Agendum
Oakland University
Board of Trustees Formal Session
December 9, 2013

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF SEPTEMBER 1 – OCTOBER 31, 2013 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 September 1 - October 31, 2013.

- 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 September 1 - October 31, 2013.

9. Attachments: A. Grants and Contracts Report.

Submitted to the President

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

Recommended on ______, 2013 to the Board for approval by

Betty J. Youngblood, Ph.D.

Interim President

Office of Research Administration Copy of Grants BOT Report2 for Sept and Oct for Dec 9 2013 meeting.xls

Principal Investigator Ernest Krug School of Medicine	Awarding Agency Arnold P. Gold Foundation	Title and Project Abstract An Evening of Humanism and Ethics. The 2013 Inaugural evening of Humanism and Ethics will provide an opportunity for OUWB students to hear distinguished doctors speak and engage with physicians, ethicists, and classmates in small group discussions examining case-based ethical issues.	Award Amount		Total Award All Years	
			\$	5,000	\$	5,000
Venice Sule Department of Educational Leadership	American Educational Research Association	My Brother My Sister College Access and Retention through Mentoring. My Brother My Sister (MBMS) is a community-based initiative designed to facilitate college access and retention among youth. MBMS provides culturally sensitive leadership training and peer mentoring. This service grant is designed to assist MBMS with program assessment.	\$	4,434	\$	4,434
Bradley Roth Department of Physics	Vanderbilt University and Medical Center	Optimal Design of Challenge-Response Experiments in Cardiac Electrophysiology. The objective of this project is to use new statistical methods to investigate challenge-response behavior in experiments. The methods will be tested using simulations and experiments in cardiac electrophysiology.	\$	76,380	\$	397,472
Brian Sangeorzan Department of Mechanical Engineering	Denso Foundation	Powertrain Testing and Analytical Tools for Powertrain Research. This funding will ensure that Oakland University mechanical engineering students engaged in research, and those participating in the international FSAE competition program, will train on equipment, which mirrors real-world environments that students will encounter as they pursue their careers.	\$	30,000	\$	30,000
Xiangqun Zeng Department of Chemistry	Michigan State University	Autonomous Electrochemical Gas Sensor Detection Microsystem for Mine Safety. 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.	\$	160,107	\$	643,990
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 Department of Physics.	\$	7,411	\$	188,508

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Jie Yang Department of Computer Science and Engineering	National Science Foundation	Distributed Robust Spectrum Sensing and Sharing in Cognitive Radio Network. This project will lead to new insights into exploiting control theory to perform distributed spectrum sensing and new approaches for detecting and localizing unauthorized users to enhance spectrum efficiency in cognitive radio networks.	\$	150,149	\$	150,149
Andrei Slavin Department of Physics	National Science Foundation	Collaborative Research: Microwave Auto-Oscillators Driven by Pure Spin Currents. The goal is to develop a new class of microwave devices-magnetic auto-oscillators driven by pure spin currents, or spin-current auto-oscillators and to understand the nature of dynamical modes excited by spin currents in magnetic nanostructures.	\$	129,999	\$	129,999
Amy Butler OU INC	Grand Valley State University	Business Accelerator Fund-Client Engagement. The program objectives for this project are 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.	\$	113,300	\$	300,000
Mary Dereski School of Medicine	SIR Foundation	Survival after Radioembolization for Metastatic Colorectal Cancer. This project will investigate the costs and outcomes associated with Y90 Radioembolization for the liver.	\$	4,000	\$	4,000
Mohammad Siadat Department of Computer Science and Engineering	William Beaumont Hospital	Urinary Continence Index for Prediction of Urinary Incontinence in Older Women. The purpose of this research in collaboration with Beaumont Health System is to develop a Urinary Continence Index using a novel application of data mining strategies. The additional funding supports mentee involvement in the ongoing research project.	\$	20,254	\$	41,687
Lorenzo Smith Department of Mechanical Engineering	Battelle Pacific Northwest Laboratory	Aluminum Formability Extension through Superior Blank Processing. The purpose of this work is to use a combined experimental and numerical approach to develop processing methods for preparation of stamping blanks that achieve extended ductility compared to conventional blanks.	\$	42,000	\$	251,349
Dan Aloi Department of Electrical and System Engineering	University of Michigan	Reliable Peripheral Nerve Interfaces. The goal of this project is to develop and demonstrate a reliable peripheral nerve interface to control a prosthesis.	\$	6,006	\$	148,624
Jennifer Eastwood School of Medicine	Arnold P. Gold Foundation	Epistemological Beliefs and Medical Humanism Education: A Systematic Review. Considering that epistemological views are highly relevant to aspects of medical humanism, we will conduct a systematic review of research on epistemological beliefs in medical education.	\$	2,500	\$	5,000

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Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Zissimos Mourelatos Department of Mechanical Engineering	University of Michigan (prime awardee of U.S. Army TACOM)	Efficient Reliability-Based Design Optimization and Robust Design Methods. The goal of this project is to develop a novel integrated approach for a resource-efficient design validation co-process.	\$	154,338	\$	946,755
Andrei Slavin Department of Physics	University of Michigan (prime awardee of U.S. Army TACOM)	Fast Frequency Detector Based on a New Functional Metamaterial: Randomized Array of Spin-Torque. Our objective is to detect and analyze frequencies of microwave transmissions, which is a vital task in survivability applications.	\$	47,619	\$	47,619
Gopalan Srinivasan Department of Physics	National Science Foundation	Acquisition of Scanning Microwave Microscope for Multidisciplinary Research on Materials and Device. Funds will be used for the acquisition of a scanning microwave microscope (SMM). This instrument will be shared by the Physics, Chemistry, and Engineering faculties and will enhance our capabilities with ongoing externally funded programs.	\$	114,919	\$	114,919
Sayed Nassar Department of Mechanical Engineering	U.S. Army TARDEC / TACOM	Transparent Armor Delamination Mitigation. The objective of this project is to perform root cause analysis of Transparent Armor panel delamination using FEA simulation and testing.	\$	796,736	\$	2,427,770
		Total	\$	1,865,152	\$	5,837,275