

SUBMITTED BY: STEPHEN M. LANIER, VICE PRESIDENT FOR RESEARCH

**NEW RESEARCH AWARDS OVER \$200,000
OCTOBER, 2021 THROUGH APRIL, 2022**

COLLEGE OF EDUCATION

Administration & Organization

Principal Investigator: Sarah Winchell Lenhoff
Award Period: 10/1/2021 to 9/30/2022
Anticipated Total: \$821,000
Sponsor: Skillman Foundation
Project Title: Detroit Education Research Partnership

Kinesiology, Health, and Sports Studies

Principal Investigator: Jeanne Barcelona
Award Period: 1/15/2022 to 9/30/2023
Anticipated Total: \$202,644
Sponsor: Michigan Fitness Foundation
Project Title: Metro Detroit Healthy Youth Initiative

Principal Investigator: Mariane Fahlman
Award Period: 1/15/2022 to 9/30/2023
Anticipated Total: \$450,000
Sponsor: Blue Cross Blue Shield of Michigan
Project Title: Building Healthy Communities Reducing Health Disparities in Elementary Schools

Teacher Education

Principal Investigator: Anna Miller
Award Period: 10/1/2021 to 9/30/2025
Anticipated Total: \$297,969
Sponsor: U.S. Department of Education
Project Title: Child Care Access Means Parents in School

COLLEGE OF ENGINEERING

Civil & Environmental Engineering

Principal Investigator: Fatmir Menkulasi
Award Period: 10/1/2021 to 9/29/2023
Anticipated Total: \$234,817
Sponsor: State of Michigan Department of Transportation - MDOT
Project Title: Research on Repair of Bridge Deck Fascias

Principal Investigator: Stephen Remias
Award Period: 10/11/2021 to 12/31/2025
Anticipated Total: \$250,000
Sponsor: State of Michigan Department of Transportation - MDOT
Project Title: Intelligent Woodward Corridor Project
and
Award Period: 2/1/2022 to 4/1/2027
Anticipated Total: \$231,445
Sponsor: City of Detroit
Project Title: Michigan Mobility Collaborative's Automated Driving System (ADS)

Computer Science

Principal Investigator: Marco Brocanelli
Award Period: 3/1/2022 to 2/28/2027
Anticipated Total: \$223,217
Sponsor: National Science Foundation
Project Title: CAREER: Enhancing Energy Efficiency in Mobile Augmented Reality Apps

Principal Investigator: Zheng Dong
Award Period: 1/1/2022 to 12/31/2024
Anticipated Total: \$499,861
Sponsor: National Science Foundation
Project Title: CNS Core: Small: Enabling Real-time, Scalable and Secure Collaborative Intelligence on the Edge

Engineering Technology

Principal Investigator: Wen Chen
Award Period: 3/1/2022 to 2/29/2024
Anticipated Total: \$269,210
Sponsor: National Science Foundation
Project Title: IRES Track II: A US-France ASI for Industrial Risk Management in Active Diagnosis, Accurate Characterization, and Reliable Mitigation with Resilience

COLLEGE OF LIBERAL ARTS AND SCIENCES

Biological Sciences

Principal Investigator: Marianna Sadagurski
Award Period: 4/1/2022 to 1/31/2027
Anticipated Total: \$1,896,110
Sponsor: National Institute of Environmental Sciences of the National Institutes of Health
Project Title: Benzene Exposure Promotes Neuroinflammation and Metabolic Dysregulation

Chemistry

Principal Investigator: Long Luo

Award Period: 1/13/2022 to 9/30/2024

Anticipated Total: \$200,000

Sponsor: Pacific Northwest National Laboratory

Project Title: Design of structural inhomogeneities to control functional properties and

Award Period: 12/3/2021 to 12/2/2024

Anticipated Total: \$701,316

Sponsor: U.S. Department of Defense

Project Title: Developing a low-cost device for on-site detection of per- and polyfluoroalkyl substances (PFAS) in drinking water

Principal Investigator: Charles Winter

Award Period: 1/1/2022 to 12/31/2024

Anticipated Total: \$270,000

Sponsor: Semiconductor Research Corporation

Project Title: ALD Precursor Development for Low Resistivity Zr, Hf, and Nb Nitride Films and

Award Period: 4/1/2022 to 3/31/2025

Anticipated Total: \$517,487

Sponsor: National Science Foundation

Project Title: Leveraging Cyclopropanols in Natural Product Synthesis

Public Health

Principal Investigator: Jingsha (Sasha) Zhou

Award Period: 12/1/2021 to 12/31/2023

Anticipated Total: \$249,983

Sponsor: Robert Wood Johnson Foundation

Project Title: Conducting a Critical Analysis of Existing Research Methods and an Exploration of Promising New Approaches to the Study of Structural Racism

COLLEGE OF NURSING

Adult Health/Administration

Principal Investigator: Umeika Stephens

Award Period: 10/1/2021 to 9/30/2022

Anticipated Total: \$1,573,000

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

Project Title: Nurse Practitioner Expansion Program

PROVOST & VP FOR ACADEMIC AFFAIRS

Center for Urban Studies

Principal Investigator: Thomas Thompson

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

Anticipated Total: \$850,618

Sponsor: Michigan Department of Labor and Economic Opportunity

Project Title: AmeriCorps Urban Safety Project 2021 - 2022

and

Award Period: 12/1/2021 to 12/1/2023

Anticipated Total: \$450,000

Sponsor: Skillman Foundation

Project Title: AMUS Youth Cody Rouge

and

Award Period: 12/1/2021 to 11/30/2023

Anticipated Total: \$492,354

Sponsor: Michigan Health Endowment Fund

Project Title: Detroit Older Adult Home Safety Assessment

and

Award Period: 10/1/2021 to 9/30/2022

Anticipated Total: \$340,076

Sponsor: State of Michigan Department of Education

Project Title: Qualitative Compliance Information Project (Early On / Part C)

and

Award Period: 10/1/2021 to 9/30/2022

Anticipated Total: \$1,065,453

Sponsor: State of Michigan Department of Education

Project Title: Research Support for Part B State Performance Plan / Annual Performance Report

Developmental Disabilities Institute

Principal Investigator: Angela Martin

Award Period: 1/1/2022 to 12/31/2022

Anticipated Total: \$209,480

Sponsor: Health Services Advisory Group, Inc.

Project Title: NCI Consumer Survey 2022

Principal Investigator: Sharon Milberger

Award Period: 10/1/2021 to 9/30/2022

Anticipated Total: \$2,333,333

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

Project Title: COVID-19 Vaccination for Underserved Population

VP Academic Affairs

Principal Investigator: Darryl Gardner
Award Period: 10/1/2021 to 9/30/22026
Anticipated Total: \$269,888
Sponsor: The University of Michigan
Project Title: The Michigan-Louis Stokes Alliance for Minority Populatio

VICE PRESIDENT FOR RESEARCH

Principal Investigator: Phillip Levy
Award Period: 11/10/2021 to 10/28/2024
Anticipated Total: \$900,000
Sponsor: Bank of America Charitable Foundation
Project Title: Wayne Health Mobile Unit Care at Work Pilot

SCHOOL OF MEDICINE

Center for Molecular Medicine and Genetics

Principal Investigator: Francesca Luca
Award Period: 3/15/2022 to 12/31/2026
Anticipated Total: \$3,358,219
Sponsor: National Heart, Lung and Blood Institute
Project Title: Psychosocial and Genetic Effects on Gene Expression and Asthma

Principal Investigator: Shengyi Sun
Award Period: 12/1/2021 to 11/30/2026
Anticipated Total: \$1,925,000
Sponsor: National Institute of Diabetes and Digestive and Kidney Disease
Project Title: Novel role of endoplasmic reticulum-associated degradation in iron metabolism

Principal Investigator: Ren Zhang
Award Period: 4/1/2022 to 3/31/2027
Anticipated Total: \$1,507,977
Sponsor: National Institute of Diabetes and Digestive and Kidney Disease
Project Title: Mitochondrial NAD kinase: function and mechanism in metabolism

Emergency Medicine

Principal Investigator: Jeffrey Kline
Award Period: 12/7/2021 to 3/31/2025
Anticipated Total: \$5,913,104
Sponsor: National Heart, Lung and Blood Institute
Project Title: BEside Exclusion of Pulmonary Embolism in children without Radiation (BEEPER)

Family Medicine and Public Health Sciences

Principal Investigator: Angulique Outlaw
Award Period: 10/2/2021 to 5/31/2022
Anticipated Total: \$283,983
Sponsor: Florida State University
Project Title: Scale It Up Effectiveness Implementation

Internal Medicine

Principal Investigator: Noreen Rossi
Award Period: 4/1/2022 to 11/30/2025
Anticipated Total: \$2,534,156
Sponsor: National Heart, Lung and Blood Institute
Project Title: Impact of Dietary Fructose and High Salt Diet on Neurocardiovascular and Renal Function

Principal Investigator: Avnish Sandhu
Award Period: 10/1/2021 to 9/30/2022
Anticipated Total: \$575,563
Sponsor: State of Michigan Dept. of Health & Human Service
Project Title: Detroit TB Project FY22

Neurology

Principal Investigator: Yongsheng Chen
Award Period: 1/15/2022 to 11/30/2026
Anticipated Total: \$1,389,828
Sponsor: National Institute of Neurological Disorders and Stroke
Project Title: Biomarker development in patients with HNPP

Obstetrics and Gynecology

Principal Investigator: Ayesha Alvero
Award Period: 10/25/2021 to 10/24/2023
Anticipated Total: \$247,433
Sponsor: Janet Burros Memorial Foundation
Project Title: Metabolic adaptation as a mechanism for chemoresistance in ovarian cancer

Ophthalmology, Visual and Anatomical Sciences

Principal Investigator: Ryan Insolera
Award Period: 2/1/2022 to 1/31/2025
Anticipated Total: \$742,471
Sponsor: National Institute of Neurological Disorders and Stroke
Project Title: Mechanistic investigation of in vivo pathways of neuronal mitochondrial degradation

Pathology

Principal Investigator: Hyeong-Reh Kim
Award Period: 1/1/2022 to 11/30/2024
Anticipated Total: \$693,000
Sponsor: U.S. Department of Defense
Project Title: HACD2, a regulator of bone-resident breast cancer cell dormancy and growth

Pediatrics

Principal Investigator: Eishi Asano
Award Period: 4/15/2022 to 2/28/2027
Anticipated Total: \$2,411,798
Sponsor: National Institute of Neurological Disorders and Stroke
Project Title: Functional Brain Mapping in Pediatric Neurosurgery

Physiology

Principal Investigator: Patrick Mueller
Award Period: 12/1/2021 to 11/30/2025
Anticipated Total: \$2,513,906
Sponsor: National Heart, Lung and Blood Institute
Project Title: Contribution of neuroplasticity in the rostral ventrolateral medulla to physical inactivity-related cardiovascular disease

Principal Investigator: Jeffrey Ram
Award Period: 10/1/2021 to 9/30/22
Anticipated Total: \$1,610,455
Sponsor: State of Michigan Dept. of Health & Human Services
Project Title: SARS CoV-2 Epidemiology - Wastewater Evaluation and Reporting (SEWER) Network

Principal Investigator: Zhibing Zhang
Award Period: 4/1/2022 to 3/31/2027
Anticipated Total: \$2,401,671
Sponsor: National Institute of Child, Health and Human Development
Project Title: Intraflagellar transport (IFT) and sperm formation

SCHOOL OF SOCIAL WORK

Principal Investigator: Elizabeth Agius
Award Period: 11/1/2021 to 9/30/2022
Anticipated Total: \$300,000
Sponsor: State of Michigan Dept. of Health & Human Services
Project Title: Coalition, Women, and Recovery Services Evaluations