

RECOMMENDATIONS

- ❖ **Recommendation 1:** That the Federal Government close the current \$1 billion gap in research funding to ensure that all sectors of society have access to the talent, ideas, and knowledge they need to thrive.
- ❖ **Recommendation 2:** Expand the Canada Research Chairs program by an additional 1,000 chairs, as outlined in the Liberal Party's 2021 election platform and in the Minister of Industry's Mandate Letter. Compensate for the impact of inflation by increasing the funding levels for the two CRC tiers by 25%.
- ❖ **Recommendation 3:** Increase granting agency funding by 10 per cent per year for each of the next 5 years, and 5 per cent per year for each of the subsequent 5 years and increase the current award amounts of the Canada Graduate Scholarship (CGS) Program.
- ❖ **Recommendation 4:** Immediately invest and/or shift resources to address the backlogs in approving the visa applications of international students.
- ❖ **Recommendation 5:** The Federal Government support the PRAIRIE Hub for Pandemic Preparedness, which is an alliance of the Universities of Alberta, Calgary, Manitoba, and Saskatchewan to accelerate development and commercialization of vaccine, antiviral and diagnostic countermeasures for potential pandemic pathogens.
- ❖ **Recommendation 6:** Ensure the next intake of the Canadian Agricultural Partnership (CAP) include allocated funds for research and training infrastructure that is essential for enabling innovative research partnerships and driving value-added agricultural innovation in Western Canada.
- ❖ **Recommendation 7:** Recognize the critical healthcare human resource and training needs facing Canada and create a fund to support medical research and training infrastructure at post-secondary institutions.
- ❖ **Recommendation 8:** Enhance opportunities for Indigenous scholarship through funding greater access to academic appointments, increased funding for Indigenous research and research chairs, and provide funding that supports the creation of Indigenous spaces for the benefit and learning of all our academic communities.
- ❖ **Recommendation 9:** Additional funding should be made available through the Investing in Canada Infrastructure Program and post-secondary institutions must remain eligible to apply for green infrastructure programs.

INTRODUCTION

The University of Manitoba (UM) recognizes that Canadians are living in uncertain and challenging times. Ongoing economic pressures are accentuating inequities in our society, and we are forced to confront complex problems while still emerging from a pandemic. Despite these challenges, we have an opportunity to build a more just and prosperous path forward.

As Manitoba's research university, UM continues to make important contributions across all sectors of Canadian society. Creating vaccines, finding innovative infrastructure solutions, or making a meaningful impact in important areas such as reconciliation, UM has done and can still do so much more to make our world a better place. We strongly believe that universities are a critical partner in advancing Canadian society and the economy in the years to come.

Timely and vital investments that enable important research and help address current needs are necessary to cultivate these kinds of transformative outcomes. Therefore, UM welcomes the opportunity to provide recommendations to the House of Commons Standing Committee on Finance as part of the 2023 pre-budget consultations.

DIVERSE TALENT, RESEARCH, AND INNOVATION

As a member of the U15, UM supports the recommendation that the Government of Canada close the current \$1 billion gap in research funding to ensure that all sectors of society have access to the talent, ideas, and knowledge they need to thrive. Canada faces increasing international competition for the talent needed to drive high-growth, knowledge-intensive industries; address social, environmental, and economic challenges; and build an equitable, inclusive society. At the same time, Canada is falling behind in supporting the development of highly qualified talented individuals. A comprehensive and robust research environment is essential to the health, prosperity, and security of Canadians and to our efforts to build a creative, inclusive, and vibrant society. However, re-investment is needed in our people, and in the university research environments in which they are trained to meet the demands of all sectors of Canadian society,

We support the recommendations of Universities Canada and U15 to increase research funding and make Canada an attractive destination for international students to study and, hopefully, building a career.

Specifically, per the recommendations of the U15, we must ensure that Canada's outstanding research leaders have the resources they need to provide research experiences for the next generation. UM asked the federal government to expand the Canada Research Chairs program by an additional 1,000 chairs, as outlined in the Liberal Party's 2021 election platform and in the Minister of Industry's Mandate Letter and to compensate for the impact of inflation by increasing the funding levels for the two CRC tiers by 25%.

We must also ensure that the broadest possible range of students can benefit from engagement with research by providing the full spectrum of researchers with the resources to undertake excellent research projects. To accomplish this, Canada must increase granting agency funding by 10 per cent per year for each of the next 5 years, and 5 per cent per year for each of the subsequent 5 years. Additionally, in keeping with the recommendations of the House of Commons Standing Committee on Science and Research, the federal government should increase the current award amounts of the Canada Graduate Scholarship (CGS) Program.

There is a particular need to prioritize increased research funding in the health, STEM and business fields to address the massive health care challenges facing Canada and to ensure we have the talent needed to take advantage of the opportunities presented by a rapidly changing economy.

Finally, of immediate concern are the increasingly long backlogs in approving the visa applications of international students. International students accounted for approximately 21% of UM's population in 2021. Without them, Canada risks losing out on the international talent we have recruited to come to our university and our province.

CANADIAN BIOMEDICAL RESEARCH FUND – PRAIRIE HUB

The COVID-19 pandemic highlighted profound gaps in Canada's biomanufacturing ability to respond to public health crises. These gaps directly contributed to devastating health, social and economic declines in Canada. The proposed PRAIRIE Hub for Pandemic Preparedness is an alliance of the Universities of Alberta (lead), Calgary, Manitoba, and Saskatchewan to accelerate development and commercialization of vaccine, antiviral and diagnostic countermeasures for potential pandemic pathogens. The Hub will focus on the unique perspective of protecting human health through a One Health/Zoonosis lens to help prepare for the next pandemic or infectious outbreak.

In accordance with Canada's Biomanufacturing and Life Science Strategy (BLSS):

- 1) we will develop a strong and coordinated governance structure,
- 2) our PRAIRIE Hub, in synergy with other hubs, will form a strengthened research system with a talented pipeline,
- 3) we will grow businesses and build capacity for infectious disease response, and
- 4) our training programs will ensure this talent in biomanufacturing is maintained in years to come.

The core mission of PRAIRIE hub is to address critical biomanufacturing gaps in vaccines, small molecule therapeutics, and diagnostics advancements, which contributed to shortcomings in the last pandemic. Being globally informed with a domestic focus, the PRAIRIE Hub's vision is to contribute to our national biomanufacturing for pandemic preparedness. The hub will provide a conduit between Canada's untapped academic, industrial, and health resources to enable a faster, and more robust response to future epidemics, that will positively impact Canadians while recognizing health disparities for systemically excluded groups.

INVESTING IN MODERN, SUSTAINABLE INFRASTRUCTURE

Enabling innovative partnerships between the public sector, academia and industry starts with investing in the infrastructure and capacity for research. UM is proud of the ongoing multi-partner initiatives that live on its campuses and is committed to pursuing new opportunities for further collaboration. As UM students, staff and faculty return to in-person activities, there is a need to address space shortages in the near term.

UM has two immediate priorities in this regard.

First, the Protein Foods Innovation Centre is one potential opportunity to support academia-industry partnership by investing in infrastructure that will advance important food protein research on UM's campus. Adjacent to the Richardson Centre for Functional Foods and Nutraceuticals, the proposed Centre will allow the Department of Food and Human Nutritional Sciences to continue to teach and train students in areas related to dairy processing and add new capacity for the development and study of new non-dairy, protein-rich food products developed from plants and plant-animal protein blends. This new research facility will also benefit small to medium enterprises, including Indigenous enterprises seeking to develop new protein-rich food products. Moreover, the facility will be designed to develop and enhance processes for the sustainable extraction and processing of proteins and will support UM's GHG reduction goals. The projected cost of this new facility, including construction and research infrastructure, is \$23.4M. This project strongly aligns with the strategic priorities of the Canadian Agricultural Partnership and should be given serious consideration as an excellent candidate for approval through this fund.

Additionally, the University of Manitoba's proposed new Prairie Crops and Soils Research (PCSR) Facility initiative will enable research that will contribute to economic vitality in Canada and enhance global food security and agricultural sustainability. This \$11.8M project will be a cornerstone of research excellence, building on the Faculty of Agricultural and Food Sciences' global reputation for innovation, rigour, and discovery. The facility will allow us to accelerate soil and crop research far beyond what is currently possible and help drive value-added agricultural innovation in Western Canada.

Given the importance of maintaining and updating the research and training infrastructure that supports a thriving agriculture industry, we recommend that the Government of Canada ensure the next intake of CAP include allocated funds for research and training infrastructure.

Second, at a time when Canada's healthcare system is facing extraordinary pressure, investing in critical teaching and research infrastructure at UM's campus that supports interprofessional collaborative care is essential. The Rady Faculty of Health Sciences includes the Institute for Global Public Health, National Coordinating Centre for Infectious Diseases, Indigenous health programs and the Colleges of Nursing, Pharmacy, Dentistry, Medicine and Rehabilitation Sciences. As the need to train health-science students grows, so does the need for capacity and modern infrastructure. UM is prepared to work with the Federal Government in identifying specific opportunities for investments that will support health care delivery in Manitoba and the need for interprofessional care that produces better outcomes for patients.

Healthcare is critically important to Canada's future – and in the event of future pandemics – UM sees a need for a federal fund to support medical research and training infrastructure.

The University has committed to carbon neutrality by 2050, including a 50% reduction by 2030. We have several projects underway to meet that goal, including a major initiative funded through the Green Infrastructure Stream of the Investing in Canada Infrastructure Program. Therefore, we recommend additional funding for this program and that post-secondary institutions remain eligible to apply.

INDIGENOUS ENGAGEMENT

UM thanks the Federal Government for its support of a permanent home for the National Centre for Truth and Reconciliation (NCTR) and its ongoing work, as announced in the 2022 budget. UM is honoured to

host the NCTR on campus and fully support its vision for a permanent home worthy of its place in Canada's past, present and future.

In addition, UM is home to one of the largest Indigenous student populations in Canada. Investing in the future of Canada includes investing in the Indigenous populations. Enhancing opportunities for Indigenous scholarship through funding greater access to academic appointments, increased funding for Indigenous research and research chairs, and funding that supports the creation of Indigenous spaces for the benefit and learning of all our academic communities is critical.

CONCLUSION

The University of Manitoba is Manitoba's research university, supporting the economic, social, and cultural success of our province. Continued federal investment in education, research and innovation, knowledge mobilization and commercialization, and green and sustainable infrastructure are essential as we continue towards economic recovery post-pandemic. Funding for research universities drives economic competitiveness and building a more just and prosperous path forward.

We thank the Committee for its consideration.