Agendum
Oakland University
Board of Trustees Formal Session
March 2, 2010

## ACCEPTANCE OF GRANTS AND CONTRACTS TO OAKLAND UNIVERSITY FOR THE PERIOD OF NOVEMBER 1, 2009 THROUGH FEBRUARY 28, 2010

## A Recommendation

- **1.** <u>Division and Department:</u> Academic Affairs/Office of Grants, Contracts and Sponsored Research
- 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 November 1, 2009 through February 28, 2010.

- **3.** <u>Previous Board Action:</u> 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.** <u>Educational Implications</u>: 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 Office of Grants, Contracts and Sponsored Research 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, 2009 through February 28, 2010.

9. <u>Attachments:</u> A. Grants and Contracts Report.

Submitted to the President

n \_\_\_\_\_\_\_\_, 2010 by

Virinder K. Moudgif

Senior Vice President for

Academic Affairs and Provost

Recommended on \_

, 2010

to the Board for approval by

Gary D. Russi

President

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Nilesh Patel Department of Computer Science and Engineering	OptimizeRx	SampleMD.com Development, Integration and Usability Analysis. The objective of this project is to implement an electronic drug sample management system that can help pharmaceutical industry and medical practitioners manage their drug sample distribution activity using an all electronic transaction system.	\$	30,457	\$	30,457
Gopalan Srinivasan Department of Physics	Virginia Tech/ DARPA	Passive, Highly-Sensitive, Room Temperature Magnetic Field Sensors and Arrays for Detection VT/DARP. The goal of this project is to conduct research and development of an imaging system based on magnetic field sensing.	\$	147,344	\$	147,344
Reginald McCloud Pre-College Programs	DAPCEP	Detroit Area Pre-College Engineering Program (DAPCEP-ITEST). This funding will provide underrepresented students the interest and preparation needed to succeed in a University-level science or engineering curriculum.	\$	4,970	\$	4,970
Reginald McCloud Pre-College Programs	DAPCEP	Detroit Area Pre-College Engineering Program (DAPCEP-ITEST). This funding will provide underrepresented students the interest and preparation needed to succeed in a University-level science or engineering curriculum.	\$	9,600	\$	9,600
Gopalan Srinivasan Department of Physics	U. S. Army	Millimeter and Sub-Millimeter Wave Magnetoelectric Interactions in Layered Multiferroics: Phenomena and Devices. A research program is proposed on (i) the nature of magnetoelectric (ME) interactions at millimeter and sub-millimeter wave frequencies in ferrite-ferroelectric layered structures and (ii) design and characterization of novel dual electric and magnetic field tunable mm-wave devices. Studies will focus on basic physics and device concepts related to two important effects: ME coupling between tightly bound layers influencing the frequency of ferromagnetic resonance and ME coupling between unbound layers leading to the creation of hybrid spin-electromagnetic waves.	\$	130,000	\$	303,300

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Gopalan Srinivasan Department of Physics	Office of Naval Research	Electric Field Tunable Microwave and Millimeter Wave Ferrite Devices. This research will focus on magnetoelectric (ME) effects in novel layered ferromagnetic-ferroelectric composites. The primary objectives are: (i) synthesis of novel ferrite-piezoelectric bilayers, (ii) wide-band magnetoelectric characterization, (iii) characterization and design of multifunctional smart sensors and signal processing devices based on such structures. The specific focus will be on single crystal/epitaxial ME structures.	\$	58,786	\$	418,786
Mohammad Siadat Department of Computer Science and Engineering	Henry Ford Health System	Software Development for Stroke Recovery Data Analysis. The objective of this project is to develop brain connectivity software based on functional MRI and DTI measurements. Brain connectivity can potentially reveal important information such as hidden epileptogenic foci in epilepsy and a better understanding of the extent of damage in stroke cases.	\$	21,000	\$	21,000
Lorenzo Smith Department of Mechanical Engineering	Ford Motor Company	Electro-Hydraulic Forming of Advanced High Strength Steels. The goal of this project is to develop a design tool based upon numerical modeling for electrohydraulic forming technology.	\$	111,000	\$	326,089
Brad Roth Department of Physics	Henry Ford Health System	Graduate Student Support for Medical Physics Research at Henry Ford Hospital. The objective of this funding is to support Biomedical Sciences. This support allows many of our best and brightest graduate students to work in the world-class laboratory of Distinguished Professor Michael Chopp and his colleagues, many of whom are adjunct faculty in our Physics department.	\$	63,028	\$	63,028
Omar Brown-El Center for Multicultural Initiatives	Michigan Department of Energy, Labor, and Economic Growth	Students First. The goal of this program is to provide "at-risk students" with intrusive support services to improve academic performance, first-year retention and first-year GPA. Students in the target popluation will be required to attend tutoring, major/career exploration workshops, transition workshops, meet with an assigned financial aid advisor, and meet regularly with a peer mentor or resident assistant.	\$	50,000	\$	50,000

Principal Investigator	Awarding Agency	Title and Project Abstract	Award Amount		Total Award All Years	
Julie Ricks-Doneen Department of Human Development and Child Studies	Michigan Department of Education	Continuation for Great Start Readiness Program (GSRP) Funding Year 2 of 3. The objective of this project is to provide funding for eight children to attend full day preschool taught by a Master's level and a Bachelor's level teacher. The eight children receiving these services will have greater success in school and readiness to begin kindergarten.	\$	54,400	\$	54,400
Andrei Slavin Department of Physics	U. S. Army	Analytical Model of Microwave Generation in Magnetic Nano- Oscillators Driven by Spin-Polarized Current. The goal of this project is to develop an analytical model of microwave generation in spin-torque nano-oscillators (STNO) driven by spin-polarized current.	\$	50,000	\$	50,000
Richard Sabina School of Medicine	Bayer CropScience	Overexpression, Purification, and Characterization of Arabidopsis AMP Deaminase. The objective of this project is to develop potential herbicides by high-throughput chemistry. Evaluation of lead compounds as effective transition state-type inhibitors of an enzyme will be performed.	\$	35,000	\$	35,000
Patricia Wren School of Health Sciences	University of Michigan	Preparations for In-Home Testing of Brain-Computer Interfaces (BCI) Operating Assistive Technology. The goal of this project is intended to prepare for in-home testing of brain-computer interfaces among target user populations across the lifespan, including people with amyotrophic lateral sclerosis (ALS), muscular dystrophy (MD), spinal cord injury (SCI), and cerebral palsy (CP).	\$	10,967	\$	10,967
		Total	\$	776,552	\$	1,524,941