SUBMITTED BY:

EZEMENARI M. OBASI, PH.D., VICE PRESIDENT FOR RESEARCH

New Research Awards over \$100,000 January 1, 2024 – March 31, 2024

COLLEGE OF ENGINEERING

Biomedical Engineering

PI Name: Bir, Cynthia Grant Title: Low-cost Integrated Blast Acquisition Test Surrogate Sponsor: Physical Sciences, Inc. Project Dates: 8/18/2024 – 5/31/2025 Anticipated Total: \$328,667

Chemical Engineering

PI Name: Harris, Carolyn Grant Title: Shunt Catheter Optimization in the Treatment of Hydrocephalus Sponsor: U.S. Army Medical Research Project Dates: 1/15/2024 – 1/14/2026 Anticipated Total: \$307,202

Civil & Environmental Engineering

PI Name: Shuster, William Grant Title: Supporting resident writers and their environmental literacy toward a novel watershed management plan Sponsor: Erb Family Foundation Project Dates: 1/1/2024 – 12/31/2024 Anticipated Total: \$100,000

COLLEGE OF LIBERAL ARTS AND SCIENCES

Chemistry

PI Name: Chekmenev, Eduard Grant Title: Plug-and-Play Hyperpolarized MRI of Metabolism on Clinical Scanners Sponsor: Massachusetts General Hospital Project Dates: 1/18/2024 – 12/31/2027 Anticipated Total: \$188,961 PI Name: Walker, Alice Grant Title: CAREER: Computational Design of Fluorescent Proteins with Multiscale Excited State QM/MM Methods Sponsor: National Science Foundation Project Dates: 4/1/2024 – 3/31/2029 Anticipated Total: \$690,816

Economics

PI Name: Danagoulian, Shooshan Grant Title: Seasonal Allergy Blues: Is Mental Health Worse on High Pollen Days? Sponsor: American Foundation for Suicide Prevention Project Dates: 1/1/2024 – 12/31/2025 Anticipated Total: \$125,000

Physics

PI Name: Ananna, Tonima Grant Title: Updating the Unified Model of AGN based on X-ray detected Obscured AGN Populations Sponsor: National Aeronautics and Space Administration Project Dates: 2/29/2024 – 2/28/2027 Anticipated Total: \$289,802

COLLEGE OF NURSING

Dean's Office

PI Name: Neal, Donald Grant Title: Out-of-School Time Sponsor: State of Michigan Department of Education Project Dates: 1/1/2024 – 9/30/2024 Anticipated Total: \$1,091,040

COLLEGE OF EDUCATION

PI Name: Shalhout, Fareed Grant Title: IREX 2024 Mandela Washington Fellowship for Young African Leaders (YALI) Sponsor: Irex Project Dates: 1/15/2024 – 9/15/2024 Anticipated Total: \$197,560

OFFICE OF THE PROVOST & ACADEMIC AFFAIRS

Center for Urban Studies

PI Name: Thompson, Thomas Grant Title: Gordie Howe Windsor Detroit Bridge Authority Sponsor: Gordie Howe Windsor-Detroit Bridge Authority Project Dates: 4/1/2024 – 3/31/2025 Anticipated Total: \$638,283

SCHOOL OF MEDICINE

Center for Molecular Medicine and Genetics

PI Name: Huettemann, Maik Grant Title: Product Development and Human Feasibility Trial of Novel Non-invasive Device for Effective Treatment of Tinnitus Sponsor: MTRAC for Life Sciences Innovation Hub Project Dates: 4/1/2024 – 3/31/2025 Anticipated Total: \$143,750

PI Name: Huettemann, Maik Grant Title: Cytochrome c acetylation drives prostate cancer aggressiveness and Warburg effect Sponsor: U.S. Department of Defense Project Dates: 2/1/2024 – 1/31/2027 Anticipated Total: \$1,385,993

Obstetrics/Gynecology

PI Name: Alvero, Ayesha Grant Title: Mechanisms of immune surveillance in ovarian cancer Sponsor: Janet Burros Memorial Foundation Project Dates: 1/1/2024 – 12/31/2025 Anticipated Total: \$248,068

PI Name: Pilsner, J. Grant Title: Sperm mitochondrial biomarkers and male reproductive health Sponsor: National Institute of Child Health and Human Development Project Dates: 2/20/2024 – 1/31/2029 Anticipated Total: \$3,144,890

PI Name: Rodriguez Garcia, Marta Grant Title: Aging Compromises Neutrophil-Mediated Innate Protection Against HIV in the Human Female Genital Tract Sponsor: National Institute on Aging Project Dates: 2/15/2024 – 5/31/2025 Anticipated Total: \$549,210

Oncology

PI Name: Jacob, Jennifer Grant Title: Defining Cancer Intervention Targets by Functional Genomics Analysis of Outbred F1 Mice Sponsor: National Cancer Institute Project Dates: 3/1/2024 – 2/28/2026 Anticipated Total: \$2,786,889

PI Name: Schwartz, Ann Grant Title: Genetic Variation in Cancer Risk and Outcomes in African Americans Sponsor: National Cancer Institute Project Dates: 2/13/2024 – 1/31/2029 Anticipated Total: \$9,616,417

PI Name: Shekhar, Malathy Puthan Grant Title: Elucidation of a novel transcriptional reprogramming-induced mechanism of endocrine resistance and therapeutic targeting Sponsor: National Cancer Institute Project Dates: 3/1/2024 – 3/31/2026 Anticipated Total: \$395,973

PI Name: Thompson, Hayley Grant Title: Wayne State University Center for Health Equity and Community Knowledge in Urban Populations (CHECK-UP) Sponsor: CVS Pharmacy, Inc Project Dates: 1/1/2024 – 12/31/2024 Anticipated Total: \$600,000

Ophthalmology, Visual and Anatomical Sciences

PI Name: Yu, Fu-Shin Grant Title: Role of Programmed Cell Death Pathways in Bacterial Keratitis Sponsor: National Eye Institute Project Dates: 3/1/2024 – 2/28/2029 Anticipated Total: \$2,167,882

Physiology

PI Name: Mendez, Mariela Grant Title: Novel mechanism of activation of the Renin-Angiotensin-System by inflammatory cells in diabetic kidney disease Sponsor: National Institute of Diabetes, Digestive & Kidney Diseases Project Dates: 1/25/2024 – 12/31/2026 Anticipated Total: \$577,500

Psychiatry and Behavioral Neurosciences

PI Name: Perrine, Shane Grant Title: Biochemical and behavioral analysis of TACTOGEN compounds with MDMA-like properties Sponsor: Tactogen Project Dates: 2/19/2024 – 2/20/2025 Anticipated Total: \$175,826

Surgery

PI Name: Shanti, Christina Grant Title: Pediatric General Surgery Research Infrastructure Grant Sponsor: The Children's Foundation Project Dates: 1/1/2024 – 12/31/2024 Anticipated Total: \$141,618

SCHOOL OF SOCIAL WORK

PI Name: Larson, Matthew Grant Title: Wayne County Department of Health, Human & Veteran Services & Naloxone Vending Machine Implementation & Evaluation Sponsor: Wayne County Project Dates: 1/1/2024 – 12/31/2027 Anticipated Total: \$3,678,419

VP FOR HEALTH AFFAIRS

PI Name: Hassan, Sonia Grant Title: Synergy of Scholars for Maternal and Infant Health Equity in Michigan (The SOS Maternity)Sponsor: State of Michigan Dept. of Health & Human Services - MDHHS Project Dates: 2/1/2024 – 9/30/2024 Anticipated Total: \$8,000,000