Agendum
Oakland University
Board of Trustees Formal Session
August 12, 2014

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF MAY 1 – JUNE 30, 2014 A Recommendation

- 1. Division and Department: Academic Affairs/Office of Research Administration
- 2. <u>Introduction:</u> 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 through June 30, 2014.

- **Previous Board Action:** The Board accepts grants and contracts to Oakland University on a regular basis at its Formal Sessions.
- **4.** <u>Budget Implications:</u> Grants and contracts contribute to the University through the recovery of direct and indirect expense incurred in support of research projects.
- **Educational Implications:** Grants and contracts enhance the training and education of students.
- **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. <u>University Reviews/Approvals:</u> 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.
- **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 through June 30, 2014.
- 9. Attachments: A. Grants and Contracts Report.

Submitted to the President on 8-7-, 2014 by

James P. Lentini, D.M.A. Senior Vice President for Academic Affairs and Provost

Recommended on Aug. 7, 2014 to the Board for approval by

Betty J. Youngblood Interim President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years	
Osamah Rawashdeh Department of Electrical and Computer Engineering	National Science Foundation	REU Site: Interdisciplinary Research Experience in Electrical and Computer Engineering. This funding will help promote interest in research and careers in the area of Electrical and Computer Engineering. Ten participants will spend ten weeks in the upcoming three summers working in active research labs in the department.	\$ 122,286	\$	366,866
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.	\$ 7,532	\$	196,040
Michael Sevilla Department of Chemistry	National Institutes of Health	Mechanisms of Radiation Damage to DNA: LET Effects. The goal of this project is to study free radical mechanisms of radiation damage to DNA.	\$ 197,563	\$	725,904
John Seeley Department of Chemistry	Western Michigan University/EPA	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.	\$ 10,428	\$	78,136
Suha Kridli School of Nursing	Blue Cross Blue Shield of Michigan Foundation	Improving Health Behaviors of Arab American Youth. The objective of this research is to study the effectiveness of a health education curriculum for Arab American youths in Michigan.	\$ 72,921	\$	72,921
Laila Guessous Department of Mechanical Engineering	National Science Foundation	REU Site: Automotive and Energy Research and Industrial Mentorship (AERIM) Program at Oakland University. The primary objective of this REU site is to engage 10 undergraduate students, particularly women, in a 10-week summer research experience in the automotive and energy fields.	\$ 359,826	\$	359,826
Gautam Singh Department of Computer Science and Engineering	Denso Corporation	Autonomous Vehicles: Database for Sensor Tagging and Indexing. This project aims at developing a database for tracking, processing and tagging data acquired from sensors on a vehicle.	\$ 95,000	\$	95,000
Lianxiang Yang Department of Mechanical Engineering	Tongji University/ Shanghai Electric International Economic and Trading	Development of Shearography System with a Wide Angle of View. The goal of this project is to develop a shearographic system with a wide angle of view, more than 12 times larger than the existing systems.	\$ 22,940	\$	22,940

Principal Investigator Samia Ragheb School of Medicine	Awarding Agency American Medical Association Foundation	Title and Project Abstract Carotid Atherosclerosis: Biomarkers to Identify Patients at Risk for Stroke. The long- term goal of this research is to determine biomarkers in peripheral blood that can prospectively identify patients at risk for plaque instability.	Award Amount		Total Award All Years	
			\$	2,499	\$	2,499
Gopalan Srinivasan Department of Physics	United States Army	Self Assembled Multiferroic Nanostructures and Studies on Magnetoelectric Interactions. The goal of this project is to extend current research to novel self-assembled ferromagnetic- ferroelectric nanostructures and studies on ME interactions and negative-index characteristics.	\$	116,000	\$	318,777
Cynthia Shellenback Department of Sociology and Anthropology	Oakland Schools	Help Me Grow Program Evaluation Contract. This funding will be used to complete a program evaluation for the Michigan Help Me Grow Project, implement research methodologies in accordance with measurement matrix and year three evaluation, as well as analysis and quarterly reports.	\$	10,000	\$	10,000
Lianxiang Yang Department of Mechanical Engineering	AK Steel	Experimental Draw Bead Simulation Involving Inclined Double Bead Configuration. The goal of this project is to determine experimentally the draw bead restraining force from nine different draw bead configurations, which feature double beads geometry and inclined binder angle, and determine the R-values in three different directions from an uniaxial tensile test.	\$	19,339	\$	19,339
Julie Ricks-Doneen Department of Human Development and Child Study	Oakland Schools/Great Start Collaborative- Oakland	Strengthening Families Parent Café. This funding will be used to provide one parent café series with three total training sessions.	\$	2,000	\$	2,000
Beth Black Department of Health Sciences	American Physical Therapy Association	Theory Based Intervention Program to Support Physical Activity for Patients with Multiple Sclerosis. The purpose of this study is to examine whether an individualized home-based physical activity counseling intervention, based on Social Cognitive Theory and using physical activity monitoring technology, can increase levels of physical activity.	\$	6,020	\$	6,020
Anna Spagnuolo Department of Mathematics and Statistics	Michigan Space Grant Consortium	Mathematical Modeling of Prokaryotic Speciation. This project aims to derive a mathematical model for prokaryotic speciation in relation to a planetary-scale atmosphere.	\$	2,500	\$	2,500
Ka C Cheok Department of Electrical and Computer Engineering	TACOM/TARDEC	Intelligent Ground Vehicle Competition. Oakland University will conduct the 2014 Annual Intelligent Ground Vehicle Competition and support activities for the competition events.	\$	89,900	\$	89,900

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Zijuan Liu Department of Biological Sciences	National Institutes of Health	Role of SLC39A8 (ZIP8) in Selenite Transport. The goal of this project is to identify the functions of SLC39A8 (ZIP8) in selenite transport in cell culture and transgenic mice and determine the impact of ZIP8 activity on cellular responses to selenite.	\$	11,147	\$	433,950
Gary Barber Department of Engineering and Computer Science	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.	\$	58,190	\$	1,533,339
Lianxiang Yang Department of Mechanical Engineering	Chrysler Group LLC	Aluminum Edge Cracking Strain of Tensile Samples. This project will study the influence of the pre-strained of three aluminum samples on hole edge cracking limit strain in tensile tests at Oakland University Laboratories.	\$	25,000	\$	25,000
Fabia Battistuzzi Department of Biological Sciences	Michigan Space Grant Consortium- NASA	Evolutionary History of Hyperthermophilic Bacteria: Early Divergence or Recent Adaptations. The goal of this research is to resolve the phylogenetic history of hyperthermophiles and address their evolution in terms of the origin of life.	\$	2,500	\$	2,500
Marshall Kitchens Department of Writing and Rhetoric	National Writing Project	SEED High Needs High School Grant. This funding will be used to run the invitational summer institute through full scholarships and stipends to eight total participants over the next two summers.	\$	10,000	\$	70,000
		Total	\$	1,243,591	\$	4,433,457