Agendum
Oakland University
Board of Trustees Formal Session
June 5, 2017

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF MARCH 1 - APRIL 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 March 1 through April 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.

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 March 1 through April 30, 2017.

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

Submitted to the President
on 5/22, 2017 by

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

Recommended on 5/23, 2017
to the Board for approval by

George W. Hynd
President

Attachment A

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Sergey Golovashchenko Department of Mechanical Engineering	United States Council for Automotive Research, LLC	**U-Bend Testing for Phase 3 of USCAR Al Die Wear Project-DOE.** The objective of this research is to develop methodology of measuring surface defects on U-bent coupons, inserts of U-bending tool and hole punching inserts.	$ 80,086	$ 80,086
Alex Delavan Office of Research Administration	University of Michigan/MEDC	**T3N 3.0.** A high-priority goal for Oakland University is to leverage the expertise of faculty and students with success in technology commercialization. To that end, the university will hire the services of a mentor-in-residence (MIR) in collaboration with the Michigan T3N fund organization, to help active researchers who are interested in pursuing commercialization and other business paths.	$ 25,000	$ 50,000
Laurel Stevenson School of Health Sciences	Oakland County Health Division	**Health and Wellness 4x4 Plan Evaluation.** Oakland University will provide evaluation services for the Health and Wellness 4x4 Plan Evaluation by assisting in developing the evaluation plan and tools, conduct data collection, entry, and analyses.	$ 5,487	$ 5,487
Joanne Reger Department of Sociology, Anthropology, Social Work, and Criminal Justice	Sociologists for Women in Society	**Editorship of Gender and Society.** This funding will be used for editor, management, and production costs that will occur in the production of the journal, *Gender and Society,* for a three-year term.	$ 130,511	$ 374,299
Brian Sangeorzan Department of Mechanical Engineering	Fiat Chrysler Automobiles LLC	**Powertrain PREP Programs.** This funding will be used for an FCA-sponsored supplemental learning program in the area of automotive powertrain development for junior and senior SECS students.	$ 10,080	$ 27,509

Kathleen Spencer School of Nursing	Jonas Center	**Jonas Scholarship 2016-2018.** The Jonas Center supplied matching funds for two DNP students to receive scholarships for their tuition for doctoral studies.	$ 5,000	$ 10,000
Martha Escobar Department of Psychology	National Science Foundation	**Strategies: Building Unique Inventions to Launch Discoveries, Engagement and Reasoning in STEM.** This project will immerse 40 rising 10th-12th grade students annually in technology-rich, inquiry-based activities under the "Learning STEM by Making" framework, whose learning outcomes will be analyzed through the lens of a social science study. Teachers' experiences will be analyzed concurrently.	$ 190,120	$ 190,120
Erik Fredericks Department of Computer Science	Michigan Space Grant Consortium	**A Multi-Agent Approach for Minimizing Security and Power Concerns in Cyber-Physical Systems.** This project will examine how extra-functional properties, such as security and power consumption, can be improved on low-cost/low-power Internet of Things devices.	$ 5,000	$ 5,000
Megan Conrad Sczygielski Department of Industrial & Systems Engineering	Michigan Space Grant Consortium	**Design and Validation of a Custom Force Fixture for Modeling Hand Strength.** This funding will be used to design and build a fixture to measure force exertions of the fingers and thumb in pinch grasps. The fixture will be adjustable for a wide range of pinch spans and capable of measuring uniaxial forces applied by two, three, four or five digits. The force fixture will be used in future studies to model astronaut hands for use in designing safe vehicle maintenance tasks and customized gloves.	$ 5,000	$ 5,000

Reginald McCloud Pre-College Programs	Michigan Department of Labor & Economic Growth	**Gaining Early Awareness and Readiness for Undergraduate Programs (GEARUP).** The GEAR UP College Day Program is designed to provide academic and social support for students currently in 12th grade with support continuing through their first year of college. As a result of their active participation, students will be adequately prepared for college. The program will provide an opportunity for underrepresented students to discover first hand the potential of college.	$ 90,429	$ 90,429
Omar Brown-El Center for Multicultural Initiatives	State of Michigan	**C.O.R.E. Program FY17.** The goal of the CORE Program is to address the needs of underrepresented students who attend Oakland University with targeted support services by the Center for Multicultural Initiatives.	$ 91,364	$ 91,364
Christina Papadimitriou School of Health Sciences	NIDILRR - Rehabilitation Research and Training Centers (RRTCs) Program	**Peer Health Navigation for Medicaid Beneficiaries with Physical Disabilities: A CBPR Intervention.** Medicaid beneficiaries with disabilities experience structural, financial, cognitive, attitudinal and physical barriers to healthcare that put them at high risk of health disparities. Our OP-ENS intervention will assist in coordinating care for these individuals.	$ 18,261	$ 55,428
Anyi Liu Department of Computer Science	Michigan Space Grant Consortium	**Cyber Threat Intelligence Sharing and Correlation against Advanced Cyber Intrusions.** The goal of the project is to protect critical IT assets and data against cyber intrusions by providing secure, effective, and affordable risk management services in general, and designing and implementing a cyber event correlation system and "as-a-service" framework that aggregates, correlates and disseminates cyber events in particular.	$ 5,000	$ 5,000
Sanela Martic Department of Chemistry	Michigan Space Grant Consortium	**Eye Lens Proteins and Cataracts.** In this research, Nishva Patel aims to evaluate how metal ions modulate structure and function of a-crystalline by using a myriad of biochemical and biophysical methods.	$ 2,500	$ 2,500

Yuejian Wang Department of Physics	Michigan Space Grant Consortium	**Radial X-Ray Diffraction: A Robust Method to Characterize the Strong Aerospace Materials.** This funding will be used to establish an approach to develop a high pressure synchroton radial X-ray diffraction and study the strength of an aerospace material, Al203.	$ 5,000	$ 5,000
Susan Awbrey Office of the Provost	The Kresge Foundation	**Great Lakes Student Success Conference.** This funding will support the annual Great Lakes Student Success Conference and two Institutional Learning Communities.	$ 100,000	$ 100,000
Xia Wang Department of Mechanical Engineering	Michigan Space Grant Consortium	**Thermal Osmosis Water Flow Model in PEM Fuel Cells.** The goal of this research is to develop a model to predict thermal osmosis in PEM fuel cell membranes.	$ 5,000	$ 5,000
Marshall Kitchens Department of Writing & Rhetoric	National Writing Project	**2017-2018 SEED Invitational Leadership Institute Grant.** With this grant, Meadow Brook Writing Project plans to run its summer institute by offering scholarships to Metro Detroit teachers in July 2017 and July 2018. The remaining grant money will be used for stipends for our two institute facilitators, honoraria for teachers to present at or attend continuity events, and a small amount for supplies.	$ 15,000	$ 15,000
Krzystof Kobus Department of Mechanical Engineering	Michigan Space Grant Consortium	**Earth System Science STEM Camps.** A continuing comprehensive, hands-on, student-centered, activity-based outreach and education program is proposed here to deliver substantive Earth system sciences training to three separate populations - K-12 students, K-12 STEM teachers, and the broader community.	$ 20,000	$ 20,000

Peng Zhao Department of Mechanical Engineering	Los Alamos National Lab	**Development and Validation of KIVA-hpFE for Spray and Engine Processes.** Validate engine stimulation code KIVA-hpFE over different combustion configurations, such as two-phase spray combustion, turbulent flow in motored engines, and combustion process in diesel engines. The validation shall be achieved by comparing simulation results using KIVA-hpFE with other reacting flow code, or with available DNS and experimental targets in well-accepted combustion benchmarks.	$ 69,957	$ 69,957
Huirong Fu Department of Computer Science	National Security Agency	**Inspiring the Next Generation of Cyber Stars.** A comprehensive, hands-on, activity-based, student-centered summer camp program is proposed to deliver substantive cybersecurity training to K-12 students.	$ 100,000	$ 100,000
Laila Guessous Department of Mechanical Engineering	Michigan Space Grant Consortium	**Oakland University MSGC Pathway to External Grants.** This funding will be used to support MSGC-funded faculty and students in their efforts to obtain external research grants or disseminate their MSGC-funded research results at conferences.	$ 5,000	$ 5,000
Lawrence Herriman Macomb-OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund-Client Engagement, Alerje.** 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.	$ 7,000	$ 7,000
Krzystof Kobus Department of Mechanical Engineering	United States Army REAP	**2017 Summer High School Research.** This award will be used to fund two high school students' research projects in summer 2017.	$ 4,000	$ 4,000

Scott Tiegs Department of Biological Sciences	Michigan Department of Natural Resources	**Citizen Science and New Zealand Mud Snails: Fly Fisherman as Sentinels and Deterrents of Range Expansion.** Our objective for this project is a state-wide monitoring network that will engage fly fishermen as 'citizen scientists' in order to provide early detection of New Zealand mud snails in Michigan.	$ 191,888	$ 191,888
Christina Papadimitriou School of Health Sciences	Veterans Affairs	**Understanding Caregiver Language Regarding Change in Disorders of Consciousness Qualitative Study.** This funding will be used to explore the language used by caregivers and clinicians to communicate change they perceive in patients who are in disordered states of consciousness following brain injury.	$ 6,813	$ 6,813
Sayed Nassar Department of Mechanical Engineering	National Center for Manufacturing Sciences	**Defect Propagation in Bonded Glass Panels Due to Localized Cyclic Heat.** The objective of the project is to study the effect of glass coating(s) on the performance of autoclave-bonded double-layered safety glass panels that are subjected to cyclic localized heat generated by embedded heat elements that are cyclically turned on and off at room temperature.	$ 105,107	$ 105,107
			$ 1,298,603	$ 1,626,987