

Agendum
Oakland University
Board of Trustees Formal Session
December 9, 2019

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY
FOR THE PERIOD OF SEPTEMBER 1 – OCTOBER 31, 2019
A Recommendation

1. **Division and Department:** Academic Affairs/Research Office
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 – October 31, 2019.

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 Research Office 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, 2019.


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

Submitted to the President
on 11/25, 2019 by



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

Recommended on 11/25, 2019
to the Board for approval by



Ora Hirsch Pescovitz, M.D.
President

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Judith Fouladbakhsh School of Nursing	Blue Cross Blue Shield of Michigan Foundation	Effects of Yoga Therapy and Qigong on the Self-management of Pain among ER Positive Breast Cancer Survivors. This study plans to examine yoga therapy and qigong/taiji to test feasibility and compare potential benefits, risks and effects on perceptions and self-management in this population.	\$ 70,000	\$ 70,000
Stephanie Swanberg School of Medicine	National Network of Libraries of Medicine	Creating Ready-Made Health Education Toolkits- Expanding a Pilot Program into a Sustainable Outreach Partnership with a Public Library. This project will fund a medical student intern for summer internship through Oakland University William Beaumont School of Medicine.	\$ 18,071	\$ 18,071
Douglas Carr Department of Political Science	Advancing Macomb	Environmental Scan for Advancing Macomb. This funding will be used to conduct an environmental scan of Macomb County's nonprofits and municipal offices to help Advancing Macomb more fully understand an apparent deficit in philanthropic funding in the region.	\$ 4,000	\$ 4,000

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
JingTang Department of Electrical and Systems Engineering	National Institutes of Health	Dose Reduction in Pediatric/Adolescent Brain PET Imaging through Artificial Neural Networks. The goal of this project is to use the machine learning technology in positron-emission tomography (PET) imaging process so that the newly developed tracer can be applied in pediatric autism spectrum disorder research.	\$ 228,409	\$ 228,409
Laila Guessous Department of Mechanical Engineering	Michigan Space Grant Consortium/ University of Michigan	Michigan Space Grant Consortium-Administration. 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.	\$ 1,500	\$ 1,500
Domenico Luongo Department of Environmental Health and Safety	Pacific Northwest National Laboratory	Office of Radiological Security Program (ORS): Security Enhancements at Oakland University. This project will upgrade the security for the irradiator suite and the pump house at Oakland University, essential for ongoing faculty research.	\$ 145,735	\$ 145,735
Laurel Stevenson Department of Interdisciplinary Health Sciences	Michigan Health Endowment Fund	Prescription for a Healthy Pontiac. This program will facilitate and create a culture of healthy eating and physical activity within families with children and/or seniors, reduce loneliness and social isolation among seniors, and strengthen community relationships.	\$ 242,209	\$ 484,418

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Xiangqun Zeng Department of Chemistry	LabSystems, LLC /NSF	Post-CMOS Ionic Liquid Electrochemical Gas Sensors. The objective of this project is to advance our understanding on fundamentals of electrode/electrolyte interface, especially of electrode of microstructures to develop miniaturized electrochemical gas sensors.	\$ 64,905	\$ 64,905
Zissimos Mourelatos Department of Mechanical Engineering	University of Michigan/DOD	Probability of Mobility for Mission Planning of Autonomous Ground Vehicles at "High Stress" Environment. The objectives of this research are to account for heterogeneous uncertainty sources to improve the prediction confidence in developing a NG-NRMM; and to develop a mission planning approach for operation in "high stress" environments.	\$ 38,095	\$ 38,095
Dominique Daniel Kresge Library	National Endowment for the Humanities	Improving the Storage Environment of Oakland University Archives and Special Collections. This grant will support an environmental monitoring program for collection storage areas and the purchase of supplies to rehouse fragile books and pamphlets.	\$ 9,943	\$ 9,943
Christopher Cooley Department of Mechanical Engineering	South Illinois University	Finite Element/Contact Mechanisms Modeling and Experimental Correlation of the OH-58 Transmission. The objective of this project is to identify the vibration signatures of full rotorcraft drivetrain systems.	\$ 29,498	\$ 29,498

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Xiangqun Zeng Department of Chemistry	Alpha Foundation	Miniaturized and Low Cost Electrochemical Particulate Matter (PM) Sensor for Mine Dust Exposure Assessment. With this project we will develop a miniaturized, low cost electrochemical PM sensor that will allow on site monitoring of the size and type of PM in mines for respirable dust monitoring and control.	\$ 745,717	\$ 745,717
Florence Dallo School of Health Sciences	Harvard University	Stress (Early Childhood and Politically-Related) and Health. The goals of this study are to examine trends in birth outcomes in years prior to and 12 months after both September 11 th and the 2016 presidential election.	\$ 52,959	\$ 117,568
Michele Parkhill Purdie Department of Psychology	Alliance of Coalitions for Healthy Communities	Social Norms Intervention Assessment. The Alliance of Coalitions for Health Communities has entered into an agreement with Oakland University's health coordinator to conduct a social norms intervention on campus to reduce problematic drinking in students. This funding will be used to conduct research to measure the effectiveness of this intervention.	\$ 8,320	\$ 24,820
Andrei Slavin Department of Physics	Air Force Office of Scientific Research / University of Central Florida	Terahertz Spintronics with Antiferromagnetic Insulators. The goal of this research is to develop new materials and techniques, leveraging the unique properties of antiferromagnets to transform methods of generation, transmission, and processing of THz signals.	\$ 155,916	\$ 877,749

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Gary Barber Department of Mechanical Engineering	Eaton Corporation	Tribological Performance of Busway Coatings. The tribological performance of busway coatings will be determined by running friction and wear tests. The performance of standard coatings will be compared to prototype samples.	\$ 46,000	\$ 92,000
Jason Wasserman School of Medicine	Gold Foundation	Humanism in Health and Healthcare: Development of a Free, For-Credit, Internationally Available Course on Humanism Delivered on the NextGenU Platform. This course will fill a need for high quality education in the humanistic aspects of health and healthcare on an international level.	\$ 3,500	\$ 3,500
Donald Newlin Department of Chemistry	Cooperative Invasive Species Management Area/MDNR	Invasive Species Mapping. This award will provide four Oakland University Environmental Science students funding to map the location of invasive species in the Lake St. Clair watershed.	\$ 1,767	\$ 1,767
Donald Newlin Department of Chemistry	Macomb County Public Works/MDNR	Invasive Species Mapping. This award will provide four Oakland University Environmental Science students funding to map the location of invasive species in the Lake St. Clair watershed.	\$ 3,130	\$ 3,130

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
David Stone Research Office	Saliva Management Systems	SWIK Patient Use Study-Phase 1. The goal of this project is to test the effectiveness of the SWIK Oral System, which aims to reduce patient suffering by lowering the incidence of oral infections.	\$ 11,396	\$ 11,396
Julian Rrushi Department of Computer Science and Engineering	Fortinet	Signature-Based Detector of Network Attacks on Industrial Control Systems. This project will focus on research and developing adequate approaches to testing and validation of the existing signatures of the Fortinet product.	\$ 46,864	\$ 46,864
Kenneth Mitton Eye Research Institute	Retinol Solutions/NIH	Noregen, a Regenerative Medicine Ocular Therapeutic. This Small Business Technology Transfer Phase 1 will develop production of Noregen, a protein to repair and regenerate retinal vessels, in partnership with Retinal Solutions LLC.	\$ 134,997	\$ 134,997
Daniel DeVescovo Department of Mechanical Engineering	LightWeight Innovations	Investigating the Thermodynamic Merit of the Jones Engine Concept. This project will seek to perform detailed thermodynamic and combustion modeling to quantify the efficiency and torque production benefits of the Jones Engine configuration compared to a conventional slider-crank engine.	\$ 41,312	\$ 41,312

Grants and Contracts Report for Period September 1 - October 31, 2019

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Rosemary Max Global Engagement	United States Department of State	Exchange for Pakistani Educators/Administrators (ESPA): Equity, Access and Learning Disability in Secondary Schools in Pakistan. Oakland University seeks to support secondary teachers in Pakistan in their development of inclusive services to students who suffer from an undiagnosed or unsupported learning disability or any condition that impedes learning.	\$ 408,795	\$ 408,795
Darrin Hanna Department of Electrical and Computer Engineering	DataSpeed	Proposal for Supporting an Embedded Intelligence Lab at Oakland University. This funding will support the Embedded Intelligence Lab at Oakland University for research and development in high speed intelligent embedded systems.	\$ 79,812	\$ 79,812
Total			\$ 2,592,850	\$ 3,684,001