

# **2023 New Investigator Operating Grant Recipients**

# **HEALTH - BASIC BIOMEDICAL**

# Name: Dr. Aleeza Gerstein

Institution: University of Manitoba, Faculty of Science, Department of Microbiology
Funding Pillar: Basic Biomedical
Funding Amount: \$65,000 per year for two years
Funded by: Research Manitoba
Project Title: A multi-omics characterization of recurrent vaginal yeast infections

"There is a global need for increased research and funding for conditions that affect women. This support from Research Manitoba comes at a critical time and means we can continue building a local research program ("THRIVE yeast", https://mthrive.ca/) to better understand the biological basis of recurrent yeast infections."

# Name: Dr. Robert Beattie

**Institution:** University of Manitoba, Rady Faculty of Health Sciences, Department of Biochemistry and Medical Genetics (Medicine)

Funding Pillar: Basic Biomedical
Funding Amount: \$65,000 per year for two years
Funded by: Research Manitoba
Project Title: Dissecting the Contribution of Copy Number Variants in Brain Development and Disease at Single Cell Resolution

"The Research Manitoba New Investigator Award is a great opportunity for my research program and career. With this support, we can access advanced resources, collaborate with experts, and develop state-of-the-art transgenic mouse lines for medical research. It will also accelerate our innovative research by supporting highly qualified researchers in my lab. Our focus is on understanding a critical region of the human genome found mutated in many patients with autism spectrum disorder and schizophrenia, as well as the impact of environmental factors on brain development. Our pilot data has shown exciting cell-specific molecular differences in the brain, and we aim to develop a platform to study copy number variation disorders at single-cell resolution. My lab is the first in Canada to leverage Mosaic Analysis with Double Markers (MADM) technology for this purpose, and I'm excited to bring these genetic advancements to the people of Manitoba. The funds will help establish a translational approach to studying neuropsychiatric diseases in rodents, with the eventual goal of developing novel patient-specific therapeutics. I'm grateful for this funding opportunity and excited for the potential it has for fast-tracking medical breakthroughs in the field of neural developmental disorders."

# **HEALTH - SOCIAL POPULATION HEALTH**

# Name: Dr. Brett Houston

Institution: University of Manitoba, Rady Faculty of Health Sciences, Department of Internal Medicine (Medicine)
 Funding Pillar: Social Population Health
 Funding Amount: \$63,758 per year for two years
 Funded by: Research Manitoba
 Project Title: Evaluation of tranexamic acid among outpatients with myelodysplastic syndrome and acute myeloid leukemia: a multicentre pilot trial

# Name: Dr. Elsie Duff

Institution: University of Manitoba, Rady Faculty of Health Sciences, College of Nursing
Funding Pillar: Social Population Health
Funding Amount: \$65,000 per year for two years
Funded by: Research Manitoba
Project Title: Impact of Post-COVID-19 Condition on Frontline Healthcare Workers in Manitoba

"I am grateful for the Research Manitoba award that will help our team understand the impacts of the COVID-19 pandemic on the health of Manitoban healthcare workers. The COVID-19 pandemic deeply (and possibly irrevocably) changed our experience of what it is to be a healthcare worker. Through our research we will explore the health, behavioural, economic, and professional impacts of post-COVID conditions in Manitoban healthcare workers."

# **SOCIAL SCIENCES & HUMANITIES**

#### Name: Dr. Kim Mitchell

Institution: University of Manitoba, Rady Faculty of Health Sciences, College of Nursing
 Funding Pillar: Social Sciences & Humanities
 Funding Amount: \$20,000 per year for two years
 Funded by: Research Manitoba
 Project Title: Can Literacy and Language Screening Predict Academic Performance? Using Simulated Learning Activities to Assess Medical Language Learning

"Receiving Research Manitoba Funding is potentially a career turning moment for me as a new investigator. Nursing education research is vital but underfunded as a research focus. Knowledge gaps in how to educate and retain students in a complex practice-focused discipline impacts the supply of strong nursing practitioners to the health care system which is presently in crisis due to shortages of nurses exacerbated by the COVID-19 pandemic. Receiving funding could be perceived as an endorsement of the importance of our work which sits at the intersection of social science and health."

#### Name: Dr. Lindsay Larios

Institution: University of Manitoba, Faculty of Social Work
Funding Pillar: Social Sciences & Humanities
Funding Amount: \$19,985.67 in year one, and \$18,675.36 in year two
Funded by: Research Manitoba
Project Title: Abortion in Manitoba: An intersectional analysis of access to care

"The project will address a critical knowledge gap concerning the experience of access to abortion, provide insight into the healthcare system and community sector supports in Manitoba and the kinds of challenges pregnant people face in urban, rural, northern prairie communities in Canada. I'm honoured for the opportunity to do this important work and deepen my knowledge of this critical issue in healthcare in Manitoba."

# Name: Dr. Stephanie Chesser

Institution: University of Manitoba, Faculty of Kinesiology and Recreation Management
 Funding Pillar: Social Sciences & Humanities
 Funding Amount: \$20,000 per year for two years
 Funded by: Research Manitoba
 Project Title: Examining the therapeutic recreation assessment of residents within Manitoba personal care homes

"Research Manitoba funding will provide me with invaluable support as an early career investigator seeking to forge a new path for my research. By providing the resources necessary to employ student research assistants, it will also directly contribute to the training of the next generation of Manitoba-based researchers."

# Name: Dr. Warren Clarke

Institution: University of Manitoba, Faculty of Arts, Department of Anthropology
 Funding Pillar: Social Sciences & Humanities
 Funding Amount: \$19,998 in year 1 and \$19,938 in year two
 Funded by: Research Manitoba
 Project Title: Addressing Anti-Blackness in post-secondary spaces: Decolonizing white settler learning to create educational pathways for Afro-Caribbean Black students

"The award will extend my ability to uncover the multi-faceted ways of Black experiences in Manitoba. As a Black scholar whose work is public-facing, I take pride in working towards educating and supporting Manitoba's Black youth's education and social development."

# **NATURAL SCIENCES & ENGINEERING**

# Name: Dr. Amine Mezghani

Institution: University of Manitoba, Faculty of Engineering, Department of Electrical and Computer Engineering
 Funding Amount: \$25,000 for per year for two years
 Funded by: Research Manitoba
 Project Title: Enabling Digital Equity via Intelligent Radio Infrastructure

"Receiving this award offers me an opportunity to delve into a fresh perspective on connectivity for rural areas, with a specific focus on sustainability and energy efficiency. I sincerely appreciate this recognition, and it motivates me to persistently strive for making a significant contribution in my research field."

# Name: Dr. Jessica Rodgers

Institution: University of Manitoba, Faculty of Science, Department of Physics and Astronomy
Funding Pillar: Natural Science & Engineering
Funding Amount: \$25,000 for per year for two years
Funded by: Research Manitoba
Project Title: Development of automated tools for the enhancement and aided interpretation of gynecologic brachytherapy ultrasound images

"As my first Principal Investigator grant, this award is extremely meaningful for me and will truly serve to kickstart my research into improving treatments for gynecologic cancers, allowing me to better support a student to work toward this aim and provide them with more training opportunities, as well as provide a stepping-stone to future national funding opportunities."

# Name: Dr. Evan McDonough

Institution: University of Winnipeg, Faculty of Science, Department of Physics
Funding Pillar: Natural Science & Engineering
Funding Amount: \$25,000 for per year for two years
Funded by: Research Manitoba
Project Title: Nonthermal Production of Dark Matter In Cosmic Inflation with Multiple Fields

"This grant will launch the McDonough Astro-Particle Physics Group at the University of Winnipeg, which will investigate the primordial origins of the mysterious dark matter component in our universe. This comes at a decisive moment in my career as a theoretical physicist, enabling me to capitalize on the talent and skill available here in the province of Manitoba and build on the excellence of institutions such as the Winnipeg Institute for Theoretical Physics."

#### Name: Dr. Kirstin Brink

Institution: University of Manitoba, Faculty of Environment, Earth, and Resources, Department of Geological Sciences
 Funding Pillar: Natural Science & Engineering
 Funding Amount: \$25,000 for per year for two years
 Funded by: Research Manitoba
 Project Title: Multifaceted approach to examining trace element uptake in biomineralized tissues

"This award will allow me to expand my research program and understand how otoliths, the ear stones of fish, mineralize and grow in different environments. I am excited to use this award to collaborate with Manitobans across the province and understand changes in ecosystems over time."