Research Manitoba and our partners are pleased to announce the recipients for the 2021 Grants & Awards Competition:

**Master’s Studentship Competition**
Partnered with the CancerCare Manitoba Foundation, Children’s Hospital Research Institute of Manitoba, George & Fay Yee Centre for Healthcare Innovation, Health Sciences Centre Foundation, Manitoba Lung Association, and University of Manitoba WM Ross Scholarship

**Social Sciences and Humanities**
All Studentships are valued at $12,000

*Julie Brodeur*, Faculty of Kinesiology and Recreation Management, University of Manitoba, ‘Obsessive passion in youth sport parents: Relationships with need satisfaction and abuse of sport officials’

*Christina Parsons*, Faculty of Kinesiology and Recreation Management, University of Manitoba, ‘No fun, no games - Recreation and Accessibility through Perspectives of Poverty’

*Katharine Zinger*, Department of Psychology, Faculty of Arts, University of Manitoba, ‘Awareness and Analysis: How Morphological Processes Predict Growth in Early Reading Comprehension’

**Natural Sciences and Engineering**
All Studentships are valued at $12,000

*Nanxi Huang*, Department of Biological Sciences, Faculty of Science, University of Manitoba, ‘The effect of environmental clutter on the use of metric information from landmark arrays by pinyon jays’

*Quintin Litke*, Department of Biosystems Engineering, Faculty of Engineering, University of Manitoba, ‘Development of Smart and Biodegradable, Multilayered Food Packaging’
Tiffany Penner, Department of Microbiology, Faculty of Science, University of Manitoba, ‘Biochemical and functional characterization of Legionella pneumophila core effectors, Lpg1356, Lpg2832 and Lpg3000’

Jillian Reimer, Department of Environment and Geography, Faculty of Environment, Earth, and Resources, University of Manitoba, ‘Macroalgae distribution in varying glacial fjords as an indicator of light and nutrient availability (Disko Bay, Greenland)’

Volodymyr Shyianov, Department of Electrical and Computer Engineering, Faculty of Engineering, University of Manitoba, ‘Massive Unsourced Wireless Access for Next-Generation Communication Systems’

Adam Snyder, Department of Geological Sciences, Faculty of Environment, Earth, and Resources, University of Manitoba, ‘The Jaw Mechanics of Dimetrodon (Synapsida: Sphenacodontidae): Using Finite Element Analysis’

Bamelak Tadele, Department of Electrical and Computer Engineering, Faculty of Engineering, University of Manitoba, ‘Investigating Age and Quality of Information in Internet of Things through massive MIMO’

Emma Traynor, MSc in Bioscience, Technology and Public Policy, Faculty of Graduate Studies, The University of Winnipeg, ‘Exploring Carbon dioxide responses within the Salmonidae family’

Health
All Studentships are valued at $12,000 unless otherwise specified below

Oluwaseun Ajibola, Department of Immunology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Cellular mechanisms that drive HIV-1 latency in T-cells’

Mehrafarin Ashiri, Department of Biochemistry and Medical Genetics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Using an engineered human hexosaminidase as an enzyme replacement therapy (ERT) into treat a mouse model of Tay-Sachs Disease’
Funded by the Children’s Hospital Research Institute of Manitoba ($17,850)

Rilwan Azeez, Department of Immunology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Prevalence and Persistence of SARS-CoV-2 Antibodies among Families in the Canadian CHILD Cohort Study’
Funded in partnership with Research Manitoba ($12,000) and the Children’s Hospital Research Institute of Manitoba ($5,850)

Kevin Balkaran, Department of Community Health Sciences (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Is home care safe? Evaluating the effectiveness of current violence policies in Manitoba home care settings’
Jocelyn Elias, College of Nursing, Rady Faculty of Health Sciences, University of Manitoba, ‘A Leadership Development Program for Long-Term Care Leaders: A Qualitative Exploratory Study’

Lucas Evangelista de Lima Terceiro, Department of Pathology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Delineating the role of prolactin-inducible protein (PIP), a breast cancer biomarker, in promoting lung metastasis.’ Funded by the CancerCare Manitoba Foundation ($17,850)

Daryl Fung, Department of Computer Science, Rady Faculty of Health Sciences, University of Manitoba, ‘Develop Innovative Deep Learning Techniques to Improve the Performance of Early Breast Cancer Detection Using Mammography in Manitoba’ Funded by the CancerCare Manitoba Foundation ($17,850)

Nyambura Kahia, Department of Immunology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Defining CD8 T cell exhaustion development during chronic infection using single-cell RNA sequencing analysis’ Funded by the Health Sciences Centre Foundation ($12,000)

Katherine Li, Department of Medical Microbiology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Tracking the Genetic Diversity and Antigenic Variations of SARS-CoV-2 During the COVID-19 Pandemic’

Stacey Line, Department of Pharmacology and Therapeutics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Development and validation of a dynamic, microfluidic, blood brain barrier-brain tumor co-culture model for examining alterations in microvessel permeability’ Funded by the CancerCare Manitoba Foundation ($17,850)

Saeid Maghsoudi, Department of Physiology and Pathophysiology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Inhibition of Adenylyl Cyclase by Cysteine Nitrosylation in Hypoxic Pulmonary Hypertension Confirming a Target For Therapeutic Options’ Funded in partnership with Research Manitoba ($6,000) and the Children’s Hospital Research Institute of Manitoba ($11,850)

Jessica Meza Resillas, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba, ‘Brain pericyte calcium signaling during vasomotion and neurovascular coupling’

Olha Myhalatyuk, Department of Pharmacology and Therapeutics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Role of microglial NMDA receptors in synaptic plasticity’

Braydon Nault, Master of Science (Environmental and Life Sciences), Faculty of Science, Brandon University, ‘Systematic analysis of the cell secretome to decipher the mechanisms of miRNA regulating tumor microenvironment’
Nicole Neudorf, Department of Biochemistry and Medical Genetics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Evaluating the impact reduced SKP2 expression has on chromosome instability in human epithelial cells’
Funded by the CancerCare Manitoba Foundation ($17,850)


Mir Sohayeb Rabbi, Faculty of Engineering, University of Manitoba, ‘Mechanisms of Feed-Forward inhibition in the Prefrontal Cortex’

Grace Seo, Department of Medical Microbiology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Whole genome sequencing of Canadian SARS-CoV-2 strains and its application to help inform the Canadian public health response’

Madhumita Suresh, College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba, ‘Vessel-On-A-Chip Model: Nanoparticle Trafficking in Blood Vessels’
Funded in partnership with Research Manitoba ($6,000) and the Children’s Hospital Research Institute of Manitoba ($11,850)

Olivia Tefft, Faculty of Kinesiology and Recreation Management, University of Manitoba, ‘New athletic therapy graduates perspectives and beliefs on chronic pain and their relevant training experiences’

Michelle Wuzinski, Department of Medical Microbiology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Rapid Mycobacterium tuberculosis detection directly from patient sputa and prediction of antimicrobial resistance using whole genome sequencing’
Funded by the Lung Association, Manitoba ($12,000)

**PhD in Health Research Studentship Competition**
Partnered with the CancerCare Manitoba Foundation, Children’s Hospital Research Institute of Manitoba, and George & Fay Yee Centre for Healthcare Innovation

Sharon Chou, Department of Psychology, Faculty of Arts, University of Manitoba, ‘Virtual group-based cognitive processing therapy for the treatment of posttraumatic stress symptoms in postpartum women: Development and Mixed Methods Pilot Evaluation’
Funded by the George & Fay Yee Centre for Healthcare Innovation ($35,000)

Ramandeep Kaur, Department of Physiology and Pathophysiology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Potential role of hydroxyeicosatetraenoic acids in modulating human airway smooth muscle cells physiology in asthma’
Funded by the Children’s Hospital Research Institute of Manitoba ($17,850)
**Andrea Klippenstein**, College of Nursing, Rady Faculty of Health Sciences, University of Manitoba, ‘Empowering Sibling Voices in Pediatric Hematopoietic Stem Cell Donation’
Funded by the Children’s Hospital Research Institute of Manitoba ($17,850)

**Qian Liu**, Department of Biochemistry and Medical Genetics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Interpretable and extendable deep learning models for identifying prognostic radiogenomic biomarkers from multimodal imaging and genomic data’
Funded by the CancerCare Manitoba Foundation ($17,850)

**Emma Martell**, Department of Human Anatomy and Cell Science (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Characterizing the Role of Metabolic and Cellular Plasticity in Chemoradiotherapy Response and Tumor Recurrence in Patient-derived Glioblastoma’
Funded by the CancerCare Manitoba Foundation ($17,850)

**Darrien Morton**, Department of Community Health Sciences (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘A critical policy analysis of Manitoba’s Child Welfare System: How do care pathways impact the health trajectories of First Nations and Métis children and youth?’
Funded by the Children’s Hospital Research Institute of Manitoba ($17,850)

**Kailee Rutherford**, Department of Biochemistry and Medical Genetics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Determining the Impact of Ubiquitylation and Deubiquitylation on Chromosome Instability and Cancer Pathogenesis’
Funded by the CancerCare Manitoba Foundation ($17,850)

**Health Research Postdoctoral Fellowship Competition**
Partnered with the CancerCare Manitoba Foundation, Children’s Hospital Research Institute of Manitoba, and George & Fay Yee Centre for Healthcare Innovation

**Dr. Charlie Rioux**, Department of Psychology, Faculty of Arts, University of Manitoba, ‘Effect of an online multimodal maternal intervention on children’s disruptive behaviour disorders: The moderating role of temperament and physiological regulation asthma’
Funded by the Children’s Hospital Research Institute of Manitoba ($44,100)

**Dr. Tamiris Souza**, Faculty of Kinesiology and Recreation Management, University of Manitoba, ‘Rejuvenating immune function using extracellular vesicles to reverse cognitive decline’
Funded by the Children’s Hospital Research Institute of Manitoba ($44,100)
New Investigator Competition

Dr. Karen Alley, Department of Environment and Geography, Faculty of Environment, Earth, and Resources, University of Manitoba, ‘Using Remote Sensing to Determine the Drivers of Change on Sydkap Glacier, Southern Ellesmere Island’
$46,200

Dr. Mandy Archibald, College of Nursing, Rady Faculty of Health Sciences, University of Manitoba, ‘A Living Lab for Pediatric Development and Rehabilitation Research: Innovating on Integrated Knowledge Translation for Family-Centered Care’
$130,000

Dr. Matthew Bakker, Department of Microbiology, Faculty of Science, University of Manitoba, ‘Developing a novel biosensor for trichothecene mycotoxins’
$50,000

Dr. Britt Drögemöller, Department of Biochemistry and Medical Genetics (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Investigating the relationship between drug-induced changes in gene expression in the inner ear and hearing loss caused by chemotherapeutic treatments’
$130,000

Dr. Xiaopeng Gao, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, ‘Exploring mechanisms controlling spring-thaw nitrous oxide emissions from croplands in Manitoba’
$50,000

Dr. Benjamin Lindsey, Department of Human Anatomy and Cell Science (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Uncovering the properties of neural stem cells and the micro-environment in promoting successful brain repair’
$129,750

Dr. Christopher Pascoe, Department of Physiology and Pathophysiology (Medicine), Rady Faculty of Health Sciences, University of Manitoba, ‘Maternal Diabetes and Smoking As Early Life Risk Factors For Chronic Obstructive Pulmonary Disease’
$130,000

Dr. Patricia Thille, College of Rehabilitation Sciences, Rady Faculty of Health Sciences, University of Manitoba, ‘Storying physiotherapy: Exploring fat stigma and clinical care’
$39,955
Thank you to Our Partners!