Agendum
Oakland University
Board of Trustees Formal Session
December 2, 2015

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF SEPTEMBER 1 – OCTOBER 31, 2015

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 September 1 through October 31, 2015.

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.

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 through October 31, 2015.

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

Submitted to the President
on 11/19/15, 2015 by

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

Recommended on 11/20, 2015
to the Board for approval by

George W. Hynd
President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Julie Gustafson Macomb-OU INCubator	Macomb County/MEDC	**International Defense Landing Zone.** This funding will support the International Defense Landing Zone for foreign firms looking to break into the U.S. market with our Department of Defense and Department of Homeland Security customers.	$ 9,000	$ 9,000
Mary Lose Department of Reading and Language Arts	Reading Recovery Council of North America	**Reading Recovery Expansion Grant.** This funding will be used to train Reading Recovery teachers to expand implementation at Walton Charter Academy, Grand Blanc Community Schools, and Detroit Public Schools.	$ 18,000	$ 18,000
Jason Wasserman School of Medicine	Hope Warming Center	**HOPE Recuperative Center Outcomes Study.** The goal of this research is to conduct data analysis on outcomes of a recuperative care facility for discharged homeless patients.	$ 5,014	$ 5,014
Osamah Rawashdeh Department of Electrical and Computer Engineering	Fiat Chrysler Automobiles	**Development of a Custom Crate-Engine CAN Interface Module.** To develop a custom controller module that interfaces an existing engine controller with a variable reluctance speed sensor, hall effect device speed sensor, MIL lights, and gauges.	$ 43,450	$ 43,450
Sayed Nassar Department of Mechanical Engineering	National Center for Manufacturing Sciences/TACOM	**Safety Glass Manufacturing Process Optimization.** The goal of this research is to optimize the safety glass manufacturing process and investigate mechanical stresses caused by metal frames.	$ 507,772	$ 507,772

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Ken Elder Department of Physics	National Science Foundation	**Ordering of Two-Dimensional Strained Films.** The plan for this research is to investigate the ordering of two-dimensional or quasi two-dimensional films, which have been a topic of considerable interest for many reasons and years.	$ 200,000	$ 200,000
Tao Shu Department of Computer Science and Engineering	National Science Foundation	**NeTS: Small: Collaborative Research: Network Economics for Secondary Spectrum Ecosystems.** This project explores the optimal market mechanisms under the competition-and-collaboration market framework.	$ 232,476	$ 232,476
Nessan Kerrigan Department of Chemistry	National Science Foundation	**Asymmetric Synthesis of Gamma-Lactones from Sulfoxonium Salts.** The objective of this research is for the development of efficient methodologies for the asymmetric synthesis of monocyclic *y*-lactones from readily available sulfoxonium salts.	$ 299,997	$ 299,997
Amy Butler OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund Client Engagement-300 Medical.** 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.	$ 30,000	$ 30,000

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Amy Butler OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund Client Engagement-Safety in Motion.** 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.	$ 15,000	$ 15,000
Vijitashwa Pandey Department of Industrial and Systems Engineering	DTE	**A PLM Focused Optimal Design of DTE Power Plants.** The goal of this project is to use Product Lifecycle Management (PLM) to result in a power plant that performs optimally over its lifetime, and instituting a formal methodology for future projects at DTE.	$ 35,000	$ 35,000
Amy Butler OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund Client Engagement-Diversified Solar.** 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 to catalyze multiplier effect.	$ 39,300	$ 39,300
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.	$ 42,294	$ 297,516

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Bradley Roth Department of Physics	Vanderbilt University and Medical Center/NIH	**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.	$ 79,394	$ 397,472
Zissimos Mourelatos Department of Mechanical Engineering	Fiat Chrysler Automobiles	**Durability Tuning Box Initiative for using Surrogate Data (2nd Phase)** The goal of this project is to develop an advanced scaled load factor generation method to accurately predict load data for a new vehicle using previous data from different vehicles.	$ 21,900	$ 49,900
Xia Wang Department of Mechanical Engineering	National Science Foundation	**Research Experience for Teachers in Alternative Energy and Automotive Engineering (AEAE).** This program seeks to strengthen K-12 education in STEM disciplines by each year involving 12 middle and high school science and mathematics teachers and pre-service teachers from the metro-Detroit area in multidisciplinary and cutting edge research on alternative energy and automotive engineering during the summer at Oakland University.	$ 575,979	$ 575,979
Julie Gustafson Macomb-OU INCubator	Community Foundation for Southeastern Michigan	**Cyber Security Range.** The incubator is launching a cyber-range at the Velocity Center, a facility with a unique internet connection that can be used for testing and training.	$ 204,000	$ 204,000
		Total	**$ 2,358,576**	**$ 2,959,876**