



Manitoba COVID-19 Research Fund

Interim Report



Manitoba COVID-19 Research Fund Report

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Key Milestones



March 20, 2020 – Partnered on three Canadian Institutes of Health Research (CIHR) Operating Grants: Canadian 2019 Novel Coronavirus (COVID-19) Rapid Response Grants (these were included in people surveyed)



April 8, 2020 – Announced Manitoba COVID-19 Research Fund – Rapid Response Grant, COVID-19 Innovation Proof-of-Concept (IPoC), Clinical Trial (CT) support

April 14, 2020 – Rapid Response Grant (RRG) competition opens

April 20, 2020 – COVID-19 IPOC competition opens

May 19, 2020 – RRG competition closes and external, scientific reviews happen

June 22, 2020 – RRG results announced and research begins



August 11, 2020 – First two COVID-19 IPoC grants announced

September 4, 2020 – RRGs and additional CT funding announced

October 7, 2020 – COVID-19 IPoC competition closes



October 2020 – February 2021 – Four COVID-19 IPoC grants approved; Two additional COVID-19 research grants approved

April 2021 – Impact survey sent to grantees who received awards between March and September 2020

April 8, 2020

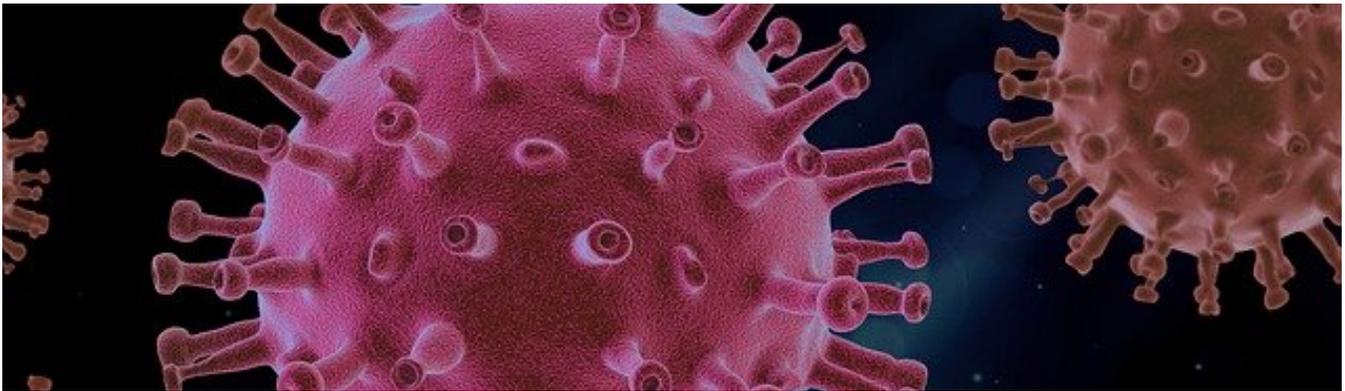
Announcement of Manitoba COVID-19 Fund



New Fund to Advance Strides Toward Vaccines and Treatments for Coronavirus

\$5-million COVID-19 research fund through Research Manitoba was announced by Health, Seniors and Active Living Minister Cameron Friesen.

Introduction



Manitoba researchers are known to punch above their weight and the leading-edge research they are doing to combat COVID-19 is no exception.

The \$4.4M distributed through Research Manitoba to over 19 approved research projects has made a significant impact both here in Manitoba and in the global fight against this pandemic.

Through that \$4.4M investment, over \$8.5M in additional partnered funding has been brought back into the province to support the projects.

These funds were allocated more quickly than ever before, maintained the rigorous high standards that Research Manitoba adheres to, and proactively addressed the urgency that COVID-19 required. This expedited process allowed the researchers to jump into their projects, to pay for equipment and expertise in the form of hiring students and experienced technicians that they needed, and to immediately scale up their projects to level that benefits the entire province, country, and global community.

Our researchers continue to make inroads in areas critical to us making it through this pandemic safely and better equipped to handle future crisis.



Mental Health



Our Researchers are Helping Manitobans by focusing on:

- Mental health effects of living through a pandemic and what supports are needed.
- Access to medication and health issues in the general population and those with mental health disorders.
- Looking at different member groups of our society (e.g., expectant mothers, vulnerable populations), what supports are available to them, and how they cope.
- Identifying vulnerable populations and geographic variations within the city, which will help to target needed resources.
- Studying public health for Manitoba's unique population.
- How to better support healthcare providers through a pandemic.
- Accelerated digital healthcare options.

Physical Health



Helping Manitobans Stay Healthy through Research:

- Reducing mortality and/or serious effects of the virus
- Research into vaccine development
- Identifying what works (e.g., full-dose blood thinners decreased the need for life support and improved outcome in (moderately ill) hospitalized COVID-19 patients)
- Identifying what doesn't (e.g., Hydroxychloroquine not a successful treatment of COVID-19)
- Developing better PPE
- Improving screening tests to identify virus sooner, and using to detect other SARS illnesses
- Understanding viral variants and developing effective measures to stop them
- Detecting patterns of virus spread, identifying vulnerable populations and how they are affected
- Cancer patients and the impact of COVID-19 (e.g., screening, wait times, time to diagnosis, survival rates)

Societal Impacts



Manitoba Researchers are Studying Societal Impacts of the Pandemic:

- Effects of virtual healthcare - how to best use it, how to reach those who need it, how to facilitate access to it, how it has been taken up/used, and how to improve this
- Social impacts of pandemic effects - how factors such as social distancing measures, school and business closures, job loss, and economic changes are impacting society
- How healthcare leaders and policy makers are responding to the pandemic and learning and developing possible preventions and intervention models, and how Manitoba can be better prepared for future events

Global Impacts

Manitoba Researchers are also having a Global Impact:

- Inroads have been recognized at an international level
- Increased understanding of potential barriers or interruptions to access for care
- Contributing to increased mental health supports around the world
- Help preparing for future spread of this and other contagions
- Identify groups and communities struggling with effects of COVID-19, and working towards enabling rapid interventions
- Has promoted international collaboration, demonstrating the talent that Manitoba has to offer to this global effort



Supporting Local Talent and Growth

- Over 30 post-secondary students and Postdoctoral Fellows have been hired to work on these research projects, and more hires are planned
- Junior staff are gaining invaluable experience and skills by working on these cutting-edge projects and new technologies
- Researchers' collaboration with local experts across the spectrum has increased the progress being made and is also fostering a supportive working community within and outside of the province
- The work being done now is setting the stage for future training and growth opportunities for our local institutions, partner organizations (e.g., hospitals), and highly qualified personnel



Knowledge Translation



33+ Publications

26 Media Features

10+ Info Sessions/Knowledge Sharing

2+ Conferences

Our Partners in COVID-19 Research



Our partners provide funds to support this essential work in Manitoba

- Canadian Institutes of Health Research (CIHR)
- CancerCare Manitoba Foundation (CCMF)
- Children's Hospital Research Institute of Manitoba (CHRIM)
- Victoria General Hospital Foundation (VGHF)

News and Media Features

Date	Media	Link
April 8, 2020	TV	https://globalnews.ca/news/6793498/health-minister-to-update-manitobans-on-coronavirus-research-measures-wednesday/
April 8, 2020	Newspaper (WFP)	https://www.winnipegfreepress.com/special/coronavirus/province-injects-millions-into-covid-19-research-569489222.html
April 8, 2020	Online Story	https://www.chrisd.ca/2020/04/08/manitoba-covid-19-research-fund-clinical-trial/
April 13, 2020	Online Story	https://mailchi.mp/academica/8golh8o8x6?e=bca5106184
May 9, 2020	TV	https://www.cbc.ca/news/canada/manitoba/manitoba-scientists-researchers-covid-19-1.5558392?fbclid=IwAR0_VOkJaOu_6Xg-1RazFVHT4I4mVvKxlcRd-wYIOfWuqMslt-IULJtkjTc
May 12, 2020	CTV News Winnipeg	https://winnipeg.ctvnews.ca/manitoba-researchers-launch-global-clinical-trial-that-could-improve-survival-of-covid-19-1.4936226
May 13, 2020	Radio Interview	https://omny.fm/shows/cjob-afternoon/sports-research?t=19m38s
June 3, 2020	Online Story (UofM)	https://news.umanitoba.ca/hydroxychloroquine-not-effective-in-preventing-the-development-of-covid-19-when-used-as-post-exposure-prophylaxis/
June 25, 2020	Online Story (UofM)	https://news.umanitoba.ca/new-funding-for-um-covid-19-research/
July 4, 2020	Online Story	https://cihr-irsc.gc.ca/e/52199.html
November 13, 2020	Online Story (CIHR)	https://cihr-irsc.gc.ca/e/52199.html
December 14, 2020	Winnipeg Free Press	https://www.winnipegfreepress.com/local/manitoba-team-embeds-research-in-covid-19-care-573384482.html
December 22, 2020	UM Today	https://news.umanitoba.ca/international-trials-of-blood-thinners-in-critically-ill-covid-19-patients-pause-due-to-futility/

News and Media Features

Date	Media	Link
January 22, 2021	Winnipeg Free Press	https://www.winnipegfreepress.com/arts-and-life/life/health/blood-thinners-help-moderate-covid-cases-and-may-reduce-strain-on-icus-trials-show-573643652.html
January 23, 2021	Winnipeg Free Press	https://www.winnipegfreepress.com/special/coronavirus/global-trials-push-blood-thinners-into-covid-19-fight-573648332.html
January 25, 2021	CBC	https://www.cbc.ca/news/canada/manitoba/blood-thinners-covid-19-manitoba-study-1.5887145
January 28, 2021	Online	https://www.medpagetoday.com/infectiousdisease/covid19/90840
January 28, 2021	Online	https://www.attacc.org/presentations
January 29, 2021	Online	https://www.medpagetoday.com/infectiousdisease/covid19/90962
February 1, 2021	External Newsletter	https://youriwk.com/2021/01/29/iwk-health-lab-using-pet-scanner-for-covid-19-research/
February 5, 2021	UM Today	https://news.umanitoba.ca/um-community-adapts-to-face-covid-19-challenges/
February 8, 2021	External Article - The Conversation	https://theconversation.com/breastfeeding-research-improves-lives-and-advances-health-but-faces-conflicts-151820
February 9, 2021	External Article - UM Today	https://news.umanitoba.ca/breastfeeding-research-improves-lives-and-advances-health-but-faces-conflicts/
February 26, 2021	VHGF Blog	https://www.thevicfoundation.ca/stay-connected/news/details/main-blog/2021/02/22/new-manitoba-research-investment-supports-global-fight-against-covid-19
March 1, 2021	UM Today	https://news.umanitoba.ca/hip-to-heparin/
March 30, 2021	CBC Radio	https://www.cbc.ca/listen/live-radio/1-29-information-radio-mb/clip/15834380-with-lockdowns-restrictions-precautionary-measures-ways-people-access

List of Funded Projects

COVID-19 Innovation Proof-of-Concept (IPoC)

Last Name	First Name	Company	Project Title	RM Funded Amount
Bako	Lisa	Cubresa Inc.	Cubresa's Proof-of-Concept NuPET Bio Compatibility Kit for Small-Animal SARS-CoV-2 PET Imaging in a BSL-3 Environment	\$100,000
Pacak	John	Avda Diagnostics Inc.	High-Throughput Rapid Detection of Infectious Diseases such as COVID-19	\$150,000
Rigatto	Claudio	Fusion Group Wellness Institute Chronic Disease Innovation Centre (CDIC)	Can virtual lifestyle programming limit collateral health damage from the COVID-19 pandemic: a pilot study	\$99,892
Miller	Donald	utR Biotech Ltd.	Development and characterization of utRAP technology - a nanoparticle platform for preventing SARS-Cov2 infection in airway and vasculature	\$86,550
Ramjiawan	Bram	PTEX	Copper-Infused Reusable Protective Face Mask for Prevention of SARS-CoV-2 Infections	\$100,000
Ramjiawan	Bram	Intrinsic Analytics Inc.	Evaluation of a Novel Saliva Based Test for Detection of SARS-CoV-2	\$100,000

Other

Last Name	First Name	Project Title	RM Funded Amount	Notes
Zarychanski	Ryan	Clinical Trials	\$1,400,000	Partnered with CancerCare Manitoba Foundation and Victoria General Hospital Foundation CCMBF: \$100,000 VGHF: \$100,000
Hitchon	Carol	Safety and Immunogenicity of SARS-CoV2 vaccines	\$84,105	
Romanescu	Razvan	Mobility and COVID-19 Trends	\$100,000	
Ng	Adolf	An Investigation on Epidemic Logistical Response and Planning: The Case of Novel Coronavirus (Covid-19)	\$258,900	RM supported via CIHR competition
Pickering	Bradley	Development of field-deployable and point-of-need diagnostics for SARS-CoV-2 using CRISPR-based technology	\$270,550	Partnered with CIHR CIHR: \$140,270
Yao	Xiao-Jian	Development of a novel DC-targeting vaccine approach targeting 2019-nCoV spike protein for controlling nCoV infection	\$270,550	Partnered with CIHR CIHR: \$326,578

List of Funded Projects

Rapid Response Grants (RRG)

Last Name	First Name	Project Title	RMB Funded Amount	Notes
Azad	Meghan	Rapid research in the CHILD Cohort to inform Manitoba's response to the COVID-19 pandemic: investigating the prevalence and predictors of SARS-CoV-2 infection, and the health and psychosocial impact of the COVID-19 pandemic on Manitoban families	\$100,000	Partnered with CIHR CIHR: \$1,589,795
Chochinov	Harvey	Death, Dying and Dignity in the time of the COVID-19 Pandemic	\$235,676	
Decker	Kathleen	Evaluating the impact of the response to the COVID-19 pandemic on Manitobans diagnosed with cancer	\$122,154	Partnered with CancerCare Manitoba Foundation CCMBF: \$122,154
Eltonsy	Sherif	The impact of population-level physical distancing during COVID-19 pandemic on health care services in Manitoba: a focus on vulnerable populations	\$150,000	
Haigh	Jody	DEVELOPMENT OF HUMANIZED ACE2 MOUSE MODELS FOR COVID-19 RESEARCH	\$65,500	
Halas	Gayle	Virtual Visits and Management of Primary Care in a Pandemic Environment	\$184,677	
Leong	Christine	Evaluating the impact of COVID-19 public health measures on healthcare utilization, psychotropic drug use, and mortality among individuals living with mental illness: a population-based study using administrative data	\$100,000	
Liu	Song	Potent Renewable Anti-Viral Face Mask	\$200,063	
MacKenzie	Lauren	Manitoba COVID-19 Serology (MaCS) Network	\$448,500	
Nickel	Nathan	A Distinction-Based Study on Equity in COVID-19 Testing among Manitoba First Nations, Metis and Inuit	\$99,435	
Reynolds	Kristin	Dissemination and Evaluation of a Cognitive Behavioural Therapy E-Health and M-Health Intervention for Anxiety in Pregnancy and Postpartum During COVID-19	\$104,945	
Roos	Leslie	The PACT Program: Parenting Apart while Coming Together	\$198,232	Partnered with CHRIM CHRIM: \$50,000
Torabi	Mahmoud	Projection of COVID-19 Pandemic and Possible Interventions in Manitoba	\$68,500	
Udod	Sonia	The Healthcare Leader's Role during the COVID-19 Pandemic: Integrating Crisis Leadership and Organizational Resilience	\$95,876	

19 Projects Funded

17 Survey Responses

**\$8.5M
ROI**

This is an interim report, more impacts and data will follow as the projects progress and findings are shared.

Note: some of the recipients of the Manitoba COVID-19 Research Fund were not included in the survey as their grant started in late 2020 and early 2021.

MORE DATA COMING SOON



Vaccine Research



Virtual Visits



Pregnancy & Pandemic



Mental Health Issues



Testing & Imaging

About Research Manitoba

Research Manitoba is a provincial funding agency, which strives to champion the Manitoba research community, supports early career researchers and graduate students in Manitoba and coordinates funding of research in health, natural and social sciences, engineering, and the humanities. Our organization also fosters partnerships to advance and strengthen Manitoba's resources, assets, and innovations.

Research Manitoba's goal is to become the most improved province in research.

Connect with Us

Ms. Karen Dunlop is Research Manitoba's Chief Executive Officer.

If you'd like to learn more about our organization or to connect with Manitoba's COVID-19 researchers please email Karen at:

karen.dunlop@researchmb.ca



The provincial efforts to support research into COVID-19 and other important areas will continue. Research Manitoba is leading an initiative called RITHIM that will streamline the ethics and privacy review process throughout the province. This will strengthen Manitoba's position as not only a great place to conduct research, but also as a leader in how research can move from theory to practical application that benefits each and every Manitoban and those beyond our borders.





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