

**Agendum  
Oakland University  
Board of Trustees Formal Session  
August 8, 2016**

**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY  
FOR THE PERIOD OF MAY 1 - JUNE 30, 2016**  
**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 May 1 – June 30, 2016

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.
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.


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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 May 1 – June 30, 2016.
9. **Attachments:** A. Grants and Contracts Report.

Submitted to the President  
on 7/28, 2016 by

  
James P. Lentini  
Senior Vice President for  
Academic Affairs and Provost

Recommended on 7/28/, 2016  
to the Board for approval by

  
George W. Hynd  
President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Sanela Martic Department of Chemistry	National Institutes of Health	<b>Mechanistic Studies of Anti-Tau Antibodies Effects on Tau Biochemistry.</b> Tauopathies are a class of neurodegenerative disorders which involve tau protein. This project aims to determine inhibitory mechanisms of anti-tau antibodies on tau phosphorylation, aggregation, and microtubule stability.	\$ 433,433	\$ 433,433
Richard Olawoyin Department of Health Sciences	University of Michigan/MSGC	<b>Application of Silver-Nanoparticles for Food Preservation on Space Missions.</b> The goal of this project is to explore the use of nanotechnology as a viable solution for food reservation on space missions.	\$ 5,000	\$ 5,000
Evan Trivedi School of Health Sciences	University of Michigan/MSGC	<b>Fluorinated Phthalocyanines as Light Harvesting Molecules in Solar Cells.</b> Our goal is to develop Pcs with fluorine atoms at their periphery.	\$ 2,500	\$ 2,500
Krzysztof Kobus Department of Mechanical Engineering	University of Michigan/MSGC	<b>Earth System Science STEM Camps, Outreach and Teacher Training.</b> This funding will be used for summer STEM camps and workshops for K-12 students, teachers, and the general public.	\$ 5,000	\$ 5,000
Wenjin Zhou Department of Computer Science and Engineering	University of Michigan/MSGC	<b>Design Better Drug for Space Radiation-Influenced Lung Cancer K-RAS Electron Structure Computation.</b> Our goal is to elucidate the potential drug binding to K-RAS at the molecular level.	\$ 5,000	\$ 5,000
Sanela Martic Department of Chemistry	University of Michigan/MSGC	<b>Mechanisms of UV/02-Initiated Modifications of Peptides/Proteins of the Eye.</b> The goal of this research is to characterize modifications of crystalline protein and peptides induced by UV irradiation in the presence of oxygen, and evaluate their aggregation.	\$ 5,000	\$ 5,000
Krzysztof Kobus Department of Mechanical Engineering	U.S. Army	<b>Research Education Apprenticeship Program (REAP).</b> This funding will assist two students on directed SECS summer research.	\$ 4,000	\$ 4,000

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Andrew Goldberg Eye Research Institute	National Institutes of Health	<b>Investigation of the Molecular Basis of Rod and Cone Photoreceptor Structure.</b> This research will improve understanding of healthy rod and cone cell structure and the changes that occur during progressive retinal disease, and may suggest strategies for preserving sight.	\$ 388,320	\$ 1,514,157
Laurel Stevenson School of Health Sciences	Oakland County Health Division	<b>Health and Wellness 4x4 Plan Evaluation.</b> Oakland University will provide evaluation services for the Health and Wellness 4x4 Plan Evaluation by assisting in developing the evaluation plan and tools, conduct data collection, entry, and analyses.	\$ 3,761	\$ 3,761
Geraldine Graham Upward Bound	U.S. Department of Education	<b>Project Upward Bound College Preparatory Academy.</b> 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.	\$ 615,170	\$ 2,972,942
Randal Westrick Department of Biological Sciences	American Heart Association	<b>The Identification of Genetic Regulators of Plasminogen Activator Inhibitor-1.</b> Elevated plasma plasminogen activator inhibitor-1 (PAI-1) is associated with thrombosis, which causes the majority of deaths due to cardiovascular disease. This funding will be used to identify the precise variant controlling PAI-1 and determine whether it affects other platelet specific genes.	\$ 4,000	\$ 4,000
Joanne Reger Department of Sociology and Anthropology	Sociologists for Women in Society	<b>Editorship of Gender and Society.</b> This funding will be used for editor, management, and production costs that will occur in the production of the journal <i>Gender and Society</i> for a three-year term.	\$ 98,277	\$ 243,788
Linda Gillum School of Medicine	Quinnipiac University	<b>Northeast Group Educational Affairs.</b> The purpose of this study is to determine whether there are differences between new schools and established schools in the medical school and academic health center culture for faculty.	\$ 1,250	\$ 1,250

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Susan Awbrey Office of the Associate Provost	The Kresge Foundation	<b>2016 Student Success Conference.</b> This funding will support the 2016 Student Success Conference coordinated by Oakland University.	\$ 40,000	\$ 40,000
Lianxiang Yang Department of Mechanical Engineering	Auto/Steel Partnership	<b>Pre-Strain Half Dog Bone Shaped Coupons for Edge Cracking Limit Experiments with DIC Strain Measurements.</b> The objective of this project is to measure the edge cracking limit with different pre-strained samples using Digital Image Correction strain measurement system.	\$ 37,808	\$ 37,808
Lawrence Herriman Macomb-OU INCubator	Grand Valley State University/MEDC	<b>Business Accelerator Fund-Client Engagement, VIZBE.</b> The objective for this project is to make accelerator services available statewide, make services available to high priority companies in regions, share accelerator best practices statewide, build lasting collaborations, and create jobs to catalyze multiplier effect.	\$ 13,700	\$ 13,700
Jennifer Lucarelli School of Health Sciences	Michigan State University	<b>Shared Measurement Food Access Survey Pilot.</b> The goal of this project is to collaborate with Michigan State University's Center for Regional Food Systems in pilot testing a Food Access Survey in the Pontiac community.	\$ 5,800	\$ 5,800
Frank Giblin Eye Research Institute	Retinal Solutions, LLC	<b>Norrin Proof of Concept.</b> This project will test recombinant Norrin for proof of concept. Retinal Solutions is developing a clinical-grade drug for retinal disease, which must be shown to be effective in animal studies to be considered for ongoing development.	\$ 81,150	\$ 81,150
Joanne Reger Department of Sociology and Anthropology	Sociologists for Women in Society	<b>Editorship of Gender and Society.</b> This funding will be used for editor, management, and production costs that will occur in the production of the journal <i>Gender and Society</i> for a three-year term.	\$ 145,511	\$ 243,788

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Anne Hranchook School of Nursing	Health Resources and Services Administration (HRSA)	<b>Nurse Anesthesia Traineeship Grant.</b> The purpose of this project is to provide full-time graduate nurse anesthesia students with traineeship support to pay for the cost of tuition for the Oakland University-Beaumont Graduate Program of Nurse Anesthesia and to improve the quality and quantity of graduates able to enter advanced practice nursing roles in rural, critical access and medically underserved areas of the United States.	\$ 27,938	\$ 27,938
Mary Jamieson Department of Biological Sciences	United States Department of Agriculture/National Institute of Food and Agriculture	<b>Impacts of Herbaceous Bioenergy Feedstock Production Systems on Bee Communities.</b> This research will investigate the potential impacts of land use on pollinator assemblages in Colorado agricultural ecosystems.	\$ 59,277	\$ 59,277
Fabia Battistuzzi Department of Biological Sciences	National Aeronautics and Space Administration	<b>Innovative Molecular Timing Applications to Obtain Accurate Histories of Life.</b> The goal of this research is to establish an objective and computationally easy procedure to evaluate the accuracy of published and future time trees that will lead to more accurate and concordant timelines.	\$ 195,328	\$ 581,213
Keyu Li Department of Mechanical Engineering	Fiat Chrysler Automobiles US LLC	<b>Fatigue Testing of Auto Components.</b> The objective of this research is to find the threshold of mean stress and corresponding stress amplitude for specific type of bolts.	\$ 90,000	\$ 90,000
Yuejian Wang Department of Physics	Academy of Applied Science	<b>High Pressure Materials Science: An Inspired Research Experience for Underrepresented High School Students.</b> The goals of this program is to deliver the inspired research experience to two high school students, exclusively from underserved and underrepresented minorities in STEM in the metro Detroit area.	\$ 4,000	\$ 4,000
Li Li Department of Mathematics and Statistics	National Security Agency	<b>Bases in Cluster Algebras and their Geometries and Combinatorics.</b> The goal of this project aims to address the connection between geometries and combinatorics and some natural bases of cluster algebras, and to find more explicitly computable description of these bases.	\$ 19,847	\$ 19,847
<b>Total</b>			<b>\$ 2,291,070</b>	<b>\$ 6,404,352</b>