Agendum
Oakland University
Board of Trustees Formal Session
October 22, 2015

# ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF JULY 1 – AUGUST 31, 2015 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 July 1 through August 31, 2015.

- 3. <u>Previous Board Action:</u> The Board accepts grants and contracts to Oakland University on a regular basis at its Formal Sessions.
- **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.
- **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.
- 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 through August 31, 2015.
- 9. <u>Attachments:</u> A. Grants and Contracts Report.

Submitted to the President on 10 - (9, 2015 by

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

proval by

George W. Hynd

President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Judith Fouladbakhsh School of Nursing	National Cancer Institute / NIH	A Pilot Study of Yoga for Breathing & Quality of Life of Lung Cancer Patients. This study will examine the effects of a standardized yoga protocol as compared with exercise for breathing, mood, sleep and quality of life of lung cancer patients.	\$	208,199	\$	208,199
Lianxiang Yang Department of Mechanical Engineering	Auto/Steel Partnership	Pre-Strain Wide Coupons for Edge Cracking Limit Experiments with DIC Strain Measurements. The object of this project is to provide pre-strained coupons with DIC strain distribution measurements for edge cracking limit experiments.	\$	15,264	\$	15,264
Krzystof Kobus Department of Mechanical Engineering	U.S. Army	<b>REAP Summer 2015.</b> This grant will fund two high school students that will be working on an engineering project for the purpose of enrichment.	\$	4,000	\$	4,000
Julie Gustafson Macomb OU INCubator	Grand Valley State University/MEDC	Business Accelerator Fund-Client Engagement. The objective of 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 catalyze multiplier effect.	\$	21,050	\$	21,050
Thomas Ferrair School of Medicine	Michigan State Medical Society Foundation	Hands-on Gardening and Cooking Intervention to Promote Healthful Eating. This grant will fund a community-based health education research project developed and conducted by Milan Anderson, a first- year medical student at OUWB.	\$	1,304	\$	1,304
Hsiang-Hua Melanie Chang Department of Modern Languages and Literatures	Chiang Ching-kuo Foundation for International Scholarly Exchange	Demonstrative and definite noun phrases in child Mandarin and English. This funding will be used for a comparative study of Madarin distal demonstratives and their potential English counterparts.	\$	17,500	\$	17,500
<b>Chhabi Govind</b> 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.	\$	428,656	\$	1,517,055

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Fay Hansen Department of Biological Sciences	Wayne State University/USDA	An Integrated Approach to Ensuring Food Safety and Sustainability in Urban Agriculture in the Greater Detroit. This is a collaborative research project between Oakland University and Wayne State University. The OU Student Organic Farm will be responsible for the community engagement portion, assisting the gardens through civic engagement components of classes and by holding research and education forums.	\$ 70,000	\$	70,000	
David Garfinkle Department of Physics	National Science Foundation	Studies of Singularities, Black Holes and Gravitational Radiation. This project will study the properties of gravitational collapse, the formation of black holes, and the emission of gravitational radiation that takes place in the collapse process.	\$ 140,297	\$	140,297	
Reginald McCloud Pre-College Programs	State of Michigan	<b>GEAR UP.</b> This program is designed to provide academic and social support for students currently in the tenth grade with support continuing through their first year of college. As a result of their active participation, students will be adequately prepared for college.	\$ 30,458	\$	190,214	
Libon Rong Department of Mathematics and Statistics	National Science Foundation	Virus Infection and Immune Responses: Modeling, Analysis, and Implications. This CAREER project is an integrated research, education, and outreach program that focuses on quantitative studies of virus infections and immune responses, as well as their implications for antiviral treatment and vaccination.	\$ 78,135	\$	400,060	
Anne Hranchook School of Nursing	Health Resources and Services Administration	Nurse Anesthesia Traineeship Program. 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.	\$ 30,408	\$	30,408	
Sanela Martic Department of Chemistry	American Chemical Society	Structure-Oxidation Potential Relationship of Antioxidants and Peroxide Formation in Gasoline. This research is aimed at characterizing gasoline and oxidation inhibitors, and quantifying the peroxide formation in commercially available gasoline.	\$ 55,000	\$	55,000	

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Yonghong Yan Department of Computer Science & Engineering	National Science Foundation	SHF: Small Collaborative Research: Application-aware Energy Modeling and Power Management. One of the critical challenges in scaling out current and future high performance computing (HPC) and enterprise computing systems is the requirement that their power envelope remain comparable to that of today's systems. This project addresses this power wall challenge from the system software aspect.	\$	249,875	\$	249,875
Fabia Battistuzzi Department of Biological Sciences	Michigan Space Grant Consortium/NASA	Improving Phylogenetic Accuracy through Optimization of Evolutionary Rate Models. This project is a follow-up of an Undergraduate Fellowship Award granted by the MSGC in 2014 to Anais Brown.	\$	5,000	\$	5,000
Lianxiang Yang Department of Mechanical Engineering	Chrysler Group LLC FCA	Pre-Strain and Notched Coupon Tensile Testing with Two Faces DIC Strain Measurements. To conduct 4" wide pre-straining and the notched edge cracking limit strain tensile experiments with DIC strain measurements.	\$	26,710	\$	26,710
Frank Giblin Eye Research Institute	National Institutes of Health	Proteins of Normal and Cataractous Lenses. The broad objective of this project is to better understand the role of oxidative stress in the development of human nuclear cataract, the most common type of lens opacity in older adults, and the type most likely to require surgery.	\$	372,948	\$ ^	1,831,153
Amy Butler OU INC	Grand Valley State University/MEDC	Business Accelerator Fund Client Engagement-PHAIQ. The objectives 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.	\$	29,000	\$	29,000
Krzysztof Kobus Department of Mechanical Engineering	Michigan Space Grant Consortium	Earth Science STEM Camps, Outreach and Teacher Training. This funding will support Summer STEM camps for K-12 students, teachers, and the general public.	\$	20,000	\$	20,000

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Yonghong Yan Department of Computer Science and Engineering	University of Houston/NSF	II-New Collaborative: Image Processing Cloud (IPC). This project will establish a multi-institutional domain-specific Cloud Computing infrastructure to enable new high-performance image processing research and education opportunities.	\$	38,733	\$	38,733
Ferman Chavez Department of Chemistry	National Institutes of Health	Mechanistic Studies on Bioremediation Metalloenzymes. This work is aimed at studying the synthesis, characterization, and reactivity of compounds that mimic the active site of bioremediation enzymes.	\$	334,168	\$	334,168
Yuejian Wang Department of Physics	I*Logic Inc	Characterization of Multiferroic ZnCr2Se4. The objective of this project is to perform a high-pressure structural study of ZnCr2Se4.	\$	5,000	\$	5,000
Scott Pickett Department of Psychology	HAVEN of Oakland County	Redefine Program Evaluation. This project is a Five Phase Plan to evaluate the Redefine program being implemented through HAVEN. This funding is specific to the evaluation of Redefine being conducted in various local high schools over the course of the next one to two years.	\$	11,600	\$	11,600
		Total =	\$ 2,193,305		\$ 5,221,590	