SUBMITTED BY:

### TIMOTHY L. STEMMLER, INTERIM VICE PRESIDENT FOR RESEARCH

# New Research Awards over \$100,000 April 1, 2023 – June 30, 2023

#### **COLLEGE OF ENGINEERING**

#### **Chemical Engineering**

PI Name: Harris, Carolyn Grant Title: Investigating the source and the action behind shunt obstruction in the treatment of pediatric hydrocephalus Sponsor: National Institute of Neurological Disorders and Stroke Project Dates: 6/1/2023 – 5/31/2028 Anticipated Total: \$2,678,253

#### **Electrical & Computer Engineering**

PI Name: Wang, Caisheng Grant Title: Data-driven Community-centered Resilient Assessment and Planning Toolkit for Nexus of Energy and Water Sponsor: U.S. Department of Energy Project Dates: 5/1/2023 – 4/30/2025 Anticipated Total: \$999,479

#### **Engineering Technology**

PI Name: Mao, Yanbing Grant Title: Collaborative Research: CPS: Medium: Physics-Model-Based Neural Networks Redesign for CPS Learning and Control Sponsor: National Science Foundation Project Dates: 6/15/2023 – 5/31/2026 Anticipated Total: \$296,254

#### **COLLEGE OF LIBERAL ARTS AND SCIENCES**

#### Public Health Program

PI Name: Miranda-Hartsuff, Patricia Grant Title: Stigma Monitoring and Response System for Public Health Crises Sponsor: CDC Foundation Project Dates: 5/17/2023 – 7/31/2023 Anticipated Total: \$281,365

### **Biological Sciences**

PI Name: Schrader, Jared Grant Title: Biomolecular Condensates as Organizers of Bacterial RNA Biology Sponsor: National Institute of General Medical Sciences Project Dates: 5/5/2023 – 3/31/2028 Anticipated Total: \$1,844,620

# Chemistry

PI Name: Bour, James Grant Title: CAREER: Molecular Approaches for Understanding Defect-Porosity Relationships in Microporous Organic Polymers Sponsor: National Science Foundation Project Dates: 4/15/2023 – 3/31/2028 Anticipated Total: \$773,778

PI Name: Pflum, Mary Kay Grant Title: Helium Recovery Equipment for a Regional NMR and EPR Laboratory Sponsor: National Institutes of Health Project Dates: 5/1/2023 – 4/30/2024 Anticipated Total: \$685,000

# Physics

PI Name: Voloshin, Sergei Grant Title: Relativistic Heavy Ion Research Sponsor: U.S. Department of Energy Project Dates: 5/1/2023 – 4/30/2024 Anticipated Total: \$900,000

# Psychology

PI Name: Rudolph, Cort Grant Title: An investigation of scoring open-ended personality assessments within applicant contexts using natural language processing Sponsor: Army Research Institute Project Dates: 5/30/2023 – 2/28/2026 Anticipated Total: \$209,847

#### **EUGENE APPLEBAUM COLLEGE OF PHARMACY & HEALTH SCIENCES**

#### Pharmaceutical Science

PI Name: Wanqing Liu Grant Title: Interaction between Genome and Heavy Metals in Nonalcoholic Fatty Liver Disease Sponsor: National Institute of Environmental Health Sciences Project Dates: 6/15/2023 – 3/31/2028 Anticipated Total: \$2,951,913

#### **OFFICE OF THE PROVOST & ACADEMIC AFFAIRS**

#### **Center for Urban Studies**

PI Name: Thompson, Thomas Grant Title: Detroit Youth Service Corps 2023 Sponsor: Marathon Petroleum Foundation Project Dates: 5/1/2023 – 5/1/2024 Anticipated Total: \$180,000

PI Name: Thompson, Thomas Grant Title: Detroit Vulnerable Community Enhanced Air Quality Network Sponsor: Asthma and Allergy Foundation of America - Michigan Chapter Project Dates: 6/1/2023 – 5/31/2025 Anticipated Total: \$116,240

#### **DIVISION OF RESEARCH**

#### Institute of Gerontology

PI Name: Sneed, Rodlescia Grant Title: Maximizing the Scalability of the Chronic Disease Self-Management Program (CDSMP) Among Older Adults in State Correctional Settings Sponsor: National Institute on Aging Project Dates: 4/15/2023 – 1/31/2028 Anticipated Total: \$594,236

#### SCHOOL OF MEDICINE

# Internal Medicine

PI Name: Teena Chopra Grant Title: Improving Vaccination Rates Amongst Detroit Youth through Vaccine Ambassadors: Bridging Gaps through Hands-On Education Sponsor: Moderna, Inc. Project Dates: 6/21/2023 - 6/20/2025 Anticipated Total: \$100,000

#### Oncology

PI Name: Wu, Guojun Grant Title: Exploration of the immunosuppressive function of RBMS3/PRRX1 axis in TNBC Sponsor: National Cancer Institute Project Dates: 4/15/2023 – 3/31/2025 Anticipated Total: \$395,973

### **Ophthalmology, Visual and Anatomical Sciences**

PI Name: Ibrahim, Ahmed Grant Title: The Warburg Effect and Diabetic Retinopathy Sponsor: National Eye Institute Project Dates: 6/1/2023 – 5/31/2028 Anticipated Total: \$1,925,000

# Pediatrics

PI Name: Taub, Jeffrey Grant Title: The paradox of myeloid leukemia of Down Syndrome Sponsor: National Cancer Institute Project Dates: 6/9/2023 – 3/31/2025 Anticipated Total: \$395,973

# Pharmacology

PI Name: Jackson, Jennell Grant Title: Biomedical Career Advancement Pipeline (BCAP) Program Sponsor: Detroit Wayne Integrated Health Network Project Dates: 5/1/2023 – 9/30/2023 Anticipated Total: \$135,000

PI Name: Park, Joongkyu Grant Title: Local synaptic protein biogenesis in tauopathy Sponsor: Alzheimer's Association Project Dates: 4/1/2023 – 2/28/2026 Anticipated Total: \$200,000

PI Name: Shen, Minhong Grant Title: Targeting Tinagl1 to Enhance Immunotherapy Response in Lung Cancer Sponsor: U.S. Department of Defense Project Dates: 5/1/2023 – 3/31/2025 Anticipated Total: \$538,792

#### VP FOR HEALTH AFFAIRS

PI Name: Hassan, Sonia Grant Title: SOS Network Initial Infrastructure Sponsor: Total Health Care Foundation Project Dates: 5/1/2023 – 4/30/2024 Anticipated Total: \$251,736