

Agendum  
Oakland University  
Board of Trustees Formal Session  
May 7, 2014

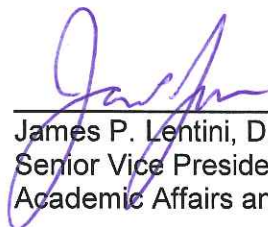
**ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY**  
**FOR THE PERIOD OF JANUARY 1 – FEBRUARY 28, 2014**  
**A Recommendation**

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, 2014.
  
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.

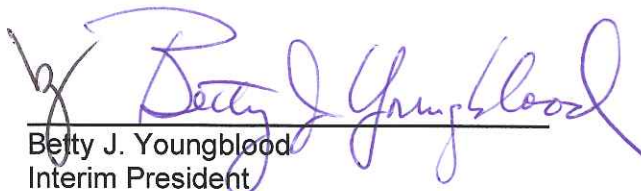
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7. **University Reviews/Approvals:** All grants and contracts are reviewed by the Office of Research Administration prior to submission to the Board to ensure compliance with federal and state laws and regulations and University policies and procedures, 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, 2014.
  
9. **Attachments:** A. Grants and Contracts Report.

Submitted to the President  
on 5-1-, 2014 by

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

Recommended on May 7, 2014  
to the Board for approval by

  
Betty J. Youngblood  
Interim President

<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>Brian Dean</b> Department of Electrical and Computer Engineering	Chrysler Corporation	<b>Automotive Air Intake Active Noise Cancellation Bench Testing.</b> <i>The purpose of this funding is to test a system that uses microphones and speakers mounted in the intake channel to provide information to a digital signal processor.</i>	\$ 25,000	\$ 25,000
<b>Bradley Roth</b> Department of Physics	Beaumont Research Institute	<b>Physics Doctorial Student.</b> <i>These funds will provide research training placement of Oakland University graduate Physics student, Ranjeeta Thapa.</i>	\$ 21,000	\$ 51,252
<b>Mohammad Reza Siadat</b> Department of Computer Science and Engineering	National Institutes of Health	<b>Urinary Continece Index for Prediction of Urinary Incontinence in Older Women.</b> <i>The objective of this project is to estimate a urinary incontinence index for older women to predict whether a subject is likely to develop incontinence in the future.</i>	\$ 135,000	\$ 402,805
<b>Julie Gustafson</b> Macomb OU INCubator	Grand Valley/MEDC	<b>Business Accelerator Fund-Client Engagement.</b> <i>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 catalyze multiplier effect.</i>	\$ 14,850	\$ 39,400
<b>Scott Crabill</b> Office of the Senior Associate Provost	Michigan Campus Compact	<b>I-Pad Peer Writing Tutoring.</b> <i>This grant will provide funding for creating supportive campus environments for engagement in community service and civic education activities.</i>	\$ 3,500	\$ 3,500
<b>Tao Shu</b> Department of Mechanical Engineering	National Science Foundation	<b>Collaborative Research: EARS: Large-Scale Statistical Learning-Based Spectrum Sensing and Cognitive Networking.</b> <i>The objective of this project is to utilize the recent results in statistical learning over big data to develop efficient 3D spectrum sensing schemes and address several key issues in large-scale CR networking based on the spectrum sensing reports developed via statistical learning.</i>	\$ 262,347	\$ 262,347
<b>Qian Zou</b> Department of Mechanical Engineering	General Motors Corporation	<b>Fretting Fatigue in Engine Block Bulkhead (Phase I).</b> <i>The main object of the project is to use a bench test machine to simulate the fretting fatigue mechanism and to obtain the real time coefficient of friction.</i>	\$ 84,386	\$ 84,386
<b>Amy Butler</b> OU INCubator	Automation Alley MEDC	<b>BI2013-Troy, Rochester Hills, Oakland.</b> <i>Oakland University, OU INCubator and Automation Alley are collaborating on providing enhanced business accelerator/incubator efforts to Oakland County and Southeast Michigan regional business focused in medical device and international business growth.</i>	\$ 178,199	\$ 330,000

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<b>Lorenzo Smith</b> Department of Mechanical Engineering	Chrysler Corporation	<b>Four Inch DBS for Alum and Steel.</b> <i>The objective of this project is to design, fabricate and test new, four-inch wide double-bead blocks featuring three levels of restraining forces.</i>	\$ 6,884	\$ 6,884
<b>Kathleen Sweeney</b> OUCARES	Michigan Department of Community Health	<b>OUCARES Vocational Multi-Media Programs.</b> <i>OUCARES will develop and deliver vocational training for adults with Autism Spectrum Disorder that will prepare them for employment in the film/entertainment media industry.</i>	\$ 500,000	\$ 500,000
<b>Dao Qi Zhang</b> Eye Research Institute	National Institutes of Health	<b>Functional Organization of the Dopaminergic Network.</b> <i>The long-term goal of the proposed study is to understand the mechanisms by which dopaminergic amacrineurons are regulated by light.</i>	\$ 329,052	\$ 1,817,368
<b>Lianxiang Yang</b> Department of Mechanical Engineering	Suzhou Gas Equipment and Valve Manufacturing	<b>Study on the Valve of Gas Insulating Joint and Insulating Flange of Equipment.</b> <i>This project will analyze the strength of gas insulating joint and insulating flange with different loading.</i>	\$ 22,000	\$ 22,000
<b>Xianggui Qu</b> Department of Mathematics and Statistics	Beaumont Health System / National Institutes of Health	<b>Learning Achieves Decreased Incident Occurrence of Lower Urinary Symptoms.</b> <i>This project will compare the effectiveness and cost-effectiveness of a group-administered behavioral treatment program to no treatment.</i>	\$ 6,173	\$ 18,886
<b>Stephen Goody</b> Oakland University Art Gallery	Michigan Council for Arts and Cultural Affairs	<b>Program for Operational and Project Support FY2014.</b> <i>This funding will support the Oakland University Art Gallery to support the production of an associated exhibition catalogue and New York art loan transports.</i>	\$ 18,000	\$ 18,000
<b>Omar Brown-EI</b> Center for Multicultural Initiatives	State of Michigan/ King Chavez Parks Initiative	<b>Collectively Oakland Retains Everyone (CORE) Program.</b> <i>The goal of the CORE program is to address the needs of underrepresented students who attend Oakland University with targeted support services by the Center for Multicultural Initiatives.</i>	\$ 91,364	\$ 91,364
<b>Amy Butler</b> OU INCubator	Grand Valley State University	<b>Grand Valley State University-Business Accelerator Fund Client Engagement-Functional Innovation Enterprises, LLC.</b> <i>The objective of 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 catalyze multiplier effect.</i>	\$ 16,500	\$ 16,500

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Julie Gustafson Macomb INCubator	Grand Valley State University	<b>Grand Valley State University-Business Accelerator Fund Client Engagement-Mobile Data Holdings.</b> <i>The objective of 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 catalyze multiplier effect.</i>	\$ 38,115	\$ 38,115
Darrin Hanna Department of Electrical and Computer Engineering	Check Corporation	<b>Mixed-Mode Development for Next Generation Consumer Medical and Automotive Devices.</b> <i>This funding will be used to perform research and development using mixed-mode electronic technologies for applications in consumer medical and automotive products.</i>	\$ 48,439	\$ 250,000
Khalid Mahmood Department of Computer Science and Engineering	Amerilodge Group LLC	<b>Using Semantic Web Technologies to Predict Futuristic Trends by Analyzing Social Network Reviews.</b> <i>This research aims at semantic-based sentiment analysis of on-line hotels' reviews to offer Amerilodge Group a fast and effective way to assess guests' feelings towards their hotels and predict expected guests in their business area in the near future.</i>	\$ 5,000	\$ 5,000
Gerard Madlambayan Department of Biological Sciences	National Institutes of Health	<b>Endothelial Cell Activation Regulates AML Growth and Relapse.</b> <i>The objective of this proposal is to determine how endothelial cell activation contributes to leukemia.</i>	\$ 429,874	\$ 429,874
Xiangqun Zeng Department of Chemistry	Michigan State University	<b>Wearable Microsystem Array for Acute Multi-Pollutant Exposure Assessment.</b> <i>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.</i>	\$ 193,148	\$ 1,138,014
Lorenzo Smith Department of Mechanical Engineering	Ford Motor Company	<b>Pulsed Joining of Body in White Components.</b> <i>Finite element models will be developed for the purpose of simulating pulsed forming processes.</i>	\$ 389,999	\$ 389,999
Susan Awbrey Office of the Senior Associate Provost	The Kresge Foundation	<b>Oakland University Student Success Conference.</b> <i>The Kresge Foundation is providing funds to support the Oakland University Student Success Conference.</i>	\$ 30,000	\$ 30,000
Osamah Rawashdeh Department of Electrical and Computer Engineering	Ford Motor Company	<b>Toward Effective Multicore Processing in Automotive Powertrain Control Systems.</b> <i>The aim of this project is to help Ford Motor Company move to multi-core processors in their powertrain control systems.</i>	\$ 104,110	\$ 104,110

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<b>Susmit Suvas</b> Department of Biological Sciences	National Institutes of Health	<i><b>Corneal Neuropeptides and Herpetic Stromal Keratitis.</b> The objective of this research is to determine how neuropeptide SP promote corneal tissue repair and clearance of infectious HSV-1 virus from the cornea.</i>	\$ 353,239	\$ 1,812,459
		<b>Total</b>	<b>\$ 3,306,179</b>	<b>\$ 7,887,263</b>