NEW RESEARCH AWARDS OVER $50,000
QUARTER 4 – FY 2017

COLLEGE OF ENGINEERING

Chemical Engineering

Principal Investigator: Da Deng, Ph.D.
Sponsor: U.S. Department of Energy
Title: Ultra High Energy Lithium-Metal Batteries Based on 3-Dimensional Architectures of Ni-Pillared Monolayer 2-D Manganese Dioxide (MN02) as Cathodes
Anticipated Total: $225,000

Principal Investigator: Yingxi Zhu, Ph.D.
Sponsor: National Science Foundation
Title: EAGER: Control of Ion Compexation of Neutral Polymers with Inorganic Macroions to Enhance Polymer Mechanical and Ion Transport Properties
Anticipated Total: $237,953
Effective Dates: 9/1/2017 – 8/31/2019

Computer Science

Principal Investigator: Nathan Fisher, Ph.D.
Sponsor: National Science Foundation
Anticipated Total: $1,249,998
Effective Dates: 8/30/2017 – 8/29/2021

Principal Investigator: Shiyong Lu, Ph.D.,
Sponsor: The State University of New York
Title: CICI:RSARC:Infrastructure Support for Securing Large-Scale Scientific Workflows
Anticipated Total: $499,786
Effective Dates: 8/30/2017 – 8/29/2020

Dean's Office – Engineering

Principal Investigator: Guangzhao Mao, Ph.D.
Sponsor: Michigan Technological University
Title: Michigan MTRAC Innovation Bub-Applied Advanced Materials
Anticipated Total: $50,000
Effective Dates: 8/30/2017 – 8/29/2018
Electrical & Computer Engineering

Principal Investigator: Pai-Yen Chen, Ph.D.
Sponsor: National Science Foundation
Title: Parity-Time Symmetric Wireless Telemetry Systems for Implantable Microsensors
Anticipated Total: $375,000
Effective Dates: 7/30/2017 – 7/29/2020

Mechanical Engineering

Principal Investigator: Leela Mohana Redy Arava, Ph.D.,
Sponsor: National Science Foundation
Title: EAGER: Carbon-Free and Binder-Free Cathode Configurations for High-Energy Lithium-Sulfur Batteries
Anticipated Total: $149,541
Effective Dates: 8/30/2017 – 2/26/2019

COLLEGE OF LIBERAL ARTS AND SCIENCES

Biological Sciences

Principal Investigator: Donna Kashian, Ph.D.
Sponsor: National Science Foundation
Title: NRT: Transforming Research in Urban Sustainability and Training (T-RUST)
Anticipated Total: $2,999,976
Effective Dates: 8/30/2017 – 8/29/2022

Physics

Principal Investigator: Christopher Kelly, Ph.D.
Sponsor: National Science Foundation
Title: The nanomechanical effects of curvature in biological membranes
Anticipated Total: $100,000
Effective Dates: 8/1/2017 – 7/31/2020

APPLEBAUM COLLEGE OF PHARMACY & HEALTH SCIENCES

Pharmaceutical Science

Principal Investigator: Fei Chen, Ph.D.
Sponsor: National Institute of Environmental Health Sciences
Title: Reduced Reactive Oxygen Species and Oxidative Phosphorylation in Arsenic-induced Cancer Stem Cells
Anticipated Total: $1,686,385
Effective Dates: 8/13/2017 – 6/28/2022
Pharmacy Practice

Principal Investigator: Hilary Marusak, Ph.D.
Sponsor: St. Baldrick’s Foundation
Title: Martial arts therapy and brain mechanisms for cancer-related pain
Anticipated Total: $50,000
Effective Dates: 07/01/2017 – 6/30/2018

PROVOST & VP ACADEMIC AFFAIRS

Center for Urban Studies

Principal Investigator: Charito Hulleza
Sponsor: Michigan State University
Title: Broadband to the Neighborhood Reducing Digital Divides in the Neighborhoods of Detroit
Anticipated Total: $60,024
Effective Dates: 10/1/2017 – 12/31/2017

Principal Investigator: Sara Thornton, Ph.D.
Sponsor: Michigan Department of Health and Human Services
Title: VOCA Resources for Victim Assistance Programs 2018
Anticipated Total: $226,583
Effective Dates: 09/29/2017 – 9/28/2018

Development Disabilities Institute

Principal Investigator: Angela Martin, Ph.D.
Sponsor: Michigan Department of Health and Human Services
Title: HCBS Ruling Implementation Project
Anticipated Total: $725,316
Effective Dates: 09/2017 – 9/28/2018

DIVISION OF RESEARCH

Institute of Gerontology

Principal Investigator: Naftali Raz
Sponsor: National Institute on Aging
Title: Age-Related Differences in the Hippocampal Glutamate Modulation During Association Learning An in Vivo Proton Functional Magnetic Resonance Spectroscopy (1H fMRS) Study
Anticipated Total: $80,956
Effective Dates: 9/24/2017 – 9/23/2019
SCHOOL OF MEDICINE

Anatomy

Principal Investigator: Bruce Berkowitz  
Sponsor: National Institutes of Health  
Title: Novel Imaging Biomarker for Treating Spatial Memory Loss in Prodromal Alzheimer's Disease Models  
Anticipated Total: $599,186  
Effective Dates: 9/13/2017 – 5/29/2022

Emergency Medicine

Principal Investigator: Aaron Brody, Ph.D.  
Sponsor: State of Michigan Department of Health and Human Services  
Title: HIV Prevention - Emergency Room Testing  
Anticipated Total: $225,000  
Effective Dates: 9/29/2017 – 9/28/2018

Principal Investigator: Brian O’Neil, M.D.  
Sponsor: National Institute of Neurological Disorders and Stroke  
Title: Michigan SIREN Collaborative  
Anticipated Total: $246,400  
Effective Dates: 7/13/2017 – 5/29/2022

Family Medicine

Principal Investigator: Angulique Outlaw, Ph.D.  
Sponsor: Children’s Hospital Foundation  
Title: Horizon’s Project  
Anticipated Total: $141,993  
Effective Dates: 7/30/2017 – 7/29/2018

Principal Investigator: Angulique Outlaw, Ph.D.  
Sponsor: Michigan Department of Health and Human Services  
Title: Tobacco Reduction Program  
Anticipated Total: $59,425  
Effective Dates: 9/29/2017 – 9/28/2018

Principal Investigator: Angulique Outlaw, Ph.D.  
Sponsor: Michigan Department of Health and Human Services  
Title: Detroit Medical Center, Horizon Project  
Anticipated Total: $127,720  
Effective Dates: 9/29/2017 – 9/28/2018
Immunology & Microbiology

Principal Investigator: Allen Rosenspire, Ph.D.
Sponsor: National Institute of Environmental Health Sciences
Title: Understanding the Connection Between Exposure to Mercury, Autoimmunity and Tolerance in B Cells
Anticipated Total: $192,500
Effective Dates: 9/28/2017 – 8/29/2018

Internal Medicine

Principal Investigator: Abdulghani Sankari
Sponsor: National Institutes of Health
Title: Sleep disordered breathing and cardiovascular outcome: New approach and secondary analysis
Anticipated Total: $122,356
Effective Dates: 9/13/2017 – 8/29/2019

Neurology

Principal Investigator: Maysaa Basha, Ph.D.
Sponsor: Epilepsy Foundation
Title: The Sounds of Seizures Audio triggered Seizure Detection
Anticipated Total: $76,000
Effective Dates: 8/1/2017 – 7/31/2018

Obstetrics/Gynecology

Principal Investigator: Nihar Nayak, Ph.D.
Sponsor: National Institutes of Health
Title: VEGF signaling in placental development and disease
Anticipated Total: $331,408
Effective Dates: 8/14/2017 – 4/28/2022

Oncology

Principal Investigator: Jennifer Beebe, Ph.D.
Sponsor: U.S. Department of Defense
Title: The Contribution of Rare Variants in Familial Clustering of Prostate and Breast Cancer in African Americans
Anticipated Total: $181,897
Effective Dates: 09/30/2017 – 09/29/2020

Principal Investigator: Ikuko Kato, Ph.D.
Sponsor: National Cancer Institute
Title: Patterns of Care/Quality of Care Study: Diagnosis Year 2016
Anticipated Total: $104,606
Effective Dates: 07/29/2017 – 08/28/2018
Principal Investigator: Manohar Ratnam, Ph.D.
Sponsor: U.S. Department of Defense
Title: ELK1-targeted molecules as a new paradigm for prostate cancer treatment
Anticipated Total: $1,077,998
Effective Dates: 10/01/2017 – 9/30/2020

Ophthalmology

Principal Investigator: Ashok Kumar, Ph.D.
Sponsor: National Eye Institute
Title: Mechanisms of Inflammation Resolution in Bacterial Endophthalmitis
Anticipated Total: $1,925,000
Effective Dates: 09/28/2017 – 8/29/2022

Pediatrics

Principal Investigator: Jennell Jackson, Ph.D.
Sponsor: Detroit-Wayne Mental Health Authority
Title: MI-AHEC 2017 Biomedical Career Advancement Program
Anticipated Total: $150,000
Effective Dates: 07/04/2017 – 08/02/2017

Pharmacology

Principal Investigator: Karin List, Ph.D.
Sponsor: Susan G. Komen for the Cure
Title: Preclinical Testing of Matriptase as a Novel Target in Inflammatory Breast Cancer
Anticipated Total: $60,000
Effective Dates: 09/05/2017 – 09/04/2018

Physical Medicine & Rehabilitation

Principal Investigator: Robin Hanks, Ph.D.
Sponsor: Administration for Community Living
Title: Southeastern Michigan Traumatic Brain Injury System
Anticipated Total: $1,784,000
Effective Dates: 09/29/2017 – 09/28/2022

Psychiatry

Principal Investigator: Sandra Jacobson
Sponsor: National Institute on Alcohol Abuse and Alcoholism
Title: Dose and Pattern of Adverse Effects in the Diagnosis of Fetal Alcohol Spectrum Disorders A Secondary Analysis of Data from Five Cohorts
Anticipated Total: $2,063,188
Effective Dates: 09/18/2017 – 05/29/2021
Principal Investigator: Arash Javanbakht, Ph.D.
Sponsor: Children’s Hospital of Michigan Foundation
Title: Risk and Resilience in Syrian and Iraqi Children Refugees Prevalence Environment and Biomarkers
Anticipated Total: $75,000
Effective Dates: 07/05/2017 – 12/31/2018

Principal Investigator: Steven Ondersma, Ph.D.
Sponsor: Michigan Health Endowment Fund
Title: High Touch High Tech (HT2)
Anticipated Total: $499,502
Effective Dates: 07/30/2017 – 07/29/2019

Principal Investigator: Shane Perrine, Ph.D.
Sponsor: National Institute on Drug Abuse
Title: Effects of Cocaine Taking and Seeking on Histone Deacetylase Class Ila Enzyme Activity in the Nucleus Accumbens of Rats
Anticipated Total: $2,952,235
Effective Dates: 08/30/2017 – 07/29/2022

Principal Investigator: Maria Ramirez, Ph.D.
Sponsor: Michigan Department of Health and Human Services
Title: VOCA Crime Victim Assistance - 2018
Anticipated Total: $345,370
Effective Dates: 09/29/2017 – 09/28/2018

Principal Investigator: David Rosenberg, M.D.
Sponsor: Michigan Department of Health and Human Services
Title: Psychiatry Program 2018
Anticipated Total: $5,605,900
Effective Dates: 09/29/2017 – 09/28/2017

**Radiation Oncology**

Principal Investigator: Jacob Burmeister, Ph.D.
Sponsor: Henry Ford Health System
Title: Quantification and Management of Cardiac Motion in Radiation Therapy (Graduate Student: Eric Morris)
Anticipated Total: $50,272
Effective Dates: 08/15/2017 – 08/14/2018

**School of Social Work**

Principal Investigator: Elizabeth Agius
Sponsor: State of Michigan Department of Health and Human Services
Title: Strategic Prevention Framework Partnership for Success 2015-2020
Anticipated Total: $127,382
Effective Dates: 09/29/2017 – 09/28/2018
Principal Investigator: Neva Nehan, Ph.D.
Sponsor: Detroit Public Schools
Title: Public Safety/Gang Prevention Grant Evaluation
Anticipated Total: $95,000
Effective Dates: 07/30/2017 – 12/29/2017