

Agendum  
Oakland University  
Board of Trustees Formal Session  
June 13, 2022

**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY**  
**FOR THE PERIOD OF MARCH 1 – APRIL 30, 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 March 1 through April 30, 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.

Acceptance of Grants and Contracts to  
Oakland University for the Period of  
March 1 – April 30, 2022  
Oakland University  
Board of Trustees Formal Session  
June 13, 2022  
Page 2

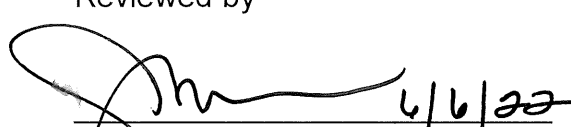
7. **University Reviews/Approvals:** All grants and contracts are reviewed by the Research Office prior to submission to the Board to ensure compliance with federal and state laws and regulations and University policies and procedures, when applicable, and with assistance from the Office of Legal Affairs 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 March 1 – April 30, 2022.
9. **Attachments:** A. Grants and Contracts Report.

Submitted to the President  
on 6/6, 2022 by

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

Recommended on 6/7, 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

**Grants and Contracts Report for Period March 1 - April 30, 2022**

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
<b>Marouane Kessentini</b> Department of Computer Science and Engineering	National Science Foundation	<b>I-Corps: Intelligent Software Quality Monitoring and Improvement Technology.</b> 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
<b>Kwame Sakyi</b> Department of Public and Environmental Wellness	Center for Learning and Childhood Development-Ghana	<b>CLDC-Ghana Research Initiative.</b> This project will give the PI focused time for creating a research arc that involves the Center in Ghana, consistent with their mission and funded by grants or consultancies.	\$6,565	\$6,565
<b>Deana Hays</b> School of Nursing	University of Illinois at Chicago / HRSA	<b>Midwest Integration of the National HIV Curriculum.</b> The focus of this project is the integration of the National HIV Curriculum (NHC) e-Learning Platform into the education and training curricula of multiple health professions and institutions with an emphasis on medical, nursing, and pharmacy programs, including graduate education/residency programs.	\$10,000	\$40,000
<b>Yang Xia</b> Department of Physics	National Institutes of Health / DHHS	<b>ACL-Deficiency Modifies Topographical Degradation in Posttraumatic Osteoarthritis.</b> Trauma is one of the leading etiologic factors for knee osteoarthritis, which can introduce a cascading series of adverse events that leads to the onset and progression of posttraumatic osteoarthritis. The central hypothesis is that the presence of the ACL-deficiency accelerates the adverse events in the progression of tissue degeneration when compared to the impact alone or the ACL-deficiency alone.	\$358,881	\$2,229,522

**Grants and Contracts Report for Period March 1 - April 30, 2022**

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
<b>Yang Xia</b> Department of Physics	National Institutes of Health / DHHS	<b>ACL-Deficiency Modifies Topographical Degradation in Posttraumatic Osteoarthritis.</b> <i>Second increment, see above.</i>	\$35,891	\$ -
<b>Laura Pittiglio</b> School of Nursing	Jonas Nursing and Veterans Healthcare	<b>School of Nursing Jonas Scholarship Application.</b> This funding will be used for courses that will prepare students to provide organizational leadership in regards to healthcare information technology within healthcare systems and academic setting, and with the essential competencies to assume a leadership role in the development of health policy at the institutional, local, state, federal, and international levels.	\$15,000	\$15,000
<b>Nishaki Mehta</b> School of Medicine	National Science Foundation	<b>PressRite - Hematoma Reduction Compression Device and Wound Cosmesis Improvement in Patients Undergoing Cardiac Device Implants.</b> This funding will be used to educate students on the uses of the PressRite, an externally applied compression device designed to reduce the incidence of hematoma and improve scar healing following implantation of cardiac implantable electronic devices such as cardiac pacemakers and defibrillators.	\$50,000	\$50,000

**Grants and Contracts Report for Period March 1 - April 30, 2022**

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
<b>Khalid Mahmood Malik</b> 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.	\$8,000	\$239,909
<b>Marouane Kessentini</b> Department of Computer Science and Engineering	National Science Foundation	<b>PFI-TT: Intelligent Software Refactoring Bot for Continuous Integration.</b> This project focuses on developing scalable methods to determine when and how to integrate developer feedback to semi-automate code refactoring for continuous integration environments while adhering to industry standards to align the effort with their commercialization objectives.	\$250,000	\$250,000
<b>Marouane Kessentini</b> Department of Computer Science and Engineering	University of Michigan / NSF	<b>Elements: An Infrastructure for Software Quality and Security Issues Detection and Correction.</b> This project develops a framework for detecting, fixing, and documenting security and quality issues. It will continuously monitor the software repository to identify security vulnerabilities and quality issues based on static and dynamic analyses, and then find the best sequence of code changes to prioritize and fix them.	\$599,999	\$599,999

## Grants and Contracts Report for Period March 1 - April 30, 2022

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
<b>Christina Papadimitriou</b> Department of Interdisciplinary Health Sciences	University of Illinois, Chicago / NIDILRR	<b>Enhancing Community Living and Increasing Participation through Self Efficacy (ECLIPSE).</b> This project will provide remote peer navigation services to help ease inpatients with disabilities transition to community living, by helping people address community living goals with support and guidance from well-trained disabled peers who have had to deal with many of these challenges themselves.	\$83,050	\$83,050
<b>Randall Westrick</b> Department of Biological Sciences	Versiti Wisconsin, Inc. / 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.	\$5,710	\$30,816
<b>Brandy Randall</b> Graduate School	Council of Graduate Schools / NSF	<b>Understanding Oakland University Master's Students Career Pathways.</b> This project gathers data from students graduating from OU with a Master's Degree. The information gained from the Master's Exit Survey will further strengthen efforts to offer master's level education that supports workforce development.	\$25,000	\$25,000
<b>Jennifer Vonk</b> Department of Psychology	Russell Sage Foundation	<b>When Police Officers Use Force Against Citizens: Not just a Black-and-White Issue.</b> The study will examine the associations that dangerous and competitive social worldviews have with perceptions of citizens and police officers involved in ambiguous altercations involving force.	\$34,274	\$34,274

**Grants and Contracts Report for Period March 1 - April 30, 2022**

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
Luis Villa Diaz Department of Biological Sciences	National Science Foundation	<b>I-Corps: Xeno-free synthetic coatings for growth and derivation of human pluripotent stem cells.</b> This funding will enable us to participate in the National I-CORPS course spring cohort #4 to further explore the market viability of our technology through interviewing stakeholders via online and in person interviews.	\$50,000	\$50,000
Tomoko Wakabayashi Human Development and Child Study	Washtenaw Intermediate School District	<b>Michigan Kindergarten Readiness Assessment: Final Statewide Analysis.</b> The outcome of this project will be a statewide analysis of the Michigan Kindergarten Entry Observation/Kindergarten Readiness Assessment, under contract with the Washtenaw Intermediate School District.	\$25,000	\$25,000
Ziming Yang Department of Chemistry	National Science Foundation	<b>CAREER: Mechanistic Understanding of Organic Carbon and Nitrogen Transformations in Hydrothermal Systems.</b> The goal of this research is to understand organic carbon and nitrogen formation and transformations in deep ocean hydrothermal systems. This research will also innovatively merge hydrothermal geochemistry with green chemistry to address current challenges in industry and chemical synthesis.	\$114,841	\$226,217
			<b>Total</b>	<b>\$1,722,211    \$3,955,352</b>