct 26, 2011 by

  
Virinder K. Moudgil  
Senior Vice President for  
Academic Affairs and Provost

Recommended on 10/26/, 2011  
to the Board for approval by

  
Gary D. Russi  
President

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
<b>John Seeley</b> Department of Chemistry	National Science Foundation	<b><i>Biogenic Volatile Organic Compounds and Their Impact in a Changing Temperate Forest.</i></b> This project will help us to understand the role that forests play in climate change.	\$ 156,740	\$ 156,740
<b>Tanya Christ</b> Department of Reading and Language Arts	Michigan Campus Compact	<b><i>Building Bridges Project: Supporting Home Literacy Practices.</i></b> The goal of this project is to provide support to parents in the literacy development of their children and to construct a replicable model of parent-teacher partnerships.	\$ 3,500	\$ 3,500
<b>Lorenzo Smith</b> Department of Mechanical Engineering	Chrysler Group LLC	<b><i>Phase I CLIC Research and Development for Sheet Metal Forming Technology.</i></b> The objective of this collaborative project is to develop novel methods, tools and solutions for improvement of sheet metal forming processes.	\$ 60,292	\$ 60,292
<b>Ka C Cheok</b> Department of Electrical and Computer Engineering	Academy of Applied Science	<b><i>Research and Engineering Apprenticeship Program I.</i></b> The objective of this project is to fund a summer apprenticeship experience at Oakland University for high school students. Students will gain exposure to robotics and cyber-physical technologies.	\$ 2,600	\$ 2,600
<b>Ka C Cheok</b> Department of Electrical and Computer Engineering	Academy of Applied Science	<b><i>Research and Engineering Apprenticeship Program II.</i></b> The objective of this project is to fund a summer apprenticeship experience at Oakland University for high school students. Students will gain exposure to robotics and cyber-physical technologies.	\$ 2,600	\$ 2,600
<b>Krzystof Kobus</b> Department of Mechanical Engineering	Academy of Applied Science	<b><i>Research and Engineering Apprenticeship Program.</i></b> The objective of this project is to fund a summer apprenticeship experience at Oakland University for high school students. Students will gain exposure to biodiesel production, ethanol production or biomass densification.	\$ 2,600	\$ 2,600
<b>Michael Polis</b> Department of Industrial and Systems Engineering	Academy of Applied Science	<b><i>Research and Engineering Apprenticeship Program.</i></b> The objective of this project is to fund a summer apprenticeship experience at Oakland University for high school students. Students will gain exposure to literature searches and formation and modification of microgrids.	\$ 2,600	\$ 2,600
<b>Osamah Rawashdeh</b> Department of Electrical and Computer Engineering	Academy of Applied Science	<b><i>Research and Engineering Apprenticeship Program.</i></b> The objective of this project is to fund a summer apprenticeship experience at Oakland University for high school students. Students will gain exposure to development of a graphical user interface for fall detection/prevention for elderly patients with dementia.	\$ 2,600	\$ 2,600

Note 1: The award reported herein is categorized as a restricted grant based on the award terms or other compliance requirements. Awards issued through philanthropic organizations may also be appropriately reflected on fundraising reports.

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
<b>Reginald McCloud</b> Pre-College Programs	Detroit Area Pre-College Engineering Program	<i>DAPCEP READY II. The objective of this project is to attract and motivate under-represented youth to pursue higher education. The goal of READY is to interest youth in careers in alternative energy.</i>	\$ 45,000	\$ 45,000
<b>Lisa Mileto</b> School of Nursing	Health Resources and Services Administration	<i>Nurse Anesthetist Traineeships. The objective of this program is to support traineeships for full-time nurse anesthetist students.</i>	\$ 16,231	\$ 16,231
<b>Frances Jackson</b> School of Nursing	Health Resources and Services Administration	<i>Nurse Anesthetist Traineeships. The objective of this program is to support traineeships for graduate nursing students.</i>	\$ 49,951	\$ 49,951
<b>Chhabl Govind</b> Department of Biological Sciences	National Institutes of Health	<i>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.</i>	\$ 272,207	\$ 1,373,730
<b>Lorenzo Smith</b> Department of Mechanical Engineering	Ford Motor Company	<i>Aluminum Enhancing Forming Limit Curve. The objective of this collaborative project is to understand the stretch/bend/draw effect on aluminum sheet material forming limit curves using digital image correlation.</i>	\$ 8,790	\$ 8,790
<b>Lorenzo Smith</b> Department of Mechanical Engineering	Ford Motor Company	<i>Process Development of Aluminum Tube Bending and Hydroforming. The objective of this project is to develop standard finite element modeling procedures for tube hydroforming processes.</i>	\$ 67,055	\$ 123,317
<b>Marshall Kitchens</b> Department of Writing and Rhetoric	National Writing Project	<i>Meadow Brook Writing Project. The purpose of this project is to conduct a summer institute and other year-round activities to improve the ability of area K-12 teachers to teach writing to their students.</i>	\$ 35,000	\$ 484,000
<b>Amy Baner-Berceli</b> Department of Biological Sciences	National Institutes of Health	<i>Physiological Role of Activation of the JAK/STAT Pathway in Hypertension. The goal of this project is to determine the role of the JAK/STST pathway in hypertension and the development of disease-related vascular and renal complications.</i>	\$ 240,514	\$ 969,343
<b>Yang Xia</b> Department of Physics	National Institutes of Health	<i>Adaptability of Articular Cartilage to External Loading by Microscopic Imaging. To detect the early changes in the in situ molecular architecture of diseased articular cartilage. We hypothesize that the load-induced changes in cartilage at the structural and molecular levels can be detected by a combination of microscopic imaging modalities and that the degradation in cartilage due to diseases or mechanical injury could affect load-induced ultra structural changes.</i>	\$ 28,094	\$ 1,726,631

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Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Andrew Goldberg Eye Research Institute	National Institutes of Health	<i>Molecular Scaffolding for Photoreceptor Outer Segment Structure and Renewal. The long-term objective of this research is to define the molecular scaffolding that underlies the dynamic architecture of vertebrate rod and cone photoreceptor outer segments. This research will advance knowledge of outer segment architecture to provide a basis for understanding how scaffolding defects impair rod and cone cell viability to cause retinal disease.</i>	\$ 342,275	\$ 1,762,053
Scott Tiegs Department of Biological Sciences	Huron Mountain Wildlife Foundation (Note 1)	<i>Influence of Landscape-Scale Variables on Functional and Structural Integrity of Northern Michigan Streams. The goal of this project is to monitor streams and rivers in the upper peninsula of Michigan using macroinvertebrate assemblages and cotton-strip decomposition rates.</i>	\$ 4,400	\$ 8,800
Brad Roth Department of Physics	Henry Ford Health System	<i>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.</i>	\$ 30,252	\$ 132,604
Geraldine Graham Upward Bound	U.S. Department of Education	<i>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.</i>	\$ 578,737	\$ 2,967,745
John Seeley Department of Chemistry	Foster-Miller	<i>Subcontract on Foster-Miller's Mobile Air Zone Extractor Project. The project involves characterization of existing materials for sampling atmospheric chemical compounds and develop new desorption approaches. This work will aid in the production of accurate and fast techniques for monitoring the chemical composition of the atmosphere.</i>	\$ 39,960	\$ 359,572
Lianxiang Yang Department of Mechanical Engineering	General Motors Corporation	<i>Developing a Shearographic Prototype for Inspection of Weld Joints. The goal of this project is to develop a prototype pre-production system for shearographic inspection of the weld joints on the GM battery.</i>	\$ 65,027	\$ 65,027

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Kathleen Moore College of Arts and Sciences	National Science Foundation	<b>Partnership for Adaptation, Implementation, and Dissemination (PAID)-Women in Science and Engineering at Oakland University (WISE@OU).</b> <i>The goal of this project is to facilitate the advancement of academic women in STEM disciplines at Oakland University. The funding will support situational analysis and development of pilot programs to enhance recruitment, promotion, and retention.</i>	\$ 518,894	\$ 518,894
Lorenzo Smith Department of Mechanical Engineering	General Motors Corporation	<b>Aluminum Enhanced Form Limit Curve.</b> <i>The purpose of this work is to understand the stretch/draw/bend effect on aluminum sheet material forming limit curves.</i>	\$ 8,790	\$ 8,790
Lorenzo Smith Department of Mechanical Engineering	Chrysler Company LLC	<b>Aluminum Enhanced Form Limit Curve.</b> <i>The purpose of this work is to understand the stretch/draw/bend effect on aluminum sheet material forming limit curves.</i>	\$ 8,790	\$ 8,790
David Schall Department of Mechanical Engineering	National Science Foundation	<b>Atomistic Simulations of the Nanotribology of Carbon-Based Materials.</b> <i>The objective of this project is to use atomistic modeling to elucidate the molecular-scale connections between properties of carbon-based materials and to explore nanotribology.</i>	\$ 146,562	\$ 146,562
George Martins Department of Physics	National Science Foundation	<b>Local Environment and Time-Dependent Effects in Nanoscale Systems.</b> <i>The purpose of this funding is to study the symmetry, local environment and time-dependent effects in nanoscale systems using a synergistic approach.</i>	\$ 36,421	\$ 179,131

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Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Robert Folberg School of Medicine	Michigan Department of Community Health	<p><b>Medicaid Physician Payment Adjustor Program.</b></p> <p><i>There is currently a challenge in the State of Michigan to ensure that patients who are enrolled in Medicaid have access to quality health care. The Federal Government established the Medicaid Physician Payment Adjustor Program (Program) that increases access to healthcare for Medicaid patients by increasing Medicaid's payment screens for physicians up to the average of what the area's commercial healthcare plans pay physicians. Oakland University is participating in the Program with William Beaumont Hospitals to support the Oakland University William Beaumont School of Medicine (OUWSOM) and to assist constituents of the State of Michigan by providing Medicaid patient provider services. Oakland University will make periodic intergovernmental fund transfers to the State of Michigan (IGT) as part of the Program to facilitate adjusted rate payments for both fee-for-service patients and managed care patients. As part of the Program, the IGT will be returned in full to Oakland University, resulting in zero net outlay. The IGT will fluctuate based on actual physician services and charges as monitored and approved by the Michigan Department of Community Health (TBD). The benefit to Oakland University of participation in the Program is the public service value of increasing access to healthcare for Medicaid patients in the State of Michigan. The benefit to the OUWSOM is the involvement of over 1,300 William Beaumont Hospital physicians as faculty members.</i></p>	TBD	TBD
<b>Total</b>			<b>\$ 2,776,482</b>	<b>\$ 11,188,493</b>

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