

# THE RESEARCH REVIEW

*School of Medicine Quarterly Newsletter*



IN THIS ISSUE

**NEW NIH AWARDS:  
APRIL-JUNE 2023**

**OTHER NEW AWARDS:  
APRIL-JUNE 2023**

**NEW IN RESEARCH**

## NEW NIH AWARDS

### **Exploration of the immunosuppressive function of RBMS3/PRRX1 axis in TNBC**

**PI:** *Dr. Guojun Wu - Department of Oncology*

Award Number: 1R21CA273771-01

In this proposal, we will employ complementary molecular, cellular, genetics, and state-of-the-arts next-generation sequencing techniques, as well as various mouse models, to investigate the function of RBMS3/PRRX1 axis in regulating immunosuppressive effect and response to immunotherapy for TNBC. The results of this study will not only provide insight into the mechanism of TNBC progression, but also lay the foundation for establishing the RBMS3/PRRX1 axis as a therapeutic target for TNBC treatment.



### **Michigan SIREN Collaborative**

**PI:** *Dr. Brian O'Neil - Department of Emergency Med*

Award Number: 5U24NS100680-05

The knowledge gained from the reliable research produced by the Michigan SIREN Collaborative (MI-SIREN) will guide the care of acute and critical clinical conditions. MI-SIREN allows application of this knowledge to a more diverse, enriched population by recruiting under-resourced subjects. MI-SIREN will perform pragmatic therapeutic trials targeted towards conditions causing significant morbidity and mortality.

### **Clinical Translation of Nuclear Export Inhibitor in Metastatic Pancreatic Cancer**

**PI:** *Dr. Asfar Azmi - Department of Oncology*

Award Number: 5R37CA215427-04

Mutant KRAS protein drives several cancer related pathways and remains a highly sought after target. We have discovered that targeting nuclear transporter XPO1 by specific inhibitors of nuclear export drugs can synergize with KRAS targeted drugs. We will perform critical pre-clinical analysis of this synergy to bring forward a novel and effective combination therapy targeting the KRAS and nuclear protein transport axis in oncogenic RAS driven tumors.





## Impact of benzene-induced MIA on fetal T cell development

PI: Dr. Gil Mor - Department of OB/GYN

Award Number: 1R01HD111146-01 1

Exposure to volatile organic compounds (VOCs) is an important determinant of maternal-fetal health, with implications for preterm birth and other adverse health outcomes. VOCs contaminate shallow soils and groundwater of post-industrial cities at Superfund, residential, commercial, and industrial properties, leading to exposures via vapor intrusion. The outcome of this study will help to understand the impact of VOCs on the fetal immune development and the susceptibility to respiratory viral infections in children.

## A novel CREBH-derived hepatokine regulates triglyceride metabolism

PI: Dr. Kezhong Zhang - Department of CMMG

Award Number: 2R01DK090313-11

Hypertriglyceridemia is a major metabolic disorder that frequently precedes or co-exists with metabolic and cardiovascular diseases. This project will identify a stress-induced secreted protein factor, named CREBH-C, which can boost triglyceride metabolism and thus mitigate hypertriglyceridemia and the associated metabolic disorders. Delineating the molecular mechanism and functional significance of this novel protein factor will have a major impact in the prevention and treatment of human metabolic and cardiovascular diseases.



## NEW IN RESEARCH NEWS

### Notice of Fiscal Policies in Effect for FY 2023

This Notice provides guidance about the NIH Fiscal Operations for Fiscal Year 2023 and implements the Consolidated Appropriations Act, 2023 (Public Law 117-328), signed into law on December 29, 2022.

### Sponsored Program Administration Proposal Submission Deadline Policy Effective 1/9/23

All proposals in final form, including all necessary components/documents and necessary approvals, should be submitted via Cayuse to SPA at least three (3) full business days prior to the funding agency's submission deadline to receive comprehensive and proper review. For proposals containing terms and conditions binding upon award, as much lead time as possible should be provided with a minimum of an additional two (2) business days required to ensure proper review.

For more info on NIH updates and things relevant to your research check out the [Research Administration Services \(RAS\) blog here](#).

## SOM RESEARCH FACTS\*

The SoM award total for 2022 was \$189,425,647 and for 2023 is \$48,819,635. The percentage of awards funded for 2022 was approximately 73% of the proposals submitted and for 2023 approximately 48% of proposals submitted thus far.

We also compared the number of proposals submitted and the number of awards received thru May 2022 to this year, see below for the figures.

### Proposals

2022 \$294,822,611/394 submitted  
2023 \$278,839,979/316 submitted

### Awards

\$92,894,555/265 awarded  
\$48,819,635/153 awarded

\*Per OVPR data

## OTHER NEW AWARDS

### **Ryan White Part A & A-Minority AIDS Initiative FY2023**

PI: *Dr. Lauren Touleyrou & Gretchen Newman - Department of Internal Medicine*

### **Ryan White Part A & A-Minority AIDS Initiative FY2023**

PI: *Dr. Elizabeth Secord - Department of Pediatrics*

### **MI AIM**

PI: *Dr. Robert Sokol - Department of Physiology*

### **Testing the Effect of Common Environmental Toxicants on Neurodevelopment and Leukemic Progression**

PI: *Dr. Ryan Thummel - Department of Ophthalmology, Visual & Anatomical Science*

### **Delineating the Roles of Tinagl1 in Immune Checkpoint Inhibitor Therapy for Triple-negative Breast Cancer**

PI: *Dr. Minhong Shen - Department of Oncology*

### **Emergency Department Opioid Use Disorder Treatment Program**

PI: *Dr. Erik Olsen - Department of Emergency Medicine*