Agendum
Oakland University
Board of Trustees Formal Session
April 3, 2017

ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF JANUARY 1 – FEBRUARY 28, 2017

A Recommendation

1. **Division and Department:** Academic Affairs/Office of Research Administration

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, 2017.

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 Office of Research Administration 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 through February 28, 2017.

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

Submitted to the President
on 3/28, 2017 by

James P. Lentini, D.M.A.
Senior Vice President for
Academic Affairs and Provost

Recommended on 3/28, 2017
to the Board for approval by

George W. Hynd
President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Lawrence Herriman Macomb-OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund-Client Engagement, Zoesen, LLC.** The objective for this project is to make accelerator services available statewide, make services available to high priority companies in regions, share accelerator best practices statewide, build lasting collaborations, and create jobs to catalyze multiplier effect.	$ 9,700	$ 542,067
Lawrence Herriman Macomb-OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund-Client Engagement, ONU One.** The objective for this project is to make accelerator services available statewide, make services available to high priority companies in regions, share accelerator best practices statewide, build lasting collaborations, and create jobs to catalyze multiplier effect.	$ 21,250	$ 563,317
Amy Butler OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund Client Engagement - 300 Medical.** The objective for this project is to make accelerator services available statewide, make services available to high priority companies in regions, share accelerator best practices statewide, build lasting collaborations, and create jobs to catalyze multiplier effect.	$ 20,000	$ 448,009

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount	Total Award All Years
Hongwei Qu Department of Electrical and Computer Engineering	National Science Foundation	**MRI: Acquisition of a Transmission Electron Microscope for Multidisciplinary Research on Materials.** The goal of this funding is to acquire a transmission electron microscope and necessary sample preparation tools for multidisciplinary research in micro/nanomaterials and devices.	$ 800,687	$ 800,867
Sara Arena School of Health Sciences	Michigan Department of Health and Human Services	**Prevention Focused Home-Based Physical Therapy Utilizing Community Partnership Referrals.** The purpose of this study is to develop, implement and evaluate the effectiveness of a primary/secondary prevention clinical practice model applicable to the practice of home health care physical therapists and in partnership with a community referral partner.	$ 23,300	$ 23,300
Dao Qi Zhang Eye Research Institute	National Institutes of Health	**Functional Organization of the Retinal Dopaminergic Network.** The long-term goal of the proposed study is to understand the mechanisms by which dopaminergic amacrineneurons are regulated by light.	$ 337,500	$ 1,809,988
Andrei Slavin Department of Physics	University of Nebraska-Lincoln/Department of Commerce	**Center for Nanoferroic Devices.** Theory of dipole-exchange spin waves in ferromagnetic films with surface magnetoelectric effect will be developed.	$ 80,000	$ 380,000
Misa Mi School of Medicine	University of Iowa	**Health Information Outreach to Homeless Patients at the HOPE Recuperative Care Center.** The Oakland University William Beaumont School of Medicine will collaborate with the HOPE Hospitality and Warming Center in Pontiac, Michigan to empower discharged homeless patients in its Recuperative Care Center.	$ 9,984	$ 9,984

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Brian Sangeorzan Department of Mechanical Engineering	Fiat Chrysler Automobiles LLC	**Powertrain PREP Programs.** This funding will be used for an FCA-sponsored supplemental learning program in the area of automotive powertrain development for Junior and Senior SECS students.	$ 17,429	$ 17,429
Christina Papadimitriou School of Health Sciences	Chicago Association for Research and Education in Science (CARES)	**Workshop in Qualitative Methods in Spinal Cord Injury.** A workshop will be conducted on Advanced Qualitative Methods for Health Sciences Research in Spinal Cord Injury and is designed for developing and enhancing skills in qualitative research methodology within a spinal cord injury research setting.	$ 8,518	$ 8,518
Guangzhi Qu Department of Computer Science	Beaumont Research Institute	**SOW: E2RAS: An Internet Based Database System for ERAS Patient Checklist.** The goal of this project is to design a database and web interface to reflect the workflow, interface for query and statistics.	$ 10,143	$ 10,143
Mary Jamieson Department of Biological Sciences	Foundation for Food and Agriculture Research	**Enhancing Crop Pollination, Pest Control, and Yield in Urban Agriculture.** This project will examine strategies to enhance crop pollination and integrated pest management in urban agriculture.	$ 210,618	$ 210,618
Frank Giblin Eye Research Institute	Retinal Solutions, LLC	**Norrin Proof of Concept.** This project will test recombinant Norrin for proof of concept. Retinal Solutions is developing a clinical-grade drug for retinal disease, which must be shown to be effective in animal studies to be considered for ongoing development.	$ 56,520	$ 56,520

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Zissimos Mourelatos Department of Mechanical Engineering	University of Michigan/TACOM	**Reliability, Maintenance and Optimal Operation of Reparable Systems with Application to a Smart Charging Microgrid with Vehicle-to-Grid Capability.** This project provides added value to ongoing ARC research, ongoing TARDEC work and work at the industry partner and other industries.	$ 77,303	$ 443,611
Mozhgon Rajaee School of Health Sciences	University of Michigan	**Cumulative Stressors for Michigan Public School Teachers.** Seventy teachers will be recruited from public school districts in southeast Michigan and surveyed during the school year on perceived stress, stress response, and overall health. An environmental survey will also be performed on the teacher's classroom and school.	$ 17,000	$ 17,000
Brent Thompson School of Medicine	American Association of Anatomists	**"I Am Anatomy", Raising Awareness and Transforming Perceptions by Promoting Professional Diversity**. The objective of this project is to enhance awareness of the anatomical sciences and transform perceptions of who is an anatomist, using multimedia platforms.	$ 50,000	$ 50,000
Lawrence Herriman Macomb-OU INCubator	Grand Valley State University/MEDC	**Business Accelerator Fund-Client Engagement, Templar.** The objective for this project is to make accelerator services available statewide, make services available to high priority companies in regions, share accelerator best practices statewide, build lasting collaborations, and create jobs to catalyze multiplier effect.	$ 17,050	$ 580,367

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Xiangqun Zeng Department of Chemistry	Michigan State University/NIH	**Wearable Microsystem Array for Acute Multi-Pollutant Exposure Assessment.** This research seeks to develop a new tool for assessment of acute exposure to airborne pollutants that would provide unique capability for researchers to study the toxicity of pollutants and model the relationship between exposure and respiratory/cardiovascular health in an acute manner.	$ 215,000	$ 1,138,014
Yonghong Yan Department of Computer Science	National Science Foundation	**CAREER: Programming the Existing and Emerging Memory Systems for Extreme-Scale Performance.** This research aims to address the programming challenge for the existing and emerging deep memory hierarchy to achieve extreme-scale performance.	$ 109,356	$ 600,000
Jessica Korneder Department of Human Development and Child Study	State of Michigan Department of Health and Human Services	**University Autism Spectrum Disorders Program.** The purpose of this program is to increase the number of board certified behavior analysts, students seeking a BCBA credential, board certified assistant behavior analysts, and expand the number of children receiving ABA within the Medicaid system.	$ 65,000	$ 65,000
Andrei Slavin Department of Physics	University of California/NSF	**EFRI NewLAW: Non-Reciprocal Spin Waves in Chiral Magnetic Systems.** The goal of this project is to use a novel approach for the creation of non-reciprocal spin waves and hybrid magneto-acoustic waves.	$ 430,000	$ 430,000

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Jennifer Vonk Department of Psychology	American Psychological Association	**Evolution and Cognition of Behavioral Flexibility in Carnivores.** Grizzly bears will be tested on various measures of behavioral innovation and flexibility.	$ 1,000	$ 1,000
Anyi Liu Department of Computer Science	National Science Foundation	**Collaborative Research: Building Cybersecurity Capacity in Pervasive Computing.** This project aims to build cybersecurity capacity of the United States in pervasive computing. The wide coverage of cyberspace facets in pervasive computing will allow students to learn the state-of-the-art research findings, gain hands-on experiences, engage in scientific research and obtain a comprehensive in-breadth appreciation of the overall cybersecurity.	$ 143,306	$ 143,306
Crystal VanKooten Department of Writing and Rhetoric	National Council of Teachers of English	**Looking and Listening for Multiple Literacies and Transfer through Video in the Writing Classroom.** This research project investigates student learning in three college writing courses that include video composition in the curriculum.	$ 7,500	$ 10,000
Erik Fredericks Department of Computer Science	National Science Foundation	**CRII:CPS: Minimizing the Oracle Problem for Self-Adaptive Cyber-Physical Systems.** This project will examine how adaptation, verification, and traceability can be provided for run-time software test oracles with respect to self-adaptive cyber-physical systems, with the intended long-term goal of improving user trust and assurance in cyber-physical systems.	$ 163,637	$ 163,637

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Deborah Doherty School of Health Sciences	Grand Valley State University	**Interprofessional Management of Prescription Opioid Abuse.** This test-retest study aims to measure knowledge gains and perceptions of an interprofessional education intervention for problem solving and critical thinking regarding opioid abuse involving 300 students and 33 faculty from different Oakland University health professions.	$ 10,000	$ 10,000
		Total	**$ 2,911,801**	**$ 8,532,695**