

Agendum
Oakland University
Board of Trustees Formal Session
October 3, 2022

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY
FOR THE PERIOD OF JULY 1 – AUGUST 31, 2022
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 July 1 through August 31, 2022.

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 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.

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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 July 1 – August 31, 2022.

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

Submitted to the President
on 9/27/22, 2022 by



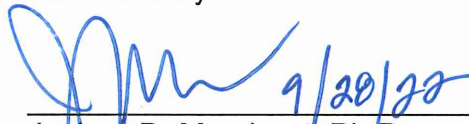
Britt Rios-Ellis, M.S., Ph.D.
Executive Vice President for
Academic Affairs and Provost

Recommended on 9/28, 2022
to the Board for approval by



Ora Hirsch Pescovitz, M.D.
President

Reviewed by



Joshua D. Merchant, Ph.D.
Chief of Staff and
Secretary to the Board of Trustees

ATTACHMENT A

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Jia Li Department of Electrical and Computer Engineering	Air Force Office of Scientific Research	Interpretable Multimodal Sensor Fusion. This investigation will reveal the link between sensor behaviors and decision making, increase the fusion system's resilience to adversarial attack, and enable domain adaptation when sensors are deployed in a new environment.	\$ 153,645	\$ 461,078
A. Valance Washington Department of Biological Sciences	National Institutes of Health	Translation Studies of the Planet Specific Receptor Trem Like Transcript. We hypothesize that Triggering receptor expressed in myeloid cells (TLT-1's) interaction with fibrinogen is a major pathway by which the immune system commandeers the hemostatic system for immune function. In this application we will mechanistically define this interaction and demonstrate its usefulness as a therapeutic target.	\$ 366,835	\$ 810,247

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Sergey Golovashchenko Department of Mechanical Engineering	National Science Foundation	IUCRC Planning Grant, Oakland University: Center for Industrial Metal Forming (CIMF). The mission of the Center for Industrial Metal Forming, which is comprised of Oakland University, Ohio State University, North Carolina State University and University of New Hampshire, is to perform cutting-edge, pre-competitive fundamental research in metal forming science and engineering.	\$ 20,000	\$ 20,000
Marouane Kessentini Department of Computer Science and Engineering	National Science Foundation	CCRI: New: A Software Refactoring Community Infrastructure. The publicly-released infrastructure will support the transition of refactoring research into practice and will enable STEM researchers to better maintain their software prototypes as these inevitably de-cay.	\$ 501,097	\$ 501,097
Lanyu Xu Department of Computer Science and Engineering	National Science Foundation	NSF Student Travel Grant for 2022 ACM/IEEE Symposium on Edge Computing (ACM/IEEE SEC). This travel grant will support 20 undergraduate and graduate students to attend the 7th ACM/IEEE Symposium on Edge Computing in Seattle in December 2022.	\$ 20,000	\$ 20,000

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Tomoko Wakabayashi Department of Education and Human Services	Oakland Livingston Human Service Agency	Youth Michigan ACE Initiative Community Champions. The overarching goal of this project is to address the pressing needs of the Pontiac community voiced by our partners—adverse childhood experiences (ACEs) and childhood trauma that affect children’s growing brains.	\$ 2,500	\$ 2,500
Taras Oleksyk Department of Biological Sciences	Helmsley Charitable Trust	Comprehensive Study of T1DM Exomes in Ukraine. The goal of this project to evaluate genetic components of Type 1 diabetes in a single population residing in Ukraine.	\$ 780,628	\$ 780,628
Sayed Nassar Department of Mechanical Engineering	National Science Foundation	IUCRC Phase I Oakland University: Center for Composite and Hybrid Materials Interfacing. This research will involve interdisciplinary teams to address the emerging need to transform current labor-intensive, experience-based CHMI practice into science-based, automated CHMI processes.	\$ 140,000	\$ 310,000
Khalid Mahmood Malik Department of Computer Science and Engineering	National Science Foundation	NSF 21-552 Innovation Corps - National Innovation Network Teams Program. This I-Corps Program will utilize experiential learning of customer and industry discovery, coupled with first-hand investigation of industrial processes, to translate invention into practice.	\$ 50,000	\$ 50,000

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Michael Kranak Department of Human Development and Child Study	Hazel Park Schools	Providing Workshop-Based Behavioral Coaching to General and Special Educators. The goal of this project is to provide short-term consultation in the form of several workshops for educators working with Hazel Park School District students in need of more intensive and specialized behavioral interventions.	\$ 900	\$ 900
Lan Jiang Department of Biological Sciences	National Institutes of Health	Osiris Genes as Novel Coordinators of Protein Trafficking in Drosophila Trachea. The objective of this research is to determine the function of Osi genes on apical secretion of the apical luminal matrix during tube expansion, the function of Osi genes as coordinators to increase numbers, volumes, activities of secretion-related trafficking components at the expanse of degradation-related trafficking components in trachea, and how Osi proteins coordinate changes in trafficking components by identifying Osi-interacting proteins.	\$ 18,985	\$ 18,985
Christina Papadimitriou Department of Interdisciplinary Health Sciences	George Washington University / NIH	Developing a Standardized Process Assessment for Relationship-Centered Shared Decision-Making (SPARCSdm). The goal of this project is to develop a new research measure to study shared decision making with persons who cannot self-report due to severe disabilities.	\$ 54,690	\$ 169,041

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Ankun Yang Department of Mechanical Engineering	National Science Foundation	MRI: Acquisition of a Confocal Raman Microscope for Multidisciplinary Research at Oakland University. Funding will be used to acquire a Horiba LabRAM Raman microscope and spectrometer at Oakland University (OU). The requested Raman performs non-invasive and non-destructive material analysis with high spatial and spectral resolutions and will enable a variety of new research directions pursued by research faculty at OU.	\$ 315,000	\$ 315,000
Douglas Zytke Department of Computer Science and Engineering	National Science Foundation	Collaborative Research: HCC: Small: Understanding Online-to-Offline Sexual Violence through Data Donation from Users. The goal of this work is to make foundational advances in the mitigation of online-to-offline harm, or harm that occurs via the combination of computer-mediated and face-to-face communication.	\$ 403,107	\$ 403,107
Mary Lewis Department of Psychology	Alliance of Coalitions for Healthy Communities	Social Norms Intervention Assessment. This study will assess the effectiveness of a social norms intervention to reduce drinking, drug use, and vaping in the college populations. An additional goal is to apply campaign social norm messages to awareness of mental health resources, student organizations, and the provision of peer socio-emotional support through social norm campaigns.	\$ 8,007	\$ 24,589

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Andrei Slavin Department of Physics	University of Central Florida / Air Force Office of Scientific Research	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.	\$ 171,832	\$ 887,749
Huirong Fu Department of Computer Science and Engineering	National Security Agency	Oakland University GenCyber Student Program. A comprehensive, hands-on, activity-based, student-centered summer camp program at entry level will be held at Oakland University to deliver substantive cybersecurity training to 100 middle and high school students in the Detroit Urban Area with a diversity of socio-economic status, gender, and ethnicity.	\$ 130,156	\$ 130,156
Huirong Fu Department of Computer Science and Engineering	National Security Agency	Oakland University GenCyber Teacher Program. A comprehensive, hands-on, activity-based, learner-centered teacher program will be hosted by Oakland University (designated as National Center of Academic Excellence in Cybersecurity (NCAE-C) by the NSA and DHS), to deliver substantive cybersecurity training to twenty-five (25) K-12 teachers in the Detroit Urban Area.	\$ 149,416	\$ 149,416

Grants and Contracts Report for Period July 1 - August 31, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Mi Hye Song Department of Biological Sciences	National Institutes of Health	Proteolytic Regulation of Centrosome Assembly. This research will contribute to advances in fundamental understandings of centrosome biology in humans and therapeutic interventions for human diseases and conditions such as cancers and microcephaly associated with abnormal centrosomes.	\$ 450,000	\$ 450,000
Zexin Ma Department of Communication, Journalism, and Public Relations	National Institutes of Health	Communicating Cancer Risk of Alcohol: Impact of Narrative Pictorial Warning Labels. This project aims to develop and evaluate the impact of narrative pictorial warning labels on visual attention, message reactance, risk perceptions, and intentions to reduce and stop drinking.	\$ 75,000	\$ 150,000
Stephanie Vallie School of Nursing	Michigan Department of Health and Human Services (MDHHS)	Sim-Lab Enhancements for the School of Nursing. The MDHHS allocation for virtual simulation technologies in nursing education funding will be used by Oakland University's School of Nursing to purchase virtual simulation access codes. Our goal is to meet the pedagogical needs of all students enrolled in the OU undergraduate nursing program.	\$ 3,432	\$ 3,432

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Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Zissimos Mourelatos Department of Mechanical Engineering	University of Michigan / United States Department of Defense	Reliable Deep Learning for Data-Driven Mobility Prediction under Uncertainty for Off-Road Autonomous Ground Vehicles. This research will develop a reliable (high-confidence) deep learning approach for off-road mobility prediction under uncertainty in the presence of scarce data.	\$ 63,402	\$ 112,486
David Stone Research Office	Michigan Economic Development Corporation	Business Incubator Programs: Incubator Gatekeeper. 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.	\$ 100,000	\$ 474,297
Tomoko Wakabayashi Department of Human Development and Child Study	Michigan Association of Intermediate School Administrators	Early Literacy Essentials Training Evaluation Project. This research project evaluates the perceived impact of the training of Birth to Age 3 and Pre-Kindergarten Essential Instructional Practices in Early Literacy.	\$ 55,000	\$ 55,000
Total Awards			\$ 4,033,632	\$ 6,299,708