

**Agendum  
Oakland University  
Board of Trustees Formal Session  
April 12, 2021**

**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY  
FOR THE PERIOD OF JANUARY 1 – FEBRUARY 28, 2021**  
**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 January 1 through February 28, 2021.

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.

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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 January 1 – February 28, 2021.
9. **Attachments:** A. Grants and Contracts Report.

Submitted to the Provost  
on 4/2, 2021 by



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

Recommended on 4/6, 2021  
to the Board for approval by



Ora Hirsch Pescovitz, M.D.  
President

## Grants and Contracts Report for Period January 1 - February 28, 2021

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
<b>Michael Sevilla</b> Department of Chemistry	National Institutes of Health	<b>Mechanisms for Radiation Damage to DNA: LET Effects.</b> A comprehensive model of the effect of radiation on DNA will be tested that describes the model physiochemical events from the initial track structure and DNA ion-radical formation through hole and electron transfer, to chemical events that lead to secondary radicals and finally result in DNA damage such as base damage and strand breaks.	\$225,000	\$900,000
<b>Sayed Nassar</b> Department of Mechanical Engineering	National Center for Manufacturing Sciences	<b>Adhesive Performance Improvements for Light Weighting Initiatives.</b> The research team will address the needs of the Army by developing a standard guide for understanding adhesive performance across the multitude of possible substrates.	\$110,000	\$1,100,000
<b>Teresa Rodges</b> Pre-College Programs	Michigan Department of Labor and Economic Opportunity	<b>GEAR-UP - Gaining Early Awareness and Readiness for Undergraduate Program.</b> The GEAR-UP College Day Program is designed to provide academic and social support for students currently in 12th grade with support continuing through their first year of college. As a result of their active participation, students will be adequately prepared for college. The program will provide an opportunity for underrepresented students to discover first hand the potential of college.	\$102,145	\$102,145

## Grants and Contracts Report for Period January 1 - February 28, 2021

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
<b>Teresa Rodges</b> Pre-College Programs	State of Michigan	<b>Michigan Department of Education College Day Allotment.</b> The College Day Program is designed to provide academic and social support for students currently moving to the eleventh grade with support continuing through their senior year of high school. As a result of their active participation, students will be adequately prepared for college.	\$55,350	\$55,350
<b>Randal Westrick</b> Department of Biological Sciences	National Institutes of Health	<b>Thrombosuppressive Mechanisms of Novel Mouse Mutants Discovered through an ENU Mutagenesis.</b> This study will seek to identify, validate and functionally characterize two thrombosis suppressor mutations that we previously identified through an ENU mutagenesis screen.	\$375,000	\$1,875,000
<b>Ziming Yang</b> 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.	\$592,632	\$592,632

## Grants and Contracts Report for Period January 1 - February 28, 2021

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Kristen Munyan School of Nursing	Sigma Theta Tau International	<b>Assessing the Prevalence of Post-Natal Depression among Fathers across Screening Instruments.</b> The purpose of this research is to evaluate the prevalence of depression/anxiety in new fathers and examine consistency between positive screening findings across common psychological clinical screening measures.	\$1,000	\$1,000
Xiangqun Zeng Department of Chemistry	LabSys, LLC	<b>A Wearable Electrochemical Alcohol Sensor.</b> The goal of this research is to develop an alcohol sensor suitable for wearable applications by innovating electrochemical alcohol sensors. In addition, a minimal invasive biocompatible microneedle array is designed to painlessly sample and deliver the interstitial fluid to the sensor.	\$21,850	\$21,850
Wei Zhang Department of Physics	National Science Foundation	<b>CAREER: Quantum Spintronic Device Building Blocks with Magnetically Ordered Materials.</b> This research will explore how natural and artificial solid-state orders, as well as quantum-mechanical couplings in condensed matter systems, can affect spintronic properties. We will also study how they can be effectively controlled to enhance future device performance.	\$111,293	\$500,000

**Grants and Contracts Report for Period January 1 - February 28, 2021**

<b>Principal Investigator</b>	<b>Awarding Agency</b>	<b>Title and Project Abstract</b>	<b>Award Amount</b>	<b>Total Award All Years</b>
Yang Xia Department of Physics	Henry Ford Health System	<b>Graduate Student Support for Medical Physics Research at Henry Ford Hospital.</b> This funding will support Oakland University graduate students to perform cutting-edge biomedical research.	\$23,823	\$46,880
<b>Total Awards</b>			<b>\$ 1,618,093</b>	<b>\$ 5,194,857</b>