

Agendum
Oakland University
Board of Trustees Formal Session
October 17, 2025

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY
FOR THE PERIOD OF JULY 1 – AUGUST 31, 2025
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 give emphasis to interdisciplinary, 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.

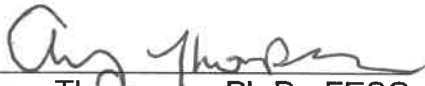
At this time, we request that the Board accept the grants and contracts reported on the attached Grants and Contracts Report, Attachment A, for the period of July 1 – August 31, 2025

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 expenses incurred in support of research projects.
5. **Educational Implications:** Grants and contracts enhance the training and education of students.

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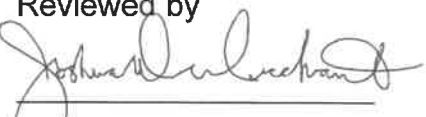
6. **Personnel Implications:** Grants and contracts awards may provide salary support for faculty, post-doctoral fellows, undergraduate and graduate students, technicians, lab managers, and other personnel, as required by the funded research project or program.
7. **University Reviews/Approvals:** All 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 July 1 – August 31, 2025.
9. **Attachments:** A. Grants and Contracts Report.

Submitted to the President
on October 8, 2025 by


Amy Thompson, Ph.D., FESG, CHES
Executive Vice President for
Academic Affairs and Provost

Recommended on 10/9, 2025
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

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Kwame Sakyi Department of Public & Environmental Wellness	Center for Learning and Childhood Development-Ghana	EPIC – Engaging Policymakers in Intersectoral Collaboration to Advance Early Childhood Care and Development: An Implementation Research Project EPIC is a research project that includes an implementation of finding to build and evaluate an inclusive, evidenced-based intersectoral policy intervention to advance early childhood health and development.	\$28,111	\$104,919
Guangzhi Qu Department of Electrical and Computer Engineering	Oakland County	Empowering Economic Growth: A Smart Platform for Managing State and County Development Opportunities This project outlines the development of a state-of-the-art platform leveraging Large Language Models (LLMs) to streamline the management and access to economic development opportunities at the county and state levels.	\$114,077	\$114,077
Gopalan Srinivasan Department of Physics	ARCTOS / Air Force Office of Scientific Research (AFOSR)	Engineered Ferrimagnetic Films via Liquid Phase Epitaxy and Sputtering The key objective of the project is to prepare thin films of magnetic oxides on a variety of substrates in order to study the influence of substrate induced mechanical strain on magnetic properties of the films. It is anticipated that the efforts will lead to new film-substrate combination for useful device technologies.	\$100,000	\$150,000
Dao-Qi Zhang Eye Research Institute	National Institutes of Health (NIH)	The Underlying Mechanisms of Visual Impairment and Myopia in Prematurity This project is relevant to public health because preterm birth and oxygen therapy in premature infants causes myopia. Results from the study will advance our understanding of why myopia of prematurity occurs in almost 1 of every 10 infants born in the United States. The goal is to develop preventive and therapeutic strategies to preserve vision in premature infants.	\$392,921	\$1,685,409

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ATTACHMENT A

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Laura Pittiglio School of Nursing	Jonas Philanthropies	School of Nursing Jonas Scholarship The Joans Scholars program provides support to nurses training for leadership roles as faculty, clinical leaders and researchers.	\$12,000	\$27,000
Adam Avery Department of Chemistry	National Institutes of Health (NIH)	Molecular and cellular mechanisms of spinocerebellar ataxia type 5 This project is to determine how SCA5-induced high-affinity actin binding leads to decreased dendritic arborization, and to elucidate mechanisms regulating spectrin-actin binding. Discoveries in this project will help guide SCA5 therapeutic development.	\$505,394	\$505,394
Vardan Karamyan Foundational Medical Studies	National Institutes of Health (NIH)	Development and Characterization of Small Molecule Activators of Peptidase Neurolysin for Stroke Therapy This project will conduct lead optimization to further refine activity and 'drug-like' properties of Nln activators, characterize the activation mechanism that the identified Nln activators exploit; and determine the therapeutic potential of Nln activators in post-stroke cerebroprotection. Our long-term goal is to develop an effective stroke therapy, which will transform the current treatment modalities for a vast number of stroke patients.	\$645,589	\$3,033,874
Colin Wu Department of Chemistry	National Science Foundation (NSF)	CAREER: Molecular Recognition of 8-Oxoguanine Modified G-Quadruplexes by the FANCDJ Helicase and the REV1 Polymerase The long-term goals of this research are to establish a Molecular Biophysics program at Oakland University and to develop an interdisciplinary single-molecule research community with my colleagues.	\$190,300	\$945,910
Mohamed Al-Shabrawey Foundational Medical Studies	National Institutes of Health (NIH)	Toward Targeting GPR31 and GPR39 Signaling in Diabetic Retinopathy This project studies Diabetic retinopathy. Current therapies afford significant vision improvements. However, side effects, high cost, invasiveness and the paucity of neuroprotection are critical barriers in clinical practice. Therefore, new or complementary treatment strategies are needed.	\$375,000	\$375,000

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Sayed Nassar Department of Mechanical Engineering	National Science Foundation (NSF)	Industry-University Cooperative Research Center (IUCRC) Phase I Oakland University: Center for Composite and Hybrid Materials Interfacing (CHMI) The proposed IUCRC 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	\$678,667
Dawn Aubry Department of Enrollment Management	Detroit Regional Chamber Foundation	Use of Credit Predictor Pro to Improve CPL Practices Oakland University is participating in a regional initiative to expand Credit for Prior Learning (CPL) practices. As part of this effort, the Chamber is offering a one-year, grant-funded subscription to CAEL's Credit Predictor Pro, including implementation support and the Skills Extractor feature.	\$1,000	\$1,000
Sayed Nassar Department of Mechanical Engineering	Georgia Institute of Technology	Industry-University Cooperative Research Center (IUCRC) Program The continued IUCRC will involve interdisciplinary teams to address the emerging need to transform current labor-intensive, experience-based CHMI practice into science-based, automated CHMI processes.	\$143,605	\$506,856
Jun Chen Department of Electrical & Computer Engineering	National Science Foundation (NSF)	Collaborative Research: Scalable Privacy Verification and Quantification for Multi-Robot Systems This project will develop a transformative robust demo-lean learning and control framework that can be used to teach cyber-physical systems how to perform tasks according to user's personal preference.	\$334,218	\$334,218
Douglas Wendell Department of Biological Sciences	Great Lakes Commission	Genetic Identification of Phragmites Subspecies Genetic analysis of samples will be used to map out areas of native Phragmites australis americanus and the invasive Phragmites australis subspecies.	\$3,416	\$10,739

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Elizabeth Delorme-Axford Department of Biological Sciences	National Institutes of Health (NIH)	The role of pseudouridine synthases in autophagy This project addresses the gap in our understanding of how autophagy – an essential pathway for managing cell stress – is regulated at the molecular genetic level. Thus, the proposed research is relevant to the part of the NIH's mission to foster fundamental discoveries as a basis to significantly advance the capacity to protect and improve human health	\$562,320	\$562,320
Dawn Woods Department of Teaching & Learning	National Science Foundation (NSF)	CAREER: Sparking "Number Talks" to Strengthen Mathematical Identities This project is designed to improve K-3 mathematics education for students from historically and persistently marginalized groups by intentionally leveraging (and confirming) resources for productive mathematical identity development.	\$337,017	\$781,196
Sergey Golovashchenko Department of Mechanical Engineering	National Science Foundation (NSF)	Industry-University Cooperative Research Center (IUCRC) Phase 1 The mission of the Center for Industrial Metal Forming (CIMF) is to perform cutting-edge, pre-competitive fundamental research in metal forming science and engineering in collaboration with industrial Members. To achieve its objectives, CIMF will bring unique expertise and facilities to the consortium and will collaborate closely with its industrial Members to conduct research and prepare engineers and professionals for the metal forming industry.	\$292,500	\$487,500
Fabia Ursula Battistuzzi Department of Biological Sciences	National Science Foundation (NSF)	NRT-HDR: Using a Data Analytics Framework to Merge STEM and Entrepreneurial Training This program will focus on the integration of Omics research projects with data analytics and entrepreneurship training. Through targeted recruitment and layered mentoring strategies this program will increase diversity and retention of underrepresented minorities in STEM.	\$747,106	\$1,999,947

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Wing-Yue Louie Department of Electrical & Computer Engineering	National Science Foundation (NSF)	CAREER: Towards Programmable Social Robots for Everyone: A Teacher-in-the-Loop Learning from Demonstration Project This project is to bridge the gap between non-technical experts and social robots so they can be effectively, intuitively, and efficiently used as well as personalized by the general population for society's needs. Towards that goal, this CAREER will develop an end-to-end LfD framework for non-technical experts to teach a social robot a task by keeping the teacher-in-the-loop throughout the entire robot learning process.	\$211,517	\$602,842
Wing-Yue Louie Department of Electrical & Computer Engineering	Automotive Research Center	Dynamic allocation of information through auditory, visual, and haptic interfaces to minimize cognitive burden and maximize performance during crew-AI teaming The overall goal of this ARC project is to develop approaches to dynamically allocate targeted task information to each member of a crew through auditory, visual, and haptic interfaces to maximize overall team mission performance.	\$55,076	\$140,000
Total			\$5,191,167	\$13,046,868