

Agendum
Oakland University
Board of Trustees Formal Session
August 7, 2017

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY
FOR THE PERIOD OF MAY 1 – JUNE 30, 2017
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 through June 30, 2017.

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.

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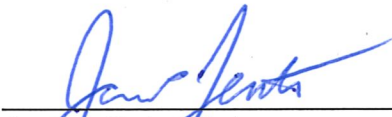
6. **Personnel Implications:** Grants and contracts awards may provide salary support for faculty, post-doctoral fellows, undergraduate and graduate students, technicians, lab managers, and other personnel, as required by the funded research project or program.

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 May 1 through June 30, 2017.


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

Submitted to the President
on 7/26, 2017 by



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

Recommended on 7/27, 2017
to the Board for approval by



Ora Hirsch Pescovitz, M.D.
President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Darrin Hanna Department of Electrical and Computer Engineering	RHK Technology	Nano-Imaging Research and Development. The goal of this research is to establish a nano-imaging research and development laboratory with scan probe microscope at Oakland University. This laboratory will advance the state of the art in high speed embedded systems for SPM, hardware simulators, and researching real-time three-dimensional atomic force spectroscopy.	\$ 197,981	\$ 500,000
Geraldine Graham Upward Bound	U.S. Department of Education	Project Upward Bound College Prep Academy. Our mission is to generate skills and motivation in participants necessary to succeed in secondary and post-secondary education, as well as to increase access and success in higher education for low-income and potential first-generation college students.	\$ 615,170	\$ 3,075,850
Vijitashwa Pandey Department of Industrial and Systems Engineering	Fiat Chrysler Automobiles	Guiding Point-of-Alignment Repairs to Reduce Warranty Costs Predicted by Prob. Decision Model. This funding will be used to develop a general purpose mathematical model to provide decision guidance at the point of alignment in the factory.	\$ 50,000	\$ 50,000
Andrew Goldberg Eye Research Institute	National Institutes of Health	Investigation of the Molecular Basis of Rod and Cone Photoreceptor Structure. 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.	\$ 338,252	\$ 1,514,157
Yang Xia Department of Physics	National Institutes of Health	ACL-Deficiency Modifies Topographical Degradation in Posttraumatic Osteoarthritis. The long-term goal of this research is to apply the imaging-based biomarkers to detect the early degradation of cartilage and subchondral bone during the progression of osteoarthritis, so that clinical outcomes can be improved.	\$ 443,531	\$ 2,229,522
Fabia Battistuzzi Department of Biological Sciences	National Aeronautics and Space Administration (NASA)	Innovative Molecular Timing Applications to Obtain Accurate Histories of Life. 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.	\$ 190,354	\$ 581,213

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Li Li Department of Mathematics and Statistics	National Security Agency	Bases in Cluster Algebras and Their Geometries and Combinatorics. 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	\$ 39,694
Zhijun Wu Department of Mechanical Engineering	PPG Industries, Inc.	Characterization of Fastener Torque-Tension Relationship with Different Coatings. With this project, we will test various coatings and perform comprehensive statistical analysis on torque-tension behavior, the effect of the coatings on the behavior, and effectiveness of the coating will be identified.	\$ 74,550	\$ 74,550
Thomas Raffel Department of Biological Sciences	National Science Foundation	A Metabolic Theory Approach to the Thermal Biology of Parasitism. The objective of this research is to test metabolic theory based models for parasite and host responses to temperature.	\$ 207,896	\$ 964,898
Andrei Slavin Department of Physics	National Science Foundation	Collaborative Research: Novel Terahertz Generators Based on Magnetic Materials. The goal of this project is to develop a tunable antiferromagnetic auto-oscillator operating at room temperature and capable of generating electromagnetic signals in the 0.1-1 THz frequency range.	\$ 210,829	\$ 210,829
Colin Wu Department of Chemistry	American Heart Association	A DNA Repair Perspective to Treat Cardiovascular Disease. This project will investigate the link between the repair of oxidative DNA damage and cardiovascular health using a series of biochemical, biophysical, and cell-based strategies.	\$ 153,031	\$ 153,031
Diane Baldwin Division of Student Affairs	Community Foundation of SE Michigan	Oakland Pontiac Partnership College Readiness Programs. College readiness is one of the main goals of the Oakland University-Pontiac partnership. This funding will be used to build on the work currently under way to prepare children for success in college as part of nurturing a broader college-focused culture in the community.	\$ 50,000	\$ 50,000

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Scott Pickett Department of Psychology	Comprehensive Early Autism Services	Service Delivery Grant. This project establishes a relationship between Oakland University and Comprehensive Early Autism Services for the purposes of therapeutic service delivery through the agency. The relationship will allow two graduate students to provide therapeutic services with clients of Comprehensive Early Autism Services.	\$ 16,380	\$ 16,380
Randal Westrick Department of Biological Sciences	American Heart Association	Mouse ENU Mutagenesis Screen for Atherothrombosis Modifier Genes. The goal of this project is to identify the genes involved in atherothrombosis, the process that causes heart attacks, strokes and peripheral artery disease. This will lead to more precise patient genetic risk profiles and the novel targets for preventative and therapeutic interventions.	\$ 150,000	\$ 150,000
Dao Qi Zhang Eye Research Institute	National Institutes of Health	Functional Organization of the Retinal Dopaminergic Network. The long-term goal of the proposed study is to understand the mechanisms by which dopaminergic amacrin neurons are regulated by light.	\$ 37,500	\$ 1,809,988
Tomoko Wakabayashi Department of Human Development and Child Study	U. S. Department of Education	Supporting Preschool and Kindergarten Students' Self-Regulation Through HighScope Curriculum Enhancements: Plan-Do-Review and Conflict Resolution. The primary goal of this project is to enhance self-regulation skills of Detroit preschool and Kindergarten students.	\$ 560,994	\$ 560,994
Total			\$ 3,316,315	\$ 11,981,106