Agendum
Oakland University
Board of Trustees Formal Session
February 2, 2024

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF NOVEMBER 1 - DECEMBER 31, 2023 A Recommendation

- 1. Division and Department: Academic Affairs/Research Office.
- 2. <u>Introduction:</u> 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 November 1 through December 31, 2023.

- **Previous Board Action:** The Board accepts grants and contracts to Oakland University on a regular basis at its Formal Sessions.
- **4.** <u>Budget Implications:</u> 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.
- **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.

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- 7. <u>University Reviews/Approvals:</u> 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 November 1 December 31, 2023.
- **9.** Attachments: A. Grants and Contracts Report.

Submitted to the President

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

Recommended on ____

2024

to the Board for approval b

Ora Hirsch Pescovitz, M.D.

President

Reviewed by

Joshua/D. Merchant, Ph.D.

Chief of Staff and

Secretary to the Board of Trustees

Grants and Contracts Report for period November 1 - December 31, 2023

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Christopher Wilson Department of Human Movement Science	Michigan Health Endowment Fund	Access 211 for Fall Prevention: Development, Validation, and Implementation of a Statewide Resource for Fall Prevention Services. Our long-term goal is to provide a freely available resource hub hosted on 211 to connect older adults to fall prevention resources in the State of Michigan.	\$408,499	\$408,499
Adam Avery Department of Chemistry	American Heart Association	Functional Consequences of Cardiomyopathy Mutations in Alpha-Actinin. The goal of this research is to understand the molecular and cellular consequences of ACTN2 mutations identified in cardiomyopathy patients. We will test the hypothesis that cardiomyopathy-associated mutations localizing to the ABD of a-actinin-2 disrupt actin binding.	\$154,000	\$154,000
Melissa Jones Department of Human Movement Science	University of Iowa / National Institutes of Health	Sedentary Behavior, Physical Activity, and 24-Hour Behavior in Pregnancy and Offspring. The PI will participate in data acquisition assist with protocol development for offspring cardiovascular assessments using procedures developed while the team was working together at the University of Iowa.	\$29,730	\$84,180
Mark Gordon Department of Police	Michigan Commission on Law Enforcement Standards	MCOLES Public Safety Academy Assistance Program. This program provides scholarships for employed recruits of local law enforcement agencies to attend a basic training academy.	\$48,000	\$48,000
Randal Westrick Department of Biological Sciences	University of Michigan / National Institutes of Health	Genetic Regulators of Plasminogen Activator Inhibitor- 1. The goal of this research is to continue the study of genetics of cardiovascular disease, with emphasis on hemostasis.	\$49,338	\$49,338

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Jun Chen Department of Electrical and Computer Engineering	National Science Foundation	CAREER: Reconfigurable and Predictive Control with Reinforcement Learning Supervisor for Active Battery Cell Balancing. This project will develop a comprehensive and unifying predictive control framework and corresponding novel methodologies for active battery cell balancing control, especially for batteries with a large number of cells.	\$100,000	\$500,000
Zhe Wang Department of Chemistry	National Institute of Justice	Developing a Portable and Fast Opioid Assessment Tool for Improved Field Decision-Making. Illegal drug use and distribution, continue to present major public safety concerns in the US, and the need for effective detection methods has never been more urgent. This research will address these limitations by developing a low-cost, handheld opioid detection device with a wide detection range, rapid results, quantification capabilities, low maintenance, and user-friendliness to combat the opioid crisis and enhance community safety.	\$308,002	\$308,002
Kelly Berishaj School of Nursing	University of Michigan / National Science Foundation	Preventing Online-to-Offline Sexual Violence with Explainable Data Feeds to Inform User Behavior. The goal of this research includes data collection and analysis regarding online dating and incorporate trauma-sensitive language in interviews and support of victims.	\$88,066	\$131,831

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Sayed Nassar Department of Mechanical Engineering	National Center for Manufacturing Sciences	Fatigue of High-Performance Adhesives. The objective of this research project is to study, evaluate, and generate a database on the fatigue strength of high-performance adhesives under various levels of mean axial stress in order to improve understanding and allow improvements to be made for a variety of adhesives used for manufacturing, maintenance and sustainment activities.	\$111,420	\$111,420
Sunny Raj Department of Computer Science and Engineering	Department of Energy	Mobilizing the Emerging Diverse Al Talent (MEDAL) through Design and Automated Control of Autonomous Scientific Laboratories. The MEDAL project aims to train faculty, doctoral, graduate, and undergraduate students at the HBCU, three HSIs, and two urban R2 universities on contemporary Al research relevant to the Department of Energy, including topics such as transformers, perceivers, large language models, pre-trained visual and scientific models, and control of autonomous scientific labs.	\$175,000	\$600,000
Rebecca Clemans School of Medicine		MI CARES 3.0. The main objective of this grant is to engage additional medical schools in providing electives and other curricular activities through shared learning and resources, aiming to encourage medical school collaborations around training medical students on treating persons with a substance use disorder.	\$32,579	\$32,579

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
David Dulio Department of Political Science	State of Michigan	Michigan Student Voting Summit Support. This funding was used to help support the 2023 Michigan Student Voting Summit held at Oakland University this past October. The nonpartisan summit was hosted by the Department of State in partnership with Campus Vote Project. It was a chance for students, educators, administrators, elected officials, and advocates to come together for a day of civic learning, idea sharing, and networking.	\$5,000	\$5,000
Michael Risner School of Medicine	Bright Focus Foundation	Harnessing Intercellular Mitochondrial Transfer in Human-Derived Retinal Cells to Treat Glaucoma. This research will include testing the influence of Mical-2 and CD38 on neuron-to-neuron and astrocyte-to-neuron transfer of mitochondria during physiologic and stressed conditions. The long-term goal is to harness mitochondrial transfer from hESC-RGCs to native RGCs towards development of treatments for glaucoma.	\$106,029	\$106,029
Joshua Haworth Department of Human Movement Science	University of Connecticut / National Institutes of Health	Communicating Cancer Risk of Alcohol: Impact of Narrative Pictorial Warning Labels. The goal of this project is to coordinate negotiations with the vendor, maintain data management, including verification of data integrity, interpreting data according to project aims, and providing sample and summary results for use in dissemination.	\$8,328	\$8,328
Huirong Fu Department of Computer Science and Engineering	Towson University / National Security Agency	Curriculum Proposal: Autonomous and Connected Vehicle Cybersecurity. This course aims to equip students with security knowledge of autonomous and connected vehicles. It will enable the students to protect future vehicles from potential cyber threats and attacks.	\$64,928	\$64,928

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Julie Kruse School of Nursing	Health Resources and Services Administration	ASPIRE: Achieving Success through Professionalism, Integrity, Resilience, and Engagement. The purpose of the Oakland University Nursing Workforce Diversity project, Achieving Success through Professionalism, Integrity, Resilience, and Engagement, is to increase nursing progression and graduation rates and retention in practice for students who are from diverse and/or disadvantaged backgroundsspecifically those from racial and ethnic minorities underrepresented among registered nurses.	\$548,199	\$2,195,252
Randal Westrick Department of Biological Sciences	National Institutes of Health	Investigating the Functional Roles of Arl6ip5 in Suppressing Thrombosis. The long-term goal of our work is to identify genetic variants that suppress intravascular blood clotting called thrombosis or venous thromboembolism (VTE).	\$450,000	\$450,000
		Total Awards	\$2,687,118	\$5,257,386