

SUBMITTED BY: DR. HILARY H. RATNER, VICE PRESIDENT FOR RESEARCH

**REPORT ON NEW AWARDED RESEARCH GRANTS
AS REPORTED TO SPONSORED PROGRAM ADMINISTRATION
FISCAL YEAR 2009 - THIRD QUARTER**

COLLEGE OF EDUCATION

Administration & Organization Studies

PI: Barbour, Michael Kristopher

Title: Virtual Schooling in Canada: Proposal for a Comprehensive Review of Provincial Policies and Activities

Sponsor: North American Council for Online Learning

Project Dates and Anticipated Amount of Award: 05/12/2009-09/01/2009; \$9,500

COLLEGE OF ENGINEERING

Biomedical Engineering

PI: Yang, King-Hay

Title: A Biomechanical Model for the Investigation of Blast Traumatic Brain Injury

Sponsor: Albert I. King, Inc.

Project Dates and Anticipated Amount of Award: 04/21/2009-07/29/2009; \$10,000

Chemical Engineering

PI: Putatunda, Susil Kumar

Title: Development of a High Strength, high toughness austenitic ferritic steel

Sponsor: National Science Foundation

Project Dates and Anticipated Amount of Award: 06/01/2009-05/31/2012; \$303,461

Civil Engineering

PI: Gates, Timothy J

Title: Guidelines for Timing Yellow and All-Red Intervals at Signalized Intersections

Sponsor: Vanasse Hangen Brustlin, Inc.

Project Dates and Anticipated Amount of Award: 03/31/2009-06/30/2011; \$77,686

Electrical & Computer Engineering

PI: Xu, Cheng-Zhong

Title: REU Site in Telematics and Automotive Information Technology

Sponsor: National Science Foundation

Project Dates and Anticipated Amount of Award: 04/01/2009-03/31/2012; \$315,000

Industrial & Manufacturing Engineering

PI: Kim, Kyoung-Yun

Title: Development of Technology Roadmap and Context Aware-Based Design System for Ubiquitous Smart Product and u-Smart Space

Sponsor: Kyung Hee University

Project Dates and Anticipated Amount of Award: 01/01/2009-12/31/2009; \$39,136

PI: Yang, Kai

Title: Assistance in Siemens Gas Turbines Integrated Product Development System

Sponsor: Siemens Power Generation

Project Dates and Anticipated Amount of Award: 05/01/2009-04/30/2010; \$98,000

Mechanical Engineering

PI: Lai, Ming-Chia

Title: Modeling and Optimization Design Tool (MODT) for Thermal Management Systems (TMS)

Sponsor: General Dynamics/Land Systems Division

Project Dates and Anticipated Amount of Award: 06/01/2009-05/30/2010; \$200,000

COLLEGE OF LIBERAL ARTS & SCIENCE

Biology

PI: Tucker, James David

Title: Micronucleus Studies in Subjects Exposed to Depleted Uranium

Sponsor: VA Maryland Health Care System

Project Dates and Anticipated Amount of Award: 05/01/2009-08/31/2009; \$39,467

Chemistry

PI: Winter, Charles H.

Title: GOALI: Precursors for the Atomic Layer Deposition Growth of Transition Metal Thin Films

Sponsor: National Science Foundation

Project Dates and Anticipated Amount of Award: 05/01/2009-05/31/2012; \$450,000

Dean's Office

PI: Greenberg, Miriam L.

Title: The Role of Tafazzin in Mitochondrial Protein Import - Implications for Barth Syndrome

Sponsor: The Barth Syndrome Foundation, Inc.

Project Dates and Anticipated Amount of Award: 03/01/2009-02/28/2010; \$40,000

Computer Science

PI: Fotouhi, Farshad

Title: Integrated Image Analysis System

Sponsor: Henry Ford Health Systems

Project Dates and Anticipated Amount of Award: 05/15/2009-08/31/2010; \$40,910

Geology

PI: Baskaran, Mark Mahalingam

Title: Collaborative Research: GEOTRACES - Methods Development and Intercalibration for the Pb-210 and Po-210 Radionuclide Pair

Sponsor: National Science Foundation

Project Dates and Anticipated Amount of Award: 04/01/2009-07/31/2009; \$13,950

Physics

PI: Huang, Zhifeng

Title: CAREER: Modeling Nanostructured Systems Outside of Equilibrium

Sponsor: National Science Foundation

Project Dates and Anticipated Amount of Award: 07/01/2009-06/30/2014; \$483,000

PI: Petrov, Alexey A.

Title: REU Site: Research Experience for Undergraduates in Astrophysics, Nuclear and Particle Physics

Sponsor: National Science Foundation

Project Dates and Anticipated Amount of Award: 05/01/2009-05/31/2012; \$287,291

EUGENE APPLEBAUM COLLEGE OF PHARMACY AND HEALTH SCIENCES

Pharmaceutical Science

PI: Firestine, Steven M.

Title: Enzymology of N5-CAIR Synthetase

Sponsor: National Institutes of Health

Project Dates and Anticipated Amount of Award: 05/01/2009-02/28/2013; \$342,529

PROVOST & VP ACADEMIC AFFAIRS

Developmental Disabilities Institute

PI: Bel, Chesley Evan

Title: Freedom to Ride: Measuring the Effectiveness of Michigan's Transportation Voucher Program

Sponsor: Easter Seals Project Action

Project Dates and Anticipated Amount of Award: 01/19/2009-08/31/2009; \$5,000

Urban, Labor, & Metropolitan Affairs

PI: Martin, David Eric

Title: Technical Assistance for Improving Community Safety

Sponsor: Community Foundation for Southeastern Michigan

Project Dates and Anticipated Amount of Award: 03/13/2009-03/12/2010; \$15,000

PI: Thompson, Thomas Lyke

Title: Research Support for the Continuous Improvement and Monitoring System Significant Proportionality

Sponsor: Marquette-Alger Regional Educational Service Agency

Project Dates and Anticipated Amount of Award: 03/01/2009-06/30/2009; \$25,000

PI: Vachta, Kerry Elizabeth

Title: Michigan Roundtable's Sun Down Town Community Truth & Reconciliation

Initiative

Sponsor: Michigan Roundtable for Diversity and Inclusion

Project Dates and Anticipated Amount of Award: 03/01/2009-12/31/2010; \$119,500

Title: An Evaluation of the Building Inclusive Communities Initiative of the Michigan Roundtable for Diversity and Inclusion

Sponsor: Michigan Roundtable for Diversity and Inclusion

Project Dates and Anticipated Amount of Award: 04/15/2009-03/31/2010; \$12,500

RESEARCH

Institute of Environmental Health Sciences

PI: Reiners, John J.

Title: The 3-Dimensional MAME Culture Model: An In Vitro Screen for Agents Affecting Mammary Gland Development

Sponsor: Johns Hopkins University

Project Dates and Anticipated Amount of Award: 02/02/2009-02/01/2010; \$35,000

PI: Stemmer, Paul M.

Title: 4000 QTrap for Discovery and Quantitation

Sponsor: National Institutes of Health

Project Dates and Anticipated Amount of Award: 05/01/2009-04/30/2010; \$500,000

Technology Commercialization

PI: Simoes, Lori Ann

Title: Thermally Stable, Volatile Atomic Layer Deposition Precursors for Transition Metal Oxide Thin Films for the Semiconductor Industry

Sponsor: Michigan Initiative for Innovation and Entrepreneurship

Project Dates and Anticipated Amount of Award: 06/01/2009-05/31/2010; \$125,175

PI: Stief, Eric K.

Title: E2 Challenge - Summer Student Startup Company Formation Program

Sponsor: Michigan Initiative for Innovation and Entrepreneurship

Project Dates and Anticipated Amount of Award: 05/01/2009-04/30/2010; \$100,000

SCHOOL OF MEDICINE

Anatomy

PI: Braun, Rodney Daniel

Title: Inhibitions of Human Uveal Melanoma Xenograft Growth by Topical Application of CA4P

Sponsor: OXiGENE, Inc.

Project Dates and Anticipated Amount of Award: 04/02/2009-09/30/2009; \$15,000

Barbara Ann Karmanos Cancer Institute

PI: Littrup, Peter J.

Title: Functional ultrasound tomography: testing a low-cost breast imaging concept
Sponsor: National Cancer Institute
Project Dates and Anticipated Amount of Award: 06/02/2009-05/31/2011; \$242,349

PI: Lum, Lawrence George
Title: Pretargeting of myeloma stem cells to boost post set anti-myeloma immunity
Sponsor: The Leukemia and Lymphoma Society, Inc.
Project Dates and Anticipated Amount of Award: 04/08/2009-09/30/2011; \$560,036

PI: Shields, Anthony Frank
Title: American college of radiology imaging network (ACRIN) committee or subcommittee chair agreement
Sponsor: American College of Radiology
Project Dates and Anticipated Amount of Award: 01/01/2009-12/31/2009; \$10,000

PI: Yang, Zeng-Quan
Title: Histone Code Modulation by Oncogenic PWWP-Domain Protein in Breast Cancers
Sponsor: U.S. Army Research Office
Project Dates and Anticipated Amount of Award: 06/01/2009-06/30/2012; \$570,000

Dermatology

PI: Mehregan, Darius Ray
Title: Laboratory Development in Specialty of Reactive Oxygen Species
Sponsor: Dermatology Foundation
Project Dates and Anticipated Amount of Award: 07/01/2009-06/30/2010; \$10,000

Internal Medicine

PI: Heath, Elisabeth Iljas
Title: Prostate Cancer Clinical Trials Group - Wayne State University/Karmanos Cancer Institute
Sponsor: U.S. Army Research Office
Project Dates and Anticipated Amount of Award: 04/15/2009-04/14/2010; \$283,962

PI: Kaye, Keith Steven
Title: Antimicrobial Stewardship Program
Sponsor: Wyeth Pharmaceuticals, Inc.
Project Dates and Anticipated Amount of Award: 06/01/2009-06/01/2010; \$52,500

Title: A Retrospective Multi Center Cohort Analyzing 1) the outcomes of patients with infections due to ESBL- producing Enterobacteriaceae treated with Cefepi
Sponsor: Merck Pharmaceutical Company
Project Dates and Anticipated Amount of Award: 05/01/2009-04/30/2010; \$47,500

Title: NIH K23 Award, Hospital -Acquired Infections in the Elderly
Sponsor: National Institutes of Health
Project Dates and Anticipated Amount of Award: 05/15/2009-07/31/2009; \$115,272

Neurology

PI: Lewis, Richard A.

Title: Database for Multifocal Motor Neuropathy and other Inflammatory Neuropathies

Sponsor: Baxter Bioscience Corporation

Project Dates and Anticipated Amount of Award: 04/22/2009-02/23/2010; \$55,000

Obstetrics/Gynecology

PI: Sorokin, Yoram

Title: Randomized Trial of an Antenatal Late Preterm Steroids (ALPS)-DCC

Sponsor: The George Washington University

Project Dates and Anticipated Amount of Award: 04/01/2009-09/30/2009; \$40,000

Ophthalmology

PI: Sosne, Gabriel

Title: The Potential for Thymosin beta 4 (TB4) as an Early Therapeutic Intervention Against Sulfur Mustard Induced Cell Injury

Sponsor: U.S. Army Research Office

Project Dates and Anticipated Amount of Award: 06/08/2009-06/07/2010; \$190,000

Pediatrics

PI: Du, Wei

Title: Diagnosing Adverse Drug Reactions in Pediatric Intensive Care Units

Sponsor: Blue Cross/Blue Shield of MI Fund

Project Dates and Anticipated Amount of Award: 07/01/2009-06/30/2011; \$74,715

PI: Shankaran, Seetha A.

Title: Fluconazole Prophylaxis for the Prevention of Candidiasis in Infants <750 Grams Birth Weight

Sponsor: Duke University

Project Dates and Anticipated Amount of Award: 04/28/2009-03/11/2010; \$205,000

Pharmacology

PI: Lash, Lawrence H.

Title: Role of renal plasma membrane transporters in the mode of action of prohibition-tp01

Sponsor: University of Texas M.D. Anderson Cancer Center

Project Dates and Anticipated Amount of Award: 07/01/2009-09/30/2009; \$37,482

Psychiatry

PI: Boutros, Nashaat Nessim

Title: Bipolar & schizophrenia network on intermediate phenotypes (b-snip)

Sponsor: Beth Israel Deaconess Medical Center

Project Dates and Anticipated Amount of Award: 06/01/2009-05/31/2010; \$45,673

PI: Keshavan, Matcheri

Title: Risk Factors for Psychosis in Chromosome 22q11 Deletion Syndrome

Sponsor: Duke University

Project Dates and Anticipated Amount of Award: 04/01/2009-07/31/2009; \$7,697

PI: Lerma, Terry DeRocher

Title: Training Agenda Cultural Competency

Sponsor: Michigan Association of Community Mental Health Boards

Project Dates and Anticipated Amount of Award: 02/01/2009-09/30/2009; \$25,579

PI: Lundahl, Leslie Helen

Title: Smoke marijuana discrimination and marijuana choice in humans: a laboratory model for medication development

Sponsor: National Institute on Drug Abuse

Project Dates and Anticipated Amount of Award: 06/15/2009-05/31/2011; \$686,160

Radiation Oncology

PI: Hillman, Gilda Gali

Title: Enhanced radiosensitization of prostate cancer cells using combined treatments of genistein and vitamin D

Sponsor: Radiological Society of North America, Inc.

Project Dates and Anticipated Amount of Award: 06/01/2009-05/31/2010; \$3,000

Urology

PI: Powell, Isaac

Title: The Influence of Metabolic Syndrome on Prostate Cancer Progression and Risk or Recurrence in African American and European American Men

Sponsor: U.S. Army Research Office

Project Dates and Anticipated Amount of Award: 07/01/2009-07/31/2012; \$564,375