

**SUBMITTED BY:                   TIMOTHY L. STEMMLER, INTERIM VICE PRESIDENT FOR RESEARCH**

**NEW RESEARCH AWARDS OVER \$200,000  
SEPTEMBER 1, 2022 THROUGH OCTOBER 31, 2022**

**COLLEGE OF EDUCATION**

**Teacher Education**

Principal Investigator: Christina DeNicolò  
Award Period: 9/1/2022 to 9/30/2027  
Anticipated Total: \$408,908  
Sponsor: U.S. Department of Education  
Project Title: Sustaining Community Knowledge and Language Practices for Educational Equity:  
Developing Pathways for Teachers of Bi/Multilingual Students (SEED)

**COLLEGE OF ENGINEERING**

**Computer Science**

Principal Investigator: Nathan Fisher  
Award Period: 9/1/2022 to 7/31/2026  
Anticipated Total: \$295,051  
Sponsor: National Science Foundation  
Project Title: Collaborative Research: CNS Core: Medium: Parallel and Real-Time Multicore Scheduling  
for an Efficiently-Used Cache (PARSEC)

**Electrical & Computer Engineering**

Principal Investigator: Mohammad Alhawari  
Award Period: 9/1/2022 to 9/2/2025  
Anticipated Total: \$418,907  
Sponsor: National Science Foundation  
Project Title: An Energy-Efficient, CMOS-based, and Scalable Mixed-Signal DNN System with  
Reconfigurable Crossbars

Principal Investigator: Masoud Honarvar Nazari  
Award Period: 9/1/2022 to 8/31/2025  
Anticipated Total: \$200,000  
Sponsor: National Science Foundation  
Project Title: Collaborative Research: AMPS Stochastic Algorithms for Early Detection and Risk Prediction  
of Hidden Contingencies in Modern Power Systems

Principal Investigator: Feng Lin  
Award Period: 9/1/2022 to 8/31/2025  
Anticipated Total: \$299,917  
Sponsor: National Science Foundation  
Project Title: Collaborative Research: Cyber-secure and Resilient Supervisory Control of Networked Discrete-Event Systems

Principal Investigator: Caisheng Wang  
Award Period: 9/1/2022 to 8/31/2024  
Anticipated Total: \$230,000  
Sponsor: National Science Foundation  
Project Title: The Development of a High-Switching-Frequency and Fast-Response Motor Emulator

### **Engineering Technology**

Principal Investigator: Mohsen Ayoobi  
Award Period: 10/1/2022 to 9/30/2028  
Anticipated Total: \$1,499,830  
Sponsor: National Science Foundation  
Project Title: ASSET: Assuring Students Success in Engineering Technology Programs

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

### **Biological Sciences**

Principal Investigator: Athar Ansari  
Award Period: 9/1/2022 to 5/31/2027  
Anticipated Total: \$1,387,650  
Sponsor: National Institute of General Medical Sciences  
Project Title: A New Paradigm of General Transcription Factor TFIIB Functionality in Termination and Promoter Directionality

### **Chemistry**

Principal Investigator: Stephanie Brock  
Award Period: 9/1/2022 to 8/31/2025  
Anticipated Total: \$1,947,281  
Sponsor: U.S. Department of Energy  
Project Title: Tunable Platforms for Solar Fuels Generation via Programmable Integration of Colloidal Components

## **Mathematics**

Principal Investigator: Hengguang Li

Award Period: 9/1/2022 to 8/31/2025

Anticipated Total: \$220,347

Sponsor: National Science Foundation

Project Title: Analysis and Novel Finite Element Methods for Elliptic Problems with Complex Boundary Conditions

Principal Investigator: Boris Mordukhovich

Award Period: 9/1/2022 to 8/31/2025

Anticipated Total: \$250,000

Sponsor: National Science Foundation

Project Title: Variational Analysis: Theory, Algorithms, and Applications

## **Physics**

Principal Investigator: Jian Huang

Award Period: 10/1/2022 to 9/30/2024

Anticipated Total: \$299,715

Sponsor: National Science Foundation

Project Title: EAGER: CRYO: Continuous Adiabatic Demagnetization Refrigeration at Millikelvin Temperatures Without Helium-3

## **VICE PRESIDENT FOR RESEARCH**

### **Institute of Environmental Health Sciences**

Principal Investigator: Christopher Kassotis

Award Period: 9/1/2022 to 8/30/2025

Anticipated Total: \$598,487

Sponsor: U.S. Environmental Protection Agency

Project Title: Assessment of Underlying Molecular Mechanisms Promoting Adipogenic Outcomes in Complex Mixtures

Principal Investigator: Melissa Runge-Morris

Award Period: 9/8/2022 to 5/31/2026

Anticipated Total: \$11,199,126

Sponsor: National Institute of Environmental Health Sciences

Project Title: Center for Leadership in Environmental Awareness and Research (CLEAR)

### **Institute of Gerontology**

Principal Investigator: Amanda Leggett

Award Period: 9/1/2022 to 5/31/2026

Anticipated Total: \$1,937,558

Sponsor: National Institute on Aging

Project Title: Profiling Psychosocial Dementia Caregiving Networks: The Impact of Dementia Care Networks on Care Outcomes of Medicare Enrollee Persons Living with Dementia

### **Merrill Palmer Skillman Institute**

Principal Investigator: Ann Stacks

Award Period: 11/1/2022 to 3/31/2023

Anticipated Total: \$214,152

Sponsor: State of Michigan Dept. of Health & Human Services

Project Title: MDHHS Baby Court Expansion

**SCHOOL OF MEDICINE**

### **Emergency Medicine**

Principal Investigator: Claire Pearson

Award Period: 10/2/2022 to 9/30/2023

Anticipated Total: \$252,030

Sponsor: State of Michigan Dept. of Health & Human Services

Project Title: HIV Prevention - Emergency Room Testing

### **Family Medicine and Public Health Sciences**

Principal Investigator: Juliann Binienda

Award Period: 9/30/2022 to 9/29/2025

Anticipated Total: \$1,494,129

Sponsor: Health Resources & Services Administration

Project Title: Geriatric Training Program for Physician Dentists and Behavioral Mental Health Progressions

### **Internal Medicine**

Principal Investigator: Robert Burack

Award Period: 10/1/2022 to 9/30/2023

Anticipated Total: \$614,400

Sponsor: State of Michigan Dept. of Health & Human Services

Project Title: Tri-County Breast and Cervical Cancer Control Program

Principal Investigator: Warren Lockette

Award Period: 9/30/2022 to 9/30/2023

Anticipated Total: \$750,000

Sponsor: U.S. Department of Defense

Project Title: The Pathogenesis of Radio Wave-Induced Brain Injury

## **Oncology**

Principal Investigator: Elisabeth Heath  
Award Period: 9/30/2022 to 9/29/2026  
Anticipated Total: \$1,847,997  
Sponsor: U.S. Department of Defense  
Project Title: The Prostate Cancer Clinical Trials Consortium: Clinical Research Site Application

Principal Investigator: Xiaohong Zhang  
Award Period: 9/30/2022 to 9/29/2024  
Anticipated Total: \$526,738  
Sponsor: Congressionally Directed Medical Research Programs  
Project Title: Targeting deubiquitinase USP10 to potentiate immunotherapy in lung cancer

## **Physical Medicine & Rehabilitation**

Principal Investigator: Robin Hanks  
Award Period: 9/1/2022 to 8/31/2027  
Anticipated Total: \$2,244,195  
Sponsor: Administration for Community Living  
Project Title: Southeastern Michigan Traumatic Brain Injury System

## **Physiology**

Principal Investigator: Suresh Palaniyandi  
Award Period: 9/13/2022 to 8/31/2024  
Anticipated Total: \$403,787  
Sponsor: National Institute of Environmental Health Sciences  
Project Title: Resolvin D1 resolves inflammation in metabolic stress associated HFpEF

Principal Investigator: Zhibing Zhang  
Award Period: 9/20/2022 to 6/30/24  
Anticipated Total: \$423,500  
Sponsor: National Institute on Minority Health and Health Disparities  
Project Title: Targeting the MEIG1/PACRG interaction for male contraception

## **Psychiatry and Behavioral Neurosciences**

Principal Investigator: Alireza Amirsadri  
Award Period: 10/1/2022 to 9/30/23  
Anticipated Total: \$1,000,000  
Sponsor: State of Michigan Dept. of Health & Human Services  
Project Title: 2023 Frontline Strong Together

Principal Investigator: Tamja Jovanovic  
Award Period: 9/1/2022 to 3/31/27  
Anticipated Total: \$286,472  
Sponsor: University of Maryland  
Project Title: Extracellular vesicles as biomarkers of trauma exposure and PTSD risk

Principal Investigator: Leslie Lundahl  
Award Period: 9/1/2022 to 7/31/27  
Anticipated Total: \$9,107,365  
Sponsor: State of Michigan  
Project Title: 2022 Veteran Marijuana Research (VMR) Grant Program

Principal Investigator: Hilary Marusak  
Award Period: 9/1/2022 to 8/31/24  
Anticipated Total: \$423,500  
Sponsor: National Institute of Child Health and Human Development  
Project Title: Effects of peer victimization on physiological markers of threat sensitivity in adolescents

#### **SCHOOL OF SOCIAL WORK**

Principal Investigator: Elizabeth Agius  
Award Period: 10/1/2022 to 9/30/2023  
Anticipated Total: \$250,000  
Sponsor: State of Michigan Dept. of Health & Human Services  
Project Title: State Opioid Response II - Evaluation and Data Collection

Principal Investigator: Elizabeth Agius  
Award Period: 10/1/2022 to 9/30/2023  
Anticipated Total: \$611,137  
Sponsor: State of Michigan Dept. of Health & Human Services  
Project Title: State Opioid Response Evaluation

Principal Investigator: Carolyn Dayton  
Award Period: 9/1/2022 to 8/31/2024  
Anticipated Total: \$300,000  
Sponsor: Ethel and James Flinn Family Foundation  
Project Title: Behavioral Health Services for Young Children and Mothers

Principal Investigator: Sheryl Pimlott-Kubiak  
Award Period: 10/1/2022 to 9/30/2023  
Anticipated Total: \$232,898  
Sponsor: State of Michigan Dept. of Health & Human Services  
Project Title: State Opioid Response Nalaxone Vending

Principal Investigator: Sheryl Pimlott-Kubiak  
Award Period: 10/1/2022 to 9/30/2023  
Anticipated Total: \$350,000  
Sponsor: State of Michigan Dept. of Health & Human Services  
Project Title: E Substance Use Disorder Education

Principal Investigator: Sheryl Pimlott-Kubiak  
Award Period: 10/1/2022 to 9/30/2023  
Anticipated Total: \$650,000  
Sponsor: State of Michigan Dept. of Health & Human Services  
Project Title: Stepping Up Technical Assistance Initiative FY2023