

**Agendum  
Oakland University  
Board of Trustees Formal Session  
August 3, 2020**

**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY  
FOR THE PERIOD OF MAY 1 - JUNE 30, 2020  
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 May 1 – June 30, 2020.

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 May 1 – June 30, 2020.
9. **Attachments:** A. Grants and Contracts Report.

Submitted to the President  
on July 29, 2020 by



C. Michelle Piskulich, Ph.D.  
Interim Executive Vice President for  
Academic Affairs and Provost

Recommended on 7/30, 2020  
to the Board for approval by



Ora Hirsch Pescovitz, M.D.  
President

GRANTS AND CONTRACTS REPORT  
FOR THE PERIOD OF MAY 1 – JUNE 30, 2020

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
<b>Julian Rrushi / Benjamin Bond</b> Department of Computer Science and Engineering	University of Michigan MSGC/NASA	<b>Reverse Engineering Attacker Cognition Through Malware Analysis.</b> This research aims at discovering the interplay between computing, namely operating systems, computer architectures, and computer hardware, and the cognitive processes that take place in the mind of threat actors.	\$5,000	\$5,000
<b>Wing-Yue Geoffrey Louie / Roman Kulikovskiy</b> Department of Electrical & Computer Engineering	University of Michigan MSGC/NASA	<b>Robots Learning Tasks from Human Virtual Reality Based Demonstrations.</b> The primary objective of this fellowship is to develop a virtual reality based system which will enable space crews to easily and efficiently program robots without requiring extensive training.	\$5,000	\$5,000
<b>Khalid Malik / Kyle Masiak</b> Department of Computer Science and Engineering	University of Michigan MSGC/NASA	<b>Towards Development of Deepfake Detection Framework.</b> This project aims to train a selected student to design innovative techniques for digital multimedia integrity and authentication, to perform evaluation in the presence of multiple deepfakes attacks, and to design and develop a large-scale unified deepfakes dataset including both audio and visual forgeries.	\$3,000	\$3,000

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Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
<b>Tomoko Wakabayashi</b> Department of Human Development and Child Studies	CARE House of Oakland County	<b>Creating Sustainable Relationship - CARE House of Oakland County Needs Assessment Proposal.</b> The goal of this research is to conduct a Community Needs Assessment for CARE House of Oakland County's child abuse prevention education efforts.	\$30,000	\$30,000
<b>Jonathan Maisonneuve</b> Department of Mechanical Engineering	University of Michigan MSGC/NASA	<b>Researching Strategic Energy Management for the Oakland University Campus.</b> This research aims at identifying ways to decrease the environmental footprint of Oakland University. It will tie into academics by collecting data to be used for class projects but also to assist the Facilities Management Department to identify areas of improvement in the area of energy efficiency.	\$3,000	\$3,000
<b>Jennifer Lucarelli</b> Department of Health Sciences	Oakland County	<b>Wellness Evaluation Project - NPC</b> The goal of this project is to assist in developing the evaluation plan, data collection tools, and conduct data analysis for the Health and Wellness 4x4 Plan.	\$7,000	\$14,000

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Victoria Roach School of Medicine	Arnold P Gold Foundation	<b>Text2StayOnTrack: Improving Diabetes Self-Management through Personalized Text Messages in Uninsured Patients at a Free Clinic.</b> This initiative aims to implement a technological intervention for three months consisting of patient-tailored text messages in English and Spanish in the following domains: medication adherence, diet, physical activity, and blood sugar management. Individualized feedback allows the content of the text messages to better match patients' literacy levels and goals thereby optimizing self-management of their disease.	\$2,000	\$2,000
Margaret Harris School of Nursing	Health Resources & Services Administration (HRSA)	<b>Nurse Faculty Loan Program (NFLP).</b> The purpose of this funding is to offer financial support to graduate student registered nurses who desire to pursue advanced degrees in nursing with the goal of becoming nurse educators in academic positions following graduation from a Doctor of Philosophy (PhD) in Nursing, Doctor of Nursing Practice (DNP) or MSN Forensic Nursing Track (FN).	\$175,421	\$175,421

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Randal Westrick Department of Chemistry	American Society of Hematology	<b>Platelet Transcriptomic Survey of Pregnant Mice.</b> The goal of this research is to examine platelet transcriptomic changes in pregnant mice to begin to investigate these mechanism(s). This project is particularly exciting because of its translational potential and its ability to further medical advancements in pregnancy associated thrombotic disease.	\$6,000	\$6,000
Yang Xia Department of Physics	Binational Science Foundation	<b>Investigation of Microstructure of Neuronal and Collagenous Tissues by NMR and MRI Techniques.</b> The goal of this project is to develop new MRI techniques that provide accurate microstructural information in tissues that the current MRI tools cannot, without harmful radiation. New MRI modalities will offer powerful tools in diagnostics of bone, brain, joint, and lung diseases and will be beneficial to the entire society.	\$80,000	\$320,000

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Venice Thandi Sule Department of Organizational Leadership	NSF/Eastern Michigan University	<b>IGE: Mentoring for Life: Enhancing STEM Graduate Student Well-Being.</b> The goal of this project is to assist in developing and assessing the mentoring program at Eastern Michigan University, building partnerships with key Oakland University faculty and administrators, modifying workshops aligned with the needs of Oakland graduate students, and surveying graduate students.	\$39,418	\$39,418
Jia Li Department of Electrical and Computer Engineering	Air Force Office of Scientific Research	<b>Dynamic Data Driven Multistatic EO/RF Sensor Fusion.</b> This project will address the problem of information fusion when using multiple, spatially distributed EO and RF sensors for automatic target recognition and tracking.	\$70,257	\$207,504
Mary Jamieson Department of Biological Sciences	Charter Township of Oakland Parks and Recreation	<b>Pollinator Surveys and Outreach.</b> The Oakland Township Parks & Recreation Natural Areas Stewardship Program will work with Oakland University and Dr. Mary Jamieson to implement a pollinator/insect monitoring and outreach program. This would include surveys throughout the summer to monitor changes in pollinator populations in response to habitat restoration work.	\$4,000	\$4,000

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Huirong Fu Department of Computer Science and Engineering	National Security Agency	<b>Oakland University GenCyber Student Program-Entry Level.</b> This program will serve 100 upper elementary, middle, and high school students in the Detroit Urban Area with a diversity of socio-economic status, gender, and ethnicity, offering five 5-day, 40-hour GenCyber student camps at entry level.	\$99,992	\$99,992
Anne Hranchook School of Nursing	Health Resources and Services Administration	<b>Oakland University Nurse Anesthetist Traineeship Program.</b> The purpose of the Nurse Anesthetist Traineeship (NAT) project is to help address the Health Resources & Service Administration's objectives and clinical priorities. The intent of the NAT project is to provide full time graduate nurse anesthesia students enrolled in the Oakland University-Beaumont Graduate Program of Nurse Anesthesia with traineeship support needed.	\$32,185	\$32,185
Mozhgon Rajaei Department of Health Sciences	Duke University/ National Institutes of Health	<b>Identifying and Addressing Contaminant Risks in Fish Tissue in the Cape Fear River.</b> The goal of this project is to conduct research in response to community needs and concerns about chemical contamination in fish tissue in the Cape Fear River basin of North Carolina, and to provide information for subsistence fish consumers to reduce potential exposure to mercury and other contaminants in fish.	\$10,000	\$10,000



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David Stone Research Administration	Michigan Economic Development Corporation	<b>Business Incubator Programs: Incubator Gatekeeper.</b> The goal of this project is to fund a key person to oversee Oakland's incubator-client gatekeeping activities. The Gatekeeper's responsibilities entail client recruiting, fundraising, strategic guidance for clients and supporting local entrepreneurships. The Gatekeeper will create efficiencies by streamlining the organizational structure that will lead to increases in the incubator's performance metrics.	\$99,812	\$374,297
Khalid Mahmood Malik Department of Computer Science and Engineering	National Science Foundation	<b>Forensic Examiner: Testbed for Benchmarking Digital Audio Forensic Algorithms.</b> The goal of this research is to establish reliable signatures for the audio acquisition system (e.g., microphone, codec, etc.) from the evidentiary recording; investigate impact of anti-forensic attacks on existing methods; design attack-aware algorithms robust to anti-forensic attacks; and develop research common platform for benchmarking audio forensics algorithms and tools.	\$ 16,000	\$ 215,909

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Randal Westrick Department of Biological Sciences	Blood Center of Wisconsin / NIH	<b>Characterization of an Isoform Specific Anticoagulant Function of TFPI-alpha.</b> We have recently identified that the tissue factor pathway inhibitor alpha-Factor V interaction is physiologically relevant. The aim of this grant is to explore this interaction in a glomeruloid body phenotype.	\$ 5,805	\$ 30,816
Geraldine Graham Upward Bound	United States Department of Education	<b>Project Upward Bound College Prep Academy.</b> 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.	\$686,928	\$3,075,850
John Beaghan Department of Finance and Administration	United States Department of Education	<b>Oakland University Emergency Institutional Grants.</b> Oakland University received government funding as part of the CARES Act to cover institutional expenses resulting from the coronavirus pandemic.	\$6,898,412	\$6,898,412
<b>Total</b>			<b>\$8,279,230</b>	<b>\$11,551,804</b>