

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

**NEW RESEARCH AWARDS
JULY THROUGH SEPTEMBER, 2020 – QUARTER FOUR FY 2020**

COLLEGE OF EDUCATION

Administration & Organization

Principal Investigator: Sarah Winchell Lenhoff
Award Period: 8/1/2020 to 7/31/2023
Anticipated Total: \$400,000
Sponsor: The Spencer Foundation
Project Title: Reducing Chronic Absenteeism, Increasing Opportunity: A School-Community-Research Partnership to Improve Policy and Practice Related to Attendance in Detroit

Principal Investigator: Sarah Winchell Lenhoff
Award Period: 9/1/2020 to 9/2/2021
Anticipated Total: \$200,000
Sponsor: Skillman Foundation
Project Title: Detroit Education Research Partnership

Dean's Office

Principal Investigator: Roland S Coloma
Award Period: 7/1/2020 to 10/31/2021
Anticipated Total: \$100,000
Sponsor: Schultz Family Foundation
Project Title: Shifting Urban Narratives

Kinesiology, Health and Sports Studies

Principal Investigator: Rachael Denise Dombrowski
Award Period: 9/1/2020 to 9/30/2023
Anticipated Total: \$375,213
Sponsor: U.S. Department of Agriculture - USDA
Project Title: Great Grocer Project

Principal Investigator: Andria Eisman
Award Period: 8/18/2020 to 1/31/2024
Anticipated Total: \$638,187
Sponsor: National Institutes of Health - NIH
Project Title: Preventing Substance Use Among Youth: Behavioral and Economic Impact of Enhanced Implementation Strategies for Communities

Principal Investigator: Leah Ross Ketcheson
Award Period: 9/1/2020 to 8/31/2022
Anticipated Total: \$500,000
Sponsor: Michigan Health Endowment Fund
Project Title: Physical Literacy And Nutrition Education (PLANE)

Teacher Education

Principal Investigator: Anna G. Miller
Award Period: 7/1/2020 to 6/30/2021
Anticipated Total: \$179,584
Sponsor: Wayne County Regional Education Services Agency
Project Title: Early Experiences for Urban Children: Four-Years-Old

COLLEGE OF ENGINEERING

Department of Biomedical Engineering

Principal Investigator: Mohammad Mehrmohammadi
Award Period: 8/1/2020 to 4/30/2024
Anticipated Total: \$1,679,470
Sponsor: National Institutes of Health - NIH
Project Title: Molecular, Functional, and Microstructural Imaging of Cervical Remodeling Biomarkers

Department of Chemical Engineering

Principal Investigator: Carolyn Anne Harris
Award Period: 7/14/2020 to 2/28/2021
Anticipated Total: \$133,033
Sponsor: Integra
Project Title: Collaboration Round 1 with Integra: Testing Endexo Coating

Principal Investigator: Yinlun Huang
Award Period: 9/1/2020 to 8/31/2022
Anticipated Total: \$219,998
Sponsor: National Science Foundation - NSF
Project Title: EAGER: Fundamental Study on Multistage Sustainability Assessment and Decision Making for Shaping Technology Innovations

Principal Investigator: Eranda Nikolla
Award Period: 8/15/2020 to 8/14/2023
Anticipated Total: \$523,254
Sponsor: U.S. Department of Energy - DOE
Project Title: Tuning Catalytically Active Single Sites in Non-stoichiometric, Mixed Metal Oxides for Oxygen Electrocatalysis

Department of Civil and Environmental Engineering

Principal Investigator: Esref Emrah Kazan
Award Period: 9/30/2020 to 9/30/2021
Anticipated Total: \$122,380
Sponsor: Occupational Safety and Health Administration - OSHA
Project Title: Residential Construction Safety and Health Awareness Training

Principal Investigator: Yongli Zhang
Award Period: 8/1/2020 to 7/31/2022
Anticipated Total: \$195,000
Sponsor: Great Lakes Water Authority
Project Title: The Occurrence and Fate of Microplastics in Wastewater and Drinking Water Treatment Systems

Department of Computer Science

Principal Investigator: Abu Sayeed Muhammad Saifullah
Award Period: 10/1/2020 to 6/30/2023
Anticipated Total: \$500,000
Sponsor: National Science Foundation - NSF
Project Title: CNS Core: Small: Low-Power Wide-Area Networks for Industrial Automation

Principal Investigator: Weisong Shi
Award Period: 7/1/2020 to 6/30/2021
Anticipated Total: \$150,000
Sponsor: National Science Foundation - NSF
Project Title: RAPID: CORPUS: An Edge Intelligence-Assisted Multi-Granularity COVID-19 Risk Predication and Update System

Department of Electrical and Computer Engineering

Principal Investigator: Amar Sarbbasesh Basu
Award Period: 9/1/2020 to 2/28/2022
Anticipated Total: \$100,000
Sponsor: Michigan Health Endowment Fund
Project Title: Preventing falls before they occur: Fall risk screenings for Detroit's older adults using novel technology

COLLEGE OF LIBERAL ARTS AND SCIENCES

Department of Anthropology

Principal Investigator: Andrea P. Sankar
Award Period: 8/18/2020 to 12/30/2020
Anticipated Total: \$49,700
Sponsor: Ford Motor Company
Project Title: Promoting COVID19 Prevention in the Ford Community

Department of Biological Sciences

Principal Investigator: Glen Ray Hood
Award Period: 9/30/2020 to 9/29/2021
Anticipated Total: \$108,908
Sponsor: U.S. Department of Agriculture - USDA
Project Title: Identification Resources for ECFF, Rhagoletis cerasi

Department of Chemistry

Principal Investigator: Stephanie L. Brock
Award Period: 9/1/2020 to 8/31/2021
Anticipated Total: \$980,000
Sponsor: National Science Foundation - NSF
Project Title: MRI: Acquisition of a Field Emission Transmission Electron Microscope to Enable Multidisciplinary Materials Research, Education, and Outreach

Principal Investigator: Eduard Yurjevich Chekmenev
Award Period: 7/15/2020 to 7/14/2023
Anticipated Total: \$1,732,500
Sponsor: U.S. Department of Defense - DOD
Project Title: Low-Cost, High-Throughput 3D Pulmonary Imaging Using Hyperpolarized Propane Gas

Principal Investigator: Eduard Yurjevich Chekmenev
Award Period: 7/22/2020 to 6/30/2022
Anticipated Total: \$418,864
Sponsor: National Institutes of Health - NIH
Project Title: Hyperpolarized Diethyl Ether for Sub-second Pulmonary MRI

Principal Investigator: Wen Li
Award Period: 7/15/2020 to 6/30/2023
Anticipated Total: \$534,969
Sponsor: National Science Foundation - NSF
Project Title: Probing Multi-electron Dynamics with Absolute CEP Dependent Strong Field Interaction

Principal Investigator: Wen Li
Award Period: 9/1/2020 to 8/31/2023
Anticipated Total: \$675,000
Sponsor: U.S. Department of Energy - DOE
Project Title: Beating Electronic Decoherence

Principal Investigator: Zhenfei Liu
Award Period: 9/1/2020 to 8/31/2022
Anticipated Total: \$110,000
Sponsor: American Chemical Society
Project Title: First-Principles Computational Study and Design of Metal-organic Frameworks for Separation of Small Hydrocarbons

Principal Investigator: Charles H. Winter
Award Period: 7/1/2020 to 6/30/2021
Anticipated Total: \$110,000
Sponsor: Basf Corporation
Project Title: Atomic Level Deposition (ALD) process development of Ta, Ti, Mo, Co, Ni, W, Al, TaN or other elemental composition of relevance using novel reducing agents

Department of Mathematics

Principal Investigator: Steven Marshall Kahn
Award Period: 8/18/2020 to 6/30/2021
Anticipated Total: \$213,000
Sponsor: Detroit Public Schools - DPS
Project Title: WSU Math Corps Math Literacy and High School Readiness Program 2020-2021

Department of Physics

Principal Investigator: Abhijit Majumder
Award Period: 7/1/2020 to 6/30/2024
Anticipated Total: \$4,048,831
Sponsor: National Science Foundation - NSF
Project Title: Framework: The X-SCAPE collaboration: The X-ion collision with a Statistically and Computationally Advanced Program Envelope collaboration

Principal Investigator: Chun Shen
Award Period: 7/15/2020 to 6/30/2023
Anticipated Total: \$255,086
Sponsor: National Science Foundation - NSF
Project Title: Quantitative Characterization of Quark-Gluon Plasma Properties with Dynamical Fluctuations

Department of Psychology

Principal Investigator: Lars Uriah Johnson
Award Period: 9/1/2020 to 8/30/2021
Anticipated Total: \$199,537
Sponsor: National Science Foundation - NSF
Project Title: RAPID: The Impact of Being Policed Under Threat

COLLEGE OF NURSING

Adult Health/Administration

Principal Investigator: Cynthera Francisca McNeill
Award Period: 7/1/2020 to 6/30/2023
Anticipated Total: \$1,494,660
Sponsor: Health Resources & Services Administration - HRSA
Project Title: Addressing St.I.G.M.A (Strategic Integration to Grow Mental Health Access)

GRADUATE SCHOOL

Principal Investigator: Ashok Kumar
Award Period: 7/1/2020 to 11/30/2020
Anticipated Total: \$517,896
Sponsor: National Institutes of Health - NIH
Project Title: ReBUILD Detroit Year 7

EUGENE APPLEBAUM COLLEGE OF PHARMACY AND HEALTH SCIENCES

Department of Pharmaceutical Science

Principal Investigator: Arun Kunchithapatham Iyer
Award Period: 8/18/2020 to 7/31/2021
Anticipated Total: \$374,752
Sponsor: National Institutes of Health - NIH
Project Title: Nano Antibiotic Delivery for Treating MRSA Infections

OFFICE OF THE PROVOST AND ACADEMIC AFFAIRS

Center for Urban Studies

Principal Investigator: Thomas Lyke Thompson
Award Period: 10/1/2020 to 9/30/2021
Anticipated Total: \$340,076
Sponsor: State of Michigan Department of Education - MDOE
Project Title: Qualitative Compliance Information Project (Early On / Part C)

Principal Investigator: Thomas Lyke Thompson
Award Period: 10/1/2020 to 9/30/2021
Anticipated Total: \$1,015,847
Sponsor: State of Michigan Department of Education - MDOE
Project Title: Research Support for Part B State Performance Plan / Annual Performance Report

Principal Investigator: Thomas Lyke Thompson
Award Period: 10/1/2020 to 9/30/2021
Anticipated Total: \$237,735
Sponsor: State of Michigan Dept. of Health & Human Services - MDHHS
Project Title: VOCA Resources for Victim Assistance Programs – 2021

Vice President for Academic Affairs

Principal Investigator: Boris Baltes
Award Period: 8/15/2020 to 9/30/2023
Anticipated Total: \$992,495
Sponsor: National Science Foundation - NSF
Project Title: Gender Equity, Advancement, and Retention in STEM (GEARS)

DIVISION OF RESEARCH

Institute of Environmental Health Sciences

Principal Investigator: Christopher Dennis Kassotis
Award Period: 9/23/2020 to 7/31/2023
Anticipated Total: \$743,973
Sponsor: National Institutes of Health - NIH
Project Title: K99/R00 - Kassotis grant transfer

Principal Investigator: Douglas Mark Ruden
Award Period: 9/1/2020 to 8/31/2021
Anticipated Total: \$321,606
Sponsor: Michigan State University - MSU
Project Title: PRENATAL EXPOSURES AND CHILD HEALTH OUTCOMES: A STATEWIDE STUDY

Principal Investigator: Douglas Mark Ruden
Award Period: 9/1/2020 to 8/31/2021
Anticipated Total: \$205,778
Sponsor: Michigan State University - MSU
Project Title: Mitigating the Impact of Implicit Bias on Maternal Morbidity and Mortality for African American Women

Institute of Gerontology

Principal Investigator: Peter Alexander Lichtenberg
Award Period: 7/1/2020 to 6/30/2021
Anticipated Total: \$255,351
Sponsor: University of Michigan - U of M
Project Title: Michigan Center for Urban African American Aging Research

Merrill Palmer Skillman Institute

Principal Investigator: Ann Michele Stacks
Award Period: 10/1/2020 to 9/30/2022
Anticipated Total: \$499,778
Sponsor: Michigan Health Endowment Fund
Project Title: Promoting Resilience among Maltreated Young Children: Creating and Sustaining a Collaborative Court Team Workforce using Technology-Based Cross Training

Office of the Vice President for Research

Principal Investigator: Phillip David Levy
Award Period: 8/1/2020 to 9/30/2020
Anticipated Total: \$451,587
Sponsor: State of Michigan Dept. of Health & Human Services - MDHHS
Project Title: Mobile COVID Units: Pilot Program in Southeast Michigan

Principal Investigator: Phillip David Levy
Award Period: 10/1/2020 to 9/30/2021
Anticipated Total: \$100,000
Sponsor: Delta Dental of Michigan
Project Title: PHOENIX Project- Delta

SCHOOL OF MEDICINE

Department of Emergency Medicine

Principal Investigator: James H. Paxton
Award Period: 9/2/2020 to 5/31/2021
Anticipated Total: \$625,279
Sponsor: Johns Hopkins University - JHU
Project Title: Convalescent Plasma to Limit Coronavirus Associated Complications. CSSC-001/CSSC-004

Department of Family Medicine and Public Health Sciences

Principal Investigator: Angulique Yvette Outlaw

Award Period: 10/1/2020 to 9/30/2021

Anticipated Total: \$110,767

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

Project Title: Tobacco Use Reduction in People Living with HIV (TURP) Pilot Project

Principal Investigator: Elizabeth Kuhl Towner

Award Period: 8/1/2020 to 7/31/2021

Anticipated Total: \$149,933

Sponsor: Patient-Centered Outcomes Research Institute - PCORI

Project Title: Developing and Evaluating a Community-Based System for Rapid Dissemination of Evidence-Based Information and Research Specific to COVID-19

Principal Investigator: Jinping Xu

Award Period: 7/1/2020 to 9/30/2021

Anticipated Total: \$149,324

Sponsor: Patient-Centered Outcomes Research Institute - PCORI

Project Title: COVID 19 Best Practices to Engage Black Men in the Development of a Cancer Health Equity Research Agenda

Department of Internal Medicine

Principal Investigator: Jonathan A. Cohn

Award Period: 7/1/2020 to 6/30/2021

Anticipated Total: \$319,082

Sponsor: University of Illinois Chicago

Project Title: MATEC - Midwest AIDS Training & Edu Ctr.

Department of Neurology

Principal Investigator: Evanthia Bernitsas

Award Period: 7/31/2020 to 1/8/2021

Anticipated Total: \$911,608

Sponsor: Genentech, Incorporated

Project Title: Investigating the Effect of Ocrelizumab in African Americans with Relapsing MS: A Novel, Advanced Multimodal MRI and OCTA Study

Principal Investigator: Paula A. Dore-Duffy

Award Period: 9/28/2020 to 8/31/2021

Anticipated Total: \$364,610

Sponsor: Mallinckrodt Inc.,

Project Title: Pericytes: A new target of Acthar

Principal Investigator: Robert P. Lisak,
Award Period: 7/15/2020 to 6/30/2022
Anticipated Total: \$447,003
Sponsor: National Institutes of Health - NIH
Project Title: Molecular profiling of exosomes from multiple sclerosis B cells

Principal Investigator: Wazim Mohamed
Award Period: 7/2/2020 to 5/31/2026
Anticipated Total: \$143,500
Sponsor: University of Cincinnati
Project Title: STATINS USE IN INTRACEREBRAL HEMORRHAGE PATIENTS

Department of Obstetrics and Gynecology

Principal Investigator: Daniel Allen Rappolee
Award Period: 8/6/2020 to 8/5/2021
Anticipated Total: \$118,104
Sponsor: Reproductive Stress (3M) Measurement, Mechanisms, and Manage
Project Title: Stress forces huESC differentiation; confirmation as an accurate DevTox HTS.

Department of Oncology

Principal Investigator: Jennifer L. Beebe-Dimmer
Award Period: 7/1/2020 to 6/30/2021
Anticipated Total: \$127,209
Sponsor: University of Southern California - USC
Project Title: Research on Prostate Cancer in Men of African Ancestry: Defining the Roles of Genetics, Immunity and Stress (RESPOND)

Principal Investigator: Lawrence E. Flaherty
Award Period: 8/18/2020 to 7/31/2025
Anticipated Total: \$120,000
Sponsor: Oregon Health and Science University
Project Title: SWOG NCORP Research Base

Principal Investigator: Lauren Melissa Hamel
Award Period: 9/1/2020 to 8/31/2025
Anticipated Total: \$844,500
Sponsor: American Cancer Society - ACS
Project Title: DISCO: A patient intervention to reduce the financial burden of cancer

Principal Investigator: Larry H. Matherly
Award Period: 9/1/2020 to 8/31/2021
Anticipated Total: \$261,133
Sponsor: National Cancer Institute - NCI
Project Title: Training Program in the Biology of Cancer

Principal Investigator: Manohar Ratnam
Award Period: 8/1/2020 to 7/31/2022
Anticipated Total: \$285,021
Sponsor: Veterans Administration - VA
Project Title: Induction of Senescence using Dexamethasone to Re-sensitize NSCLC to Anti-PD1 Therapy:
A Phase I/II Clinical Trial

Principal Investigator: Ann Grossbart Schwartz
Award Period: 8/15/2020 to 10/31/2020
Anticipated Total: \$448,778
Sponsor: Information Management Services, Inc.
Project Title: Cancer Registry Consultation with IMS

Principal Investigator: Ann Grossbart Schwartz
Award Period: 9/1/2020 to 1/31/2021
Anticipated Total: \$153,988
Sponsor: National Cancer Institute - NCI
Project Title: The impact of the COVID-19 pandemic on African American cancer survivors and their
caregivers

Principal Investigator: Rachel Elizabeth Sexton
Award Period: 9/1/2020 to 8/31/2022
Anticipated Total: \$215,746
Sponsor: U.S. Department of Defense - DOD
Project Title: Unveiling the role of Nuclear Export Protein 1 (XPO1)-microRNA axis in Gastric Cancer

Department of Ophthalmology, Visual and Anatomical Sciences

Principal Investigator: Linda D. Hazlett
Award Period: 9/30/2020 to 8/31/2024
Anticipated Total: \$1,540,000
Sponsor: National Eye Institute - NEI
Project Title: Attacking the Global Problem of Antimicrobial Resistance

Principal Investigator: Lalit Singh Pukhrambam
Award Period: 9/30/2020 to 9/29/2021
Anticipated Total: \$308,000
Sponsor: National Institutes of Health - NIH
Project Title: TXNIP expression is critical in the development of early diabetic retinopathy

Principal Investigator: Nikhlesh Kumar Singh
Award Period: 9/1/2020 to 4/30/2024
Anticipated Total: \$1,334,158
Sponsor: National Institutes of Health - NIH
Project Title: CELLULAR MECHANISMS OF PATHOLOGICAL RETINAL NEOVASCULARIZATION

Principal Investigator: Susmit Suvas
Award Period: 8/1/2020 to 7/31/2025
Anticipated Total: \$1,886,249
Sponsor: National Eye Institute - NEI
Project Title: Role of Insulin-like growth factor binding proteins in the pathogenesis of herpes stromal keratitis.

Department of Pediatrics

Principal Investigator: Elizabeth Ann Secord
Award Period: 8/1/2020 to 11/30/2020
Anticipated Total: \$125,992
Sponsor: Fred Hutchinson Cancer Research Center
Project Title: COVID-19 Prevention Network (CoVPN) Site Preparation

Department of Pharmacology

Principal Investigator: Kamiar Moin
Award Period: 8/13/2020 to 6/30/2025
Anticipated Total: \$841,824
Sponsor: National Institutes of Health - NIH
Project Title: A stable path for a core based scientist to advance imaging and cytometry in basic and preclinical research at the Karmanos Cancer Institute

Principal Investigator: Joongkyu Park
Award Period: 8/1/2020 to 6/30/2022
Anticipated Total: \$423,500
Sponsor: National Institutes of Health - NIH
Project Title: Cell-type-specific and high-resolution profiling of postsynaptic proteomes altered in Alzheimer's disease model mice

SCHOOL OF SOCIAL WORK

School of Social Work Dean's Office

Principal Investigator: Sheryl Marie Pimlott-Kubiak
Award Period: 9/28/2020 to 9/30/2023
Anticipated Total: \$150,000
Sponsor: Washtenaw County Sheriff's Office
Project Title: Bureau of Justice Assistance Project Evaluation - Washtenaw County

Principal Investigator: Poco Donna Kernsmith
Award Period: 9/30/2020 to 9/29/2025
Anticipated Total: \$375,000
Sponsor: Centers for Disease Control and Prevention - CDC
Project Title: Creating Protective Environments through School Policy Development

Principal Investigator: Bradley R. Ray
Award Period: 8/1/2020 to 9/30/2020
Anticipated Total: \$400,000
Sponsor: State of Michigan Dept. of Health & Human Services - MDHHS
Project Title: Treatment Ecosystems in Justice Settings -MI Opioid Data to Action