AGENDA

I CANDIDATES FOR DEGREES, DIPLOMAS AND CERTIFICATES - OCTOBER 2022

This report will be available at the Senate meeting. The report will also be available for Senators to review through a request to the Office of the University Secretary.

II REPORT ON MEDALS AND PRIZES TO BE AWARDED AT THE OCTOBER CONVOCATION

The report will be available for Senators to review through a request to the Office of the University Secretary.

III MATTERS RECOMMENDED FOR CONCURRENCE WITHOUT DEBATE

1. Revision to the 2022-2023 Academic Schedule, Spring 2023 Convocation Dates

IV MATTERS FORWARDED FOR INFORMATION

1. In Memoriam
   a) Dean Emeritus Garland Laliberte
   b) Dr. David H. Pentland
   c) Mr. William (Bill) Poluha
   d) Dr. Dana Schroeder

2. Correspondence from President and Vice-Chancellor
   a) RE: Request for Admission Target Increase, Bachelor of Respiratory Therapy, College of Rehabilitation Sciences (for consultation)
      • Comments of the Senate Planning and Priorities Committee
   b) RE: Admission Target Increase, Bachelor of Respiratory Therapy, College of Rehabilitation Sciences, President’s Approval
c) RE: Admission Target Increase, Bachelor of Midwifery, College of Nursing, President’s Approval Page 70

3. Correspondence from the Provost and Vice-President (Academic)

a) RE: Closure of Bachelor of Commerce (Honours) in Operational Research/Operations Management Page 71
b) RE: Implementation, Bachelor of Science (Honours) and Bachelor of Science (Major) in Environmental Geoscience Page 73
c) RE: Implementation, Bachelor of Arts (Advanced) in German Page 75
d) RE: Implementation, Bachelor of Arts (Honours) in Global Political Economy Page 77

4. Correspondence from Vice-Provost (Academic Planning and Programs) RE: Implementation, Micro-Certificate in Facilitating Older Adult Learning Page 79

5. Correspondence from the Vice-President (Research and International)

a) RE: Report on Research Contracts and Amendments Received, January 1 – June 30, 2022 Page 80
b) RE: Notification of Establishment of Research Groups in the Price Faculty of Engineering Page 89
   i) Structural Innovation and Monitoring Technologies Resource Centre

   ii) Urban Mobility and Transportation Informatics Group Page 102

6. Reports of the Senate Committee on Awards

a) [June 9, 2022] Page 121
b) [August 23, 2022] Page 133

7. Items Approved by the Board of Governors [June 28, 2022] Page 152

V REPORT OF THE PRESIDENT
VI QUESTION PERIOD

Senators are reminded that questions related to matters not on the agenda shall normally be submitted in writing to the University Secretary no later than 10:00 a.m. of the Monday preceding the meeting.

Senators are reminded that questions pertaining to items on the agenda can be asked during the Senate meeting and do not require submission in advance.

VII CONSIDERATION OF THE MINUTES OF THE MEETING OF JUNE 22, 2022

VIII BUSINESS ARISING FROM THE MINUTES - none

IX REPORTS OF THE SENATE EXECUTIVE COMMITTEE AND THE SENATE PLANNING AND PRIORITIES COMMITTEE

1. Report of the Senate Executive Committee

   Comments of the Senate Executive Committee will accompany the report on which they are made.

2. Report of the Senate Planning and Priorities Committee

   The Chair will make an oral report of the Committee’s activities.

X REPORTS OF OTHER COMMITTEES OF SENATE, FACULTY AND SCHOOL COUNCILS

1. Report of the Faculty Council of the Faculty of Graduate Studies RE: Proposal for a Micro-Diploma in Science Communication, Department of Immunology

   a) Report of the Senate Planning and Priorities Committee

2. Reports of the Senate Committee on Admissions

   a) RE: Revised Admission Requirements, Doctor of Medicine (Undergraduate Medical Education Program), Max Rady College of Medicine

   b) RE: Revised Admission Requirements, Bachelor of Midwifery, College of Nursing

3. Report of the Senate Committee on Nominations
XI  ADDITIONAL BUSINESS

1. Revision to the Governing Document Development and Review Policy  Page 242

2. Strategic Planning Committee – Election of Senate Members  Page 244

   Members should come to the meeting prepared to make nominations for these positions, and preferably should have obtained the consent of the nominee to let their name stand.

XII  MATTERS TO BE CONSIDERED IN CLOSED SESSION


   The report will be provided to members of Senate at the meeting.

XIII  ADJOURNMENT

Please send to shannon.coyston@umanitoba.ca.
CANDIDATES FOR DEGREES, DIPLOMAS AND CERTIFICATES

1. **Degrees Notwithstanding a Deficiency**

   A list of students to be considered for degrees notwithstanding a deficiency will be distributed at the meeting.

   **Deans and Directors** should note that they may be asked to explain the circumstances leading to the recommendations from their respective Faculties or Schools.

   At the conclusion of discussion of the report, the Speaker of the Senate Executive Committee will make the appropriate motion(s).

2. **Report of the Senate Committee on Appeals**

   An oral report will be presented to Senate by the Chair of the Committee only if the Committee has heard an appeal which will result in the recommendation of the award of a degree notwithstanding a deficiency.

3. **List of Graduands**

   A list of graduands will be provided to the University Secretary on the day of the meeting. The list will not be distributed to members of Senate but will be open for inspection by individual members of Senate.

   The list to be provided to the University Secretary will be a compilation of the lists of the graduands of each Faculty and School.

   The Speaker for the Senate Executive Committee will make the appropriate motion approving the list of graduands, subject to the right of Deans and Directors to initiate late changes with the Registrar up to October 7, 2022.
This request is to make two changes to the dates for the Spring 2023 session of convocation. The first change is to delete the Agriculture Diploma Convocation ceremony that is currently scheduled for May 12, 2023. The Faculty would like to include the diploma graduates in the same ceremony as the degree graduates which takes place during the main Fort Garry ceremony.

The second change is to modify the dates for the June 2023 Fort Garry ceremonies. The dates will move from June 1-2 and 5-6, 2023 to June 6-9, 2023. This change is necessitated by some facility scheduling conflicts.

CC:
Laurie Schnarr, Vice-Provost (Students)
Elfie Smith, Associate Registrar and Director of Service and Records

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.
Memoriam for Dr. Garland Laliberte

Dean Emeritus, Dr. Garland Laliberte, P.Eng. was born on the family farm near Walkerburn, Manitoba in the Shell Mouth Municipality in 1936. Garland attended elementary school at Grand Narrows and Sunny Slope. His conveyance to Grand Narrows during the winter was a home-made sleigh pulled by his dog Collie, and he had a pet deer named Jumpy. Later, he attended high school in Roblin where he was awarded the Governor General’s Medal for the best academic performance in his graduating class at only 15 years of age. Garland started his university years at the University of Manitoba, transferring to the University of Saskatchewan where he graduated at the age of 19 with a Bachelor of Science in Agricultural Engineering (with Distinction).

Garland’s first position as an engineer took him to Alberta where he worked for eight years on irrigation projects, researching and improving the distribution of irrigation and drainage. During this period, he met Audry Whitlock, and they were married in 1959. By 1961, he earned a Master of Science degree from the University of Saskatchewan and, in 1966, a Ph.D. in Engineering from Colorado State University.

In 1967, Garland accepted a professorial appointment in the Department of Agricultural Engineering at the University of Manitoba. In 1969, he was appointed Head of the Department, a position he held for 17 years. His colleagues remember him as a fatherly figure, a career counselor, a role-model, and a great supporter. The Department was known for its strong community among faculty members with daily coffees and frequent lunches at the faculty club. In those conversations, Garland often mentioned that he “comes from the God’s country” because of the Parkland region’s majestic, comforting, and healing powers.

After serving as department head, he was appointed Dean of the Faculty of Engineering. During his terms as department head and as dean, he ensured that the engineering curricula were dynamic and engaging for students and met the requirements for national accreditation. He nurtured the research of researchers in diverse fields. During his tenure as Dean, he launched three new NSERC Industrial Research Chairs, established a highly successful university/industry interface program, significantly grew research in the faculty, and strongly supported the Engineering Access Program (ENGAP) to support Indigenous students’ success in engineering. With his generous donation, he endowed the Dr. Laliberte and Dr. Bulley Scholarship fund to support undergraduate students in Biosystems Engineering. In recognition of his contributions to the Faculty and on the recommendation of his colleagues, the university honoured him with the title of Dean Emeritus in 1997. He was especially proud of this honor as it came from his colleagues.

Garland was recognized early and often for his outstanding contributions in agricultural engineering and for his leadership. In 1984, the Canadian Society for Agricultural Engineering honored him with its fellowship in recognition of his service to the agricultural engineering profession through the many committees of the society and as its President in 1978. In 1981, he had already been honored by the society with its Maple Leaf Award, the highest award given to a member.

Garland became registered with the Association of Professional Engineers of Manitoba (now Engineers Geoscientists Manitoba) in 1968, previously having been a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta for eight years. Garland served as a member of the Association Council from 1985 to 1990 and was elected as its President in 1989. He also served on
committees and boards of the Association for a combined 33 service years. In recognition of his contributions and service to the profession in Manitoba, the Association honored him with its Outstanding Service Award in 1994 and Honorary Life Membership in 2003.

Nationally, he was appointed to the Canadian Engineering Accreditation Board and served on it for 12 years including two years as its chair. While on CEAB, he played a major role in ensuring that accreditation criteria remained relevant for all disciplines of engineering. He became a Director on the Board of the Canadian Council of Professional Engineers (CCPE) (now Engineers Canada) in 1990, served on its executive for three years and was elected President in 1994, one of only four Manitobans to serve in this role since the establishment of Engineers Canada in 1936. In recognition of his contributions at the national level, Engineers Canada bestowed on him its Meritorious Service Award for Professional Service in 1998 and its Fellowship in 2009.

Garland’s wife Audry passed away in 1997, and Garland had lovingly cared for her through her battle with cancer. Garland later married Beverly Bailey and together, they enjoyed winters in St Petersburg, Florida and summers travelling and entertaining friends at their Lindenwoods home. Garland enjoyed golfing and hunting - at times hunting for golf balls.

Garland Laliberte died on July 30, 2022, of cancer at age 85. Garland leaves behind his wife Beverly, his children Tracy Janes and Marnie Feeleus and Beverly’s children Grant Bailey and Tracy Gaunt and their families.

The Price Faculty of Engineering sends its sincere condolences to Garland’s family, colleagues, and friends who will miss him deeply.
IN MEMORIAM DAVID PENTLAND

Our colleague David H. Pentland, Professor of Linguistics and Anthropology, died on 6 July 2022 after a short illness.

A towering figure in the field of Algonquian Studies, David Pentland was a student at University College in its early days, taking an Honours degree in Icelandic with Haraldur Bessason (and another concentration in Anthropology) when he was not editing The Manitoban. Turning to linguistics, he quickly became interested in the comparative study of the Algonquian languages, spoken across the continent from the eastern seaboard to the Rocky Mountains. In tracing individual languages like Cree or Ojibwe from the present back to their earliest documentary records, his Ph.D. dissertation (University of Toronto) on Algonquian Historical Phonology showed an early mastery of the field in both depth and breadth: in a life-long research program of admirable intellectual coherence, David Pentland not only drew on the structural and geographic diversity of these languages and their remarkable time-depth and historical documentation but also made exemplary use of the analytic tools of synchronic linguistics, comparative reconstruction and ethnology.

From his early stints as a sessional lecturer at universities across the West, David’s enviable control of his many subjects, his quick wit and the trouble he took with beginning students and doctoral candidates alike, were legendary. His exceptional status as a scholar was at last recognised in 1993 when the Departments of Linguistics and Anthropology at the University of Manitoba won a joint position which also included the Editorship of the annual Papers of the Algonquian Conference / Actes du Congrès des Algonquinistes.

Pentland’s oeuvre includes a long series of carefully crafted and elegantly presented papers, and as an authority on the philological and cultural evidence and the systematic analysis of the languages he had few peers. His field studies of the Cree spoken at Lesser Slave Lake (Alberta), South Indian Lake (Manitoba) and the eight communities around James Bay (where he also studied Cree cartography) are reflected throughout his work but most obviously in the Subarctic volume of the Smithsonian’s Handbook of North American Indians, where each tribal section includes a ‘Synonymy’ presenting the plethora of historical names and related issues of nomenclature.

His magnum opus is the Proto-Algonquian Dictionary, unfinished at the time of his death – perfection proving elusive. In its current version (which we hope to publish within the year) this historical and comparative analysis of the Algonquian languages runs to almost 3,000 tightly packed pages of small print in literally dozens of transcriptions and orthographies employed by lay recorders and linguists over the past four centuries. It will be his lasting monument.

We will miss him.
It is with heavy hearts that we mourn the passing of our friend, relative and colleague William (Bill) Poluha. Bill was predeceased by parents William and Nellie Poluha and is survived by many extended family and friends. Bill passed peacefully at St. Boniface Hospital on August 20, 2022.

An active member of St. Andrew’s Ukrainian Catholic Church in Winnipeg, Bill grew up in the Wolseley neighbourhood of Winnipeg, attending Laura Secord School and Gordon Bell High School. Many friendships made at Gordon Bell lasted a lifetime, and the experiences there left a lasting impression on Bill. Education continued at the University of Winnipeg where Bill graduated in 1983, majoring in physics, with a B.Sc. (4-yr).

Bill attended McMaster University in Hamilton, Ontario, where he graduated with an M.Sc. (Health and Radiation Physics) in 1986. Work experience in that program involved an internship at AECL Whiteshell in Pinawa, Manitoba. After graduation Bill worked in the private sector in Ontario in nuclear waste management. He built a solid reputation for high-quality customer service and reliable work in a highly demanding and regulated industry.

Eventually, Bill’s passion for education and research called him to a career change and he returned to school to pursue library science. He graduated with an MLIS degree in 1994 from the University of Western Ontario. As always, he made many new friendships that lasted his lifetime.

Called home to Winnipeg in 1995 to both assist his aging mother and to take a position with the University of Manitoba’s Medical Library, Bill began a new facet of his life. He quickly developed a reputation for high-quality research work, and for being a caring and supportive mentor for both colleagues and students. In one of those twists of life, the conversation that began between student and librarian continued between doctor and patient in the final weeks of Bill’s life at St. Boniface hospital where Bill found himself under the care of Dr. St. Goddard.

Bill’s career with the UM saw him move to the Science and Technology Library at the Fort Garry Campus and take on a very active role in the University of Manitoba Faculty Association and the Manitoba Federation of Labour as a safety and health committee rep and a picket captain. Bill was also an active member and avid supporter of the UM faculty Club.

In parallel with his professional work, Bill pursued his love of travel, food, wine, beer, and golf. So many friends remember fondly the trips taken, meals shared, beverages consumed and rounds of golf with Bill. And with each encounter, Bill shared his vast knowledge and experience that enriched the lives of those he was with. He was a proud member and accredited judge with the Kansas City BBQ Society, regularly making trips with friends to competitions to both compete and judge.

The diagnosis of illness that came in April 2019 did not dampen Bill’s enthusiasm for life and adventure, and he packed a lot into those few short years. The pandemic meant that many visits were virtual and the rounds of golf fewer, but the food and the beverages were
real, and the conversations were always entertaining and memorable. One final trip to Europe capped off a life too short.

All who knew Bill express their deep appreciation to the staff of the Palliative Care Ward at St. Boniface Hospital and for the care that he received at CancerCare Manitoba. Always keenly interested in the people around him, Bill left a lasting impression on many staff through his conversations and his caring.

Being Bill's friend was an investment, but one that paid rich dividends. You were truly a better person for knowing Bill, and his legacy shall live on in so many of us.
In Memoriam: Dr. Dana Schroeder

Dr. Schroeder was a respected associate professor in the department of biological sciences, where she worked from 2002 until the time of her passing in September 2020. Dana was a valued colleague, mentor, and friend. She will be fondly remembered for her cheerful optimism and kindness to students and colleagues alike.

Dana’s many contributions to the department included directing and teaching in the genetics program. She introduced hundreds of students to the study of genetics each year, and always kept them engaged with her sense of humour and discussions of the latest news in the field. Dana supervised five PhD, three MSc and 35 undergraduate students, including nine honours students. She also mentored numerous high school science fair students and contributed generously to graduate student committees.

Dana’s research was in plant developmental genetics and environmental responses, specifically the molecular and biochemical basis of plant responses to light, heat, and salinity. She made a series of important contributions to the understanding of DNA-damage repair mechanisms in plants and her work has been widely cited by scientists studying DNA repair in many organisms, including humans.

Dana was always kind, friendly, and extremely approachable to students who had questions or needed help. To honour Dana’s dedication to supporting students a scholarship has been established for graduate students in the department of biological sciences who are conducting research with a focus on genetics.

The memory of Associate Professor Dr. Dana Schroeder will be honoured through a new graduate scholarship and a study space in the Faculty of Science. The Dana Schroeder Student Science Help and Study Centre is scheduled to be opened in 2023 in the Faculty of Science.
DATE: August 19, 2022

TO: Jeff Leclerc, University Secretary

FROM: Michael Benarroch, Ph.D.  
President and Vice-Chancellor

RE: Increase to Admission Targets, Bachelor of Respiratory Therapy (B.R.T.) programs

I attach a recommendation from Dr. Greg Smith, Vice-Provost (Academic Planning and Programs) for an increase to the admission target of the Bachelor of Respiratory Therapy program effective the 2023-24 academic year.

Under the Admission Targets Policy, the President may approve changes to Admission Targets following consultation and discussion with the applicable unit's dean or director, with Senate and with the Board of Governors, subject to the provisions of the provincial Programs of Study Regulation. Given the identified impact of the proposed expansion on other units, I would also request that the item be referred to SPPC for additional advice on any resource implications.

Accordingly, please place this item on the agenda for the upcoming meetings of SPPC (August 29, 2022), Senate Executive (September 21, 2022), Senate (October 6, 2022) and the Board of Governors (September 28, 2022), respectively.

Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)  
Greg Smith, Vice-Provost (Academic Planning and Programs)  
Laurie Schnarr, Vice-Provost (Students)  
Brian Postl, Dean, Rady Faculty of Health Sciences and Vice-Provost (Health Sciences)  
Reg Urbanowski, Dean, College of Rehabilitation Sciences  
Jeff Adams, Registrar and Executive Director, Enrolment Services  
Randy Roller, Executive Director, OIA  
Cassandra Davidson, Academic Program Specialist
Date: August 17, 2022

To: Dr. Michael Benarroch, President and Vice-Chancellor

From: Dr. Greg Smith, Vice-Provost (Academic Planning and Programs)

Re: Request for Increase to Admission Targets, Bachelor of Respiratory Therapy Program

Under the Admission Targets Policy and at the request of Dr. Reg Urbanowski, Dean, College of Rehabilitation Sciences, please find attached a proposal for an admission target increase to the Bachelor of Respiratory Therapy (B.R.T.) program.

In its ongoing response to the identified need for more respiratory therapists in the province, the College is requesting an increase to their admission target from 20 seats to 40 seats, effective the Fall Term 2023, subject to approval, and receipt of new resources from the province to accommodate the growth. As a reminder, the first step of the expansion was to increase intake of seats from 16 to 20 for the Fall 2022 term. This request for the additional 20 seats, if approved, will be the final phase of the expansion for a total intake of 40 seats.

I would also note that while the total number of new seats is relatively small, the increase is a significant one given the small size of the program. As such, the College has undertaken an extensive consultation process with units impacted by the expansion and any new resources required to continue the support of the program have been factored into the cost of the expansion and are detailed in the proposal. Given the broader impact, I am recommending you consider presenting the proposal to SPPC for their feedback as part of the Senate consultation process.

Consistent with the Admission Targets Policy and Procedure, the President may approve changes to Admission Targets following consultation with the Dean/Director, Senate, and the Board of Governors, subject to the provincial Programs of Study Regulation.

Please provide your advice concerning this matter to the Office of University Secretary by Friday, August 19th, 2022, so that, if supported, the request may receive timely consideration by Senate and the Board of Governors.

Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)  
Laurie Schnarr, Vice-Provost (Students)  
Brian Postl, Vice-Provost (Health Sciences) and Dean, Rady Faculty of Health Sciences  
Reg Urbanowski, Dean, College of Rehabilitation Sciences  
Jeff Leclerc, University Secretary  
Jeff Adams, Registrar and Executive Director, Enrolment Services  
Randy Roller, Executive Director, OIA  
Cassandra Davidson, Academic Program Specialist
Universities and colleges requesting approval for a **significant modification** to a program of study from Education and Training must apply using this application form. This form reflects the requirements set out in the Programs of Study Regulation (MR 134/2015) under The Advanced Education Administration Act.

**UM INTERNAL REQUIREMENTS**

1. Please complete the application below and submit one (1) electronic copy (.pdf format) each to the Vice-Provost (Integrated Planning & Academic Programs) and the Office of the University Secretary, (where indicated) along with the following supplemental documentation:
   a. A cover letter justifying and summarizing the rationale behind the request for a significant modification.
   b. Letters of support from internal and/or external stakeholders that were consulted as part of this proposal, if applicable.

2. Note that internal approval of the proposed modification will vary depending on the type of modification (see SECTION C). Please work with the Provost’s Office and the Office of the University Secretary in advance, in identifying the appropriate procedures and approval processes. In general, please note the following for each type of modification:
   a. **CHANGE OF SITE** – may require Senate approval if the site requires modifications to admission and/or program requirements (e.g. new admission category).
   b. **CHANGE TO SEAT CAPACITY** – please refer to the Admission Targets Policy and Procedures [link](http://umanitoba.ca/admin/governance/governing_documents/academic/admission_targets.html). Changes may also require Senate approval if there are modifications to admission and/or program requirements.
   c. **CHANGE TO TIME-TO-COMPLETION** – any addition to or reduction of hours to program requirements, requires Senate approval. For undergraduate programs, please refer to SCCCC Guidelines found at [link](http://umanitoba.ca/admin/governance/forms/index.html). For graduate programs, please contact FGS for approval process.
   d. **CHANGE TO APPROVED DELIVERY MODEL** – please notify the Provost’s Office of any significant changes to course or program delivery method.
   e. **CHANGE TO STATUS OF JOINT PROGRAM** – depending on the significance of the changes resulting from the proposal, this will either require Senate approval as a program modification or will require the introduction of a new program. Please contact the Provost’s Office with more details on how becoming a joint program or ceasing a joint program will impact the program.
   f. **CHANGE TO CREDENTIAL**
   g. **CHANGES TO CAPITAL OR OPERATING RESOURCES REQUIRED**

3. Please direct questions to Cassandra Davidson, Academic Programs Specialist, Office of the Provost and Vice-President (Academic) at Cassandra.Davidson@umanitoba.ca or 204.474.7847.
Institution: University of Manitoba

Applicable faculties/department with responsibility for the program: Rady Faculty of Health Sciences / College Rehabilitation Sciences/ Respiratory Therapy

If program is a joint program, list all participating institutions and the roles of each in delivering the proposed program: N/A

Program name: Bachelor of Respiratory Therapy Program

Credential awarded: Bachelor of Respiratory Therapy

Funding request: UM is requesting $4.437 M (Yr. 1), $1.834 M (Yr. 2) and $1.342 M (Yr. 3 and ongoing).

This includes a capital request of $3.12 M (Yr. 1) and $20K (Yr. 2)

Proposed start date: 2023-09-01 (Fall 2023)

List any critical issues that may impact the start date of the program:

There are critical issues pertaining to the tight timelines for approval and receipt of the requisite funding. Not having these issues resolved soon may mean delaying the admission of students in September 2023 until September 2024 as there is no January intake. Furthermore, if the students are admitted, time is needed to recruit staff and procure equipment to ensure that the curriculum framework and course designs are not jeopardized.

The department is a small unit that is organized to teach sixteen students, growing to 20 in Fall 2022. The addition of 20 more students, for a seat capacity of 40, is a substantial increase in all courses in the first year.

Institutional Program Code(s) (PSIS reporting number):
B-1 Provide a general description of the significantly modified program and its objectives: (Include intended purpose, curriculum design, and highlight distinctive attributes)

**Purpose of the RT Program:** To educate and prepare future respiratory therapists for direct entry to practice in Manitoba. The University of Manitoba is the only English-speaking, entry-to-practice Bachelor of Respiratory Degree program among U15 universities in Canada. This leaves the University of Manitoba uniquely positioned to lead and change academic developments in the field of Respiratory Therapy. The proposed changes will strengthen the University of Manitoba’s academic RT program through both its educational leadership by allowing the University to expand its research and innovation work in Respiratory Therapy policy, scope and practice. The proposed expansion is a direct response to immediate and future labour market needs in the province for this crucial health care profession. Program growth will help meet current and pressing human resource needs for respiratory therapists in the province and will allow staff to conduct applied research of benefit to Manitoba, Canada and beyond.

Respiratory therapy is a specialized field of allied health that assesses, treats and supports people of all ages with breathing problems and other cardio-pulmonary-related illnesses and conditions. Respiratory Therapists (RTs) work in intensive care units, operating rooms, medical transportation, primary care, long-term care, and in home care. The need for RTs was deemed high in Manitoba by the provincial officials and this proposal is an attempt to address that high need.

The RT education program began in 1960 at the Winnipeg General Hospital and moved to the University in 2001. The sixteen-seat capacity remained static for over fifty-five years, with an expansion of only 4 seats in Fall 2022. The program consistently turns away qualified applicants due to its limited seat capacity.

The current program is a Bachelor of Respiratory Therapy. Applicants must take 24 credit hours consisting of prerequisite courses plus electives of the student’s choice to be considered for admission. Once admitted they complete three years of respiratory therapy education. To practice, therapists must be licensed. One of the criteria for licensing is graduation from an accredited education program. The program is accredited through a national accreditation agency and was fully re-accredited in 2020 for seven years.

**The Bachelor of Respiratory Therapy program is seeking to grow its undergraduate admission target from 20 to 40 seats, beginning Fall 2023.**

**Overview of the impact of modifications on the number of graduates:** will increase graduates to 40 students per year by 2025 (please see Appendix A).

B-2 Describe how this program serves and advances the academic, cultural, social and economic needs and interests of students and the province:

The UM RT Program is the only Respiratory Therapy program in Manitoba, contributing significantly to meeting the human resource crisis in Manitoba. Statistics Canada has identified a labour shortage for Respiratory therapists, clinical perfusionists and cardiopulmonary technologists (NOC 3214) in Canada over the next 10 years (2019-2028).
https://www.jobbank.gc.ca/marketreport/outlook-occupation/22779/ca

Shared Health has also determined that the labour market need for respiratory therapists in Manitoba is high and the current supply is well under the ability to meet that need.
Various health entities throughout the province have provided letters of support and are included as an Appendix to this proposal.

As part of its strategy to expand capacity, the College of Rehabilitation Sciences (CORS) is committed to addressing the under-representation of Indigenous healthcare providers in Manitoba. Three seats are reserved each year for a Canadian Indigenous applicant. This number will be increased to five with the increase in enrollment. A further five seats will be allocated to students from the north who may or may not be Indigenous.

There is an estimated 20%-25% vacancy rate in respiratory therapy positions in Manitoba. This has placed a strain on acute care services, emergency transportation, and care of chronic conditions in the community across the lifespan. Current graduates are hired before they graduate. In 2020 and 2021, there were special initiatives with the regulatory body to complete the requirements for graduation earlier and hire UM students earlier to enable them to work sooner because of the COVID crisis. Furthermore, the current healthcare transformation plans will place an increased emphasis on respiratory therapy needs across the province.

This program expansion is the second step taken by the university to respond to the high need for graduates from this program. While helping to mitigate the demand for RT professionals, the recently approved 2022-23 expansion of 4 seats will not fully meet the needs of the province. The College and the UM continued their consultations with internal academic and administrative units and external partners, as well as with government and identified the need for a larger expansion and second proposal.

B-3 Describe the existing and anticipated post-secondary learning needs of students in Manitoba that this program addresses and responds to:

This is an existing program. An increase in enrolment responds to the need for respiratory therapists during the ongoing pandemic and the increasing retirements in the profession. See also B-2.

B-4 Will the program be available for part-time study?

No, all enrollment is full-time. There is only one intake per year in Fall semester.

B-5 Is there a cooperative education, work placement, internship or practicum component?

Yes. Students in years 2,3 & 4 of the Bachelor of Respiratory Therapy program must perform hours of clinical fieldwork experience.

Clinical placements mainly occur in Manitoba (Winnipeg) and other urban (Brandon) and rural settings (Steinbach, Thompson) across Manitoba. The resources required to support students going to rural areas will be acquired through the student initiatives fund and the RFHS fund, as has been the practice all along.
SECTION C – MODIFICATION TYPE

C-2 Change to seat capacity

C-2.1 - List originally approved or currently offered seat capacity and proposed seat capacity.

One intake each Fall academic year:
- Previously offered seat capacity of 16 students
- Fall 2022 seat capacity increase to 20 students
- Fall 2023 and onward proposed seat capacity of 40 students

C-2.2 - Provide rationale for this change. (Examples include changes in applications, enrolment and employer demand or alignment with the institution’s strategic direction and priorities.)

The added seats respond to an ongoing need for added respiratory therapy graduates across Manitoba sectors and industries and ongoing demand by students for entry into UM Respiratory Therapy degree program. It is now public knowledge there are critical shortages of Respiratory Therapists in Manitoba.

Demand for graduates is very high in Manitoba with many students receiving employment letters of offer before they graduate. Over 2021-2022, the College has had several questions from the clinical community about potential enrollment increases due to the current and ongoing demand presented by the COVID-19 pandemic. The Government of Manitoba declared the need for respiratory therapists to be very high and training an increased number of these healthcare professionals aligns with the province’s ‘Skills, Talent and Knowledge Strategy’ by addressing a current and future shortage in the workforce.

The clinical transformation plan in the province will place an even higher burden of need on the health system.

Below is a table indicating total number of applicants, number of eligible applicants and average AGPA since 2014. This is based on an intake of 16 per year. There is a waitlist each year of an additional 10-15 qualified RT applicants.

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<td>Total number of applicants</td>
<td>67</td>
<td>62</td>
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<td>63</td>
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<td>59</td>
<td>56</td>
<td>56</td>
<td>53</td>
</tr>
<tr>
<td>Number of eligible applicants</td>
<td>51</td>
<td>41</td>
<td>47 *</td>
<td>37</td>
<td>45</td>
<td>37</td>
<td>37</td>
<td>44</td>
<td>in progress</td>
</tr>
<tr>
<td>Average AGPA for a student admitted</td>
<td>3.9</td>
<td>3.9</td>
<td>3.775</td>
<td>3.924</td>
<td>3.89</td>
<td>4.042</td>
<td>3.933</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

*1 applicant withdrew and is not included in totals

C-2.3 - Intake Information

C-2.3 (a) - What is the projected enrolment for the first intake?
40 students for Fall 2023.

C-2.3 (b) - What is the maximum seat capacity (defined as first-year enrolment capacity)?
40 students

C-2.3 (c) - What is the anticipated date of maturity?
Fall 2025. See Appendix A for details.
The College of Rehabilitation Sciences (CORS) is committed to addressing the under-representation of Indigenous health-care providers in Manitoba. Two seats are reserved each year for a Canadian Indigenous applicant. This number will be increased to five seats per year in enrollment. See B-2.

SECTION D – MODIFICATION INFORMATION

**D-1 Describe how this significant modification aligns with the strategic plans of your institution:**

This modification aligns with the university’s strategic priorities as follows:

**Support and sustain a post-COVID teaching, learning, research, and work environment. This includes our commitment, as one of Canada’s top 15 research universities, to remain a leader in research excellence.**

As Canada’s only English-speaking university-based RT program we are fully engaged in the province by helping to educate tomorrow’s respiratory therapists in Manitoba. We are also committed to research that creates, discovers, and translates new knowledge in and about the field. Lastly, we will engage in inter-collaborative research that supports new knowledge and enhances the practice of respiratory therapy. This modification will enable us to train additional practitioners to engage in practice and research that furthers the mission of the department and meets the demands of this initiative.

**Enhance and expand opportunities for learning, including research opportunities for students.**

This modification will enable the department to engage further in learning opportunities for RT students and will also enable students to engage in faculty members’ research initiatives. The expansion will enable additional cohorts to be engaged in the community and expand the current offerings. When fully implemented, the expansion will add sixty students. With these new numbers, a greater range of internships and community projects are possible, such as student clinics and experiential learning in many regions of the province. In addition, new faculty will increase the span of knowledge and expertise available to students.

**Deliver on our commitment to Indigenous achievement and engagement.**

There are very few Indigenous RTs and few students. This initiative, together with other College initiatives, will seek to increase the number of students recruited into the program and will provide support in retaining them in the program.

This modification will also enable more faculty and students to participate in outreach programs serving urban Indigenous populations and First Nations communities by creating resources for research and action under the College’s “We walk together in health and wellness” project.

A partnership with Northern communities is being explored to further deliver excellent education and build community in the North with Indigenous and Non-Indigenous peoples. The expansion would support collaboration with the North and create opportunities to build and strengthen resources and infrastructure to better serve these communities.

**Create a more accessible, equitable, diverse, and inclusive university.**

We are committed to the EDI initiatives in RFHS and actively participate in them. This modification will enable us to continue to hone our curriculum to ensure that knowledge and experience in accessible and equitable for a diverse audience of learners. The expansion will provide an opportunity to support more student spaces from designated groups.
D-2 Outline the internal approval process (i.e. committees, governing bodies) for approving this significant modification within your institution and indicate any dates of decision. (Governing Council, Board of Governors, Board of Regents, Senate, other)

Decision-Making body: Senate (consultation only)
Decision:
Date:

Decision-Making body: Board of Governors (consultation only)
Decision:
Date:

Decision-Making body: President
Decision:
Date:

D-3 Responsibility to consult

D-3.1 If this program subject to mandatory review or approval by organizations external to the institution (such as regulatory bodies, Apprenticeship Manitoba, etc.), please describe any consultation processes and provide copies of reports or letter from these organizations providing support:

We have consulted with Accreditation Canada which oversees the accreditation of the RT program. They have determined that given the nature of this modification that: “the program will not be required to provide additional documentation for this change and its status will remain as Accredited until September 30, 2027.”

See Appendix B.

D-3.2 What agencies, groups, or institutions have been consulted regarding the significant modification of this program?

Consultation with the Office of the Registrar and Enrolment Services regarding the addition of twenty seats for the fall of 2023.

Shared Health, Manitoba Health, and Manitoba Advanced Education, Skills and Immigration have all been informed. All the Regional Health Authorities have been informed. Letters of support are attached.

Letters of support from the Department of Pharmacology and Therapeutics, Department of Human Anatomy and Cell Science, Rady Faculty of Health Sciences, Faculty of Arts, and Faculty of Science indicate support for this program seat expansion.

See Appendix B for associated letters of support.
D-3.3 How have students and faculty been informed of the intent to modify this program?
A meeting to discuss a seat expansion to 40 students was held 22 June, 2022. Minutes were circulated and the Respiratory Therapy Council endorsed the proposal components as circulated and presented as it related to resource requirements for the BRT seat expansion to 40 students. At the College Executive Council Meeting on 26 July 2022, the same information was presented and was endorsed by the council.

D-4 List any similar programs offered in Manitoba: (Provide such information as institution, programs, and credentials offered in addition to any impacts on these programs, explain rationale for duplication.)
There are no other programs in Manitoba.

D-4.1 Describe any specific laddering, articulation and/or credit transfer options for Manitoban students that are anticipated to change as a result of the significant modification of this program:
There are no changes.

D-5 List any similar programs offered in Canada: (Provide such information as institution, programs, and credentials offered in addition to any impacts on these programs, explain rationale for duplication.)
University of Manitoba is unique amongst Canadian educational institutions, delivering the only English speaking, entry-to-practice Bachelor of Respiratory Therapy degree program in the country.

For a complete listing of programs refer to Appendix C.

D-5.1 Describe any specific laddering, articulation and/or credit transfer options for Manitoban students that are anticipated to change as a result of the significant modification of this program.

There are no changes.

D-6 Describe any changes in labour market demands in Manitoba for graduates of this Program as a result of this significant modification:
(Provide such information as probable employment destinations or further educational opportunities available to graduates of this new program of study. Attach any formal reports such as those from Associations, Statistics Canada, Sector Councils, Industry or Regulators.)
The persistent vacancy rate in this profession was identified as a high concern by government in its analysis of the healthcare landscape. Statistics Canada has identified a labour shortage for respiratory therapists, clinical perfusionists and cardiopulmonary technologists (NOC 3214) in Canada over the next 10 years (2019-2028).
https://www.jobbank.gc.ca/marketreport/outlook-occupation/22779/ca

At the current rate of graduation, we are not able to meet the demand side of the workforce. There will continue to be a high labour market demand for respiratory therapists in Manitoba even with the approval of the four-seat expansion. The addition of four seats represents an immediate response to this high need, but it clearly will not meet the full demand that is current, and that will only increase given the chronicity of the Manitoba population and the health care transformation that is planned. A seat expansion to 40 students better addresses the market demand in Manitoba. This increase will support the clinical transformation that the province is undergoing and will support RTs working to a full scope of practice.
D-7 If copies of any internal or peer evaluations with respect to the significant modification of this program of study are being provided with this proposal, please indicate how any issues identified by these evaluations have been addressed and attach any relevant documents as available:

No evaluation was conducted.

D-8 Does this significant modification entail an increase to tuition, or the establishment of or increase to fees that apply to students in this program of study?

No change. Students will be assessed tuition and fees at rates approved by the UM Board of Governors and the Province.

SECTION E – REQUIRED RESOURCES AND FINANCIAL IMPLICATIONS

E-1 If one-time or pilot funding is being requested to support the significant modification of this program of study, please identify the amount of funding being requested:

The below amounts are requested in the capital and “other expenses” categories and part of the overall ask of $4.437 M, $1.834 M and $1.342 M in funding over the 3 years respectively.

The following one-time funding is being requested:

- $3.140 M in capital funding (space and equipment).
- $670 K in support of recruiting, start-up costs and training for new faculty and instructors.
- $150 K project coordinator role for 2 yrs.

See Appendix D and Appendix E for more details.

E-2 If ongoing funding is being requested to support the significant modification of this program of study, please identify the amount of funding being requested:

The annual recurring operational budget we are seeking is $1.342 M.

See Appendix D for details.

E-3 If new funding is not being requested, how will the significant modifications to the program be funded? (Include such information as: where reallocated funding will come from, and the implications of reallocating that funding on other programs/activities of the institution.)

New funding is being requested

E-4 What are the resource implications to the institution in delivering the significantly modified program of study? (Include such information as: budget, IT, library, laboratory, computer, space, practicum liability insurance, student services, etc)

The resource implications when at full capacity of 120 students is reached in year 3 would be as follows:
Non-Salary Operating Expenses - $415K (includes impacts on RFHS units such as Accreditation Unit, Office of Interprofessional Collaboration, Northern Placements, Lab (CLSF)), etc.

University-wide Overhead - $243K (includes costs administrative costs associated with supporting academic programming that program outside of an academic unit such as student supports and services, access to libraries and other administrative services like HR, IT and Finance).

Space – $1.864M for fit-up of new RT space; $103K per year for 10 years lease space for units displaced by RT expansion.

Instructional costs – please see E.5

E-5 Please describe new and existing staffing resources needed to provide this significantly modified program of study. (Include reallocation of existing faculty, hiring of new faculty, administrative and support services and any other considerations.)

Current staffing to support 20 students per year starting in September 2022: 7 FTE UMFS Academic positions, 3 FTE Instructor/Sessional Positions, 2 FTE Support Staff positions.

Full Time (FT) permanent instructors/clinical coordination/sessonal instruction, 1 Part Time (PT) term instructor 0.6 FTE, 3 tenure track assistant professors at 40% teaching, 2.0 admin support for all clinical, research and department head support. In addition, some of the full time instructor FTE is outside sources (contracted) sessional instructors to fill gaps.

New Staffing: further to above, noting that 20 + 20 added students = 100% increase in enrollment.

Faculty/Instructor Positions:

- Additional 4.5 FTE tenure track academic (of which 40% is teaching) - to expand RT lead research, supervise MSc Program for RT, create an RT Master’s program, supervise students/work in new clinic development projects (including one-time start-up funding of $150K for each tenure track position). Includes 0.5 support for the Faculty of Arts to deliver courses in support of the program*.

- Additional 2.0 FTE instructor – offload clinical coordinator teaching and fill in gaps of courses, help with student recruitment and interdisciplinary teaching. Can aid in coordinating BRT (Bachelor of Respiratory Therapy) 1 & BRT 2 clinical, exploring new placements and affiliations, assist with admin work until admin hired, member of committees (curriculum), fill in service gaps. Or could offload teaching of senior faculty who could then be dedicated to curriculum reform. Includes 0.5 support for the Department of Human Anatomy and Cell Science to deliver courses in support of the program*.

Additional 2.0 FTE to Administrative/Support Positions:

- Ongoing 1.0 administrative support (Office Assistant 5).
- Ongoing 0.5 FTE for admin/class technician - support instructors with setting up labs, classrooms, inventory and equipment ordering, etc. Class technician added to support additional course sessions and instructors.
- Ongoing 0.5 admissions admissions and recruitment support for College

*The BRT program is supported by the Department of Human Anatomy and Cell Science, the Department of Pharmacology and Therapeutics, in delivery of coursework within the program, and the Faculty of Arts and Faculty of Science deliver required courses for entry to the program (see Appendix B). It is important to note that this is a a multi-unit/faculty program and all the constituents support the expansion with the adequate and ensured resources.
E-6 Please describe the effect of the significant modification of this program on existing capital infrastructure and equipment:

The expansion of the program and additional FTE’s will require capital investment of $3.140 M ($3.12 M in Yr. 1 and $20K in Yr. 2). Investment will be required for major equipment purchases (i.e. ventilators), retrofitting of space, and furniture / fixtures.

Major Equipment Purchases include the below. Please refer to Appendix E for details.

<table>
<thead>
<tr>
<th>Capital Item</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>QTY</td>
<td>Unit Cost</td>
<td>Total</td>
</tr>
<tr>
<td>Ventilators</td>
<td>10.00</td>
<td>$48,500</td>
<td>485,000</td>
</tr>
<tr>
<td>Hiflow</td>
<td>1.00</td>
<td>$10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Bipaps</td>
<td>5.00</td>
<td>$5,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Misc equipm</td>
<td>1.00</td>
<td>$280,000</td>
<td>280,000</td>
</tr>
<tr>
<td>Furn, Comp &amp; Misc</td>
<td>4.00</td>
<td>$5,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Space Reno</td>
<td>1.00</td>
<td>1,900,000</td>
<td>1,900,000</td>
</tr>
<tr>
<td>Lease Fit-Up</td>
<td>1.00</td>
<td>400,000</td>
<td>400,000</td>
</tr>
</tbody>
</table>

Subtotal Operating | $3,120,000 | $20,000 | $ -

Space renovations include expanded office space, lab space and equipment storage. Respiratory therapy utilizes large bulky equipment that takes specialized storage along with storage for gases. The major renovation costs are related to HVAC upgrades; fit-up costs related to creating new classrooms to accommodate students size and to fit up space for accommodating respiratory therapy equipment and supplies.
SECTION F – SIGNATURES

(A second signature section is provided for joint programs only)

SUBMITTED BY:

President:

Name:

Signature:

Date: Click here to enter a date.

Vice-President/Academic:

Name:

Signature:

Date: Click here to enter a date.

For use by joint programs only:

President:

Name:

Signature:

Date: Click here to enter a date.

Vice-President/Academic:

Name:

Signature:

Date: Click here to enter a date.

SUBMIT COMPLETED FORM

Once completed and signed, please submit this application form to Post-Secondary Education and Labour Market Outcomes at PSE-LMO@gov.mb.ca with the following attachments (double-click to engage check box):

- [ ] Cover letter
- [ ] Program of Study Financial Form
- [ ] Any supporting documentation (reviews, letters of support, etc.)

If you have any questions or require further information, please contact:

Post-Secondary Education and Labour Market Outcomes
Manitoba Education and Training
400-800 Portage Avenue Winnipeg MB R3C 0C4
(204) 945-1833
PSE-LMO@gov.mb.ca

2017-11-03
SIGNIFICANTMODIFICATION APPLICATION
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## APPENDIX A: Enrolment Progression Chart

<table>
<thead>
<tr>
<th>Term of Academic year</th>
<th>Winter 2022</th>
<th>Fall 2022</th>
<th>Winter 2023</th>
<th>Fall 2023</th>
<th>Winter 2024</th>
<th>Fall 2024</th>
<th>Winter 2025</th>
<th>Fall 2025</th>
<th>Winter 2026</th>
<th>Fall 2026</th>
<th>Winter 2027</th>
<th>Fall 2027</th>
<th>Winter 2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Intake (2022) – 20 students</td>
<td>x</td>
<td>BRT 1 (20)</td>
<td>BRT 1 (20)</td>
<td>BRT 2 (20)</td>
<td>BRT 2 (20)</td>
<td>BRT 3 (20)</td>
<td>~20 students graduate at the end of the term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Intake (2023) – 20 students</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>BRT 1 (40)</td>
<td>BRT 1 (40)</td>
<td>BRT 2 (40)</td>
<td>BRT 2 (40)</td>
<td>BRT 3 (40)</td>
<td>~40 students graduate at the end of the term</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Intake (2024) – 20 students</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>BRT 1 (40)</td>
<td>BRT 1 (40)</td>
<td>BRT 2 (40)</td>
<td>BRT 2 (40)</td>
<td>BRT 3 (40)</td>
<td>~40 students graduate at the end of the term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Intake (2025) – 20 students</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>BRT 1 (40)</td>
<td>BRT 1 (40)</td>
<td>BRT 2 (40)</td>
<td>BRT 2 (40)</td>
<td>BRT 3 (40)</td>
<td>~40 students graduate at the end of the term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduates from earlier intakes</td>
<td>~16 students graduate from Fall 2019 intake</td>
<td>~15 students graduate from Fall 2020 intake</td>
<td>~15 students graduate from Fall 2021 intake</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: Letters of Support
University of Manitoba Letters of Support
June 28, 2022

Reg Urbanowski
Dean & Professor
College of Rehabilitation Sciences
Rady Faculty of Health Sciences
R122 – 771 McDermot Avenue
Winnipeg, MB R3E 0T6

Dear Dr. Urbanowski,

Re: Respiratory Therapy program expansion

I support the increase to 40 seats per year starting in 2023 for the Bachelor of Respiratory Therapy program. I understand that this increase is based on approval by Senate, the Board of Governors and is subject to approval of funding by the Government of Manitoba.

Yours sincerely,

[Signature]

Brian Postl, CM, OM, MD, FRCP(C), FCAHS
Dean, Max Rady College of Medicine
Dean and Vice-Provost, Rady Faculty of Health Sciences
MEMORANDUM

Date: August 8, 2022

To: Greg Smith, Vice-Provost Academic Planning and Programming

From: Raman Dhaliwal, Associate Vice President Administration

RE: Respiratory Therapy Program Expansion

The Bannatyne Campus can support an expansion to the Respiratory Therapy (RT) Program by September 2023. This will require us to displace several groups currently on the 3rd floor of Pathology into leased and other internal spaces. There will be classroom impacts of this as well. The classrooms on the third floor of Pathology will support the RT expansion and new classrooms will need to be rebuilt in other underutilized spaces at Bannatyne to replace the ones being dedicated to the RT expansion. The overall capital and lease costs have been included in the proposal. We have factored in leased space cost for ten years as we strongly believe a new building is required at Bannatyne campus and are using a ten-year horizon in which this may be possible. If a new building isn't available in ten years, the lease costs will continue to apply as the space will be needed at Bannatyne Campus. The efficiency of space use at Bannatyne Campus is remarkable, however, it is very clear that all options have been exhausted and if further health sciences programs occur, a new building is required to accommodate increased activity at Bannatyne.
July 4, 2022

Dr. Urbanowski, Dean
College of Rehabilitation Sciences
R106 - 771 McDermot Avenue
University of Manitoba
Winnipeg, MB R3E 0T6 Canada

Dear Dr. Urbanowski,

Thank you for your email on Wednesday, May 25th to present the planned expansion in the Bachelor of Respiratory Therapy program by 40 students annually, with the first increased cohort taking place in September 2022.

The Bachelor of Respiratory Therapy program requires three (of six potential) courses delivered in the Faculty of Science; [BIOL 1020 and BIOL 1030] or [BIOL 1000 and BIOL 1010] and [STAT 1000 or STAT 1150]. The Faculty of Science supports the proposed expansion to the program and is confident that we have capacity to satisfy the modest increase proposed for the Bachelor of Respiratory Therapy program.

Sincerely,

Dr. Brian Mark
Dean, Faculty of Science
Professor, Department of Microbiology & Department of Biochemistry and Medical Genetics
Re: RT program expansion

Krystyna Koczanski <Krystyna.Koczanski@umanitoba.ca>
Mon 2022-07-18 1:18 PM

To: Reg Urbanowski <Reg.Urbanowski@umanitoba.ca>
Cc: Liane Allen <Liane.Allen@umanitoba.ca>; Brian Mark <Brian.Mark@umanitoba.ca>

Good afternoon Reg,

We have discussed the matter and decision was made that no additional financial/human resources would be required by The Faculty of Science.

Best,

Krystyna

Associate Dean, Administration
Faculty of Science, 249 Machray Hall
phone: 204-474-8310
email: krystyna.koczanski@umanitoba.ca

---

From: Reg Urbanowski <Reg.Urbanowski@umanitoba.ca>
Date: Monday, July 18, 2022 at 8:39 AM
To: Krystyna Koczanski <Krystyna.Koczanski@umanitoba.ca>
Cc: Liane Allen <Liane.Allen@umanitoba.ca>
Subject: FW: RT program expansion

Good day Krystyna

I am forwarding this message to you for handling. Here is some background information:

- Our College is putting a proposal together for an expansion of our respiratory therapy program. This proposal will be submitted to the government after due process within the UM.
- We are submitting a proposal to increase our seats in the Respiratory Therapy program by forty, starting in September 2023. Students applying for the program must complete prerequisites in their first year of university. The following are the courses in your faculty:
  - BIOL 1020 and BIOL 1030 OR BIOL 1000 and BIOL 1010
  - STAT 1000 OR STAT 1150
- Mark provided the attached letter of support to accompany our proposal.
- My email to Mark is to determine if your faculty would need extra resources because of this expansion. If so, we would build that into the proposal.

Can you send me an email stating that you will or won’t need extra resources because of this expansion?

Best regards

Reg

---

From: Reg Urbanowski
Sent: Monday, July 18, 2022 8:33 AM
To: Brian Mark <Brian.Mark@umanitoba.ca>
Cc: Sean Mckenna <Sean.Mckenna@umanitoba.ca>; Liane Allen <Liane.Allen@umanitoba.ca>
Subject: RT program expansion
Thank you for the letter of support, Mark. It is appreciated. I want to check to see if the expansion might require extra resources. We are seeking new money from the government for this proposal, so if there are resource requirements on your end, please let me know asap.

Thanks
Reg

I often work outside of regular hours. Please do not feel obligated to reply or take action outside your regular working hours.
Reg Urbanowski, Dean & Professor (he/his/him)
College of Rehabilitation Sciences,
Rady Faculty of Health Sciences

R122 – 771 McDermot Avenue
Winnipeg, Manitoba R3E 0T6
Tel. 204-318-5284
Fax. 204-789-3927
Reg.urbanowski@umanitoba.ca

Please note that our College is scent-free. Some individuals have allergies and sensitivities to certain chemicals in scented products. Please refrain from wearing scented products when visiting our college.
August 2, 2022

Dear Professor Urbanowski,

The Faculty of Arts provides its qualified support for the enrolment-target expansion from 16 to 40 seats in the Respiratory Therapy Program. While the numbers are relatively small (an increase of 24), it does represent a 150% increase in the enrolment target for this program. We are also aware of a forthcoming proposal for a significant enrolment-target increase in another program. There may be others forthcoming as well. This follows the significant increase in the Engineering and Nursing enrolment targets that have been approved by the President. Arts has already used internal resources to deal with the additional demands of these nursing and engineering expansions. Hence, in order to add these additional students without displacing others we are asking for a half position of $65,000 to cover the places required. We also strongly request that there be university-wide discussions to allow us to strategically manage our enrolment targets. If these discussions are taking place, we request that the Faculty of Arts be included in them. Thank you for being in touch about these changes.

Sincerely,

Heidi Marx
Dr. Reg Urbanowski  
Professor and Dean  
College of Rehabilitation Sciences  
Rady Faculty of Health Sciences  
R122-771 Bannatyne Avenue  
Winnipeg, MB R3E 0T6  

June 27, 2022  

Re: Support for increased enrolment in the Bachelor of Respiratory Therapy program  

Dear Dr. Urbanowski,  

Thank you for describing the intent of the College of Rehabilitation Sciences to expand enrollment in the Bachelor of Respiratory Therapy program by 40 seats in September, 2023. Our department is aware that this action will require increased student numbers in RESP 1440, which is a course to which we provide all teaching resources. I would like to give my assurance that the Department of Pharmacology and Therapeutics is supportive of this expansion and is committed to delivering the current course content to 40 additional students enrolled in a single course section.  

Please contact me if you would like to discuss this in more details.  

Sincerely,  

Chris M. Anderson, PhD  
Professor and Head  
Department of Pharmacology and Therapeutics  
Max Rady College of Medicine  
Rady Faculty of Health Sciences
To
Reg Urbanowski, MScOT, EdD
Dean, College of Rehabilitation Sciences

RE: Respiratory Therapy Program Expansion

July 4, 2022

Letter of Support

Dear Dr. Urbanowski,

Thank you for informing me of the proposed increased enrolment at the College of Rehabilitation Sciences is proposing which concerns the expansion of the Bachelor of Respiratory Program from currently 16 students to 40 students.

The Department of Human Anatomy and Cell Science is currently providing anatomy education to 16 RT students within the ANAT 1030 course. We deliver 24 lecture hours and 6 laboratory sessions for 1.5 hours each for a total of 33 direct student contact hours. With the planned substantially increased student number in the Respiratory Program (150 % increase in enrolment) the joint teaching concept in the ANAT1030 course will no longer be a suitable format with the available personnel and learning resources.

It will be required to create a separate new anatomy course for the RT program that addresses the specific learning content and provides an effective educational experience for the much larger RT student class.

Establishing, coordinating and leading a new anatomy course requires a substantial amount of teaching hours dedicated to the RT program with respect to teaching times, learning content and course organization including creating and administering the course examinations. Practical anatomy learning sessions are structured in small group teaching style and require an adequate instructor to student ratio to facilitate the most effective student learning. From a personnel resource standpoint the Department of Human Anatomy and Cell Science will need additional personnel resources equivalent to a 0.5 full-time instructor to be able to accommodate this new course in the RT program.

We have available the newly renovated Dr. George Yee Laboratory for Anatomical Sciences that provides space capacity to accommodate an anatomy course with increased enrolment in the RT program. The laboratory can house parallel teaching groups at the capacity of 40 students. The department of Human Anatomy and Cell Science will require selected additional teaching models, iPad stations and software resources to facilitate small group learning settings in this new course.
In conclusion, provided additional personnel and learning resources the Department of Human Anatomy and Cell Science will be able to provide the complete spectrum of gross anatomy and embryology education to RT students and is fully supportive of the increased enrollment to the RT program.

Sincerely,

Sabine Hombach-Klonisch, MD, PhD
Professor & Head
Dept. of Human Anatomy and Cell Science
TO: Reg Urbanowski, Dean, College of Rehabilitation Sciences  
FROM: Jeff Adams, University Registrar & Executive Director, Enrolment Services  
DATE: August 15, 2022  
SUBJECT: Letter of support for admissions target increase

I am in full support of the College of Rehabilitation Sciences’ proposed admission target increase for the Bachelor of Respiratory Therapy degree program from 20 seats to 40 seats effective for the fall 2023 intake. The increase in available seats could result in an increased number of applicants and I can confirm that this increase in workload can be accommodated by the Admissions Office.

I look forward to supporting the College of Rehabilitation Sciences as their proposal moves through the approval process.

Cc: Laurie Schnarr, Vice-Provost (Students)  
Erin Stone, Deputy Registrar and Director, Admissions
Accreditor/Regulator Letters of Support
July 21, 2022

BY EMAIL

Reginald Urbanowski, Dean – College of Rehabilitation Sciences
University of Manitoba
Respiratory Therapy Program
771 McDermot Avenue
Winnipeg, MB R3E 0T6

Dear Mr. Urbanowski:

Subject: Program Expansion - Respiratory Therapy Program (UNIM1)

This letter is in response to the recent notification received by EQual, from the University of Manitoba, in regards to the proposed expansion of annual student enrollment within the Respiratory Therapy Program (UNIM1) from 14 to 40 students.

I write to confirm that, “an increase from 14 to 40 students”, by an established education program is considered by EQual to constitute a substantial program change.

Our existing Health Education Accreditation Client Agreement categorizes the Respiratory Therapy Program (UNIM1) as a VA program: multi-site program with one contact site and more than 10 clinical / practicum sites.

The current annual accreditation fee for a VA program is $11,512. The University of Manitoba’s proposed substantial program change does not trigger any adjustment in the categorization of the Respiratory Therapy Program (UNIM1) as a VA program.

However, in considering the impact of a substantial program change to the Respiratory Therapy Program (UNIM1), the University of Manitoba will be requested by EQual to:

• Self-assess and consider how the program change will impact upon each accreditation criteria (including all high priority and normal priority criteria); and
• Report to EQual the specific program changes that will be implemented to accommodate the increased student enrollment within the program (e.g., all changes to curriculum, faculty, clinical sites, etc.).

If it is subsequently determined by EQual that a substantial program change has indeed impacted the education program’s compliance with any accreditation criteria, the education program will be requested by EQual to:

• Provide additional documentation and/or evidence to support how the program intends to remain compliant with any identified accreditation criteria; and
• As necessary, EQual may conduct further assessment of the program to validate and confirm the education program’s compliance with the accreditation criteria.
Please continue to liaise directly with your accreditation specialist, Nikolina Petranovic (Nikolina.Petranovic@healthstandards.org), regarding the process outlined above once specific changes are determined and confirmed.

If you have any questions or concerns regarding this matter, please do not hesitate to contact me directly (James.Sullivan@healthstandards.org).

Yours sincerely,

James A. Sullivan, BScN, RN, MHA, CHE
Interim Manager, EQual
Accreditation Canada

cc: Kaitlin King, Acting Department Head of the Department of Respiratory Therapy
Liane Allen, Confidential Administrative Secretary for the College of Rehabilitation Sciences
Nikolina Petranovic, Accreditation Specialist – Accreditation Canada
Accreditation Canada File No. UNIM1 (University of Manitoba – Respiratory Therapy Program)
Dr. Reg Urbanowski, Dean  
College of Rehabilitation Sciences  
R106 - 771 McDermot Avenue  
University of Manitoba  
Winnipeg, MB R3E 0T6 Canada  

Thursday June 30, 2022  

Dear Dr. Reg Urbanowski,  

On behalf of the Manitoba Association of Registered Respiratory Therapists (MARRT) Board of Directors, thank you for the invitation to include our voice with the proposal to increase the seat allocation in the Bachelor of Respiratory Therapy (RT) Program. It is our understanding that four new seats will be added to the current 16 seats for the fall 2022 intake and that an additional 20 new seats will be added for the fall 2023 intake for a total of 40 seats in the Respiratory Therapy program.  

This is very exciting news for the Department of Respiratory Therapy at the University of Manitoba as well as for Manitobans who will eventually experience greater access to the care and expertise provided by Registered Respiratory Therapists (RRT). Many health care facilities currently have vacant RRT positions and with an increasing number of RRTs approaching the age of retirement, it is imperative to prepare for the numbers who will leave the profession; a number that could be disproportionately higher than the number currently graduating from the current RT program. We are also aware that for example, the Brandon General Hospital, recently increased the number of ICU beds from 10 to 16 and is seeking to fill an additional four (4) permanent fulltime EFTs, indicating that the need for RRTs is growing.  

The proposed seat increases are welcomed and supported by the MARRT coupled with some questions and comments that we hope are part of the strategy in planning for the delivery of a larger program. Currently, the Registered Respiratory Therapy (RRT) staffing models and scope of practice are limited in Manitoba. It is MARRT’s hope that the increase in the number of graduates from the BRT program will eventually translate into filling current gaps and vacancies within the healthcare system; and beyond that, build capacity, see RRTs move into emerging roles, and allow RRTs the opportunity to practice to a fuller scope of their profession resulting in increased efficiencies and improved cardiopulmonary care for patients. In addition, this increase will allow RRTs to extend the expertise of their profession to areas such as: education; to northern, rural and remote areas; and to see growth in the areas of Primary Care; offering Manitobans accessible cardiopulmonary health care, wellness, and preventative care.  

As health-care examines patient outcomes, research suggests that a typical ratio of mechanical ventilator to RT ratio is 5:1 (Vent:RT=5.1) in ICUs in teaching hospitals in Canada, with ratios fluctuating based on factors related to the care specialization of the ICU (West, Nickerson, et al., 2016). This is an example of a ratio required for safe practice standards and emerging research is supporting the need for RRTs to be
available to perform to this scope of care. The eventual increase in the number of RRTs in the workforce will allow for the support of safe and consistent practices such as this.

With the proposed increase in the number of seats, we expect that proportionate increases will also occur in all aspects of programming and student support ranging from physical space, equipment needs, number of faculty, student support and any other function necessary to maintain the requirements of program accreditation and the quality of the program. Caution is noted that given the current 1:1 preceptor to student ratio in clinical placements, it is important to highlight that the current shortage of RRTs in some facilities could impact this ratio by having to increase the number of students per preceptor. This may result in reduced opportunities to learn, practice, and evaluate competencies while also impacting the quality of patient care. Although simulation to teach clinical competencies can be considered, the National Competency Framework and the MARRT do not allow for the evaluation of a wide variety of competencies through simulation. We trust that strategies will be put in place to mitigate the dilution of the high quality of education provided.

The first increase in the number of graduates from the expanded BRT program will not be realized until the summer of 2026. The MARRT Board is in full support of the University of Manitoba, Department of Respiratory Therapy increasing the number of seats in the BRT program which will eventually translate into an increase in RRTs available to provide specialized care to Manitobans. It is our hope that we can work together to address some of the challenges noted in our letter that will support the program expansion and ultimately benefit Manitoba.

Sincerely,

Deborah Handziuk, MEd, EdPsych
Executive Director & Registrar
On behalf of the MARRT Board of Directors

Health Agency Letters of Support
July 20, 2022

Dr. Reg Urbanowski
Dean and Professor
College of Rehabilitation Sciences
Rady Faculty of Health Sciences

Dear Dr. Urbanowski:

Respiratory therapists (RTs) have always played a vital role across the health system, with the COVID-19 pandemic response further emphasizing the global requirement for their specialized training in the assessment, management and treatment of patients experiencing breathing or cardiopulmonary disorders.

RTs provide essential care to patients of all ages who are having trouble breathing for a variety of reasons, including chronic respiratory disease, asthma, emphysema, infectious diseases and disorders of other body systems. They are highly trained and skilled health professionals working in home and community care, long-term care, across acute care facilities in ORs, ICUs and other clinical settings, and delivering resuscitation and stabilization to critically ill or injured patients both in facility and during patient transport.

The University of Manitoba's RT education program provides RT graduates with a solid foundation for entry to clinical practice while also preparing them for future career development as expert clinicians, teachers, researchers or health system leaders.

Consistent with many health care professions, respiratory therapy is facing significant vacancy issues across the health system. The 16 seats currently available in the University of Manitoba RT program are no longer able to meet the demand for RTs within all health sectors, regions and service delivery organizations. Shared Health employs a large cadre of RTs at the Health Sciences Centre and within Emergency Response Services. We are highly dependent on the clinical, educational, research and leadership expertise of RTs and strongly support the recommended expansion to 40 seats to meet growing demand for these valued professionals.

I would be happy to discuss this further with you at your convenience.

Sincerely,

Helen Clark, RRT, MBA, FCSRT
Chief Operating Officer, Emergency Response Services
Chief Allied Health Officer
Shared Health
June 30, 2022

To: Reg Urbanowski, Dean of College of Rehabilitation Sciences,

The Winnipeg Regional Health Authority (WRHA) delivers health services and promotes well-being in the Winnipeg and Churchill areas. We provide services through our hospitals, health centres, long-term care facilities and community health services including clinics, public health and home care services. The scope of practice and work of Respiratory Therapists (RTs) are central to the provision of safe patient care in many sectors of the health care system. The WRHA supports in principle the proposal being developed by the University of Manitoba, at the request of the provincial government, for increasing the number of seats from 16 to 40. This increase will ensure safe staffing levels and support the effective delivery of health services.

The WRHA is committed to providing support and supervision for these additional students during their clinical education rotations. The programs supporting RT students in the WRHA includes Critical Care, Anesthesia, Pulmonary Rehabilitation, Community Care, Chronic Care, Long Term Ventilator Service, Diagnostics and health education. Sites with RT placements are St. Boniface Hospital, Grace Hospital, Seven Oaks General Hospital, Concordia Hospital, Victoria Hospital, Deer Lodge Centre, Riverview Health Centre and Misericordia Health Centre.

If further information is required, please do not hesitate to reach out.

Sincerely,

Candice Harmon
Professional Lead Respiratory Therapy
Winnipeg Regional Health Authority
July 5, 2022

Reg Urbanowski  
Dean, College of Rehabilitation Sciences  
University of Manitoba  
Sent via email: Reg_Urbanowski@umanitoba.ca

Dear Sir:

Mr Urbanowski, it is my privilege to provide this letter of support to increase the number of Respiratory Therapist student seats at the University of Manitoba from 16 to 40 students per year.

This increase is anticipated to help fulfill the demand for maintaining and increasing the recruitment and retention of Respiratory Therapists in Northern Manitoba. We support the increase in principle, and would like to offer our continued support in the clinical supervision of students during their placements.

Please feel free to contact me if there is any further information you require.

Sincerely,

Joy Tetlock, Acting CEO/ CPSP Implementation Lead for  
Helga Bryant RN, BScN, MScA  
Chief Executive Officer
July 14, 2022

University of Manitoba
R118, 771 McDermot Ave.
Winnipeg, Manitoba
R3E 0T6

Dear Dean Reg Urbanowski,

Subject: Bachelor of Respiratory Therapy Program

I am pleased to provide a letter on behalf of Prairie Mountain Health (PMH) in support of the University of Manitoba, Bachelor of Respiratory Therapy (BRT) program. I would like to take this opportunity to emphasize the need to increase the number of seats for this program. The program has provided quality Respiratory Therapists to the Prairie Mountain Health region, but the small number of graduates does not meet the demand needed to fill vacant positions throughout the Region & Province.

Prairie Mountain Health continually faces recruitment challenges especially in rural areas. We employ many strategies to increase and retain staff to overcome vacancy challenges. One strategy is to support practical experiences for educational programs, such as the BRT. PMH has been very active in supporting practicum experiences for BRT students and would be pleased to welcome more. One of the benefits of doing a practicum is getting a better understanding of a health care setting. This ultimately provides an incentive to apply for vacant positions as the individual has had the opportunity to develop a level of comfort in a particular facility as a student.

In closing, PMH fully supports an expansion of seats in the BRT program to better suit the needs of health service delivery now and into the future.

Sincerely,

[Signature]

Brian Schoonbaert
CEO
Dear Reg Urbanowski,

I am in approval in principal of the increased in enrolment of the BRT program from 16 students to 40 students per year. I plan to actively continue to support supervision of students at Bethesda Regional Health Centre for clinical education rotations. There are many needs in rural Manitoba for more respiratory therapy support, I would love to one day see community care services expanded locally in Steinbach. To be able to expand the program, this is a great step.

Warm regards,

Justin Chan, RRT, CRE

Respiratory Therapy
Bethesda Regional Health Centre
Southern Health-Santé Sud
316 Henry Street
Steinbach, MB R5G 0P9
T 204-326-6411 ext 2263 F 204-326-6931
E jchan@southernhealth.ca
www.southernhealth.ca

Together leading the way for a healthier tomorrow.

Ensemble vers un avenir plus sain.
APPENDIX C: Canadian Respiratory Therapy Programs

<table>
<thead>
<tr>
<th>Location</th>
<th>Educational institution</th>
<th>Program(s)</th>
<th>Program duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>British</td>
<td></td>
<td>Fast-track stream (for those who already have a Bachelor of Science)</td>
<td>2 years</td>
</tr>
<tr>
<td>Columbia</td>
<td>Thompson Rivers University tru.ca</td>
<td>Respiratory Therapy Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dual-credential: Respiratory Therapy Diploma and Bachelor of Health Science</td>
<td>4 years</td>
</tr>
<tr>
<td>Alberta</td>
<td>Northern Alberta Institute of Technology nait.ca</td>
<td>Respiratory Therapy Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Southern Alberta Institute of Technology sail.ca</td>
<td>Respiratory Therapy Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td>Manitoba</td>
<td>University of Manitoba umanitoba.ca</td>
<td>Bachelor of Respiratory Therapy</td>
<td>4 years</td>
</tr>
<tr>
<td>Ontario</td>
<td>Michener Institute of Education at UHN michener.ca</td>
<td>Respiratory Therapy Program - Advanced Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>St. Clair College of Applied Arts and Technology stclaircollege.ca</td>
<td>Respiratory Therapy Program - Advanced Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Algonquin College of Applied Arts and Technology algonquincollege.com</td>
<td>Advanced Diploma in Respiratory Therapy</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Canadore College of Applied Arts and Technology canadorecollege.ca</td>
<td>Advanced Diploma in Respiratory Therapy</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>La Cité collégiale - Collège d'arts appliqués et de technologie collegelacite.ca</td>
<td>Thérapie respiratoire</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Fanshawe College of Applied Arts and Technology fanshawec.ca</td>
<td>Advanced Diploma in Respiratory Therapy</td>
<td>100 weeks</td>
</tr>
<tr>
<td></td>
<td>Conestoga College Institute of Technology and Advanced Learning conestogac.on.ca</td>
<td>Advanced Diploma in Respiratory Therapy</td>
<td>3 years</td>
</tr>
<tr>
<td>Province</td>
<td>Program Name</td>
<td>Degree/Knowledge Area</td>
<td>Duration</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Quebec</td>
<td>Vanier College</td>
<td>Diploma in Respiratory &amp; Anaesthesia Technology</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>CEGEP de Ste-Foy</td>
<td>Techniques d’inhalothérapie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>CEGEP de Sherbrooke</td>
<td>Techniques d’inhalothérapie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Collège de Rosemont</td>
<td>Techniques d’inhalothérapie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>CEGEP de Chicoutimi</td>
<td>Techniques d’inhalothérapie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>College Ellis – Campus de Trois-Rivières</td>
<td>Techniques d’inhalothérapie et anesthésie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>College Ellis – Campus de Longueuil</td>
<td>Techniques d’inhalothérapie et anesthésie</td>
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<td></td>
<td>CEGEP de l’Outaouais</td>
<td>Techniques d’inhalothérapie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>College de Valleyfield</td>
<td>Techniques d’inhalothérapie</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>New Brunswick Community College – Saint John</td>
<td>Respiratory Therapy Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>Collège communautaire du Nouveau-Brunswick</td>
<td>Thérapie respiratoire</td>
<td>120 weeks</td>
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<tr>
<td>Nova Scotia</td>
<td>QEII/Dalhousie University</td>
<td>Diploma in Respiratory Therapy</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Health Science with a specialization in Respiratory Therapy</td>
<td>4 years</td>
</tr>
<tr>
<td>Newfoundland and Labrador</td>
<td>College of the North Atlantic</td>
<td>Respiratory Therapy Diploma</td>
<td>3 years</td>
</tr>
<tr>
<td>International</td>
<td>College of the North Atlantic (Qatar)</td>
<td>Respiratory Therapy Diploma</td>
<td>3 years</td>
</tr>
</tbody>
</table>
APPENDIX D: Program Financial Form
**MEDT Form**

**Economic Development and Training**

**Post-Secondary Education and Labour Market Outcomes**

**Program Proposal Financial Form**

**Form Instructions:**
1. When proposing a new program *Current Fiscal Year* (the first column) should be left blank, with the first year of the program starting in year 1.
2. When proposing a new program expansion *Current Fiscal* should be entered in the first column.
3. If a program reaches maturity prior to Fiscal Year 4, remaining fiscal year columns must still be completed so that *Ongoing Program Funding* can be calculated.
4. Fill in line items for revenue, expenditure, and capital as these pertain to the program. Examples are correspondently listed to the right of the table.
5. Ensure that line items account for overhead. For example, include the amount of tuition that the program will receive after administrative overhead.
6. Only fill out areas shaded in green, using cash accounting. The increment, on-going and total will self-populate accordingly.

---

**Institution:** College of Rehabilitation Sciences, Rady Faculty of Health Sciences, University of Manitoba

**Program Name:** Respiratory Therapy

**Contact Information:** Reg Urbanowksi, Dean; Nathan Dueck, Director of Finance; Sam Vagianos, Senior Financial Officer

**Date:** May-22

<table>
<thead>
<tr>
<th>Current Fiscal Year</th>
<th>Fiscal Year 1</th>
<th>Increment</th>
<th>Fiscal Year 2</th>
<th>Increment</th>
<th>Fiscal Year 3</th>
<th>Increment</th>
<th>Ongoing Program Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Enter 0’s if new program)</td>
<td>Budget Yr. 1</td>
<td>(change from current year to year 1)</td>
<td>Budget Yr. 2</td>
<td>(change from year 1 to year 2)</td>
<td>Budget Yr. 3</td>
<td>(change from year 2 to year 3)</td>
</tr>
<tr>
<td><strong>Revenue Information</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tuition (expansion)</td>
<td>$ 105,820</td>
<td>$ 105,820</td>
<td>$ 219,577</td>
<td>$ 113,757</td>
<td>$ 341,716</td>
<td>$ 122,139</td>
<td>$ 341,716</td>
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<tr>
<td>Student Fees (expansion)</td>
<td>$ 4,200</td>
<td>$ 4,200</td>
<td>$ 8,484</td>
<td>$ 4,284</td>
<td>$ 12,853</td>
<td>$ 4,369</td>
<td>$ 12,853</td>
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<td>$ 296,296</td>
<td>$ 30,784</td>
<td>$ 329,365</td>
<td>$ 33,069</td>
<td>$ 341,716</td>
<td>$ 12,351</td>
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<td>Student Fees (base)</td>
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<td>$ 11,760</td>
<td>$ 944</td>
<td>$ 12,726</td>
<td>$ 966</td>
<td>$ 12,853</td>
<td>$ 127</td>
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<td>Contribution from Institution/Unit (Existing Res.)</td>
<td>$ 1,183,125</td>
<td>$ 1,151,397</td>
<td>$(31,728)</td>
<td>$ 1,164,117</td>
<td>$ 12,720</td>
<td>$ 1,200,030</td>
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<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td></td>
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<tr>
<td><strong>Total Revenue (A)</strong></td>
<td>$ 1,459,453</td>
<td>$ 1,569,473</td>
<td>$ 110,020</td>
<td>$ 1,734,269</td>
<td>$ 164,796</td>
<td>$ 1,909,169</td>
<td>$ 174,900</td>
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</tbody>
</table>
Institution: College of Rehabilitation Sciences, Rady Faculty of Health Sciences, University of Manitoba
Program Name: Respiratory Therapy
Contact Information: Reg Urbanowski, Dean; Nathan Dueck, Director of Finance; Sam Vagianos, Senior Financial Officer
Date: May-22

<table>
<thead>
<tr>
<th>EXPENDITURE INFORMATION</th>
<th>Current Fiscal Year</th>
<th>Fiscal Year 1</th>
<th>Increment</th>
<th>Fiscal Year 2</th>
<th>Increment</th>
<th>Fiscal Year 3</th>
<th>Increment</th>
<th>Ongoing Program Funding</th>
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<tr>
<td>New Academic Salaries - Direct</td>
<td>$448,500</td>
<td>$448,500</td>
<td>$840,698</td>
<td>$392,198</td>
<td>$874,622</td>
<td>$33,924</td>
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<td>New Professional/Support Salaries - Direct</td>
<td>$60,000</td>
<td>$60,000</td>
<td>$128,100</td>
<td>$68,100</td>
<td>$132,584</td>
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<td>New Operating Expenses</td>
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<td>$857,583</td>
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<td>Student Support</td>
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<td>Indirect Salary Expenses</td>
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<td>$194,874</td>
<td>$52,123</td>
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<td>Administrative Overhead</td>
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<td>Existing Academic Salaries - Direct</td>
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<td>$128,454</td>
<td>$4,344</td>
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<td>$123,595</td>
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<td>Existing Operating Expenses</td>
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<td>$2,886,170</td>
<td>$3,548,525</td>
<td>$662,355</td>
<td>$3,251,451</td>
<td>$297,074</td>
<td>$3,251,451</td>
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Institution: College of Rehabilitation Sciences, Rady Faculty of Health Sciences, University of Manitoba
Program Name: Respiratory Therapy
Contact Information: Reg Urbanowksi, Dean; Nathan Dueck, Director of Finance; Sam Vagianos, Senior Financial Officer
Date: May-22

<table>
<thead>
<tr>
<th>Current Fiscal Year</th>
<th>Fiscal Year 1</th>
<th>Increment</th>
<th>Fiscal Year 2</th>
<th>Increment</th>
<th>Fiscal Year 3</th>
<th>Increment</th>
<th>Ongoing Program Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Enter 0's if new program)</td>
<td>Budget Yr. 1</td>
<td>(change from current year to year 1)</td>
<td>Budget Yr. 2</td>
<td>(change from year 1 to year 2)</td>
<td>Budget Yr. 3</td>
<td>(change from year 2 to year 3)</td>
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**CAPITAL INFORMATION**

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<th>Description</th>
<th>Budget Yr. 1</th>
<th>Budget Yr. 2</th>
<th>Budget Yr. 3</th>
<th>Ongoing Program Funding</th>
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<tr>
<td>Teaching / Lab Equipment</td>
<td>$800,000</td>
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<td>Furniture, Computers, Misc. Office</td>
<td>$20,000</td>
<td>$20,000</td>
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<tr>
<td>Space</td>
<td>$2,300,000</td>
<td>$2,300,000</td>
<td>$-</td>
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<tr>
<td>Total Capital (C)</td>
<td>$3,120,000</td>
<td>$3,120,000</td>
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<td>$-</td>
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</table>

Revenue less Expenditures and Capital (A-(B+C)) | $- | $- | $- | $- | $- |
Funding Request                               | $4,436,697   | $1,834,256   | $2,602,441   | $491,974   | $1,342,282   |

Page 3 of 11
# 1. STAFFING REQUIREMENTS (FTE)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<tbody>
<tr>
<td>New Academic Positions (FTE) (Appendix A)</td>
<td>3.50</td>
<td>6.50</td>
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<tr>
<td>New Professional and Support Positions (FTE) (Appendix A)</td>
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<td>2.00</td>
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<td><strong>Subtotal Staffing Requirements (FTE)</strong></td>
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# 2. PROGRAM COSTS

## Direct Program Costs

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<th>Year 1</th>
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<th>Year 3</th>
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<tr>
<td>New Academic Salaries (incl bpl) (Appendix A)</td>
<td>$448,500</td>
<td>$840,698</td>
<td>$874,622</td>
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<td>Existing Academic Salaries (incl bpl) (Appendix A)</td>
<td>1,211,748</td>
<td>1,254,159</td>
<td>1,298,055</td>
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<tr>
<td>New Professional/Support Salaries (incl bpl) (Appendix A)</td>
<td>60,000</td>
<td>128,100</td>
<td>132,584</td>
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<td>Existing Professional/Support Salaries (incl bpl) (Appendix A)</td>
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<td></td>
<td></td>
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<tr>
<td>Operating Expenses (Appendix B)</td>
<td>765,116</td>
<td>857,583</td>
<td>414,878</td>
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<td>Existing Operating Expenses (Appendix B)</td>
<td></td>
<td></td>
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<tr>
<td>Student (Graduate/Undergraduate) Support (Appendix C)</td>
<td>-</td>
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<td>Major Equipment (Appendix D)</td>
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<td>Vehicles (Appendix D)</td>
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<td>Renovations (Appendix D)</td>
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<td>Furniture (Appendix D)</td>
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<td>Other Capital (Appendix D)</td>
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<td><strong>Subtotal Direct Program Costs</strong></td>
<td>$5,853,069</td>
<td>$3,352,588</td>
<td>$2,976,683</td>
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## Indirect Program Costs

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<th>Year 3</th>
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<td>New Indirect Salary Expenses (incl bpl) (Appendix A)</td>
<td>$10,350</td>
<td>$21,062</td>
<td>$32,149</td>
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<td>Existing Indirect Salary Expenses (incl bpl) (Appendix A)</td>
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<tr>
<td><strong>Subtotal Indirect Program Costs</strong></td>
<td>$10,350</td>
<td>$21,062</td>
<td>$32,149</td>
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## Total Program Costs (Direct & Indirect)

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<td><strong>Total Program Costs</strong></td>
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<td>$3,373,650</td>
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### 3. ENROLMENT

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<th>Year 3</th>
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<tbody>
<tr>
<td>Expected Enrolment (headcount)</td>
<td>76</td>
<td>100</td>
<td>120</td>
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<tr>
<td>Expected Enrolment (credit hours)</td>
<td>2,812</td>
<td>3,700</td>
<td>4,440</td>
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### 4. NET PROGRAM ALLOCATIONS TO FACULTY/SCHOOL

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<th>Year 3</th>
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<tr>
<td>Operating Grant Revenue (see note)</td>
<td>$247,690</td>
<td>$494,565</td>
<td>$694,103</td>
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<td>Tuition Revenue (Appendix E)</td>
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<tr>
<td>• Credit Hour Based Undergraduate</td>
<td>$126,611</td>
<td>$253,317</td>
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<tr>
<td>• Graduate</td>
<td>-</td>
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<tr>
<td>• Program Based</td>
<td>-</td>
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<tr>
<td>• Other Compulsory Student Fees</td>
<td>$7,257</td>
<td>$14,523</td>
<td>$20,589</td>
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<tr>
<td>Tax on Grant and Tuition Revenue</td>
<td>$66,438</td>
<td>$132,749</td>
<td>$186,935</td>
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<tr>
<td>Indirect Central Support Costs</td>
<td>$297,141</td>
<td>$528,321</td>
<td>$608,993</td>
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<tr>
<td>Net Allocation Impact</td>
<td>$17,979</td>
<td>$101,335</td>
<td>$277,816</td>
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<tr>
<td>• Plus: Program/Course Specific Fees</td>
<td>$5,144</td>
<td>$5,250</td>
<td>$4,497</td>
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<tr>
<td>Less: Administrative Overhead</td>
<td>$76,313</td>
<td>$62,125</td>
<td>$55,683</td>
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<tr>
<td>Total Net Impact</td>
<td>$(53,190)</td>
<td>$44,460</td>
<td>$226,629</td>
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### 5. EXISTING RESOURCES

#### From Operations:

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<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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</thead>
<tbody>
<tr>
<td>Academic Salaries (Appendix A)</td>
<td>$1,211,748</td>
<td>$1,254,159</td>
<td>$1,298,055</td>
</tr>
<tr>
<td>Professional and Support Salaries (Appendix A)</td>
<td>124,110</td>
<td>128,454</td>
<td>132,950</td>
</tr>
<tr>
<td>Indirect Salaries (Appendix A)</td>
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<tr>
<td>Operating Expenses</td>
<td>123,595</td>
<td>123,595</td>
<td>123,595</td>
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<tr>
<td>Current/prior years surplus (carryover)</td>
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#### From Other Sources:

Subtotal Existing Resources $1,459,453 $1,506,208 $1,554,599

### 6. Program shortfall (surplus)

(Program Costs - Program Revenue - Existing Resources)

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<th>Year 2</th>
<th>Year 3</th>
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</thead>
<tbody>
<tr>
<td>Internal Funds Requested through Strategic Allocation</td>
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<tr>
<td>Reallocation of internal resources</td>
<td>20,459</td>
<td>(11,273)</td>
<td>(114,678)</td>
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<td>Funds Requested of the Provincial Government</td>
<td>4,436,697</td>
<td>1,834,256</td>
<td>1,342,282</td>
</tr>
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Balance (should be zero) $0 $0 $(0) $(0)

---

Submitted by Faculty/School Budget Officer (signature)  
Aug 18, 2022

Reviewed by Graduate Studies Dean or Designate (signature)  
(For graduate program submissions only)  
Chester Wojciechowski  
Aug 18, 2022

Reviewed by University Budget Officer (signature)  
Date
### NEW

<table>
<thead>
<tr>
<th></th>
<th>FTE</th>
<th>Total Salary</th>
<th>FTE</th>
<th>Total Salary</th>
<th>FTE</th>
<th>Total Salary</th>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Excluded Academic Admin</td>
<td></td>
<td>$ -</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
</tr>
<tr>
<td>Professor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Assoc/Asst Professor or Senior Instructor</td>
<td>2.50</td>
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<tr>
<td>Teaching Assistants</td>
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<td>3,750</td>
<td>-</td>
<td>7,631</td>
<td>-</td>
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<td><strong>Subtotal New Academic Salaries</strong></td>
<td>3.50</td>
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<td>700,581</td>
<td>6.50</td>
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<td>$ 448,500</td>
<td>6.50</td>
<td>$ 840,698</td>
<td>6.50</td>
<td>$ 874,622</td>
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<td><strong>Professional and Support Staff</strong></td>
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</tr>
<tr>
<td>EMAPS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AESES</td>
<td>1.00</td>
<td>50,000</td>
<td>2.00</td>
<td>106,750</td>
<td>2.00</td>
<td>110,486</td>
</tr>
<tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Subtotal New Professional and Support Staff</strong></td>
<td>1.00</td>
<td>50,000</td>
<td>2.00</td>
<td>106,750</td>
<td>2.00</td>
<td>110,486</td>
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<tr>
<td>Benefits and Pay Levy</td>
<td>10,000</td>
<td>21,350</td>
<td>22,097</td>
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<tr>
<td><strong>Total New Professional and Support Staff (incl. BPL)</strong></td>
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<td>$ 60,000</td>
<td>2.00</td>
<td>$ 128,100</td>
<td>2.00</td>
<td>$ 132,584</td>
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<tr>
<td><strong>Indirect Staff (Within your faculty/school)</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>EMAPS</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>AESES</td>
<td>-</td>
<td>8,625</td>
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<td>17,552</td>
<td>-</td>
<td>26,791</td>
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<td>CUPE TA’s</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal New Indirect Staff</strong></td>
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<td>8,625</td>
<td>-</td>
<td>17,552</td>
<td>-</td>
<td>26,791</td>
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<td><strong>Total New Indirect Staff (including BPL)</strong></td>
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<td>$ 10,350</td>
<td>-</td>
<td>$ 21,062</td>
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<td>$ 32,149</td>
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</table>

**Total New Staff**

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<td>YEAR 1</td>
<td>4.50</td>
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<tr>
<td>YEAR 2</td>
<td>8.50</td>
<td>$ 989,860</td>
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<tr>
<td>YEAR 3</td>
<td>8.50</td>
<td>$ 1,039,355</td>
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Appendix A - Salary Expenses

SENATE PLANNING AND PRIORITY COMMITTEE

NEW PROGRAM APPROVAL PROCESS
SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

### EXISTING (Within your faculty/school)

<table>
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<th>Academic</th>
<th>Year 1</th>
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<th></th>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluded Academic Admin</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
</tr>
<tr>
<td>Professor</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
</tr>
<tr>
<td>Assoc/Asst Professor or Senior Instructor</td>
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<tr>
<td>Teaching Assistants</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
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<tr>
<td><strong>Subtotal Existing Academic Salaries</strong></td>
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<td>1,009,790</td>
<td>10.00</td>
<td>1,045,133</td>
<td>10.00</td>
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<td>10.00</td>
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<table>
<thead>
<tr>
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<th></th>
</tr>
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<td></td>
<td>- $</td>
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<tr>
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<td>- $</td>
<td></td>
<td>- $</td>
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<td>- $</td>
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<tr>
<td><strong>Subtotal Existing Professional and Support Staff</strong></td>
<td>2.00</td>
<td>103,425</td>
<td>2.00</td>
<td>107,045</td>
<td>2.00</td>
<td>110,791</td>
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<td>128,454</td>
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<table>
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<th></th>
<th></th>
</tr>
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<tbody>
<tr>
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<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
</tr>
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<td>CUPE TA's</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
</tr>
<tr>
<td><strong>Subtotal Existing Indirect Staff</strong></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Benefits and Pay Levy</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
<td></td>
<td>- $</td>
</tr>
<tr>
<td><strong>Total Existing Indirect Staff (including BPL)</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Total Existing Staff</th>
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<tbody>
<tr>
<td><strong>12.00  $ 1,335,858</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRAND TOTAL</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>16.50  $ 1,854,708</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
## SENATE PLANNING AND PRIORITY COMMITTEE
### NEW PROGRAM APPROVAL PROCESS

<table>
<thead>
<tr>
<th>Direct Expenses</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>700BGT Travel - Budget (includes visiting speakers, orientation, research day)</td>
<td>$1,500</td>
<td>$3,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>701BGT Hospitality - Budget</td>
<td>$313</td>
<td>$625</td>
<td>$938</td>
</tr>
<tr>
<td>704BGT Printing and Duplicating - Budget</td>
<td>$104</td>
<td>$208</td>
<td>$313</td>
</tr>
<tr>
<td>706BGT Consumable Materials/Supplies Budget (includes computers)</td>
<td>$625</td>
<td>$1,250</td>
<td>$1,875</td>
</tr>
<tr>
<td>708BGT Telecommunications - Budget</td>
<td>$1,350</td>
<td>$2,550</td>
<td>$2,550</td>
</tr>
<tr>
<td>710BGT Other Expenses (Nonconsumable) Budget</td>
<td>$643,224</td>
<td>$730,449</td>
<td>$284,703</td>
</tr>
<tr>
<td>713BGT Insurance - Budget</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>716BGT Externally Contracted Serv - Budget</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>718BGT Professional Fees - Budget</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>740BGT Repairs and Maintenance - Budget</td>
<td>$118,000</td>
<td>$119,500</td>
<td>$119,500</td>
</tr>
</tbody>
</table>

| Subtotal Direct Operating | $765,116 | $857,583 | $414,878 |
## SENATE PLANNING AND PRIORITY COMMITTEE
### NEW PROGRAM APPROVAL PROCESS

### Appendix C - Student Support

<table>
<thead>
<tr>
<th>Graduate / Undergraduate Support Expense</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>7700 Scholarships</td>
<td>$</td>
<td>-</td>
<td>$</td>
<td>-</td>
<td>$</td>
</tr>
<tr>
<td>7710 Bursaries</td>
<td>$</td>
<td>-</td>
<td>$</td>
<td>-</td>
<td>$</td>
</tr>
<tr>
<td>7720 Awards</td>
<td>$</td>
<td>-</td>
<td>$</td>
<td>-</td>
<td>$</td>
</tr>
</tbody>
</table>

| Subtotal Operating                        | $      | -      | $      | -      | $      | -      |

---

Page 9 of 11
### Appendix D - Capital Costs

#### SENATE PLANNING AND PRIORITY COMMITTEE

**NEW PROGRAM APPROVAL PROCESS**

<table>
<thead>
<tr>
<th>Capital Item</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>QTY</td>
<td>Unit Cost</td>
<td>Total</td>
<td>QTY</td>
<td>Unit Cost</td>
</tr>
<tr>
<td>Ventilators</td>
<td>10.00</td>
<td>$48,500</td>
<td>485,000</td>
<td>$</td>
<td>-</td>
</tr>
<tr>
<td>Hiflow</td>
<td>1.00</td>
<td>$10,000</td>
<td>10,000</td>
<td>$</td>
<td>-</td>
</tr>
<tr>
<td>Bipaps</td>
<td>5.00</td>
<td>$5,000</td>
<td>25,000</td>
<td>$</td>
<td>-</td>
</tr>
<tr>
<td>Misc equipm</td>
<td>1.00</td>
<td>$280,000</td>
<td>280,000</td>
<td>$</td>
<td>-</td>
</tr>
<tr>
<td>Furn, Comp &amp; Misc</td>
<td>4.00</td>
<td>$5,000</td>
<td>20,000</td>
<td>4.00</td>
<td>$5,000</td>
</tr>
<tr>
<td>Space Reno</td>
<td>1.00</td>
<td>1,900,000</td>
<td>1,900,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lease Fit-Up</td>
<td>1.00</td>
<td>400,000</td>
<td>400,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal Operating</strong></td>
<td>3,120,000</td>
<td>$20,000</td>
<td>$</td>
<td>-</td>
<td>$</td>
</tr>
</tbody>
</table>
## 1. Expected Enrolment

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>76</td>
<td>100</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Graduate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate (continuing only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>2,812</td>
<td>3,700</td>
<td>4,440</td>
<td>4,440</td>
<td>4,440</td>
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<tr>
<td>Graduate</td>
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<td></td>
<td></td>
<td></td>
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</tbody>
</table>

## 2. Tuition Revenue Generated by the Program

### Credit Hour Based - Undergraduate

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/24</td>
<td>$143</td>
<td>$148</td>
<td>$154</td>
<td>$160</td>
<td>$166</td>
</tr>
</tbody>
</table>

### Credit Hour Based - Graduate

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Program Based - Undergraduate

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Program Based - Graduate

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Program/Course Specific Fees

<table>
<thead>
<tr>
<th>Fee Items</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Fees (enter amount in applicable years)</td>
<td>$15,960</td>
<td>$21,210</td>
<td>$25,707</td>
<td>$25,964</td>
<td>$26,223</td>
</tr>
<tr>
<td>Field Trip Fees (enter amount in applicable years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Fee description/rate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Program/Course Specific Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$15,960</td>
<td>$21,210</td>
<td>$25,707</td>
<td>$25,964</td>
<td>$26,223</td>
</tr>
</tbody>
</table>

## Total Tuition and Fees Generated by the Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/24</td>
<td>$418,076</td>
<td>$570,151</td>
<td>$709,138</td>
<td>$735,024</td>
<td>$761,874</td>
</tr>
</tbody>
</table>

## 3. Tuition Revenue Allocated to the Faculty

### Credit Hour Based - Undergraduate

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/24</td>
<td>402,116</td>
<td>548,941</td>
<td>683,432</td>
<td>709,061</td>
<td>735,650</td>
</tr>
</tbody>
</table>

### Credit Hour Based - Graduate

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Program Based

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Program/Course Specific Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/24</td>
<td>15,960</td>
<td>21,210</td>
<td>25,707</td>
<td>25,964</td>
<td>26,223</td>
</tr>
</tbody>
</table>

### Other Compulsory Student Fees (enter amount)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Tuition Revenue Allocated to the Faculty

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/24</td>
<td>$418,076</td>
<td>$570,151</td>
<td>$709,138</td>
<td>$735,024</td>
<td>$761,874</td>
</tr>
</tbody>
</table>
### APPENDIX E: Lab and Miscellaneous Equipment, 2023-2024 (+20 students)

<table>
<thead>
<tr>
<th>Misc Equipment</th>
<th>Current stock</th>
<th>Unit Cost</th>
<th>Increase in need</th>
<th>total cost for 50% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filters (Vent, Spiro, Etc)</td>
<td>700</td>
<td>$3.00</td>
<td>350</td>
<td>$1,050.00</td>
</tr>
<tr>
<td>Portable Diagnostic Spirometer</td>
<td>1</td>
<td>$2,500.00</td>
<td>2</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Mips/Meps Gauges</td>
<td>5</td>
<td>$300.00</td>
<td>2.5</td>
<td>$750.00</td>
</tr>
<tr>
<td>Wright Respirometer</td>
<td>2</td>
<td>$250.00</td>
<td>1</td>
<td>$250.00</td>
</tr>
<tr>
<td>Saturation Monitor And Probes</td>
<td>1</td>
<td>$3,000.00</td>
<td>2</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Abg Kits</td>
<td>100</td>
<td>$2.00</td>
<td>50</td>
<td>$100.00</td>
</tr>
<tr>
<td>Cuff Pressure Manometer</td>
<td>5</td>
<td>$50.00</td>
<td>2.5</td>
<td>$125.00</td>
</tr>
<tr>
<td>Arterial Catheters &amp; Central Lines</td>
<td>7</td>
<td>$75.00</td>
<td>3.5</td>
<td>$262.50</td>
</tr>
<tr>
<td>Sutures, Alcohol Pads, Gauze</td>
<td>25</td>
<td>$5.00</td>
<td>12.5</td>
<td>$62.50</td>
</tr>
<tr>
<td>Blood Management System &amp; Pressure Monitoring Kit</td>
<td>3</td>
<td>$75.00</td>
<td>1.5</td>
<td>$112.50</td>
</tr>
<tr>
<td>Incentive Spirometry, PEP Devices, Peak Flowmeters</td>
<td>5</td>
<td>$100.00</td>
<td>2.5</td>
<td>$250.00</td>
</tr>
<tr>
<td>Vital Signs Monitor (BP, Temp, Etc)</td>
<td>0</td>
<td>$1,500.00</td>
<td>2</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Bubble Humidifier</td>
<td>26</td>
<td>$11.00</td>
<td>13</td>
<td>$143.00</td>
</tr>
<tr>
<td>Nebulizer</td>
<td>5</td>
<td>$7.00</td>
<td>2.5</td>
<td>$17.50</td>
</tr>
<tr>
<td>Aeroneb Prox Solo Nebulizer Unit &amp; Consumables</td>
<td>1</td>
<td>$2,800.00</td>
<td>1</td>
<td>$2,800.00</td>
</tr>
<tr>
<td>Surgical Instruments</td>
<td>7</td>
<td>$10.00</td>
<td>3.5</td>
<td>$35.00</td>
</tr>
<tr>
<td>Syringes (1ml, 3ml, 5ml, 10ml)</td>
<td>10</td>
<td>$10.00</td>
<td>5</td>
<td>$50.00</td>
</tr>
<tr>
<td>Suction Catheters (Various FR Sizes)</td>
<td>20</td>
<td>$8.00</td>
<td>10</td>
<td>$80.00</td>
</tr>
<tr>
<td>Portable Suction &amp; Regulator Setup Kit</td>
<td>1</td>
<td>$1,000.00</td>
<td>4</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>suction mannequin</td>
<td>0</td>
<td>$5,000.00</td>
<td>2</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Resp Medications Various Manufacturers</td>
<td>20</td>
<td>$100.00</td>
<td>10</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Portable CO2 Monitor &amp; Consumables</td>
<td>1</td>
<td>$3,500.00</td>
<td>1</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>Oxygen Accessories (Trees, Keys)</td>
<td>20</td>
<td>$5.00</td>
<td>10</td>
<td>$50.00</td>
</tr>
<tr>
<td>Oxygen Regulators - Tapered &amp; 50psi</td>
<td>2</td>
<td>$250.00</td>
<td>1</td>
<td>$250.00</td>
</tr>
<tr>
<td>Oxygen Flowmeters</td>
<td>5</td>
<td>$25.00</td>
<td>2.5</td>
<td>$62.50</td>
</tr>
<tr>
<td>Bourdon O2 &amp; Air Regulators</td>
<td>1</td>
<td>$300.00</td>
<td>2</td>
<td>$600.00</td>
</tr>
<tr>
<td>Oxygen Conserving Device</td>
<td>1</td>
<td>$400.00</td>
<td>2</td>
<td>$800.00</td>
</tr>
<tr>
<td>Oxygen Double Connector/Splitter</td>
<td>4</td>
<td>$50.00</td>
<td>2</td>
<td>$100.00</td>
</tr>
<tr>
<td>Air/O2 Blender</td>
<td>0</td>
<td>$1,200.00</td>
<td>3</td>
<td>$3,600.00</td>
</tr>
<tr>
<td>Various O2 Masks, Prongs, Etc</td>
<td>100</td>
<td>$50.00</td>
<td>50</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>Humidity (Bottles, HME, Etc)</td>
<td>25</td>
<td>$10.00</td>
<td>12.5</td>
<td>$125.00</td>
</tr>
<tr>
<td>Hand Ventilation Bags</td>
<td>7</td>
<td>$150.00</td>
<td>3.5</td>
<td>$525.00</td>
</tr>
<tr>
<td>Airway Pressure Manometers</td>
<td>2</td>
<td>$50.00</td>
<td>1</td>
<td>$50.00</td>
</tr>
<tr>
<td>Laryngectomy Kit</td>
<td>1</td>
<td>$200.00</td>
<td>2</td>
<td>$400.00</td>
</tr>
<tr>
<td>Cricothyrotomy Kit</td>
<td>1</td>
<td>$150.00</td>
<td>2</td>
<td>$300.00</td>
</tr>
<tr>
<td>Endotracheal Tubes (Mult Sizes)</td>
<td>12</td>
<td>$6.00</td>
<td>6</td>
<td>$36.00</td>
</tr>
<tr>
<td>Laryngoscope Blades (Mult Sizes)</td>
<td>6</td>
<td>$50.00</td>
<td>3</td>
<td>$150.00</td>
</tr>
<tr>
<td>Ventilator Circuits (Box Neo, Adult)</td>
<td>2</td>
<td>$100.00</td>
<td>1</td>
<td>$100.00</td>
</tr>
<tr>
<td>Trach Supplies (Mult Sizes)</td>
<td>15</td>
<td>$200.00</td>
<td>7.5</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>LMA Masks (Mult Sizes)</td>
<td>4</td>
<td>$30.00</td>
<td>2</td>
<td>$60.00</td>
</tr>
<tr>
<td>Optiflow Cannula (Mult Sizes) Kit</td>
<td>1</td>
<td>$3,880.00</td>
<td>2</td>
<td>$7,760.00</td>
</tr>
<tr>
<td>Vent Flow Sensors (Adult And Neo)</td>
<td>10</td>
<td>$50.00</td>
<td>5</td>
<td>$250.00</td>
</tr>
<tr>
<td>Item</td>
<td>Qty</td>
<td>Cost</td>
<td>Subtotal</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----</td>
<td>--------</td>
<td>----------</td>
<td></td>
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<tr>
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**TOTAL OVER 2 YEARS** $331,256.50

**2022 ASK** $50,000

**2023 ASK** $280,000
August 29, 2022

Comments of the Senate Planning and Priorities Committee RE: Request for Admission Target Increase, Bachelor of Respiratory Therapy, College of Rehabilitation Sciences

At the request of the President, the Senate Planning and Priorities Committee (SPPC) was consulted on a request from the College of Rehabilitation Sciences, to increase the admission target for the Bachelor of Respiratory Therapy (B.R.T.) program from twenty (20) to forty (40) spaces, effective for the 2023 Fall Term. The Committee offered the following comments and advice, with respect to the resource implications. The President has asked that the comments of SPPC be shared with the Senate Executive Committee, together with the request from the College.

1) It was suggested that the College might provide some rationale for the need for an additional 4.5 FTE positions and, particularly, the need for 3.5 FTE tenure track positions, to support what would be a relatively small number of additional students relative to some other undergraduate programs at the University. The Committee enquired about the rationale not only for the number of positions but the necessity for tenure-track rather than Instructor positions.

2) Related to the previous comment, the SPPC remarked on the letter of support provided by the Dean, Faculty of Science, which indicates the Faculty has capacity to support the proposed enrolment expansion in the B.R.T., which might impact enrolment in several courses offered by the Departments of Biological Sciences and Statistics. The Committee contrasted the request from the College, for an additional 3.5 FTE tenure-track faculty to teach an additional 20 students in the B.R.T. program, with the absence of a request for additional teaching resources for the 1000- level Biological Sciences (BIOL) and Statistics courses, which already have large enrolments in multiple sections, have sometimes been oversubscribed in recent years, and, with respect to the BIOL courses, are laboratory-intensive courses delivered in a context of ongoing pressures on available laboratory spaces for teaching.

3) The Committee also contrasted the response received from the Dean, Faculty of Science, with the response from the Associate Dean, Faculty of Arts, who is requesting an additional 0.5 FTE academic position to support additional service teaching demands expected to result from the proposed B.R.T. enrolment expansion.

4) The Committee commented on the need to consider potential and various resource implications that might be associated with the need for a larger number of clinical placements, as noted below. These include increased demands on human resources, in addition to increased operating costs. Consideration of these things would be critical given the institutional priority for experiential learning.

- If there is an objective to increase the number of clinical placements in rural and northern locations, consideration would need to be given to: the time required to build relationships with communities; costs associated with creating any necessary infrastructure at those locations; and necessary supports for students who would need to relocate to communities where the clinical placements would take place. It was noted that Ongomiizwin might be able to support the College in some of the work of building relationships.
- It was suggested that the College might consult with the Assembly of Manitoba Chiefs and the Southern Chiefs’ Organization about potential locations for clinical placements in Indigenous communities.
• There may be a need to include the northern allowance when budgeting for salaries and benefits for any staff who will be working at locations in northern communities.

5) With reference to the letters of support from various health agencies in the province, which are all supportive of the planned enrolment increase, the Committee commented on the importance of acknowledging that there will be additional pressures on resources across the health system, to support the additional number of students who will need to complete the clinical placements that are required in all three years of the B.R.T. program.

Respectfully submitted,

Professor Derek Oliver, Chair
Senate Planning and Priorities Committee
DATE: June 30, 2022

TO: Jeff Leclerc, University Secretary

FROM: Michael Benarroch, Ph.D.  
President and Vice-Chancellor

RE: Increase to Admission Target, Bachelor of Respiratory Therapy Program

The College of Rehabilitation Science has requested an increase to the undergraduate admission target for the Bachelor of Respiratory Therapy program to alleviate demand for respiratory therapists within the province. The proposal was forwarded for consultation to Senate on June 22, 2022, and the Board of Governors on June 28, 2022, with no concerns raised.

Under the Admission Targets Policy, the President approves changes to, and the introduction of, admission targets following consultation and discussion with the applicable dean or director, with Senate, and with the Board of Governors, subject to the provisions of the provincial Programs of Study Regulation.

In accordance with this policy, I approve an increase to the undergraduate admission target to the Bachelor of Respiratory Therapy program from 16 to 20 seats effective the Fall 2022 intake, subject to approval by the province and confirmation of new on-going provincial funding in support of the expansion.

Please proceed accordingly.

Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)  
Greg Smith, Vice-Provost (Academic Planning and Programs)  
Laurie Schnarr, Vice-Provost (Students)  
Brian Postl, Brian Postl, Dean, Rady Faculty of Health Sciences and Vice-Provost (Health Sciences)  
Reg Urbanowski, Dean, College of Rehabilitation Sciences  
Jeff Adams, Registrar and Executive Director, Enrolment Services  
Shelley Hopkins, Executive Director, Financial Planning  
Randy Roller, Executive Director, OIA  
Cassandra Davidson, Academic Program Specialist
DATE: June 30, 2022

TO: Jeff Leclerc, University Secretary

FROM: Michael Benarroch, Ph.D.
President and Vice-Chancellor

RE: Increase to Admission Target, Bachelor of Midwifery Program

The College of Nursing has requested an increase to the undergraduate admission target for the Bachelor of Midwifery program to mitigate expected attrition rates and to maintain cohorts at levels that meet the needs of the province, including those of Northern Manitoba. The proposal was forwarded for consultation to Senate on June 22, 2022, and the Board of Governors on June 28, 2022, with no concerns raised.

Under the Admission Targets Policy, the President approves changes to, and the introduction of, admission targets following consultation and discussion with the applicable dean or director, with Senate, and with the Board of Governors, subject to the provisions of the provincial Programs of Study Regulation.

In accordance with this policy, I approve an increase to the undergraduate admission target to the Bachelor of Midwifery program from six to eight seats effective the Fall 2023 intake, subject to approval by the province.

Please proceed accordingly.

Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)
Greg Smith, Vice-Provost (Academic Planning and Programs)
Laurie Schnarr, Vice-Provost (Students)
Brian Postl, Brian Postl, Dean, Rady Faculty of Health Sciences and Vice-Provost (Health Sciences)
Netha Dyck, Dean, College of Nursing
Jeff Adams, Registrar and Executive Director, Enrolment Services
Shelley Hopkins, Executive Director, Financial Planning
Randy Roller, Executive Director, OIA
Cassandra Davidson, Academic Program Specialist
Date: August 3, 2022

To: Dr. Bruno Silvestre, Dean, I.H. Asper School of Business, Faculty of Management

From: Dr. Diane Hiebert-Murphy, Provost and Vice-President (Academic)

Re: Notification – Closure of the Bachelor of Commerce (Honours) in Operational Research/Operations Management

Please find attached the Manitoba Advanced Education, Skills and Immigration’s approval of the UM proposal to permanently close the Bachelor of Commerce (Honours) in Operational Research/Operations Management. This decision follows Senate’s recommendation and approval by the Board of Governors in May 2022 to close the program.

In 2004, a new major in Logistics and Supply Chain Management was introduced in response to market demand in Manitoba. Concepts within the new major overlapped with the Operational Research/Operations Management major. Since that time, student interest has shifted to the Logistics and Supply Chain Management major, significantly reducing demand for the older major.

As there are currently no students enrolled in the program, the closure of the program is effective September 1, 2022.

Thank you to everyone involved in the process.

Cc: Michael Benarroch, President and Vice-Chancellor
    Greg Smith, Vice-Provost (Academic Planning and Programs)
    Jeff Leclerc, University Secretary
    Jeff Adams, Registrar and Executive Director, Enrollment Services
    Randy Roller, Executive Director, OIA
    Cassandra Davidson, Academic Programs Specialist
July 19, 2022

Dr. Michael Benarroch  
President and Vice-Chancellor  
University of Manitoba  
president@umanitoba.ca

Dear Dr. Benarroch:

I am pleased to advise that the Department of Advanced Education, Skills and Immigration has reviewed and approved the University of Manitoba’s proposal to permanent cesse the Bachelor of Commerce (Honours) in Operational Research/Operations Management program, as submitted.

It is my understanding that the Operational Research major has become redundant as the University introduced the Logistics and Supply Chain Management (SMC) major in 2004. I also understand that there are no students enrolled in the program and that students who are interested in this field of study will be able to apply to the SMC major.

The department requests that the University of Manitoba share information with the school community and the public in any materials indicating the university proposed the cessation of the program due to low enrollment and duplication of programs.

Should you have any questions, please contact Mr. Grant Prairie, Director of Universities, at 204-945-8564 or at Grant.Prairie@gov.mb.ca.

Sincerely,

For Eric Charron

c. Dr. Greg Smith, Vice-Provost (Academic Planning and Programs), University of Manitoba  
W. Joe Funk, Assistant Deputy Minister, Advanced Education Division, Advanced Education, Skills and Immigration  
Agnes Wittmann, Senior Director of Post-Secondary Institutions, Advanced Education, Skills and Immigration  
Grant Prairie, Director of Universities, Advanced Education, Skills and Immigration
Date: June 13, 2021

To: Dr. Stephan Pflugmacher Lima, Dean, Clayton H. Riddell Faculty of Environment, Earth and Resources

From: Dr. Diane Hiebert-Murphy, Provost and Vice-President (Academic)

Re: Implementation of Bachelor of Science (Honours) and Bachelor of Science (Major) in Environmental Geoscience

On June 1, 2022, the University received formal notification from the Deputy Minister, Manitoba Advanced Education, Skills and Immigration, that the proposal to establish a Bachelor of Science (Honours) and Bachelor of Science (Major) in Environmental Geoscience has been approved (see attached). The letter highlights the university’s ongoing commitment to meet the educational and labour market needs of the province, in this instance contributing to the province’s efforts of environmental remediation and sustainability.

I hereby approve the implementation of the programs commencing Fall 2022, noting the following:

- The B.Sc. (Hons) and B.Sc. (Maj.) in Environmental Geoscience each require 120 credit hours of coursework.
- The programs will be funded through the reallocation of existing resources and tuition revenue. As such, no additional financial support will be allocated in support of this implementation.
- Tuition rates for the program will be the approved rates of the Clayton H. Riddell Faculty of Environment, Earth and Resources, or, for courses outside of the Faculty, the rate approved of the respective teaching Faculty.
- The maximum seat capacity for the program, defined as first-year enrolment in the program, is 20 students.

Consistent with Section 9.7(1) of the Advanced Education Administration Act, should you wish to make any significant modifications to, or cease to provide the program in the future, you are required to seek and receive approval from the province. In this respect, the program is and will be subject to any regulations prescribed under Section 9.7(1) of the Act.

On behalf of the University of Manitoba, I extend my congratulations to all those who have worked so hard to design this exciting new program.

Cc: Michael Benarroch, President and Vice-Chancellor
    Greg Smith, Vice-Provost (Academic Planning and Programs)
    Jeff Leclerc, University Secretary
    Jeff Adams, Registrar and Executive Director of Enrolment Services
    Randy Roller, Executive Director, Institutional Analysis
    Shelley Hopkins, Executive Director, Financial Planning
    Cassandra Davidson, Academic Programs Specialist
June 1, 2022

Dr. Michael Benarroch
President and Vice-Chancellor
University of Manitoba
president@umanitoba.ca

Dear Dr. Benarroch:

I am pleased to advise that the Department of Advanced Education, Skills and Immigration has reviewed and approved the University of Manitoba’s proposal to establish a new Bachelor of Science (Honours) and Bachelor of Science (Major) in Environmental Geoscience, as submitted.

It is my understanding that the proposed programs will be the first undergraduate Environmental Geoscience program in Manitoba, which will allow students to study in Manitoba and contribute to the areas of environmental remediation, nutrient removal in Lake Winnipeg, and removal of pollutants from mine tailings in the future. I appreciate the ongoing commitment of the University to meet the educational and labour market needs of the province and wish the University every success with the program.

Given recent challenges related to the COVID-19 pandemic, it is important to note that the approval of a proposal does not obligate a university or college to implement the change. Approval of a proposal is valid for three years from the effective date of the approval. Institutions retain the ability to implement at their discretion during that period. If the University of Manitoba does not implement the proposed change before September 2025, it must resubmit the proposal for the intended change.

Should you have any questions, please contact Mr. Grant Prairie, Director of Universities, at 204-945-8564 or at Grant.Prairie@gov.mb.ca.

Sincerely,

Eric Charron

c. Dr. Greg Smith, Vice-Provost (Academic Planning and Programs), University of Manitoba
   W. Joe Funk, Assistant Deputy Minister
   Agnes Wittmann, Senior Director of Post-Secondary Institutions,
   Grant Prairie, Director of Universities, Advanced Education, Skills and Immigration
Date: June 13, 2021
To: Dr. Jeff Taylor, Dean, Faculty of Arts
From: Dr. Diane Hiebert-Murphy, Provost and Vice-President (Academic)
Re: Implementation of Bachelor of Arts (Advanced) in German

On June 1, 2022, the University received formal notification from the Deputy Minister, Manitoba Advanced Education, Skills and Immigration, that the proposal to establish a Bachelor of Arts (Advanced) in German has been approved (see attached). The letter highlights the university’s efforts to address Manitoba’s need for advanced critical thinkers and competent problem solvers.

I hereby approve the implementation of the program commencing Fall 2022, noting the following:

- The program is a 120-credit hour program in which students can choose to complete either a B.A. (Single Advanced Major) (48 credit hours of German courses), B.A. (Single Advanced Major) with Co-operative Education Option (45 credit hours of German courses) or a B.A. (Double Advanced Major) (42 credit hours of German courses).

- The program will be funded through the reallocation of existing resources and tuition revenue. As such, no additional financial support will be allocated in support of this implementation.

- Tuition rates for the program will be the approved rates of the Faculty of Arts, or, for courses outside of the Faculty, the rate approved of the respective teaching Faculty.

- The maximum seat capacity for the program, defined as first-year enrolment in the program, is 8 students.

Consistent with Section 9.7(1) of the Advanced Education Administration Act, should you wish to make any significant modifications to, or cease to provide the program in the future, you are required to seek and receive approval from the province. In this respect, the program is and will be subject to any regulations prescribed under Section 9.7(1) of the Act.

On behalf of the University of Manitoba, I extend my congratulations to all those who have worked so hard to design this exciting new program.

Cc.: Michael Benarroch, President and Vice-Chancellor
     Greg Smith, Vice-Provost (Academic Planning and Programs)
     Jeff Leclerc, University Secretary
     Jeff Adams, Registrar and Executive Director of Enrolment Services
     Randy Roller, Executive Director, Institutional Analysis
     Shelley Hopkins, Executive Director, Financial Planning
     Cassandra Davidson, Academic Programs Specialist
June 1, 2022

Dr. Michael Benarroch
President and Vice-Chancellor
University of Manitoba
president@umanitoba.ca

Dear Dr. Benarroch:

I am pleased to advise that the Department of Advanced Education, Skills and Immigration has reviewed and approved the University of Manitoba’s proposal to establish a new Bachelor of Arts (Advanced) in German, as submitted.

It is my understanding that the new four-year Advanced Major will address the needs of German majors who wish to receive a more in-depth education and training in the German language and in German Cultural Studies. Options of international exchange and co-op placement will allow students to gain experience in internationalization and intercultural skills, specific linguistic skills and cultural competency. I appreciate the ongoing commitment of the University to provide students with excellent education that is aligned with the needs of Manitoba employers for critical thinkers and competent problem solvers.

Given recent challenges related to the COVID-19 pandemic, it is important to note that the approval of a proposal does not obligate a university or college to implement the change. Approval of a proposal is valid for three years from the effective date of the approval. Institutions retain the ability to implement at their discretion during that period. If the University of Manitoba does not implement the proposed change before September 2025, it must resubmit the proposal for the intended change.

Should you have any questions, please contact Mr. Grant Prairie, Director of Universities, at 204-945-8564 or at Grant.Prairie@gov.mb.ca.

Sincerely,

Eric Charron

---

c.  Dr. Greg Smith, Vice-Provost (Academic Planning and Programs), University of Manitoba
W. Joe Funk, Assistant Deputy Minister, Advanced Education Division, Advanced Education, Skills and Immigration
Agnes Wittmann, Senior Director of Post-Secondary Institutions, Advanced Education, Skills and Immigration
Grant Prairie, Director of Universities, Advanced Education, Skills and Immigration
Date: June 13, 2021
To: Dr. Jeff Taylor, Dean, Faculty of Arts
From: Dr. Diane Hiebert-Murphy, Provost and Vice-President (Academic)
Re: Implementation of Bachelor of Arts (Honours) in Global Political Economy

On June 1, 2022, the University received formal notification from the Deputy Minister, Manitoba Advanced Education, Skills and Immigration, that the proposal to establish a Bachelor of Arts (Honours) in Global Political Economy has been approved (see attached). The letter highlights the university’s efforts to address Manitoba’s need for advanced critical thinkers and competent problem solvers.

I hereby approve the implementation of the program commencing Fall 2022, noting the following:

- The program is a 120-credit hour program in which students complete a Bachelor of Arts (Single Honours).
- The program will be funded through the reallocation of existing resources and tuition revenue. As such, no additional financial support will be allocated in support of this implementation.
- Tuition rates for the program will be the approved rates of the Faculty of Arts, or, for courses outside of the Faculty, the rate approved of the respective teaching Faculty.
- The maximum seat capacity for the program, defined as first-year enrolment in the program, is 18 students.

Consistent with Section 9.7(1) of the Advanced Education Administration Act, should you wish to make any significant modifications to, or cease to provide the program in the future, you are required to seek and receive approval from the province. In this respect, the program is and will be subject to any regulations prescribed under Section 9.7(1) of the Act.

On behalf of the University of Manitoba, I extend my congratulations to all those who have worked so hard to design this exciting new program.

Cc.: Michael Benarroch, President and Vice-Chancellor
     Greg Smith, Vice-Provost (Academic Planning and Programs)
     Jeff Leclerc, University Secretary
     Jeff Adams, Registrar and Executive Director of Enrolment Services
     Randy Roller, Executive Director, Institutional Analysis
     Shelley Hopkins, Executive Director, Financial Planning
     Cassandra Davidson, Academic Programs Specialist
June 1, 2022

Dr. Michael Benarroch
President and Vice-Chancellor
University of Manitoba
president@umanitoba.ca

Dear Dr. Benarroch:

I am pleased to advise that the Department of Advanced Education, Skills and Immigration has reviewed and approved the University of Manitoba’s proposal to establish a new Bachelor of Arts (Honours) in Global Political Economy, as submitted.

It is my understanding that this program will provide training to students in conceptualizing connections between global political and economic forces and local issues such as poverty, employment, public health, housing, environmental transformations, economic development, and social inequalities. I appreciate the ongoing commitment of the University to provide students with excellent education that is aligned with the needs of Manitoba employers for critical thinkers and competent problem solvers.

Given recent challenges related to the COVID-19 pandemic, it is important to note that the approval of a proposal does not obligate a university or college to implement the change. Approval of a proposal is valid for three years from the effective date of the approval. Institutions retain the ability to implement at their discretion during that period. If the University of Manitoba does not implement the proposed change before September 2025, it must resubmit the proposal for the intended change.

Should you have any questions, please contact Mr. Grant Prairie, Director of Universities, at 204- 945-8564 or at Grant.Prairie@gov.mb.ca.

Sincerely,

Eric Charron

c. Dr. Greg Smith, Vice-Provost (Academic Planning and Programs), University of Manitoba
W. Joe Funk, Assistant Deputy Minister, Advanced Education Division, Advanced Education, Skills and Immigration
Agnes Wittmann, Senior Director of Post-Secondary Institutions, Advanced Education, Skills and Immigration
Grant Prairie, Director of Universities, Advanced Education, Skills and Immigration
Date: June 24, 2022

To: Dr. Rod Lastra, Acting Dean, Division of Extended Education

From: Dr. Greg Smith, Vice-Provost (Academic Planning and Programs)

Re: Program Introduction, Micro-Certificate in Facilitating Older Adult Learning

At its meeting of June 22, 2022, the University of Manitoba Senate approved the proposal by the Division of Extended Education to offer a Micro-certificate in Facilitating Older Adult Learning.

Following consultation with the Division, I hereby approve the implementation of this program effective the Fall 2022 term. No additional financial support will be allocated in support of this implementation.

On behalf of the University of Manitoba, I extend my congratulations to all those who have worked so hard to design the program.

Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)
Laurie Schnarr, Vice-Provost (Students)
Jeff Adams, Registrar and Executive Director of Enrolment Services
Jeff Leclerc, University Secretary
Randy Roller, Executive Director, OIA
Cassandra Davidson, Academic Programs Specialist
TO: Mr. Jeff Leclerc, University Secretary

FROM: Dr. Digvir Jayas, Vice-President (Research and International)

DATE: July 8, 2022

SUBJECT: Reports on Research Contracts Funds and Amendments Received

COPIES: Dr. Jay Doering, Associate Vice-President (Partnerships)
Dr. Annemieke Farenhorst, Associate Vice-President (Research)

Attached are copies of Report on Research Contracts and Amendments Received for the period of January 1, 2022 to June 30, 2022. Please include the reports on the next Senate agenda.

Thank you

DSJ/rk

Attach.
### New Research Agreement Funds Awarded (over $20,000)
**ORS Processed Date: January 1, 2022 to June 30, 2022**

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<th>Awarded Amount</th>
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<td><strong>Clayton H. Riddell</strong></td>
<td>Barber, David</td>
<td>Centre for Earth Observation Science</td>
<td>Digital Research Alliance of Canada</td>
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<td>Mobilizing scientific data into action - how to make science usable</td>
<td>Contract</td>
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<td>Fayek, Mostafa</td>
<td>Earth Sciences</td>
<td>Snow Lake Lithium Ltd.</td>
<td>74,799</td>
<td>The Geology and Geochemistry of the Li-rich Pegmatites, Snow Lake Region, Manitoba, Canada</td>
<td>Contract</td>
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<td>Koper, Nicola</td>
<td>Natural Resources Institute</td>
<td>Alberta Conservation Association</td>
<td>24,255</td>
<td>Effects of unpredictable industrial noise on Species at Risk and nest predators in Alberta - season 2</td>
<td>Contract</td>
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<td>Kuzyk, Zou Zou</td>
<td>Centre for Earth Observation Science</td>
<td>Oceans North</td>
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<td>Oceanography Expedition to James Bay</td>
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<td>Papakyriakou, Timothy</td>
<td>Centre for Earth Observation Science</td>
<td>University of Calgary</td>
<td>177,517</td>
<td>Canadian Consortium for Arctic Data Interoperability: Advancing Arctic Research through Connected Data Infrastructure</td>
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<td>Thompson, Shirley</td>
<td>Natural Resources Institute</td>
<td>Institute of International Education</td>
<td>31,293</td>
<td>Post-doc position funded in part by IIE-Scholar rescue fund</td>
<td>Contract</td>
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<td>Wang, Feiyue</td>
<td>Environment &amp; Geography</td>
<td>Sel Saint Laurent</td>
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<td>Characterization of Seawater Cryoconcentration for Sea Salt Production</td>
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<td><strong>College of Dentistry</strong></td>
<td>Chelikani, V.G.B.</td>
<td>Oral Biology</td>
<td>Cystic Fibrosis Foundation</td>
<td>187,932</td>
<td>Bitter taste receptor mediated innate immune responses in cystic fibrosis</td>
<td>Grant with associated agreement</td>
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<td>Prashen</td>
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<td><strong>College of Medicine</strong></td>
<td>Banerji, Versha</td>
<td>Internal Medicine</td>
<td>Lymphoma Canada</td>
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<td>COVID-19 and inflammatory bowel disease: A population-based, prospective study of disease impact, mental health and patient resilience</td>
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<td>From Knowledge to Action (K2A): Developing interventions to improve older adult care transitions between nursing homes and emergency wards</td>
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**Faculty Total:** 187,932

Total Awarded Amount: 812,609
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<td>Evaluating public health COVID-19 vaccine communication: A content analysis of agency websites and focus group reflections on usability of content.</td>
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<td>Prevention of inflammatory bowel diseases in persons at risk: The PIONIR trial (Preventing IBD Onset in Individuals at Risk)</td>
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<td>Shankar, Jai</td>
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<td>A multicentre, randomized, double-blinded, placebo-controlled, parallel group, single dose design to determine the efficacy and safety of Nerinetide in participants with acute ischemic stroke undergoing endovascular thrombectomy excluding thrombolysis (ESCAPE-NEXT Trial)</td>
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<td>Distributed Network Meta-Analysis of Multi-Provincial Data to Evaluate Temporal Trends and the impact of Anti-TNF Therapy on the Risks of Inflammatory Bowel Diseases-Associated Cancers</td>
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<td>Real World Data of the Use of Ceftolozane/Tazobactam for the Treatment of Patients With Hospital-Acquired Pneumonia (HAP) Ventilated HAP (vHAP) and Ventilator-Associated Pneumonia (VAP) in Canada 2022-2023</td>
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<td>Tachie, Mark</td>
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<td>Surveying Land-Based Learning in Canadian Universities</td>
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<td>Zacharias, Kari</td>
<td>Centre for Engineering Professional Practice and Engineering Education</td>
<td>D2L INNOVATION GUILD</td>
<td>D2L INNOVATION GUILD</td>
<td>296,750</td>
<td>Bridging the Gender Gap: Skills for the Advancement of Women in the Age of Covid</td>
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<td>Faculty of Science</td>
<td>Davoren, Gail</td>
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<td>Garroway, Colin</td>
<td>Biological Sciences</td>
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<td>87,745</td>
<td>Capelin Spawning Sites and Predator Critical Foraging Habitat in Placentia Bay</td>
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<td>Gagnon, Suzanne</td>
<td>Business Administration</td>
<td>Ryerson University</td>
<td>Ryerson University</td>
<td>87,745</td>
<td>Capelin Spawning Sites and Predator Critical Foraging Habitat in Placentia Bay</td>
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<td>Clayton H. Riddell Faculty of Environment, Earth, and Resources</td>
<td>Hanson, Mark</td>
<td>Environment &amp; Geography</td>
<td>Fisheries and Oceans Canada</td>
<td>-63,800</td>
<td>Water quality in Iqaluit coastal marine ecosystems</td>
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<td>College of Dentistry</td>
<td>Schroth, Robert</td>
<td>Preventive Dental Sciences</td>
<td>University of Toronto</td>
<td>13,000</td>
<td>Nishtam Nwiipitan (My First Teeth): A multi-prolonged approach to improving mother and child oral health in Aboriginal communities</td>
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<td>Azad, Meghan</td>
<td>Pediatrics and Child Health</td>
<td>W. Garfield Weston Foundation</td>
<td>25,000</td>
<td>Optimizing the prebiotic profile of donor human milk for preterm infants: Feasibility of new donor milk matching strategy based on maternal secretor status</td>
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<td>Beer, Darcy</td>
<td>Pediatrics and Child Health</td>
<td>University of Calgary</td>
<td>0</td>
<td>A national pediatric SARS-CoV-2, emergency department-based surveillance project under immunization partnership fund</td>
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<td>Blanchard, James</td>
<td></td>
<td>Community Health Sciences</td>
<td>Genesis Analytics Proprietary Limited</td>
<td>1,290,515</td>
<td>South to South learning network for HIV prevention - a learning grant in support of the GPC</td>
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<td>Ghrooda, Esseddeeg</td>
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<td>Internal Medicine</td>
<td>University of Cincinnati</td>
<td>73,830</td>
<td>Statins use in intracerebral hemorrhage patients (SATURN)</td>
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<td>Keynan, Yoav</td>
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<td>Public Health Agency of Canada</td>
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<td>National Collaborating Centre for Infectious Diseases (NCCID)</td>
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<td>Lim, Lily</td>
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<td>Pediatrics and Child Health</td>
<td>University of British Columbia</td>
<td>35,200</td>
<td>The Canadian Alliance of Pediatric Rheumatology Investigators National Juvenile Idiopathic Arthritis Registry (CAPRI)</td>
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<td>Marrie, Ruth</td>
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<td>Internal Medicine</td>
<td>University of British Columbia</td>
<td>21,131</td>
<td>Disease-modifying drug safety and effectiveness in multiple sclerosis (DRUMS)</td>
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<td>McLaren, Paul</td>
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<td>Medical Microbiology and Infectious Diseases</td>
<td>Johns Hopkins University</td>
<td>53,400</td>
<td>Sex, gender the immunopathogenesis of HIV-1</td>
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<td>Santer, Deanna</td>
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<td>Immunology</td>
<td>University of Alberta</td>
<td>5,000</td>
<td>Characterization of interferon-lambda 1 as a treatment for COVID-19</td>
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<td>Shankar, Jai</td>
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<td>Radiology</td>
<td>Centre Hospitalier de L'Universite de Montreal (CHUM)</td>
<td>48,035</td>
<td>Computed tomography perfusion for neurological death determination: A prospective Canadian multicenter diagnostic test study</td>
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<td>Sibley, Kathryn</td>
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<td>Community Health Sciences</td>
<td>Toronto Rehabilitation Institute - University Health Network (UHN)</td>
<td>40,000</td>
<td>Wearable technology implementation and innovation to prevent fall-related hip fractures and traumatic brain injuries in older adults</td>
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<td>Singer, Alexander</td>
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<td>Family Medicine</td>
<td>University of Ottawa</td>
<td>17,114</td>
<td>Health surveillance of community-dwelling, person-living-with-dementia and caregiver dyads</td>
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<tr>
<td>Name</td>
<td>Department</td>
<td>Institution</td>
<td>Funding Amount</td>
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<td>Van Domselaar, Gary</td>
<td>Medical Microbiology and Infectious Diseases</td>
<td>Simon Fraser University</td>
<td>-127,448</td>
<td>Bioinformatics tools to enable federated, real time genomic epidemiology data sharing and analysis in a one health framework</td>
<td>Grant with associated agreement</td>
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<td>Zarychanski, Ryan</td>
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<td>Laval University</td>
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<td>Hemoglobin transfusion threshold in traumatic brain injury optimization: The HEMOTION trial</td>
<td>Tri-Agency sub-award agreement</td>
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<td>Nursing</td>
<td>Manitoba Health</td>
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<td>2011 Manitoba Nursing Graduate Employment Survey</td>
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<td><strong>99,850</strong></td>
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<td>Pharmacy</td>
<td>Research Institute of the McGill University</td>
<td>40,545</td>
<td>Enhancing CAN-AIM capacity to respond to drug safety and effectiveness queries: Cough and cold products containing opioids</td>
<td>Tri-Agency sub-award agreement</td>
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<td><strong>College of Pharmacy</strong></td>
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<td>Bullock, Paul</td>
<td>Soil Science</td>
<td>Western Grains Research Foundation</td>
<td>-94,761</td>
<td>Developing a risk model to mitigate FBH in western Canadian cereal production</td>
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<td>Ominsiki, Kimberly</td>
<td>Animal Science</td>
<td>Canadian Cattlemen's Association</td>
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<td>Economic and environmental impacts associate with removal of productivity-enhancing technologies in the Canadian beef cattle industry</td>
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<td>Paterson, Michael</td>
<td>Entomology</td>
<td>University of Toronto</td>
<td>20,000</td>
<td>pELAStic: a whole-ecosystem experiment to understand the fate and effects of microplastics</td>
<td>Tri-Agency sub-award grant (with agreement)</td>
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<td>Ferguson, Philip</td>
<td>Mechanical Engineering</td>
<td>Magellan Aerospace</td>
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<td><strong>Faculty of Engineering</strong></td>
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<td>Lin, Francis</td>
<td>Physics and Astronomy</td>
<td>My Health Logic Inc.</td>
<td>311,480</td>
<td>Developing lab-on-chip based point-of-care diagnostic tests for chronic kidney disease</td>
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<td>Mark, Brian</td>
<td>Microbiology</td>
<td>Simon Fraser University</td>
<td>38,500</td>
<td>Single turnover covalent chaperones for disease related lysosomal enzymes</td>
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<td>Muthukumarana, Saman</td>
<td>Statistics</td>
<td>Fisheries and Oceans Canada</td>
<td>24,707</td>
<td>Conduct Analyses of Capture-Mark-Recapture of Data for Dolly Varden</td>
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<td>Hiebert-Murphy, Elizabeth Diane</td>
<td>Dean's Office - Faculty of Social Work</td>
<td>Manitoba Department of Families</td>
<td>54,700</td>
<td>The couples project</td>
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<td>National Centre for Truth and Reconciliation (NCTR)</td>
<td>Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)</td>
<td>285,000</td>
<td>Missing children and unmarked burials: Closing the research gaps, Phase 2</td>
<td>Contract</td>
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<td>Perry, Adele</td>
<td>Centre for Human Rights Research</td>
<td>Indigenous and Northern Affairs Canada</td>
<td>152,018</td>
<td>16th Session of the UN Permanent Forum, Expert Mechanism on the Rights of Indigenous Peoples</td>
<td>Contract</td>
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<td><strong>Vice-President (Research and International)</strong></td>
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<td><strong>Total Amount of New Funding:</strong></td>
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To: Mr. Jeff Leclerc, University Secretary

From: Dr. Digvir Jayas, Vice-President (Research and International) and Chair, Senate Committee on University Research (SCUR)

Date: September 7, 2022

Subject: Notification to Senate on establishment of SIMTReC Centre (Structural Innovation and Monitoring Technologies Resource Centre) Research Group

CC: Dr. Annemieke Farenhorst, Associate Vice-President (Research)
Dr. Jay Doering, Associate Vice-President (Partnerships)
Dr. Marcia Friesen, Dean, Price Faculty of Engineering
Dr. Cyrus Shafai, Associate Dean, Research and Graduate Programs, Price Faculty of Engineering
Dr. Shawn Clark, Head, Civil Engineering
Dr. Derek Oliver, Head, Electrical and Computer Engineering
Dr. Aftab Mufti, Director, SIMTReC Centre
Dr. Douglas Thomson, Associate Director, SIMTReC Centre

The Research Centres, Institutes, and Groups Policy, section 2.9, Policy Governing the Establishment of Research Groups, states “Research groups are established under the authority of the Vice-President (Research and International), normally on the recommendation of the department head (where appropriate) and dean/director.”

Accordingly, the Dean and Associate Dean, Research and Graduate Programs, Price Faculty of Engineering and Heads of Civil Engineering and Electrical Engineering, have forwarded a recommendation for the establishment of the SIMTReC Centre (Structural Innovation and Monitoring Technologies Resource Centre) Research Group to me as Vice-President (Research and International). I subsequently reviewed and approved the proposal.

As Chair of SCUR, I am now requesting that Senate be informed of the establishment of the SIMTReC Centre (Structural Innovation and Monitoring Technologies Resource Centre) Research Group.

Please contact me should you require further information. A copy of the proposal for the research group is attached for your information.

DSJ/rk
attach.

umanitoba.ca/research
22 August 2022

Dr. Digvir Jayas  
Vice-President, Research & International  
Office of the VPRIO  
University of Manitoba

Re: Statement accompanying the proposal for the establishment of SIMTReC Group

As Department Heads, Associate Dean, and Dean in the Price Faculty of Engineering, we are pleased to submit this letter in support of the application by Drs. Aftab Mufti and Douglas Thomson to establish SIMTReC Centre (Structural Innovation and Monitoring Technologies Resource Centre) as a Research Group under the UM’s governance policy for Research Groups. This letter also serves as a statement of common understanding between all the signatories to this letter.

The attached proposal outlines the history of SIMTReC Centre and its predecessors and outlines the scope and impact that SIMTReC Centre has had since the mid-1990s. The proposal to formally establish itself as a Research Group is in keeping with the intention to promote collaboration among members and support the legitimacy of the Group both inside and outside the University. Growing the membership and associated scope of activities of the Group is also an express interest of the applicants.

The signatories to this letter are in agreement of the following:

- SIMTReC Group office space is allocated by the Price Faculty of Engineering, affording the same priority and proportionality given to other researchers and research groups in the Faculty. Currently, the instrumentation and equipment infrastructure is distributed and resides primarily in Room A250, Agricultural & Civil Engineering Building as well as in the McQuade Structures Laboratory.

- The SIMTReC Group receives funding from Research Manitoba, Manitoba Hydro, NSERC, NRC IRAP, NRC/DoD, Mitacs and industrial partners via research grants/contracts to its director, associate director, and members. Costs of administrative support and any other required personnel are derived from the research grants/contracts generated by the Group / Group members. The Price Faculty of Engineering has not allocated any operating budget to this Group.

- Any teaching release afforded to the SIMTReC director, associate director, and/or members will be discussed with and approved by the respective department head. The cost of coverage of
teaching release will be borne by research contracts/grants generated by the Group / Group members.

- Recovery of indirect costs on contract and grant revenue will be collected according to the rates established by the UM at the time of award of a contract / grant. Currently, all indirect cost recovery remains in the Price Faculty of Engineering. A proportion is returned to the Principal Investigator according to percentages established by the Faculty at the time of award.

We look forward to the establishment of SIMTReC Group and its continued, unique contributions to technology development and application in its sector.

Sincerely,

Dr. Aftab Mufti
Director, SIMTReC Centre

Dr. Shawn Clark
Head, Civil Engineering

Dr. Cyrus Shafai
Associate Dean, Research & Graduate Programs
Price Faculty of Engineering

Dr. Derek Oliver
Head, Electrical & Computer Engineering

Dr. Douglas Thomson
Associate Director, SIMTReC Centre

Dr. Marcia Friesen
Dean
Price Faculty of Engineering
Proposal to establish the

SIMTReC Group

as an approved Research Group of
The University of Manitoba

August 23, 2022

Submitted by:
Aftab Mufti, C.M., FRSC, PhD., P.Eng. - Director
Aftab.Mufti@umanitoba.ca

Douglas Thomson, FCAE, Ph.D., P.Eng. - Associate Director
Douglas.Thomson@umanitoba.ca
NAME OF RESEARCH GROUP
SIMTReC Group (Structural Innovation and Monitoring Technologies Resource Centre)

OBJECTIVES AND RATIONALE FOR FORMATION OF THE RESEARCH GROUP

History

In 1995, the ISIS Canada Research Network Inc. (not-for-profit corporation) funded by the Networks Centres of Excellence (funded through the Government of Canada) and the Government of Manitoba (Department of Science, Innovation, Energy and Mines) was established based at the University of Manitoba. The ISIS Canada Research Network had comprised of 14 universities from coast to coast, 30 principal investigators (engineering professors), graduated over 700 researchers and included 90 partners in the government and private sector. The ISIS Canada Research Network program mobilized the advancement of the civil engineering profession to a world leadership position through the use of advanced composite materials and the application of structural health monitoring to civil infrastructure. As the research results evolved, and the use of ISIS technologies gained acceptance, the user sector became increasingly reliant on ISIS Canada Research Network personnel for technical guidance and advice. In 2002, ISIS Canada Research Network Inc. formally established the Structural Health Monitoring Support Centre (SHMSC) at the University of Manitoba.

In 2009 after 14 years of research and field demonstration projects, ISIS had created an awareness among the owners of infrastructure of the huge benefit of using FRPs and SHM. ISIS did this by developing unique design manuals that were used as a basis for updating the design codes. These were complemented through ISIS education modules, durability monographs, guidelines for certification of FRP products and life cycle engineering and costing models. In the process, design engineers have become increasingly receptive to both the corrosion free bridge deck and the concept of the ISIS Winnipeg Principles, which use the inherent arching action in concrete bridge decks as part of the design consideration. In effect, ISIS Canada Inc. has revolutionized the design of bridges and structures through the use of new materials and design concepts; the service life of concrete bridge decks can now be tripled to 100 years for a potential saving of $100 billion in the 21st century. Because of the paradigm shift that has taken place the discipline of Civionics was introduced. Civionics is a new term coined from Civil-Electronics, which is derived from the
application of electronics to civil structures. It is similar to the term Avionics, which is used in the aerospace industry.

In 2009 funding through the NCE program for the ISIS Canada Research Network Inc. was coming to an ended; a new facility was required to meet the need moving forward. Through a successful application, two-years of NCE Management Funds (2009 to 2011) for the transition to a permanent self-sustainable facility was received. These funds were matched by the Government of Manitoba (Department of Innovation, Energy and Mines). A key aspect of the plan was the recognition of further effort needed to commercialize FRP and SHM. Neither Canada’s small and medium-sized FRP and SHM businesses nor the government user sector has the capacity to close the gap between existing research and economically viable commercial products and services. During the transition the name of the Structural Health Monitoring Support Centre (SHMSC) was changed to the ISIS Canada Resource Centre. The Centre is a national service to the civil infrastructure sector assisting to meet the needs of the field of SHM which required a centralized approach to manage the pool of specialized equipment and technology. One of the benefits was to maximize the benefit of 14 years of research and technology transfer conducted by ISIS Canada Research Network Inc.

Unfortunately, negative reaction to identification as ISIS Canada developed from confusion between ISIS Canada and ISIS (global) representing the Islamic State of Iraq & Syria with its violent world-wide reputation. ISIS Canada Research Network Inc. and ISIS Canada Resource Centre were forced into a name change to become the Structural Innovation and Monitoring Technologies Resource Centre Inc. (SIMTReC Inc. and the Structural Innovation and Technologies Resource Centre. It was the same not-for-profit corporation and Resource Centre, but with a new name, continuing to be the “go-to-centre” for the Canadian engineering design, construction and manufacturing community; providing guidance and technical advice on all aspects of the former ISIS technologies—from the use of FRPs, life cycle engineering and costing considerations to the application of SHM.

During the years of 2011 to 2016, SIMTReC received funding through the Government of Manitoba (Department of Science, Innovation, Energy and Mines) in to help fund the administration and technology transfer along with research projects which was transitioned to Research Manitoba in 2016. Research Manitoba’s Program that for a number of years (2016 to 2018) provided SIMTReC Inc. with its provincial financial support was cancelled effective March 2018. Since then, Research
Manitoba has developed some new support programs along with input from the SIMTReC Group which have been supporting current research in the group.

Fortunately, that said on-going projects for SIMTReC have continued; Manitoba Hydro’s ground rod corrosion monitoring, City of Winnipeg- Arlington Street bridge load sensors, and City of Winnipeg – Louise Bridge sensor load-monitoring project along with WSP and Intelligent Structures have been successfully performed. Mitacs projects have included a Post-Doctoral and Masters internship on Solar Powered Intermittent Cathodic Protection of Reinforced Concrete and Interface & Data analysis for a Bridge SHM.

Project funding sources and opportunities were negatively impacted in the past couple years (2019 to 2021) with the withdrawal of several funding programs from NSERC and Manitoba Infrastructure. In previous years SIMTReC benefitted greatly with a number of projects from these sources. That said with the hard work of the SIMTReC early in 2020 funding and project opportunities started to increase again for the SIMTReC. IRAP approached SIMTReC with a new funding opportunity to assist small & medium size companies to move forward with their research and development on innovative concepts; several Research Manitoba projects were approved; and a major technical service project was awarded with Vector Construction Ltd.

Note: Structural Innovation and Monitoring Technologies Resource Centre Inc. the not-for-profit corporation was dissolved under the Canada Not-for-profit Corporations Act (NFP Act) in July 2022. The corporation has distributed all of its property to the University of Manitoba and discharged all of its liabilities.

Description of Current Research Activities

Currently, the Group is dedicated to continued advancement in high-level user-focused research and innovation for structural monitoring using sensors.

Our Vision

To be Canada’s leading and most influential Group for monitoring, evaluation, and innovation of civil structures.

Our Mission

SIMTReC Group is dedicated to applied research and innovation in Advanced Technologies and Structural Monitoring for bridges and other structures.
Our Mission will be achieved by:

- Applying SIMTReC Group’s developed technologies to extend the service life of civil infrastructures for the benefit of the end-user community in Manitoba, North America, and the World.
- Being the research and innovation link for civil structural monitoring between the engineering faculty, government, and industry.
- Increasing the visibility of structural innovation and monitoring research occurring at the University.
- Training highly qualified personnel in the transfer of technology to industry and end-users.
- Encouraging the dissemination of knowledge and expertise among researchers, owners and practitioners.
- Coordinate and create major funding proposals to the granting agencies.

Research benefits and opportunities will result from the establishment of the Research Group

Expanding SIMTReC Group’s training activities will actively support the needs of industry by creating a pipeline of skilled talent that can integrate new advancements and innovations. SIMTReC Group is ideally positioned through its training of highly qualified graduate and post-graduate students and mature postdocs to help facilitate growth and build capacity for industry.

Responding to Industry requirements to update and increase the skillset of existing employees, SIMTReC Group will expand its industry training program, aligning with end-user needs. Specialized training to engineers to integrate new advancements and technologies into industry is a key component to the transfer and use of new technologies.

Optimizing and building partnerships with universities and other organizations will bring unique benefits for all parties at many levels. Researcher engagement will be strengthened and expanded to include a wider group of disciplines. SIMTReC Group’s value will be communicated, and new initiatives created that offer greater benefits and increased collaboration within an expanded community.
The Group will establish and maintain a web site that indicates the scope of research interests, capabilities and activities at the University. This site will serve as a database of expertise and instrumentation relevant to research. It will also promote and advertise research in the Group at the University, highlighting its activities and strengths. An annual report summarizing the activities and research interests of the Group will be assembled and distributed.

DESCRIPTION OF THE CONSTITUTION OF THE RESEARCH GROUP

Organization and Governance

To ensure accountability and sound financial decision making SIMTReC Group has assembled a strong management team and Advisory Committee. As the Group progresses across Faculty and Department lines, the organization will be adjusted.

Organization Structure

Director / Associate Director Dr. Aftab Mufti, Director and Dr. Douglas Thomson, Associate Director (with administrative support of the Project Coordinator) reporting to the Dean, Price Faculty of Engineering. Due to the interdisciplinary nature of this Group it reports to the Dean.

SIMTReC Group Advisory Committee is a committee of experienced people invited by the Director to give advice and recommendations. The purpose is to help the Group gain new insights and advice to solve business problems or explore new opportunities by stimulating robust, high-quality conversations. The role of an Advisory Committee is to provide advice. Advisory Committee participants will be able to actively contribute to the goals and desired outcomes of the research Group.

Current Advisory Committee Members (as of May 1, 2022)

• Chair: Donald Whitmore, P.Eng. (Ret’d) - Vector Construction Ltd.
• Darren Burmey, P.Eng., FEC – City of Winnipeg
• Marcia Friesen, Ph.D., P. Eng., Price Faculty of Engineering, University of Manitoba
• Rick Haldane-Wilsone, P.Eng., CIM – PCL Construction
• Andy Horosko, P.Eng. – BeauBay Consulting
• Digvir Jayas, O.C., Ph.D., D.Sc., P.Ag., P.Eng. - University of Manitoba
• Graeme Loeppky, P.Eng. – Dillon Consulting
• John Logan, P.Eng. - Manitoba Transportation & Infrastructure
• Aftab Mufti, C.M., FRSC, PhD., P.Eng. - University of Manitoba
• David Whitmore, P.Eng., FACI, FCSCE - Vector Corrosion Technologies

Ex-Officio
• Douglas Thomson, FCAE, Ph.D., P.Eng. - University of Manitoba
• Secretary: Charleen Choboter

Other Committees

Other Committees will be formed on an as needed basis, drawing on the skills and talents of each member, and work toward common goals to ensure the research Group success.

Note: A staff member may be assigned by the Director to support the work of the Chair and the Committee, where the staff member is financially supported by and assigned to the Group.

Categories of membership of SIMTReC Group and the criteria of each of these categories

Members: Faculty Member of the Price Faculty of Engineering (including Adjunct Professors) that form the member groups (listed in this document) will be the initial Members. Only Members can become part of the committee structure of the Group. Members will normally have research interest and funding in the area of applied research and innovation in Advanced Technologies and Structural Monitoring for bridges and other structures. Members are expected to contribute to the administration of the Group.

Associate Members: These include all technical support staff, postdoctoral fellows and research associates that are supervised by Members, in addition to long term visitors to the Group.

Student Members: Graduate and undergraduate students supervised by Members.

Visitors: Researchers that visit the Group for short periods of time, normally less than twelve months.

Collaborator: Member from the University of Manitoba or other educational institutions, industry and government

Conditions of Membership

Members will be appointed by the Director.

Associate Members will be added to the Group roster through their affiliation with Members.
**Student Members** will be part of the Group through their supervisors who are Members of the Group.

**Visitors** will be approved through their work affiliation with Members of the Group.

**Collaborators** will be added to the Group roster through their affiliation with Members.

**The privileges and responsibilities of membership.**

- Members will have the responsibility of performing and publishing cutting edge, world-class research in premier peer-reviewed journals.
  - Members are expected to acknowledge the Group contributions to the research, in any work that arises from activities within the Group.
- Members will develop SIMTReC Group activities into a national hub of research and innovation in the areas of Advanced Materials, Advanced Technologies and Structural Monitoring in Infrastructure
- Members are expected to attend meetings as required.
- Members will be included in all the activities of the Group and also be included in all promotional activities of the Group.
- Members will co-supervise postdoctoral fellows, graduate and undergraduate students where it is appropriate. Members are expected to encourage interactions between students.

**MANAGEMENT**

**Reporting**

The SIMTReC Group will report to the Dean of the Price Faculty of Engineering.

**Mechanisms for regular review and assessment**

The Director and Associate Director of the SIMTREC Group will meet regularly with the Head of the Department of Civil Engineering, Head of the Department of Electrical & Computer Engineering and the Dean, Price Faculty of Engineering.

An annual summary of the research activities of the group will be provided annually to the Vice-President (Research and International).
Physical Resources

SIMTReC Group office space is allocated by the Price Faculty of Engineering, affording the same priority given to other researchers and research groups in the Faculty. The instrumentation and equipment infrastructure is distributed and resides primarily in Room A250, Agricultural & Civil Engineering Building as well as in the McQuade Structures Laboratory.

The SIMTREC Group Resource Room located in Room A242, Agricultural & Civil Engineering Building is host to the library of the SIMTReC Group. The collection supports existing courses and research activities within the Group. The primary collection relates to Civil Engineering including the collection of manuals, reports and research material from the ISIS Canada NCE Research Network activities which includes a collection of high impact journals in the area of SHM, FRP and GFRP research.

Financial Resources

The SIMTReC Group receives funding from Research Manitoba, Manitoba Hydro, NSERC, NRC IRAP, NRC/DoD, Mitacs and industrial partners. Costs of administrative support and any other required personnel are derived from the research grants generated by the Group / Group members. The Price Faculty of Engineering has not allocated any operating budget to this Group.

The Group intends to continue providing a world-class training and research environment in the field of monitoring, evaluation, and innovation in advanced materials. The Groups basic mandates can be initiated with much of the existing infrastructure. The current budget is intended to address needs for the next 3 years.
APPENDIX A: LIST OF MEMBERS

The following is not intended to be exclusive. Rather, it is a listing of those who have past track record in the proposed Group to date.

MEMBERS

Aftab Mufti, C.M., FRSC, PhD., P.Eng. – Emeritus Professor
Baidar Bakht, C.M, D.Sc., P.Eng. - Adjunct Professor
Douglas Thomson, Ph.D., FCAE, P.Eng. – Professor
Jonathan Regehr, Ph.D., P. Eng. - Associate Professor

ASSOCIATE MEMBERS

Samuel Abraha - Technician
Basheer Al-Gohi, Ph.D., P.Eng. – Research Associate
Geofrey Cao, M.Sc., P.Eng. - Technician
Huma Khalid, Ph.D., P.Eng. – Instructor
Chad Klowak, Ph.D., P.Eng. – Manager, McQuade Structures Laboratory
Dan Szara, M.Sc., Technician
JunHui Zhao, Ph.D., P.Eng. – Research Associate

STUDENT MEMBERS

Younus Dewan – Masters Student
Taimur Ishtiaq – Masters Student
Maedeh Mirzaei – Masters Student
Roksana Kheiri – Masters Student
Boris Telehanic – Masters Student
Sadegh Mahmoudkhani – Ph.D. Candidate

COLLABORATORS - INDIVIDUAL

Karim Helmi, Ph.D. - International Research Associate – Egypt

COLLABORATORS – GOVERNMENT / CORPORATE

Vector Corrosion Technologies Ltd.
Vector Construction Ltd.
Roctest / Smartec
City of Winnipeg
Manitoba Transportation & Infrastructure
Mitacs
International Society for Structural Health Monitoring of Intelligent Infrastructure
Research Manitoba

ADMINISTRATION

Charleen Choboter, Project & Research Coordinator
To: Mr. Jeff Leclerc, University Secretary

From: Dr. Digvir Jayas, Vice-President (Research and International) and Chair, Senate Committee on University Research (SCUR)

Date: September 7, 2022

Subject: Notification to Senate on establishment of UMTIG (Urban Mobility and Transportation Informatics Group) Research Group

CC: Dr. Annemieke Farenhorst, Associate Vice-President (Research)
    Dr. Jay Doering, Associate Vice-President (Partnerships)
    Dr. Marcia Friesen, Dean, Price Faculty of Engineering
    Dr. Cyrus Shafai, Associate Dean, Research and Graduate Programs, Price Faculty of Engineering
    Dr. Shawn Clark, Head, Civil Engineering
    Dr. Jonathan Regehr, Co-Director, UMTIG
    Dr. Babak Mehran, Co-Director, UMTIG

The Research Centres, Institutes, and Groups Policy, section 2.9, Policy Governing the Establishment of Research Groups, states “Research groups are established under the authority of the Vice-President (Research and International), normally on the recommendation of the department head (where appropriate) and dean/director.”

Accordingly, the Dean and Associate Dean, Research and Graduate Programs, Price Faculty of Engineering and Head of Civil Engineering, have forwarded a recommendation for the establishment of the of UMTIG (Urban Mobility and Transportation Informatics Group) Research Group to me as Vice-President (Research and International). I subsequently reviewed and approved the proposal.

As Chair of SCUR, I am now requesting that Senate be informed of the establishment of the of UMTIG (Urban Mobility and Transportation Informatics Group) Research Group.

Please contact me should you require further information. A copy of the proposal for the research group is attached for your information.

DSJ/rk
attach.
24 August 2022

Dr. Digvir Jayas  
Vice-President, Research & International  
Office of the VPRIO  
University of Manitoba

Re: Statement accompanying the proposal for the establishment of UMTIG as a Research Group at the University of Manitoba

As Department Head, Associate Dean, and Dean in the Price Faculty of Engineering, we are pleased to submit this letter in support of the application by Drs. Jonathan Regehr and Babak Mehran to establish UMTIG (Urban Mobility and Transportation Informatics Group) as a Research Group under the UM’s governance policy for Research Groups. This letter also serves as a statement of common understanding between all the signatories to this letter.

The attached proposal outlines the history, scope, and impact of UMTIG since the mid-1990s. The proposal to formally establish itself as a Research Group is in keeping with the intention to promote collaboration among members and support the reach, standing, and impact of the Group both inside and outside the University.

The signatories to this letter are in agreement of the following:

- UMTIG space is allocated by the Price Faculty of Engineering, affording the same priority and proportionality given to other researchers and research groups in the Faculty. Currently, the work of UMTIG-associated faculty and staff resides primarily in E1-327, E3-304, and E3-393 EITC, and storage allocated according to needs & availability.
- UMTIG receives funding from NSERC, NRC, Mitacs, the Province of Manitoba, industry groups and private sector partners via research grants/contracts to its co-directors. Costs of administrative and technical support beyond those currently engaged by the Price Faculty of Engineering and associated with the present UMTIG-associated faculty and activities will be supported from the research grants/contracts generated by UMTIG.
- Any teaching release afforded to the UMTIG co-directors or members will be discussed with and approved by the department head. The cost of coverage of teaching release will be borne by research contracts/grants generated by the Group / Group members.
- Recovery of indirect costs on contract and grant revenue will be collected according to the rates established by the UM at the time of award of a contract / grant. Currently, all indirect cost
recovery remains in the Price Faculty of Engineering. A proportion is returned to the Principal Investigator according to percentages established by the Faculty at the time of award.

We look forward to the establishment of UMTIG as a Research Group and its continued, unique contributions to this critical sector.

Sincerely,

Dr. Jonathan Regehr  
UMTIG Co-director

Dr. Babak Mehran  
UMTIG Co-director

Dr. Shawn Clark  
Head, Civil Engineering

Dr. Cyrus Shafai  
Associate Dean, Research & Graduate Programs

Dr. Marcia Friesen  
Dean, Price Faculty of Engineering
Proposal to establish the

Urban Mobility and Transportation Informatics Group
(UMTIG)

as an approved Research Group of
The University of Manitoba

August 24, 2022

Dr. Jonathan Regehr, Ph.D., P.Eng., Proposed Co-Director
Jonathan.Regehr@umanitoba.ca

Dr. Babak Mehran, Ph.D., P.Eng., Proposed Co-Director
Babak.Mehran@umanitoba.ca
NAME OF RESEARCH GROUP

Urban Mobility and Transportation Informatics Group – UMTIG

OBJECTIVES AND RATIONALE FOR FORMATION OF THE RESEARCH GROUP

This section presents a brief history of UMTIG, describes the nature of its research activities, and outlines the benefits and opportunities anticipated from formal recognition as a Research Group at the University of Manitoba.

History

The late Professor Emeritus Alan Clayton founded UMTIG in the early 1990s. The group, known then as the University of Manitoba Transport Information Group, principally comprised transportation engineering graduate students in the Department of Civil Engineering at the University of Manitoba. The formation of UMTIG coincided with the establishment of a unique research partnership with the Government of Manitoba to deliver its traffic monitoring program, the Manitoba Highway Traffic Information System (MHTIS). Through this partnership and other research initiatives, students had the unique opportunity to work with data to produce real-world products while pursuing their degrees. In addition to extensive traffic engineering expertise, UMTIG was highly-regarded for its contributions to freight transportation systems—especially trucking.

In 2003, Dr. Jeannette Montufar joined the Department of Civil Engineering and became UMTIG’s co-director until Professor Clayton’s retirement in 2009. She then led the group as its sole director until 2011. During this period, UMTIG expanded its research expertise to include active transportation and road safety, while maintaining its leadership in the field of traffic monitoring through ongoing delivery of the MHTIS. Dr. Montufar also founded the University of Manitoba’s Institute of Transportation Engineers (ITE) Student Chapter in 2004.

Dr. Jonathan Regehr became UMTIG’s co-director in 2011 and continued working alongside Dr. Montufar until her resignation in 2016. Dr. Regehr strengthened UMTIG’s expertise in traffic engineering and freight transport systems, and initiated a railway engineering research program. He continued to direct UMTIG’s research programs from 2016 through 2022.
In 2021, a new chapter in UMTIG’s history commenced with the award of major research funding from the National Research Council of Canada. Dr. Babak Mehran joined Dr. Regehr as Co-Director of UMTIG, adding expertise in public transportation systems, traffic engineering, transportation modelling, and statistical and machine learning applications within transportation engineering. To better reflect its current research strengths while acknowledging its rich legacy, UMTIG was re-branded as the Urban Mobility and Transportation Informatics Group.

Throughout its history, UMTIG’s true strength has been the many people—students, research associates, staff, and collaborating partners—that make it a truly unique transportation engineering research and educational environment. Despite this history and a strong record of achievement over several decades, UMTIG has not previously sought formal approval as a Research Group within the University of Manitoba. This proposal aims to formalize UMTIG as a recognized Research Group, enabling it to continue to pursue its vision as a leader in transportation engineering research and education.

**Description of Existing Research Activities**

UMTIG’s researchers provide leading-edge, data-driven, and customer-focused solutions within two focus areas: intelligent urban mobility and transportation informatics.

**Intelligent urban mobility**

Cities around the world are implementing smart technologies to support the development and management of sustainable and accessible urban transportation systems. New sensors, data sources, and connectivity enable our multi-disciplinary research team to deliver innovative mobility solutions for a multi-modal future.

Through strategic collaboration with specialists in transport planning, computer science, and electrical engineering, UMTIG consistently delivers results that blend innovation with transportation domain expertise. We have demonstrated success in the evaluation of new technologies, modelling passenger and freight demand, and building multi-resolution traffic simulations.

Recent project examples:
• Responsible Automation for Inclusive Mobility (RAIM): Using AI to Develop Future Transport Systems that Meet the Needs of Ageing Populations (research sponsor: Natural Sciences and Engineering Research Council of Canada)

• Investigating the impacts of adverse road-weather conditions on the capacity of signalized intersections (research sponsor: Natural Sciences and Engineering Research Council of Canada)

• Monitoring pedestrian and bicycle micro-mobility (research sponsor: University of Manitoba Office of Sustainability)

• Exploring relationships between rail corrugation and noise on urban transit systems (research sponsor: National Research Council of Canada)

Transportation informatics

In our increasingly data-rich world, transportation practitioners must evaluate and implement new technologies and tools to inform decisions. Advancements like machine learning, artificial intelligence, and spatial analytics offer opportunities to transform data into information, provided they rest on a foundation of quality data and robust data governance.

UMTIG has decades of experience working with public and private transportation agencies to harness the power of their data. This requires an in-depth understanding of industry needs and how to apply tools that provide relevant and practical solutions. Our work has informed countless engineering decisions concerning transportation infrastructure investments, system resilience and reliability, operational safety and performance, and regulatory reform.

Recent project examples:
• Designing and operating traffic monitoring programs (research sponsor: Manitoba Transportation and Infrastructure)

• Investigating use cases for vehicle probe data (research sponsor: Transport Canada)

• Modelling wheel-rail contact using rail profile data (research sponsor: Advanced Rail Management (Canada))

• Evaluating network resilience for the movement of dangerous goods (research sponsor: National Research Council of Canada)
Our Vision and Core Values

At UMTIG, we aim to be a leading group focused on applied research and educational excellence in urban mobility and transportation informatics. Our activities are shaped by the following core values:

- **We are passionate about the work we do.** As professional engineers, students, and researchers, we are committed to working with the research integrity expected of a first-class institution.

- **We strive for high-quality performance and the pursuit of excellence in every aspect of our work.**

- **We produce high-quality publications, technical reports, and deliverables to suit the needs of our partners and clients.**

- **We foster higher learning, innovation, and creative thinking.**

- **We promote a people-centred, equitable, diverse, and inclusive workplace.**

Benefits and Opportunities of Formal Recognition as a Research Group

We anticipate numerous benefits and opportunities arising from formal recognition of UMTIG as a Research Group.

- **Enhancement of research and training experiences:** UMTIG has always promoted a people-centred workplace, and we continue to strive to be equitable, diverse, and inclusive. Recognition as a formal research group will enable student access to people with varying levels and domains of technical expertise and to people from diverse backgrounds.

- **Improved external visibility:** UMTIG regularly collaborates with government agencies, industry professionals, academic researchers, and other partners. Through these collaborations, it has earned a well-respected reputation across industry and academia. Our vision is to continue to enhance this reputation by actively promoting UMTIG as a group, and building associated branding to enable this promotion. Near-term examples that we envision include: (1) organization of an inaugural Research Showcase, highlight findings obtained through the group’s research; and (2) development and launch of a new
UMTIG website. Improving our external visibility will also increase notoriety for the department, faculty, and university.

- **Program resiliency**: Offering a rich research and training experience requires sustained funding and the people to ensure that appropriate resources (funding, equipment, space, etc.) are continually available. Formalization of UMTIG as a Research Group offers improved resiliency for our programs in multiple ways, including: (1) co-supervision of students; (2) sharing of research resources; (3) access to world-class research equipment; and (4) internal options for recruiting candidates for sessional instructors (when Co-Directors are on leave).

- **Recruitment of top talent**: Recruitment of highly qualified personnel is increasingly difficult. Formal recognition of a Research Group will support recruitment efforts, when coupled with appropriate branding and showcasing of UMTIG’s achievements.

- **Strategic direction**: Purposeful strategic planning is difficult within most academic environments. By formalizing UMTIG as a Research Group, we intend to include strategic planning within our organizational structure. In anticipation of this proposal, we have already engaged in brainstorming activities and documented them in a vision-traction organizer shown in Appendix C. This document is updated by UMTIG’s Leadership Team on a quarterly and annual basis. In addition, by appointing an Advisory Board, we anticipate better integration of industry perspectives in UMTIG’s governance.
DESCRIPTION OF THE CONSTITUTION OF THE RESEARCH GROUP

Organization and Governance

To ensure accountability and sound financial decision-making UMTIG has assembled a strong research team, organized within the following structure\(^1\).

- **Co-Directors** (with administrative support of a **Research Coordinator**) reporting to the Department Head, Civil Engineering and the Dean, Price Faculty of Engineering. Changes to the proposed co-directorship may occur if new faculty members in transportation engineering become involved in UMTIG’s activities or if an existing Co-Director decides to resign. Potential transitions will occur only after consultation with the Advisory Board, the Department Head, and the Dean (as necessary). Preference is to maintain a co-directorship model.

- **Leadership Team** consisting of the Co-Directors, the Research Coordinator, and senior members of the research team as appointed by the Co-Directors. The Leadership Team promotes and provides direction for the activities of the group. It also facilitates industrial and other external interactions, as well as the addition of new Members, Student Members, and Visitors to the group. The team is responsible for day-to-day management of the group. The Co-Directors, normally after consultation with the Advisory Board, reserve the right to add or remove senior members of the research team to the Leadership Team.

- **Advisory Board** consisting of three or five individuals with the knowledge and experience required to support the Leadership Team in providing strategic direction to the group. Appendix A lists individuals who are considered candidates for the Advisory Board.

Membership

We propose the following membership categories for UMTIG, along with conditions of membership:

- **Members**: Selected faculty at the University of Manitoba (including adjunct faculty) who have demonstrated interest and sustained commitment to UMTIG will be appointed as

\(^1\) The organizational structure will be adjusted as the Research Group potentially expands beyond traditional Departmental and Faculty domains.
Members. For this proposal, the Co-Directors are the only Members, but this may expand to include other faculty over time, at the discretion of the Co-Directors. Appendix A lists individuals considered candidates for Members; Appendix B contains brief biographies of the proposed Co-Directors/Members.

- **Collaborating Members**: Selected faculty at the University of Manitoba (including adjunct faculty) who have demonstrated interest and commitment will be appointed by the Co-Directors as Collaborating Members. Appendix A lists individuals considered candidates for Collaborating Members.

- **Associate Members**: These include all postdoctoral fellows, research associates, technicians and administrative staff that are supervised by Members. Appendix A lists individuals considered candidates for Associate Members.

- **Student Members**: Graduate and undergraduate students supervised by Members. Appendix A lists individuals considered candidates for Student Members.

- **Visitors**: Researchers that visit the group for short periods of time, normally less than twelve months. Appendix A lists individuals considered candidates for Visitors.

The following points outline privileges and responsibilities of membership:

- Members will secure funding to ensure the stability of UMTIG and its ability to successfully implement objectives.

- Members will develop UMTIG activities into a national hub of research and innovation in the areas of urban mobility and transportation informatics.

- Members will have the responsibility of performing and publishing leading-edge, world-class research in premier peer-reviewed journals and other notable outlets.

- Members will perform, if and as appropriate, multidisciplinary experimental and theoretical research.

- Members will build rapport and maintain a respected profile amongst all stakeholders.

- Members will attend regular meetings.

- Members will have the privilege of accessing equipment that is a part of the distributed infrastructure associated with the group, subject to group access policies.
• Members are responsible for encouraging interactions between students.
• Members will supervise or co-supervise undergraduate and graduate students as well as postdoctoral fellows where it is appropriate.
• Members are required to explicitly name the group, and group funding if applicable, in any work that arises from UMTIG’s resources. For example, in a peer-reviewed publication, the member's contact information would include the affiliation with the group. This will provide one of the primary mechanisms that will increase the visibility of the group and the University.

MANAGEMENT

Reporting
UMTIG will report to the Head of the Department of Civil Engineering and the Dean, Price Faculty of Engineering. We envision providing, at minimum, an annual summary of the research activities of the group, documented principally through the annual activity reports of its Members.

Physical Resources
Our workplace focuses on the people who use it, providing the space and tools required to succeed in an environment that is equitable, diverse, and inclusive to all prospective students. UMTIG’s currently allocated space comprises E1-327 (main UMTIG office), E3-304, and E3-393 in the Engineering and Information Technology Complex, as well as access to the ground level of the Stanley Pauley Centre for field equipment storage. These spaces facilitate desk-based research, meetings (internal and with visitors to campus), access by undergraduate students to reference material, computational and server requirements, equipment utilization and storage, and a library of transportation resources. The library includes a unique collection of practice manuals and standards; high-impact periodicals, reports, and journals; a collection of historical records concerning Canadian transport policy, and previous UMTIG reports and publications.

We do not envision a request for additional space as part of this proposal.

Financial Resources
UMTIG’s Co-Directors have received funding from numerous agencies. Current research sponsors include:
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- National Research Council of Canada (NRC)
- Mitacs
- International Road Dynamics
- Manitoba Transportation and Infrastructure
- Advanced Rail Management (Canada)
- Canadian Urban Transit Research & Innovation Consortium (CUTRIC)
- Canadian Association of Road Safety Professionals (CARSP)
- Sylvia Fedoruk Canadian Centre for Nuclear Innovation

The group’s mandates can be initiated with the existing infrastructure.
APPENDIX A: INDIVIDUALS INVOLVED IN UMTIG’S GOVERNANCE AND MEMBERSHIP CANDIDATES

The following lists include candidates to participate in the governance of UMTIG and candidates for the various membership categories described above. The list is subject to approval of the proposal. It provides an indication of the number of people expected to be involved with UMTIG, as of August 19, 2022.

Co-Directors and Members (2)

Jonathan Regehr, Ph.D., P.Eng., Associate Professor, Associate Head Undergraduate, Civil Engineering

Babak Mehran, Ph.D., P.Eng. Associate Professor, Civil Engineering

Leadership Team (3)

Jonathan Regehr, Ph.D., P.Eng., Associate Professor, Associate Head Undergraduate, Civil Engineering

Babak Mehran, Ph.D., P.Eng. Associate Professor, Civil Engineering

Charleen Choboter, Research Coordinator, UMTIG

Advisory Board Candidates (5)

Walter Burdz, P.Eng., Executive Director of Highway Engineering (retired), Manitoba Transportation and Infrastructure

Jeannette Montufar, Ph.D., P.Eng., PTOE, CEO, MORR Transportation Consulting

Bjorn Radstrom, P.Eng., Manager of Service Development, Winnipeg Transit

Henry Hernandez, P.Eng., Research Professor, University of Costa Rica

Yili (Kelly) Tang, Ph.D., Assistant Professor, University of Regina
Collaborating Member Candidates (6)

Graziano Fiorillo, Ph.D., P.Eng., Assistant Professor, Civil Engineering
Aftab Mufti, Ph.D., P.Eng., Emeritus Professor, Civil Engineering
Ian Jeffrey, Ph.D., P.Eng., Associate Professor, Electrical & Computer Engineering
Jeannette Montufar, Ph.D., P.Eng., PTOE, Adjunct Professor, Civil Engineering
Ahmed Ashraf, Ph.D., P.Eng., Assistant Professor, Electrical & Computer Engineering
Michelle Porter, Ph.D., Professor, Faculty Kinesiology & Recreational Management

Associate Member Candidates (7)

Charleen Choboter, Research Coordinator, UMTIG
Kerry Lynch, Technician, Civil Engineering
Geoffrey Cao, Technician, Civil Engineering
Ahmed Lasisi, Ph.D., P.Eng., Post-doctoral Fellow
Sharath Narasimhamurthy, Ph.D., Post-doctoral Fellow
Phani Patnala, Ph.D., Post-doctoral Fellow

Student Member Candidates (11)

Julian Carneiro
Nasim Deljouyi
Maryam Ghaffari Dolama
Jenna Duke
Ryutaro Hirose
Dat Pham Hoang
Musharraf Khan
Kris Maranchuk
Navoda Rillagodage
Tara Saeidi

Cassidy Zrobek

Visitors (0)

None currently identified.
APPENDIX B: BIOGRAPHY OF MEMBERS

Dr. Jonathan D. Regehr, P.Eng. is an Associate Professor of Civil Engineering at the University of Manitoba and works as a private transportation consultant. His research and consulting experience involves transportation information systems and analysis, freight transportation, railway engineering, traffic engineering, and road safety. He is Co-Director of the Urban Mobility and Transportation Informatics Group (UMTIG) at the University of Manitoba. Working with federal, provincial, municipal, and private sector partners, Dr. Regehr’s research contributes to advancements in transportation engineering practice and policymaking in Canada and internationally. Dr. Regehr currently serves on the Executive Boards of the International Society for Weigh-in-Motion and the Heavy Vehicle Transport and Technology Forum. He Chairs the Education Committee of the Transportation Association of Canada and is former Chair of the Transportation Research Board Committee on Highway Traffic Monitoring.

Dr. Babak Mehran, P.Eng. is an Associate Professor of Civil Engineering at the University of Manitoba. His research interests include transportation network resilience modelling and analysis; applications of big data analytics, spatial data science, and artificial intelligence in transportation operations planning; applications of autonomous and connected vehicles in traffic management; modelling and design of autonomous shared mobility services; optimization of traffic operations and public transportation systems; and traffic flow modelling and simulation. He is Co-Director of the Urban Mobility and Transportation Informatics Group (UMTIG) at the University of Manitoba. Dr. Mehran is a member of the Transportation Research Board’s Standing Committee on Passenger Intermodal Facilities - AP045 and co-chairs the Special Interest Group (SIG) C4: Traffic Safety and Analysis of the World Conference on Transport Research Society.

[Full curriculum vitae available upon request.]
## THE VISION/TRACTION ORGANIZER™

**ORGANIZATION NAME:** Urban Mobility and Transportation Informatics Group

### VISION

**CORE VALUES**

1. We work with passion and integrity.
2. We strive for high-quality performance and the pursuit of excellence in every aspect of our work.
3. We foster higher learning, innovation, and creative thinking.
4. We promote a people-centered, equitable, diverse, and inclusive workplace.

**CORE FOCUS™**

**Purpose/Cause/Passion:** We aim to be a leading group focused on applied research and educational excellence in urban mobility and transportation informatics.

**Our Niche:** transportation informatics: intelligent urban mobility; traffic engineering; resilient freight transport systems, sustainable and accessible transportation.

**10-YEAR TARGET™**

In 10 years, we plan to be internationally recognized as a leading applied research and education group focused on urban mobility and transportation informatics.

**MARKETING AND OUTREACH STRATEGY**

**Target Market™ The List™:** government transportation departments (federal, provincial, municipal); private transportation research and service providers; stakeholder groups; prospective students; other researchers.

**Three Unique:**

1. Integrated, collaborative applied research and educational environment.
2. Highly qualified personnel from multiple disciplines and backgrounds.

**Proven Process:** UMTIG regularly collaborates with government agencies, industry professionals, academic researchers, and other partners. The broad, diverse experience of these seasoned professionals provides multiple perspectives on current needs, future trends, and our stakeholders' toughest issues. Listening to and acting on what they tell us is crucial in providing relevant, practical solutions to federal, provincial, and industry stakeholders.

**Guarantee:** UMTIG promises to provide leading-edge, high quality transportation research and educational programming.

### 3-YEAR PICTURE™

**Future Date:** April 2025

**Revenue:** $2,000,000

**Measurables:** revenue, trained HQPs (by level), HQP successes, courses offered (undergraduate, graduate, external), research impacts, committee leadership positions, workplace satisfaction (ESI), client satisfaction, social events.

**What does it look like?**

- UMTIG has two professors (1 tenured/full, 1 tenured/associate).
- UMTIG has established key institutional partners (e.g., computer engineering/science, city planning, logistics).
- UMTIG has strengthened relationships with key funding partners (NRC, MTI, QW, ARM).
- UMTIG has successfully retained funding from NSERC, MfAc, and/or Research Manitoba.
- UMTIG has enhanced educational curriculum at undergraduate and graduate levels to deliver material that aligns with Departmental priorities and research interests.
- UMTIG professors and students have published research that impacts transportation engineering practice/policy.
- UMTIG professors and students have maintained strong presence at TRB, NATMTC, ICOM, CITE, TAC, WRI.
- UMTIG professors and students are actively involved in national and international professional development/service initiatives related to our core focus.
- UMTIG graduates have established strong professional networks and successful careers.
- UMTIG students and clients report high levels of satisfaction regarding their experiences with UMTIG.
# The Vision/Traction Organizer

**Organization Name:** Urban Mobility and Transportation Informatics Group

## TractIon

### 1-Year Plan

**Future Date:** April 2023

- **Revenue:** $700,000
- **Measurables:** Revenue, trained HQFs (by level), HQP successes, courses offered (undergraduate, graduate, external), research impacts, committee leadership positions, workplace satisfaction (ESI), client satisfaction, social events.

**Goals for the Year:**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>G-02</td>
<td>Initiate development of two undergraduate courses: Public Transportation Systems, Railway Engineering</td>
</tr>
<tr>
<td>G-03</td>
<td>Establish UMTIG workspaces, including the deployment of newly acquired research equipment and computer servers</td>
</tr>
<tr>
<td>G-04</td>
<td>Disseminate research at conferences (TRB, NaTMEC, WRI, CITE, CARSP) and through impactful journals</td>
</tr>
<tr>
<td>G-05</td>
<td>Launch website and associated social media presence</td>
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<tr>
<td>G-06</td>
<td>On-board two PhD students, one post-doc (MK)</td>
</tr>
<tr>
<td>G-07</td>
<td>Graduate JD, NR, SM, MK, JC, MGD, RH</td>
</tr>
<tr>
<td>G-08</td>
<td>Establish internal process for recruitment, retention, and student/client interaction</td>
</tr>
<tr>
<td>G-09</td>
<td>Organize one social event per quarter</td>
</tr>
</tbody>
</table>

### Rocks

**Future Date:** June 30, 2022

**Measurables:** Trained HQFs (by level), courses offered (undergraduate, graduate, external), research impacts, workplace satisfaction (ESI), client satisfaction, social events.

**Rocks for the Quarter:**

<table>
<thead>
<tr>
<th>Rock</th>
<th>Description</th>
<th>Who</th>
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</thead>
<tbody>
<tr>
<td>R-01</td>
<td>Complete Transport Systems course</td>
<td>JR</td>
</tr>
<tr>
<td>R-02</td>
<td>Develop detailed equipment deployment plan and associated storage/calibration preparations</td>
<td>GG, KL, BM</td>
</tr>
<tr>
<td>R-03</td>
<td>NRC data vault submission and monthly meetings</td>
<td>JR, BM, GG</td>
</tr>
<tr>
<td>R-04</td>
<td>Present at WRI, NaTMEC, CITE, CARSP, ITS Europe</td>
<td>JR, BM</td>
</tr>
<tr>
<td>R-05</td>
<td>Initiate server acquisition</td>
<td>BM, GC</td>
</tr>
<tr>
<td>R-06</td>
<td>Establish group, develop website content, and launch website</td>
<td>CC, GG</td>
</tr>
<tr>
<td>R-07</td>
<td>MK-RH defense</td>
<td>BM</td>
</tr>
<tr>
<td>R-08</td>
<td>Submit articles (MK revision, MK, MGD, AL, RH, others)</td>
<td>JR, BM</td>
</tr>
<tr>
<td>R-09</td>
<td>Establish client satisfaction survey</td>
<td>JR</td>
</tr>
<tr>
<td>R-10</td>
<td>Establish and execute student performance reviews, satisfaction survey</td>
<td>JR</td>
</tr>
<tr>
<td>R-11</td>
<td>Organize social event</td>
<td>CC, GG</td>
</tr>
</tbody>
</table>

### Issues List

<table>
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<tr>
<th>Issue</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>I-01</td>
<td>NSERC Create Grant (public transportation systems)</td>
</tr>
<tr>
<td>I-02</td>
<td>Equipment arrival, calibration, and deployment delay</td>
</tr>
<tr>
<td>I-03</td>
<td>MTI/NSERC legal access/interaction agreement</td>
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<tr>
<td>I-05</td>
<td>Calendar of academic deadlines (application/submission deadlines)</td>
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<tr>
<td>I-06</td>
<td>Student exit process and sever organization</td>
</tr>
</tbody>
</table>
REPORT OF THE SENATE COMMITTEE ON AWARDS

Preamble
Terms of reference for the Senate Committee on Awards include the following responsibility:

On behalf of Senate, to approve and inform Senate of all new offers and revised offers of awards that comply with the Student Awards Policy.

Observations
At its meeting of June 9, 2022, the Senate Committee on Awards approved 5 new offers, 9 revised offers and 3 withdrawals as set out in the Report of the Senate Committee on Awards (June 9, 2022).

Recommendations
On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve 5 new offers, 9 revised offers and 3 withdrawals as set out in the Report of the Senate Committee on Awards (June 9, 2022). These award decisions comply with the Student Awards Policy.

Respectfully submitted,

Dr Jared Carlberg
Chair, Senate Committee on Awards
1. NEW OFFERS

Albert and Susan Routhier Charitable Foundation Scholarship

Albert M. Routhier (B. Comm./’80, B.A./’84) and Susan Liu-Routhier established an annually funded award at the University of Manitoba to reward the academic achievements of students in the President's Student Leadership program in the Asper School of Business. Each year, beginning in 2022-2023, one scholarship valued at $1,000 will be offered to an undergraduate student who:

1. is enrolled full-time (minimum 80% course load) in the second year of study or higher in the Bachelor of Commerce (Honours) program in the Asper School of Business;
2. is a member of the President's Student Leadership program offered through the James W. Burns Leadership Institute; and
3. has achieved a minimum degree grade point average of 3.0.

First preference will be given to a student who is a current or past member of the Canadian Armed Forces Reserves/Cadets. Second preference will be given to a student who is a past member of the Boys and Girls Club, Cub Scouts, Girl Guides, or program of a similar nature.

Candidates are required to submit a statement (maximum 250 words) which demonstrates their participation in the Canadian Armed Forces Reserves/Cadets, the Boys and Girls Club, Cub Scouts, Girl Guides, or program of a similar nature.

The Dean of the Asper School of Business (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

International Graduate Scholarship in Education

Through a bequest by Paula Achtemichuk (B.A./’65, B.Ed./’68), an endowment fund valued at $69,512.26 was established at the University of Manitoba in 2022. The purpose of the fund is to reward the academic achievements of international graduate students in the Faculty of Education at the University of Manitoba. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer one or more scholarships to graduate students who:

1. are international students;
2. are enrolled part-time or full-time in any year of study in the Faculty of Graduate Studies in a Master’s or Doctoral program offered by the Faculty of Education; and
3. have achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study.
Candidates will be required to submit: (i) a current curriculum vitae, and (ii) a statement (maximum 250 words) which describes their current research.

In the event that there are no eligible candidates who meet all of the criteria, the scholarship may be awarded to students who meet criteria (2) and (3).

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Education (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Miaw Jin Scholarship

Richard Reid Zillman established an endowment fund at the University of Manitoba with an initial gift of $25,000 in 2022. The purpose of the fund is to provide entrance scholarships to graduates of St. Norbert Collegiate and Vincent Massey Collegiate who are studying at the University of Manitoba. Each year, beginning in 2023-2024, the annual available income from the fund will be used to offer one or more scholarships, up to a maximum value of $5,000 each, to undergraduate students who:

1. have graduated from St. Norbert Collegiate or Vincent Massey Collegiate;
2. have been admitted to the University of Manitoba directly from high school;
3. are enrolled full-time (minimum 80% course load) in the first year of study in University 1 or any faculty, college, or school with a Direct Entry option at the University of Manitoba; and
4. have achieved a minimum 80% average on the best five courses appearing on the list of acceptable courses for the University of Manitoba General Entrance Scholarship Program.

In the event that there are no eligible candidates that meet all of the criteria, the scholarship may be awarded to students who meet criteria (2) through (4).

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Associate Registrar & Director, Financial Aid and Awards (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award, if because of changed conditions, it becomes necessary to do so. Such modifications shall conform as closely as possible to the expressed intention of the donor in establishing the award.
Ricky Wiens Bursary in Computer Science

In honour of Ricky Wiens (B.Sc./'12), an annually funded bursary was established for a four-year term by Bold Commerce to support undergraduate students in Computer Science in the Faculty of Science at the University of Manitoba. The available annual income will provide one or more bursaries to support students in Computer Science in the Faculty of Science. Each year, beginning in 2022-2023, and ending in 2025-2026 one or more bursaries valued from a minimum of $500 to a maximum of $2,500 each will be offered to undergraduate students who:

1. are enrolled full-time (minimum 60% course load) in the second year of study or higher in the Computer Science program in the Faculty of Science;
2. have achieved a minimum degree grade point average of 2.0; and
3. have demonstrated financial need on the standard University of Manitoba general bursary application form.

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Dean of the Faculty of Science (or designate) will ask the Head of the Department of Computer Science (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Susan Williams Peet Scholarship

Through a bequest, Susan Williams Peet established an endowment fund at the University of Manitoba in 2022. The purpose of the fund is to reward the academic achievements of graduate students specializing in Counselling Psychology in the Faculty of Education at the University of Manitoba. Each year, beginning in 2024-2025, the available annual income from the fund will be used to offer one or more scholarships to graduate students who:

1. are enrolled part-time or full-time in any year of study in the Faculty of Graduate Studies in the Masters of Education program offered by the Faculty of Education;
2. are specializing in Counselling Psychology; and
3. have achieved a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study.

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Education (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if,
because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

2. AMENDMENTS

Clara Kemila Anderson Memorial Award

The following amendments were made to the terms of reference for the Clara Kemila Anderson Memorial Award:

- The preamble was revised to:

  In memory of Clara Kemila Anderson (B.A./'63, B.S.W./'65, M.S.W./'66), who was Lady Stick of Social Work in 1965-66, her husband, Mr. Peter D. Anderson, established an endowment fund at the University of Manitoba in 1982. The purpose of this scholarship is to reward the academic achievement of students in the Faculty of Social Work.

- Annual available income was revised to available annual income throughout the terms of reference.

- The award numbers were added to the following sentences:

  Each year 50% of the available annual income from the fund will be used to offer one scholarship (#40114) to a graduate student who:

  Each year, the remaining 50% of the available annual income from the fund will be used to offer one prize (#40115) to a graduate student who:

- The numbered criteria were revised to:

  (1) was enrolled full-time in the Faculty of Graduate Studies in any Master’s program offered by the Faculty of Social Work in the year in which the award was tenable;

  (2) has achieved a minimum degree grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and

  (3) has, in the opinion of the selection committee, either (a) written the most promising thesis, or (2) has achieved the highest standing in the course-based route or project route in any Master’s program offered by the Faculty of Social Work.

David and Louise Fraser Scholarship

The following amendments were made to the terms of reference for the David and Louise Fraser Scholarship:

- The preamble was revised to:

  Through a bequest, Dr. David Fraser established an endowment fund at the University of Manitoba in 2020. The purpose of the fund is to reward the academic achievements of students who are focusing on physics in the Faculty of Science at the University of Manitoba. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer one or more scholarships to undergraduate students who:

- The numbered criteria were revised to:

  (1) are enrolled full-time (minimum 80% course load) in the second year of study or higher in the Department of Physics and Astronomy;

  (2) are enrolled in the Physics Honours Degree Program; and
(3) have achieved a minimum degree grade point average of 3.5.

- The selection committee paragraphs were revised to:
  The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above. The Head of the Department of Physics and Astronomy (or designate) will name the selection committee for this award.

**Dr. Biruta Anna Osins Medal and Award in Endodontics**

The following amendments were made to the terms of reference for the Dr. Biruta Anna Osins Medal and Award in Endodontics:

- The preamble was revised to:
  Dr. Biruta Anna Osins established an endowment fund at the University of Manitoba with an initial gift of over $90,000. The purpose of the award is to support students who demonstrate excellence in the field of Endodontics in the practice of dentistry. The available annual income from the fund will provide one medal and a monetary award of $2,000 to an undergraduate dentistry student who:

  - The numbered criteria were revised to:
    (1) is enrolled full-time in their final year of the Doctor of Dental Medicine (D.M.D.) program in the College of Dentistry at the University of Manitoba;
    (2) has achieved a minimum degree grade point average of 3.5; and
    (3) has demonstrated outstanding clinical or research proficiency in endodontic course which will include the endodontic portion of the General Practice Dentistry course (currently numbered DENT 422).

- The paragraph following the numbered criteria was revised to:
  Each year, the remaining available annual income will be used at the discretion of the Division of Endodontics for the purchase of endodontic equipment for teaching purposes within the D.M.D. program.

- The selection committee paragraph was revised to:
  The selection committee will be the Awards Committee of the Dr. Gerald Niznick College of Dentistry.

- The standard Board of Governors statement was updated.

**Emőke Szathmáry Graduate Scholarship in Music**

The following amendments were made to the terms of reference for the Emőke Szathmáry Graduate Scholarship in Music:

- The preamble was revised to:
  Dr. Marcel A. Desautels made a gift of $100,000 in honour of Dr. Emőke Szathmáry, President Emeritus, on the occasion of her retirement in 2014. This gift is in honour of her contributions to the University of Manitoba. The Manitoba Scholarship and Bursary Initiative made a contribution to the fund. The purpose of this scholarship is to attract top graduate students to the Desautels Faculty of Music at the University of Manitoba.
Beginning in 2015-2016, the available annual income from the fund will be used to offer one scholarship to a graduate student who:

- The numbered criteria were revised to:
  1. is enrolled full-time in the Faculty of Graduate Studies, in the first year of the Master of Music in the Performance (solo or collaborative), Composition, or Conducting program in the Desautels Faculty of Music;
  2. has achieved a minimum degree grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
  3. in the opinion of the selection committee, has demonstrated outstanding skill and promise in performance, composition, or conducting, as evidenced in the graduate auditions.

- The renewal paragraphs were revised to:
  The scholarship is renewable to the recipient for a second year provided that the recipient:
  1. continues to be enrolled full-time in the Faculty of Graduate Studies, and in the second year of the Master of Music in the Performance (solo or collaborative), Composition, or Conducting program in the Desautels Faculty of Music; and
  2. has achieved a minimum degree grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study.

- The selection committee paragraph was revised to:
  The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Desautels Faculty of Music (or designate) to name the selection committee for this award.

- The standard Board of Governors statement was updated.

### Esther Seidl Scholarship

The following amendments were made to the terms of reference for the Esther Seidl Scholarship:

- The preamble was revised to:
  From the testamentary gift of Esther Seidl and through gifts in her memory, an endowment fund was established at the University of Manitoba in 1999. The purpose of the fund is to recognize the academic achievements of Indigenous graduate students in the Faculty of Social Work at the University of Manitoba. Each year, the available annual income from the fund will be used to offer one or more scholarships to graduate students who:

- The numbered criteria were revised to:
  1. have self-declared as First Nations, Métis, or Inuit people from Canada;
  2. are enrolled full-time in the Faculty of Graduate Studies in any Master’s or Doctoral program offered by the Faculty of Social Work;
  3. have achieved a minimum grade point average of 3.0 based on last 60 credit hours (or equivalent) of study; and
(4) are working on the thesis, course-based, or project portion of their degree requirements.

- The paragraph following the numbered criteria was revised to:
  Candidates are required to submit: (i) a statement (maximum 500 words) outlining the, course-based, or project portion of their degree, and (ii) two letters of support from members of the Indigenous community.

- The selection committee paragraphs were revised to:
  The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.
  The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Social Work (or designate) to name the selection committee for this award.

- The standard Board of Governors statement was updated.

**Margaret Tobin Bursary for Single Parents in Social Work**

The following amendments were made to the terms of reference for the Margaret Tobin Bursary for Single Parents in Social Work:

- The preamble was revised to:
  Margaret Tobin established an endowment fund with a gift of $10,000 to the University of Manitoba in 2009. The purpose of the fund is to encourage single parents to pursue postsecondary education in the Faculty of Social Work. The Manitoba Scholarship and Bursary Initiative made a contribution to the fund. Each year, the available annual income from the fund will be used to offer one bursary to an undergraduate student who:

- The numbered criteria were revised to:
  (1) is a single custodial parent with a dependent child or children;
  (2) is enrolled part-time or full-time in the Faculty of Social Work, in either the Bachelor of Social Work program or the Inner City Bachelor of Social Work program;
  (3) has achieved a minimum degree grade point average of 2.0; and
  (4) has demonstrated financial need on the standard University of Manitoba bursary application form.

- The alternate candidate criteria were revised to:
  In any year that there is no student who meets all of the criteria outlined above, the bursary may then be offered to:
  (a) an undergraduate student who:
      (1) is a single custodial parent with a dependent child or children;
      (2) is enrolled part-time or full-time in the Northern Bachelor of Social Work program offered by the Faculty of Social Work;
      (3) has achieved a minimum degree grade point average of 2.0; and
      (4) has demonstrated financial need on the standard University of Manitoba bursary application form; or
  (b) a graduate student who:
(1) is a single custodial parent with a dependent child or children;
(2) is enrolled part-time or full-time in the Faculty of Graduate Studies, in any Master's of Social Work degree offered by the Faculty of Social Work;
(3) has achieved a minimum degree grade point average of 3.0; and
(4) has demonstrated financial need on the standard University of Manitoba bursary application form.

• The paragraph following the numbered criteria was revised to:
  Students completing the Bachelor of Social Work by distance education are not eligible for this bursary.

• The selection committee paragraph was revised to:
  The Dean of the Faculty of Social Work (or designate) will name the selection committee for this award. If a graduate student is selected, the results will be reported through the Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate).

• The standard Board of Governors statement was added.

Mike Kupfer Memorial Award

The following amendments were made to the terms of reference for the Mike Kupfer Memorial Award:

• The preamble was revised to:
  In memory of Michael Nathan Kupfer, B.Sc. (Pharm) '73, members of that class established an endowment fund to reward and support students in the College of Pharmacy. Each year, beginning in 1983-1984 the available annual income from the fund will be used to offer one prize to an undergraduate student who:

• The numbered criteria were revised to:
  (1) has successfully completed the third year of study in the PharmD program in the College of Pharmacy;
  (2) has achieved a minimum degree grade point average of 3.0;
  (3) has participated in student activities while a student in the College of Pharmacy; and
  (4) has demonstrated a high degree of empathy for his or her fellow students.

• The paragraphs following the numbered criteria were revised to:
  The College of Pharmacy will provide the application form to members of the third year class in the spring of each year. Candidates may be self-nominated or peer-nominated through the submission of a written statement (maximum 500 words) to demonstrate how they meet criteria (3) and (4).

  The name of each recipient will be engraved on a plaque to be provided by the donors and to be displayed permanently in the College of Pharmacy.

• The selection committee paragraph was revised to:
  The selection committee will be The College of Pharmacy Professional Program Awards Committee.

• The standard Board of Governors statement was added.
Mineral Society of Manitoba Prize

The following amendments were made to the terms of reference for the Mineral Society of Manitoba Prize:

- The preamble was revised to:
  
  To mark the interest and assistance of Dr. Robert Ferguson, Dr. Petr Černý, and other members of the Department of Earth Sciences in the activities of the Mineral Society of Manitoba and the interests of the Mineral Society of Manitoba in paleontology and fossil collecting, the Mineral Society of Manitoba Incorporated established an annual prize at the University of Manitoba in 1973. The purpose of this award is to reward the academic achievements of students with an interest in mineralogy or paleontology in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

  Each year, one prize valued at $750 will be offered to an undergraduate student who:

- The numbered criteria were revised to:
  
  (1) was enrolled full-time (minimum 80% course load) in the Clayton H. Riddell Faculty of Environment, Earth, and Resources in the second year of study or higher in the Honours or Major degree program in the Department of Earth Sciences in the year in which the award was tenable;

  (2) has achieved a minimum degree grade point average of 3.0; and

  (3) has achieved the highest standing in one of the following courses: Introduction to Mineralogy (currently numbered GEOL 2500), or Paleontology (currently numbered GEOL 3310).

- The paragraph following the numbered criteria was revised to:
  
  The selection committee will have the discretion to split the award in any given year, with one-half the value of the award given to each of two deserving students: one with high standing in mineralogy and one with high standing in paleontology.

- The selection committee paragraph was revised to:
  
  The Head of the Department of Earth Sciences (or designate) will name the selection committee for this award, which will include the Head and a professor in the field of mineralogy and a professor in the field of paleontology.

- The standard Board of Governors statement was added.

Nevin Estate Fellowship

The following amendments were made to the terms of reference for the Nevin Estate Fellowship:

- The preamble was revised to:
  
  In honour of Mr. John A. Nevin, a testamentary gift of $237,000 was used to establish an endowment fund in the year 2000 at the University of Manitoba. The purpose of this fund is to reward graduate students with a fellowship for their research to improve beef cattle production in multiple areas of the beef cattle industry.
The available annual income will be used to offer one fellowship, with a minimum value of $19,000, to a graduate student who:

- The numbered criteria were revised to:
  1. is enrolled full-time in the Faculty of Graduate Studies in the first year of a Master’s program or a Doctoral program offered by the Faculty of Agricultural & Food Sciences at the University of Manitoba;
  2. has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
  3. is specializing in research on beef cattle production including breeding and genetics, nutrition and management, to improve the economic and environmental sustainability of the beef cattle industry.

- The paragraphs following the numbered criteria were revised to:
  Preference will be given to a student engaged in research on the breeding and genetics of shorthorn cattle.
  In order to demonstrate how they meet criterion (3), applicants must submit a written statement (maximum 500 words) outlining their work and research.

- The renewal paragraph was revised to:
  The fellowship is renewable for one and two years for Master’s and Doctoral students respectively, at the discretion of the selection committee.

- The selection committee paragraphs were revised to:
  The selection committee will have the discretion to determine the value of the fellowship offered each year as outlined above, based on the available annual income from the fund.
  The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Agricultural and Food Sciences (or designate) to name the selection committee for this award.

- The standard Board of Governors statement was added.

3. WITHDRAWALS

Manitoba Hydro Thesis Prize (Electrical)
At the request of the donor

Master of Physician Assistant Studies Travel Support Prize
At the request of the donor

Master of Physician Assistant Studies Academic Performance Scholarship
At the request of the donor
4. OTHER BUSINESS

Nomination and vote for the Chair and Vice-Chair of SCOA for the 2022-2023 year

- Dr. Carlberg will be Chair of SCOA for the 2022-2023 year.
- Prof. MacPherson will be Vice-Chair for the 2022-2023 year.
REPORT OF THE SENATE COMMITTEE ON AWARDS

Preamble
Terms of reference for the Senate Committee on Awards include the following responsibility:

On behalf of Senate, to approve and inform Senate of all new offers and revised offers of awards that comply with the Student Awards Policy.

Observations
At its meeting of August 23, 2022, the Senate Committee on Awards approved 15 new offers, 11 revised offers and 7 withdrawals as set out in the Report of the Senate Committee on Awards (August 23, 2022).

Recommendations
On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve 15 new offers, 11 revised offers and 7 withdrawals as set out in the Report of the Senate Committee on Awards (August 23, 2022). These award decisions comply with the Student Awards Policy.

Respectfully submitted,

Dr Jared Carlberg
Chair, Senate Committee on Awards
1. NEW OFFERS

CFY Prizes in Science

The Division of Extended Education at the University of Manitoba established the CFY Prizes in Science in 2022. The purpose of the CFY Prizes in Science is to recognize and celebrate the academic success, particularly in first-year science courses, of Common First Year (CFY) students in the Access Program in Extended Education. Each year, up to two prizes valued at $500 each will be offered to students who:

(1) were enrolled in the Access Program in the year in which the award was tenable;

(2) have successfully completed at least two of the following courses with a minimum grade of B in each course*: Biology: Foundations of Life (currently numbered BIOL 1000 Biology), Biology: Biological Diversity and Interaction (currently numbered BIOL 1010 Biology), Biology 1: Principles and Themes (currently numbered BIOL 1020), Biology 2: Biological Diversity, Function and Interactions (currently numbered BIOL 1030), Basic Statistical Analysis 1 (currently numbered STAT 1000), or Mathematics in Art (currently numbered MATH 1020); and

(3) have demonstrated perseverance and/or a high level of commitment to the science program, which has contributed to their success.

* This course list may be amended from time to time. For the most current listing of eligible courses, please consult the application form.

In order to demonstrate how they meet criterion (3), candidates are required to complete an application form, which is available at the Access office.

Preference may be given to students who have not previously been awarded this prize.

The prizes will be presented at a formal Access Program event, such as the Access Graduation Celebration, when possible.

The Dean of Extended Education (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate) and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

CFY Writing Competition Prizes in Arts

The Division of Extended Education at the University of Manitoba established the CFY Writing Competition Prizes in Arts in 2022. The purpose of the CFY Writing Competition Prizes in Arts is to recognize and celebrate outstanding writing in academic essays or creative work completed by Common First Year (CFY) students in the Access Program in Extended Education. Each year, up to three prizes valued at $500 each will be offered to students who:

(1) were enrolled in the Access Program in the year in which the award was tenable;
(2) have successfully completed at least two of the following courses with a minimum grade of B in each course*: Introduction to the University (currently numbered ARTS 1110), English Composition (currently numbered ENGL 0930), Writing about Literature (currently numbered ENGL 0940), Indigenous Peoples in Canada - Part 1 (currently numbered INDG 1220), or Indigenous Peoples in Canada - Part 2 (currently numbered INDG 1240); and

(3) have demonstrated outstanding writing in academic essays or creative work.

* This course list may be amended from time to time. For the most current listing of eligible courses, please consult the application form.

Candidates are required to submit: (i) a piece of formal writing completed as part of a written assignment in one of the listed courses, and (ii) a completed application form, available at the Access office. Candidates are limited to one entry.

Preference may be given to students who have not previously been awarded this prize.

The prizes will be presented at a formal Access Program event, such as the Access Graduation Celebration, when possible.

The Dean of Extended Education (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate) and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Dr. Esther D. Israels Bursary

In memory of Esther D. Israels (M.Sc./’58, MD/’50), an endowment fund was established at the University of Manitoba in 2022. The purpose of the fund is to provide financial resources to students while they pursue their Undergraduate Medical Education program. When funds are available, the Manitoba Scholarship and Bursary Initiative may make a contribution to the award. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer one or more bursaries to undergraduate students who:

(1) are enrolled full-time in any year of study in the Undergraduate Medical Education program in the Max Rady College of Medicine;

(2) are in good standing; and

(3) have demonstrated financial need on the standard University of Manitoba general bursary application.

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Dean of the Max Rady College of Medicine (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate) and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if,
because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intent of the donor in establishing the award.

**Dr. Marvin Seale Scholarship**

Through a bequest, the estate of Martin Seale established an endowment fund at the University of Manitoba with a gift of $50,000 in 2022. The purpose of the award is to encourage incoming undergraduate students with an interest in pursuing a career in agriculture. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one or more scholarships up to a maximum value of $10,000 to undergraduate students who:

1. are enrolled full-time (minimum 80% course load) in their second year of study in the Diploma in Agriculture program in the School of Agriculture; and
2. have achieved a minimum degree grade point average of 3.0.

The selection committee will have the discretion to determine the number and value of awards offered each year as outlined above, based on the available annual income from the fund.

The selection committee will be the Faculty of Agricultural and Food Sciences Awards Committee.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

**Dr. Pamela G. Hawranik Bursary**

Dr. Pamela G. Hawranik established an endowment fund at the University of Manitoba in 2022. The purpose of the fund is to provide financial support to students in the College of Nursing who are Manitoba residents. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer one or more bursaries to undergraduate students who:

1. have graduated from a high school in rural Manitoba*;
2. are enrolled full-time (minimum 60% course load) in any year of study in the Bachelor of Nursing program in the College of Nursing;
3. have achieved a minimum degree grade point average of 2.5; and
4. have demonstrated financial need on the standard University of Manitoba bursary application form.

*For the purposes of this award, rural Manitoba is defined as outside of the census metropolitan areas of the province (as defined by Statistics Canada).

The Dr. Pamela G. Hawranik bursary is renewable for one year, provided the recipients continue to meet the numbered criteria outlined above.

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available annual income from the fund and the level of financial need demonstrated by candidates for this bursary.

The selection committee will be the Student Awards Committee of the College of Nursing.
This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor or the designate, and providing that all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Eileen Zhu and Jeff Liu Graduate Scholarship in Mechanical Engineering
Eileen Zhu (M.Sc./’94) and Jeff Liu (M.Sc./’93) established an endowment fund at the University of Manitoba with an initial gift of $25,000 in 2021. The purpose of the fund is to reward the academic achievements of graduate students pursuing studies in Mechanical Engineering in the Price Faculty of Engineering. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one scholarship to a graduate student who:

1. is enrolled full-time in the Faculty of Graduate Studies in the Master’s program in Mechanical Engineering delivered by the Price Faculty of Engineering at the University of Manitoba;
2. has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
3. has solid mechanics or material engineering as a principal field of research and study.

Applicants will be required to submit: (i) a current curriculum vitae and (ii) a one-page (maximum 250 words) research abstract.

Applicants will only be eligible to receive this scholarship once.

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Head of the Department of Mechanical Engineering (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Hugh and Elsie Willson Bursary
In honour of her parents Hugh and Elsie Willson, Brenda and Morrison Hurley established an endowment fund at the University of Manitoba with an initial gift of $25,000 in 2022. The purpose of the fund is to support undergraduate students pursuing studies in the Faculty of Social Work at the University of Manitoba. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one bursary to an undergraduate student who:

1. is enrolled full-time (minimum 60% course load) in any year of study in the Faculty of Social Work;
2. has achieved a minimum degree grade point average of 2.5; and
3. has demonstrated financial need on the standard University of Manitoba bursary application form.

The Dean of the Faculty of Social Work (or designate) will name the selection committee for this award.

Hugh and Elsie Willson Bursary

In honour of her parents Hugh and Elsie Willson, Brenda and Morrison Hurley established an endowment fund at the University of Manitoba with an initial gift of $25,000 in 2022. The purpose of the fund is to support undergraduate students pursuing studies in the Faculty of Social Work at the University of Manitoba. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one bursary to an undergraduate student who:

1. is enrolled full-time (minimum 60% course load) in any year of study in the Faculty of Social Work;
2. has achieved a minimum degree grade point average of 2.5; and
3. has demonstrated financial need on the standard University of Manitoba bursary application form.

The Dean of the Faculty of Social Work (or designate) will name the selection committee for this award.
This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

**K. Smimou Bursary for Indigenous Students in the Asper School of Business**

Dr. Kamal Smimou made an annual contribution valued at $7,500 to the University of Manitoba for a three-year term to offer the K. Smimou Bursary for Indigenous Students in the Asper School of Business. The purpose of the fund is to provide financial support to undergraduate Indigenous students in the Asper School of Business. Each year, beginning in 2023-2024 and ending in 2025-2026, the available annual income from the fund will be used to offer one bursary to an undergraduate student who:

1. has self-declared as a First Nations, Métis or Inuit person from Canada;
2. is enrolled full-time (minimum 60% course load) in any year of study in the Asper School of Business at the University of Manitoba;
3. has achieved a minimum degree grade point average of 2.0; and
4. has demonstrated financial need on the standard University of Manitoba bursary application form.

The Dean of the Asper School of Business (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

**Manitoba Graduate History Scholarship**

The Winnipeg Foundation, through its Centennial Institute, established a scholarship at the University of Manitoba to reward and encourage students who are pursuing a Master of Arts degree in the Joint Master’s Program offered by the History Departments of the University of Manitoba and the University of Winnipeg. This scholarship was established in partnership with the province of Manitoba to recognize that students who have graduated from a Manitoba high school may have interests in history at the graduate level that are outside of Canadian studies. The Winnipeg Foundation will confirm the value of these awards annually. In each year when the award is offered one or more scholarships will be offered to graduate students who:

1. have graduated from a high school in Manitoba;
2. are enrolled full-time in the Faculty of Graduate Studies in the first or second year of the Joint Master's Program offered by the Department of History;
3. have achieved a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
4. are conducting history research that is outside of Canadian studies.
Applicants will be required to submit: (i) a 500 word statement describing their proposed coursework, major paper or thesis which also includes details on the name and geographical location of the high school they graduated from; (ii) a current curriculum vitae; and (iii) a copy of their current transcript.

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Joint Discipline Committee in the Department of History to name the selection committee for this award.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Any future modifications that may be necessary due to changed conditions will require complete consultation with The Winnipeg Foundation.

**Manitoba Medical Students’ Association Bursary**

The Manitoba Medical Students’ Association (MMSA) generously pledged to provide support to fellow classmates in the Undergraduate Medical Education program (UGME) in the Max Rady College of Medicine for a period of four years, beginning in 2022-2023 and ending in 2025-2026. The Manitoba Medical Students’ Association Bursary will assist UGME students with financial support for tuition and living expenses incurred while studying medicine. The funding is raised from referendum surcharges paid by each student to the MMSA’s Student Initiatives Fund (Fund # 125665-340000) where a portion will be applied toward student bursaries. Donor Relations will consult with the MMSA’s executive and Max Rady College of Medicine’s Senior Financial Officer to confirm the available bursary funding each year. When funds are available, the Manitoba Scholarship and Bursary Initiative may make a contribution to the award. The MMSA has the right to renew the commitment at the end of the initial term.

Each year, beginning in 2022-2023 and ending in 2025-2026, one or more bursaries will be offered to undergraduate students who:

1. are enrolled full-time in any year of study in the Undergraduate Medical Education program in the Max Rady College of Medicine;
2. are in good standing; and
3. have demonstrated financial need on the standard University of Manitoba bursary application.

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Dean of the Max Rady College of Medicine (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

**Master of Physician Assistant Studies Bursary**

The Max Rady College of Medicine established an annually funded bursary in the amount of $40,000 at the University of Manitoba in 2022. The Max Rady College of Medicine and
Department of Family Medicine will each contribute $20,000 per year for five years. The purpose of the fund is to support students in the Master of Physician Assistant Studies program. Each year, beginning in 2022-2023 and ending in 2026-2027 one or more bursaries will be offered to graduate students who:

(1) are enrolled full-time in the Faculty of Graduate Studies in any year of study in the Master of Physician Assistant Studies Program at the University of Manitoba;
(2) have achieved a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
(3) have demonstrated financial need on the standard University of Manitoba general bursary application.

The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The Dean of the Max Rady College of Medicine (or designate) will ask the Director of the Master of Physician Assistant Studies Program (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Michael and Nella Eskin Graduate Travel Award

Michael and Nella Eskin established an endowment fund at the University of Manitoba to assist graduate students in the Department of Food and Human Nutritional Sciences with travel costs for attending a conference to present their research. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one travel award to a graduate student who:

(1) is enrolled full-time in the Faculty of Graduate Studies in any Master’s or Ph.D. program offered by the Department of Food and Human Nutritional Sciences at the University of Manitoba;
(2) has achieved a minimum grade point average of 3.75 based on the last 60 credit hours (or equivalent) of study;
(3) has completed a significant piece of research (submitted or to be submitted for publication to a peer-reviewed journal);
(4) has been accepted to present this research at the annual conference of either the American Oil Chemists’ Society or the Institute of Food Technologists; and
(5) has an advisor whose primary appointment is in the Department of Food and Human Nutritional Sciences.

Applicants will be asked to submit a copy of the significant piece of research and the conference abstract with their applications. This award may be held in conjunction with other travel awards. The recipient may acknowledge the contribution from this award during the conference presentation or in the paper’s publication.
The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Agricultural and Food Sciences (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

**Treaty One Scholarship in Indigenous Studies**

A scholarship fund was created through The Winnipeg Foundation to mark the 150th Anniversary of Treaty One and the founding of Manitoba inspired by the formation of the Metis Nation under the leadership of Louis Riel. This award will support graduate students who are conducting research into the history of Canadian government policy respecting Indigenous (First Nation, Métis, and Inuit) peoples including the study of residential schools and the subsequent efforts at truth and reconciliation. The Winnipeg Foundation will confirm the number and value of these awards annually. Each year, beginning in 2022-2023 one or more scholarships will be offered to graduate students who:

1. are enrolled full-time in the Faculty of Graduate Studies in a Master’s or Doctoral program offered by the Department of Indigenous Studies;
2. have achieved a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
3. are conducting research into the history of Canadian government policy respecting Indigenous (First Nation, Métis, and Inuit) peoples including the study of residential schools and the subsequent efforts at truth and reconciliation.

The award is not renewable though previous recipients may reapply to receive this scholarship in both Year I and Year II of either their Master’s or Doctoral program.

Applicants will be required to submit: (i) a description of the proposed research and a statement of its relevance to research into the history of Canadian government policy with respect to Indigenous (First Nation, Métis, and Inuit) peoples including the study of residential schools and subsequent efforts at truth and reconciliation, (ii) information on their educational background and research experience, and (iii) a copy of their transcript.

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of Arts (or designate) to name the selection committee for this award.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Any future modifications that may be necessary due to changed conditions will require complete consultation with The Winnipeg Foundation.

**The Brenda LaRose Bursary for Indigenous Students**

Leaders International established an annually funded bursary to support an Indigenous student who is a single parent. The donor has committed to offering the bursary for a period of 3 years. Each year, beginning in 2022-2023 and ending in 2024-2025, one bursary valued at $2,500 will be offered to an undergraduate student who:
(1) has self-declared as a First Nations, Métis or Inuit person from Canada;
(2) is a single custodial parent with a dependent child or children;
(3) is enrolled full-time (minimum 60% course load) in University 1 or any faculty, college, or school at the University of Manitoba with a Direct Entry program;
(4) has achieved either:
   (a) as an entering student, the minimum admission requirements for University 1 or any faculty, college, or school with a Direct Entry option; or
   (b) as a continuing student, a minimum degree grade point average of 2.0; and
(5) has demonstrated financial need on the standard University of Manitoba bursary application form.

The Associate Registrar and Director, Financial Aid & Awards (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Wilhelm Guenter Fellowship

In honour of Wilhelm Guenter, the Western Nutrition Conference Planning Committee established an endowment fund at the University of Manitoba with an initial gift of $52,000 in 2021. The purpose of the fund is to reward the academic achievements of students pursuing graduate studies in Animal Science in the Faculty of Agricultural and Food Sciences.

Each year, beginning in 2022-2023, half of the available annual income from the fund will be used to offer one fellowship to a graduate student who:

(1) is enrolled full-time in the Faculty of Graduate Studies in the Master’s program in Animal Science offered by the Faculty of Agricultural and Food Sciences;
(2) has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
(3) has demonstrated strong research ability or potential.

Each year, beginning in 2022-2023, half of the available annual income from the fund will be used to offer one fellowship to a graduate student who:

(1) is enrolled full-time in the Faculty of Graduate Studies in the Ph.D. program in Animal Science offered by the Faculty of Agricultural and Food Sciences;
(2) has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
(3) has demonstrated strong research ability.

Applicants will be required to submit a description of their research or proposed research and a current curriculum vitae.

The fellowship is not automatically renewable, but previous recipients may re-apply.

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Agricultural and Food Sciences (or designate) to name the selection committee for this award.
This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

2. AMENDMENTS

**Agricultural and Food Sciences Centennial Entrance Scholarship**

The following amendments were made to the terms of reference for the Agricultural and Food Sciences Centennial Entrance Scholarship:

- The preamble was revised to:

  Alumni, faculty, agricultural industry, and friends of the Faculty of Agricultural and Food Sciences contributed $150,000 for an endowed scholarship during the 100th Anniversary of the Faculty, originally the Manitoba Agricultural College (established in 1906), in 2008. Manitoba Agriculture of the Province of Manitoba has matched the funds of the endowment. The scholarship will be awarded to high school students who plan to complete a degree from the Faculty of Agricultural and Food Sciences or a diploma from the School of Agriculture at the University of Manitoba. The available annual income from the fund will provide scholarships, each valued at $2,000. The number of annual scholarships will be determined each year on the basis of available annual income. The first scholarship will be offered in the spring of 2008. Each year, one or more scholarships will be offered to undergraduate students who:

  - The numbered criteria were revised to:

    (1) will have graduated from a high school in the Province of Manitoba with a minimum average of 85% on those courses considered for admission to the University of Manitoba, and who will be attending the University on a full-time basis in the year in which they apply for the scholarship;
    (2) will enter the Faculty of Agricultural and Food Sciences as a Direct Entry student and register for any undergraduate degree program;
    (3) have been pre-selected through an internal provincial competition among rural and urban applicants; and
    (4) demonstrate an interest and commitment to building a strong agricultural sector in the province and a strong interest in pursuing a career in the agri-food and agri-food processing industries.

- The renewal paragraph was revised to:

  For students registering in the School of Agriculture, one or more scholarships will be offered to undergraduate students who:

  (1) will have graduated from a high school in the Province of Manitoba and who will be attending the University of Manitoba on a full-time basis in the year in which they apply for the scholarship;
  (2) will enter the School of Agriculture as a Direct Entry student registered for the Diploma program;
(3) have been pre-selected through an internal provincial competition among rural and urban applicants; and

(4) demonstrate an interest and commitment to building a strong agricultural sector in the province and a strong interest in pursuing a career in the agri-food and agri-food processing industries.

- The paragraph following the numbered criteria was revised to:

In order to demonstrate how they meet criterion (4), the applicants must submit a written statement outlining the student’s vision for rural Manitoba and their career goals in the agri-food and food-processing sectors supported with a personal reference from an employer, supervisor or other (not a family member, personal friend or Manitoba Agriculture staff member) and a copy of completed courses and grades directly to Manitoba Agriculture. The applicants will be ranked by Manitoba Agriculture, who will then forward the list of ranked applicants to the Faculty of Agricultural and Food Sciences Awards Committee.

The eligibility criteria for the awarding of Scholarships will be reviewed as required by a committee known as the “Agricultural and Food Sciences Centennial Award Committee” composed of the Faculty of Agricultural and Food Sciences Award Committee and a representative (or a designate) from Manitoba Agriculture of the Province of Manitoba.

- The standard Board of Governors statement was added.

**Bryan F. Zilkey Bursary**

The following amendments were made to the terms of reference for the Bryan F. Zilkey Bursary:

- The preamble was revised to:

  Mr. Bryan F. Zilkey established an annually funded bursary at the University of Manitoba in 1998. The purpose of the bursary is to provide financial support to students in the area of Plant Sciences in the Faculty of Agricultural and Food Sciences. Mr. Zilkey’s wish is to assist students by offsetting some of the costs associated with pursuing a university education. Each year, one bursary valued at $700, will be offered to an undergraduate student who:

- The numbered criteria were revised to:

  (1) is enrolled full-time (minimum 60% course load) in the fourth year of study in the Plant Biotechnology Program in the Faculty of Agricultural and Food Sciences;
  (2) has achieved a minimum degree grade point average of 3.0; and
  (3) has demonstrated financial need on the standard University of Manitoba general bursary application form.

- The selection committee paragraph was revised to:

  The selection committee will be the Faculty of Agricultural and Food Sciences Awards Committee.

- The standard Board of Governors statement was added.

**Canada Life Actuarial Career Scholarship**

The following amendments were made to the terms of reference for Canada Life Actuarial Career Scholarship:
The preamble was revised to:

Canada Life established an annual fund at the University of Manitoba in 2010. The purpose of the fund is to reward the academic achievements of students in the Warren Centre for Actuarial Studies and Research at the University of Manitoba. This scholarship is to run for one year, expiring after the 2022-2023 academic year, three scholarships valued at $5,000 each will be offered to undergraduate students who:

The numbered criteria were revised to:

(1) are enrolled full-time (80% course load) in the second year or higher in either:
   (a) the Asper School of Business, in a Bachelor of Commerce (Honours) degree with a declared Major in Actuarial Mathematics; or
   (b) the Faculty of Science, in a Bachelor of Science (Honours) degree with a declared Major in Actuarial Mathematics or Statistics - Actuarial Mathematics;
(2) have achieved a minimum degree grade point average of 3.5; and
(3) have demonstrated leadership skills.

The paragraphs following the numbered criteria was added:

Applicants must submit a written statement (maximum 500 words) in order to demonstrate how they meet criterion (4). Leadership skills may include initiative, goal setting, outcome achievement, decision making and problem solving, interpersonal skills and team work, persuasiveness, and verbal and written communication skills. Examples of leadership can include successfully driving issues to closure, influencing others, and resolving issues among peers or team members using communication, decision making and problem solving skills. Leadership abilities may have been demonstrated through participation in extra-curricular activities including volunteer or other community involvement, including sports, and/or previous work experience.

The value of the award may be adjusted in the final year to ensure that the fund is exhausted.

The selection committee paragraph was revised to:

The Dean of the Asper School of Business (or designate) will name the selection committee and will include the Director of the Warren Centre for Actuarial Studies (or designate) and at least one faculty member who has industry experience and practical knowledge of the leadership qualities required to excel in an actuarial science career.

The standard Board of Governors statement was added.

Child Health Graduate Studentship in Nursing
The following amendments were made to the terms of reference for the Child Health Graduate Studentship in Nursing:

The preamble was revised to:

The Child Health Graduate Studentship in Nursing fund has been established at the University of Manitoba through equal contributions from the Children’s Hospital Foundation and the University’s Graduate Fellowship Matching Funds Program. This award will recognize students who already have practical work experience in child health and show an interest in continuing to study at the graduate level in this field. Each year, the available annual income from the fund will be used to offer up to three fellowships to graduate students who:
The numbered criteria were revised to:

1. have worked as a nurse, with a focus on children or child health, following completion of an undergraduate nursing degree;
2. are enrolled full-time or part-time in the Faculty of Graduate Studies, in a graduate program offered by the College of Nursing;
3. have achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
4. have submitted the best research proposal for a graduate thesis in the field of child health, as judged by the selection committee.

The following paragraph was added:
The selection committee will have the discretion to determine the number and value of awards offered each year based on the available funds, as outlined in the criteria above.

The selection committee paragraph was revised to:
The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Chair of the Graduate Program Curriculum Governance and Quality Assurance Committee of the College of Nursing to convene the selection committee for this award.

The standard Board of Governors statement was added.

Frank Edick Memorial Prize

The following amendments were made to the terms of reference for the Frank Edick Memorial Prize:

- The preamble was revised to:
  Charles H. and Sadie Edick established an endowment fund of $500 in 1955, in memory of their son, Frank. The annual interest on the fund had provided book prizes which were awarded to the student in the fourth year in Pharmacy. Each year, beginning in 2022-2023 the available annual income from the fund will be used to offer one prize to an undergraduate student who:

- The numbered criteria were revised to:
  1. has completed the requirements for the third year of the PharmD degree program in the College of Pharmacy;
  2. has achieved a minimum degree grade point average of 3.0; and
  3. has obtained the highest standing in Clinical Therapeutics 3 (currently numbered PHMD 3014).

- The selection committee paragraph was revised to:
  The selection committee for this award will be the College of Pharmacy Professional Program Awards Committee.

- The standard Board of Governors statement was added.

John Glanville Memorial Scholarship
The following amendments were made to the terms of reference for the John Glanville Memorial Scholarship:

- The preamble was revised to:
  
  The masonry industry established an endowment fund in 2012 to honour John Glanville’s contribution to the advancement of masonry engineering. The Manitoba Scholarship and Bursary Initiative made a contribution to this fund. Each year, beginning in 2021-2022, the available annual income, minus $500 (which will be used to fund the undergraduate scholarship award #25333), will be used to offer one or more scholarships with a minimum value of $3,000 each to graduate students who:

- The numbered criteria were revised to:
  1. are enrolled full-time in the Faculty of Graduate Studies at the University of Manitoba in the Civil Engineering Master’s or PhD program;
  2. have achieved a minimum degree grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
  3. are conducting research on or related to masonry studies.

- The paragraph following the numbered criteria was revised to:
  Each year, a portion of the available annual income from the fund will be used to offer one scholarship valued at $500 to an undergraduate student who:

- The second set of numbered criteria was revised to:
  1. is enrolled full-time (minimum 80% course load) in the Price Faculty of Engineering in the Department of Civil Engineering;
  2. has achieved a minimum degree grade point average of 3.5; and
  3. has taken or is registered in the Masonry Design and Construction course (currently numbered CIVL 4020).

- The selection committee paragraph was revised to:
  The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Chair of the Scholarships, Bursaries, and Awards Committee of the Price Faculty of Engineering to convene the selection committee for the graduate student scholarships. The selection committee for the undergraduate scholarship will be the Scholarships, Bursaries, and Awards Committee of the Price Faculty of Engineering.

- The standard Board of Governors statement was added.

Nature Manitoba Scholarship

The following amendments were made to the terms of reference for the Nature Manitoba Scholarship:

- The preamble was revised to:
  Nature Manitoba (formerly Manitoba Naturalists Society) established an endowment fund to provide an annual scholarship at the University of Manitoba. Each year, the available annual income from the fund will be used to offer one scholarship to a graduate student who:

- The numbered criteria were revised to:
  1. has graduated from a university in Manitoba;
(2) is enrolled full-time in the Faculty of Graduate Studies in a Master’s or Ph.D. program offered by the department of Biological Sciences; and

(3) has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study

- The selection committee paragraph was revised to:
  The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Head of the Department of Biological Sciences (or designate) to name the selection committee for this award.

- The standard Board of Governors statement was added.

**Purohit Bursary in Pharmacy**

The following amendments were made to the terms of reference for the Purohit Bursary in Pharmacy:

- The preamble was revised to:
  Mr. Bachu Purohit established an endowment fund at the University of Manitoba, with an initial gift of $2,000, to offer bursaries for students in the College of Pharmacy. The Manitoba Scholarship and Bursary Initiative made a contribution to this fund. Each year, the available annual income from the fund will be used to offer one bursary to an undergraduate student who:

- The numbered criteria were revised to:
  (1) is enrolled full-time in the third year of study in the PharmD program in the College of Pharmacy at the University of Manitoba;
  (2) has achieved a minimum degree grade point average of 2.5; and
  (3) has demonstrated financial need on the standard University of Manitoba bursary application form.

- The selection committee paragraph was revised to:
  The selection committee for this award will be the College of Pharmacy Professional Program Awards Committee.

- The standard Board of Governors statement was added.

**Sunil K. Sen Scholarship**

The following amendments were made to the terms of reference for the Sunil K. Sen Scholarship:

- The preamble was revised to:
  In memory of Dr. Sunil K. Sen, an endowment fund was established by his friends and colleagues at the University of Manitoba. Dr. S. K. Sen is a former professor in the Department of Physics. Each year, the available annual interest will be used to offer one scholarship to an undergraduate student who:

- The numbered criteria were revised to:
  (1) is enrolled full-time (minimum 80% course load) in the fourth year of study in the Physics Honours program in the Faculty of Science; and
(2) has the highest standing in the Physics Honours program;

- The selection committee paragraph was added:
  
  *The Dean of the Faculty of Science will ask the Head of the Department of Physics and Astronomy to name the selection committee for this award.*

- The standard Board of Governors statement was added.

**University Gold Medal in Pharmacy**

The following amendments were made to the terms of reference for University Gold Medal in Pharmacy:

- The preamble was revised to:
  
  *The University Gold Medal in Pharmacy will be awarded to the graduating student who:*

- The numbered criteria were revised to:
  
  (1) has achieved the highest degree grade point average (3.75 or above) in the PharmD program; and,

  (2) has carried a full, normal course load (no transfers, repeats, resists, or supplementals in any academic or fieldwork portion of the curriculum, including internships) throughout the program.

- The following tie-breaking paragraph was revised to:
  
  *Only one winner is to be named each year in the PharmD program. Ties are to be broken using the following criteria in priority order:*

  (1) the degree grade point average calculated to the second decimal place;

  (2) preference is to be given to students who have a higher proportion of “A+”s and “A”s in the total PharmD program; and

  (3) the highest sessional grade point average in the third year of the PharmD program.

**Women in the Physical Sciences Scholarship**

The following amendments were made to the terms of reference for Women in the Physical Sciences Scholarship:

- The preamble was revised to:
  
  *The female graduates of the Faculty of Science established a fund for students who identify as female in the physical sciences at the University of Manitoba in 1991. The purpose of the fund is to reward and encourage students who identify as female to enter and complete honours or major degree programs in the areas of the physical sciences. Each year, the available annual income from the fund will be used to offer one or more scholarships with a minimum value of $2,000 each to undergraduate students who:*

- The numbered criteria were revised to:
  
  (1) have identified as a female student on the application form for the University of Manitoba;

  (2) have completed the first year (minimum of 24 credit hours) of:

  (a) University 1; or
(b) a Bachelor of Science or Bachelor of Computer Science program in the Faculty of Science; or
(c) a Bachelor of Science program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources;
(3) are enrolled full-time (minimum 80% course load) in the second year of study or higher in honours or major program in computer sciences, physics, chemistry, geology, environmental geoscience, geophysics and physical geography program in the Faculty of Science or the Clayton H. Riddell Faculty of Environment, Earth, and Resources; and
(4) have achieved a minimum degree grade point average of 3.0.

- The paragraphs following the numbered criteria was revised to:
The Women in the Physical Sciences Scholarship is renewable for a maximum of three years, provided the recipients continue in the Faculty of Science or Clayton H. Riddell Faculty of Environment, Earth, and Resources, and continue to meet criteria (1), (3) and (4).
The selection committee will have the discretion to determine the number and value of awards offered each year as outlined above, based on the available annual income from the fund.
- The selection committee paragraph was revised to:
The Dean of the Faculty of Science (or designate) and the Dean of the Clayton H. Riddell Faculty of Environment, Earth, and Resources (or designate) will jointly name the selection committee for this award.
- The standard Board of Governors statement was added.

3. WITHDRAWALS

Basic Science Prize in Dental Hygiene
At the request of the donor.

Charles E. Frost Scholarship in Pharmacy
Company has dissolved, no longer funding.

Merck Scholarship for Indigenous Students in Pharmacy
At the request of the donor.

RBC Awards in Indigenous Business Education- UG Bursary
Term of award has expired 2020-2021.

RBC Awards in Indigenous Business Education- UG Scholarship
Term of award has expired 2020-2021.
RBC Awards in Indigenous Business Education- MBA Entrance Scholarship
Term of award has expired 2020-2021.

RSAC Academic Achievement Scholarship
At the request of the donor.
MEMORANDUM

DATE: June 29, 2022

TO: Michael Benarroch, Chair of Senate

FROM: Jeff M. Leclerc, University Secretary

SUBJECT: APPROVAL OF MOTION

Board of Governors – June 28, 2022

On June 28, 2022 the Board of Governors, approved the following:

THAT the Board of Governors approve, as recommended by Senate:
A. Reports of the Senate Committee on Awards [dated May 12, 2022 and June 9, 2022]
B. Proposal for a Chair in Technology Assisted Living, College of Rehabilitation Sciences
C. Proposal for a Chair in Natural Systems Agriculture for Climate Solutions, Faculty of Agricultural and Food Sciences
D. Proposal for a Professorship in Global Infectious Diseases Research, Max Rady College of Medicine

JL/mw

Copy: D. Hiebert-Murphy
   N. Andrew
   C. Cook
   D. Jayas
   V. Koldingnes
   R. Urbanowski
   M. Scanlon
   B. Postl
   C. Basha
   N. McMillan
   S. Coyston
Report of the Senate Executive Committee

Preamble

The Executive Committee of Senate held its regular monthly meeting on the above date.

Observations

1. Speaker for the Executive Committee of Senate

   Dr. Catherine Cook will be the Speaker for the Executive Committee for the October 6, 2022, meeting of Senate.

2. Comments of the Executive Committee of Senate

   Other comments of the Executive Committee accompany the report on which they are made.

Respectfully submitted,

Dr. Michael Benarroch, Chair
Senate Executive Committee

Terms of Reference
Preamble

1. The Faculty of Graduate Studies (FGS) has responsibility for all matters relating to the submission of graduate course, program, supplementary regulation, and regulation changes. Recommendations for such are submitted by the Faculty Council of Graduate Studies for the approval of Senate.

2. The Faculty Council of Graduate Studies met on the above date to consider a proposal from the Dept. of Immunology.

Observations

1. The Dept. of Immunology proposes a Micro-Diploma in Science Communication which includes (2) course introductions: IMMU 7000 and IMMU 7010.

   The micro-diploma will be exclusively available to University of Manitoba graduate students who are concurrently registered in any science-related Master's or Ph.D. program and who are in good standing in their program.

   Admission to the micro-diploma will be aligned on 1) the assessment of the writing/video sample requested; and 2) GPA. Minimum Faculty of Graduate Studies requirements apply as per the FGS Academic Guide. Further details outlined in the micro-diploma’s supplementary regulations.

   Students should provide approval to enroll in the micro-diploma program from their home unit/department.

   Course requirements include 6 credit hours consisting of IMMU 7000 Science Communication: Foundations & Writing Methodologies (3) and IMMU 7010 Science Communication: Audio-video Methodologies (3). Students must achieve a minimum grade of 'B' in each course.

   Details of the proposal follow this report.

Course Introduction

**IMMU 7000 Science Communication: Foundations & Writing Methodologies** +3

This course will provide an overview of the primary methodologies governing science communication writing. Prerequisite: Bachelor's Degree.

**IMMU 7010 Science Communication: Audio-video Methodologies** +3

This course will provide an overview of the primary audio-visual methodologies used for science communications. Prerequisite: Bachelor's Degree and Minimum grade of B in IMMU 7000.

NET CREDIT HOUR CHANGE +6
Recommendations

Faculty Council of Graduate Studies recommends THAT the program changes from the unit listed below be approved by Senate:

Dept. of Immunology

Respectfully submitted,

Dr. Kelley J. Main, Chair
Faculty Council of Graduate Studies

/ak

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.
Preamble:

1. The terms of reference of the Senate Planning and Priorities Committee (SPPC), which are found on the University Governance website, charge SPPC with making recommendations to Senate regarding proposed academic programs.

2. The definition of a Micro-Diploma, at the University of Manitoba, is found in the Certificate and Diploma Framework (Senate, February 3, 2021).

3. At its meeting on May 30, 2022, the SPPC considered a proposal from the Department of Immunology to establish a graduate-level Micro-Diploma in Science Communication. The proposal was endorsed by the Faculty Council of the Faculty of Graduate Studies at its meeting on March 30, 2022.

Observations:

1. The proposed Micro-Diploma in Science Communication would require two courses totalling 6 credit hours, IMMU 7000 Science Communication: Foundations and Writing Methodologies and IMMU 7010 Science Communication: Audio-video Methodologies. Establishment of the program would require the introduction of both courses, as set out in the attached Report of the Faculty Council of the Faculty of Graduate Studies.

2. The purpose of the program is to promote an in-depth understanding of science communication as a field of practice. The objectives of the program would be to (i) confer discrete skills and competencies by providing an overview and competency-based learning opportunities regarding the primary methodologies governing science communication and (ii) modify the learner’s perception of science communication by disseminating knowledge and improving the creation of knowledge society and by representing what science, scientific and science organization are.

3. Students who completed the two required courses, with a minimum grade of B in both courses, would be awarded the Micro-Diploma.

4. Maximum enrolment in the program would be twenty (20) students. The Department anticipates that maximum enrolment capacity would be met by Year 3.

5. The program would be open to students registered in the Faculty of Graduate Studies, in any science-related Master’s or Doctoral degree program, who are in good standing in their program and subject to approval from their home program/unit/department. The proposal includes an initial list of approved science-related programs. Students registered in a program not included on the list, who are engaged in a science-based or related non-science program, could apply and would be considered on a case-by-case basis.

6. Following discussion at SPPC, the entrance requirements were revised to spell out the weighting of the two selection criteria. Specifically, the writing / video sample would be weighted as 60 percent and the Grade Point Average based on the previous 30 credit hours would be weighted as 40 percent.
7. Completion of the Micro-Diploma would provide students with valuable communication skills that would support their success in their concurrent graduate degree studies and in their future academic or non-academic careers, which might include careers in communication, including science-communication, journalism, and information technology.

8. The Rady Faculty of Health Sciences would allocate resources to the Department to cover teaching and administrative costs plus $5,000 annually to cover costs related to instruction and administrative support, honoraria for external speakers, and materials and experiential learning activities associated with the two courses. The financial support is confirmed in a letter from Dean Postl to the Head, dated April 21, 2022.

9. The University of Manitoba Libraries indicated its collections can support the two new courses that would be required in the Micro-Diploma program.

**Recommendation:**

The Senate Planning and Priorities Committee recommends:

**THAT Senate approve and recommend to the Board of Governors that it approve a proposal to establish a Micro-Diploma in Science Communication, in the Department of Immunology, Max Rady College of Medicine. The Senate Committee on Planning and Priorities recommends that the Provost and Vice-President (Academic) not implement the program until satisfied that there would be sufficient space and sufficient funding to support the ongoing operation of the program.**

Respectfully submitted,

Professor David Watt, Chair
Senate Planning and Priorities Committee
Dec 20, 2021

Dear Dr. Main,

The Department of Immunology is pleased to submit a proposal to establish a Microdiploma in Science Communication program. As described in the attached documents, this program consists of two courses in Science Communication developed by Dr. Jean-Eric Ghia, who brings a wealth of experience and an extensive professional network in print, radio and video communications. The program is intended as an opportunity for graduate students concurrently registered in a UM graduate program and will be administered as a standalone program under the regulations included here.

The attached package includes the following documents for approval.

1) Course outlines and course introduction forms for:
   IMMU 7000 Science Communication: Foundations & Writing Methodologies
   IMMU 7010 Science Communication: Audio-Video Methodologies

2) Libraries Statement

3) Proposal for Microdiploma form

4) External letter of support regarding professional market need

5) Microdiploma Supplementary Regulations

I’m very pleased to support this fantastic initiative from Dr. Ghia. We believe this program will be of great interest to students and highly valuable for their education and career development.

Sincerely,

Aaron Marshall
Professor and Head
Department of Immunology
Proposal for New Micro-Diploma

Please complete the form below and append supporting documents, as appropriate. Electronic copies of the completed proposals are to be submitted to the Office of the University Secretary and the Deputy Provost (Academic Planning and Programs) following endorsement of the proposal by the appropriate Faculty/College/School/Division Council.

It is advised that units initially discuss the proposed program with the Deputy Provost (Academic Planning and Programs) for undergraduate-level Micro-diplomas or with the Dean of the Faculty of Graduate Studies for graduate-level Micro-Diplomas prior to completion and submission of the proposal form. Please refer to the UM Certificate and Diploma Framework detailing the requirements for micro-diploma programming.

Section A: Proposing Unit

Faculty/School/College/Division: Rady Faculty of Health Sciences / Max Rady College of Medicine

Department (where applicable): Immunology

Contact, Name and Title: Prof. Jean-Eric Ghia

Contact Email: jean-eric.ghia@umanitoba.ca

Section B: Program Overview

1. Program Type: Micro-diploma ☐ Graduate Micro-diploma ☒

2. Program Name: Science Communication

3. Credential Awarded: Micro-diploma in Science Communication

4. Program Length (credit hours): 6

5. Proposed Start Date: Fall 2022

Section C: Program Description and Delivery

6. Description of Program
   (Provide a general overview of the program, its objectives, and the intended purpose of the program.)
   Overview: The proposed graduate micro-diploma in Science Communication is a new graduate-level offering by the Department of Immunology (Max Rady College of Medicine, Rady Faculty of Health Sciences) focused on
competency-based learning toward competency in science communication. Such a program will address a significant lacuna for the province of Manitoba in the field of the development of a double competency in science communication.

**Objectives:** The two primary objectives are as follows:
1. to confer discrete skills and competencies by providing an overview and competency-based learning opportunities regarding the primary methodologies governing science communication;
2. to modify the learner’s perception of science communication, by not only disseminating knowledge and improving the creation of knowledge society, but also by representing what science, scientific and science organization are.

**Intended purpose:** The overarching purpose of this program is to promote an in-depth understanding of science communication as a field of practice by meeting the aforementioned objectives. It is hoped that, upon completion of the program, the learner will better appreciate that communication breakdown can undermine public understanding and confidence in science.

7. **Intended Outcomes**
(Outline the expected outcomes of the program and how it will benefit students.)

**General expected outcomes.**
Science Communication has recently emerged as a field of practice with increasing importance, as evidenced by in-demand Science Communication programs at institutions such as the University of British Columbia, McMaster University, University of Ottawa, and Laurentian University. Thus, this graduate microdiploma program would meaningfully enrich the graduate offerings of the University of Manitoba, and interested learners can pursue the discipline within Manitoba. Also, scholarly excellence in terms of proficient communication would be an important outcome for Master’s and PhD students who choose to also pursue this microdiploma, both in the context of their current programs and as they navigate their next steps whether within the academic or non-academic employment sectors. Finally, a formal credential in the area of Science Communication may serve as the foundation for employment within the province’s communication industries.

**Benefit for the students.**
Beyond meeting the aforementioned objectives, additional benefits are as follows:

**Educational:**
+ To increase awareness and adoption of multi-faceted approaches to learning
+ To develop technical and problem-solving skills.
+ To enhance interest in global science issue as well as broader general knowledge

**Personal:**
+ To self-develop an awareness leading to enhanced self-confidence and self-esteem.
+ To develop maturity and social poise, through the necessity to confront challenges outside a familiar field of research and comfort zone.
+ To encourage students to develop independent opinions, make informed decisions and strive to attain new goals.

**Long term:**
+ To be more comfortable in unfamiliar environments.
+ To develop personal flexibility, focus through difficult time
+ To increase employment success through the double competency education
+ To be prepared for a broad range of science communication-related employment opportunities.

8. **Program Structure**
   **a) Coursework**
(Provide a list of courses, including elective courses, required to complete the program. Outline how students are to progress through the program. Indicate whether proposed coursework is currently offered or new, noting any prerequisite details where applicable. **Append course details.**)
including a list of all course descriptions for existing and proposed courses, and course introduction forms for proposed new courses.)

The microdiploma in Science Communication consists of 6 credits of coursework:
+ IMMU 7000 Science Communication: Foundations & writing methodologies – 3 credit-hours
+ IMMU 7010 Science Communication: Audio-video methodologies – 3 credit-hours

Progression through the program:
IMMU 7000 Science Communication: Foundational & writing methodologies, with a minimum B grade, is a prerequisite for IMMU 7010 Science Communication Audio-video methodologies. To graduate with the graduate microdiploma in Science Communication, a minimum program GPA of 3.0 is required.

Appended, see 1. Proposed course details, including all course and lecture descriptions, 2. Proposed new course and course introduction forms.

**b) Experiential Learning or Work-Integrated Learning Opportunities**
(Where applicable, briefly describe any experiential learning or work-integrated-learning opportunities within the program.)

Experiential learning will be achieved in collaboration with the University of Manitoba Marketing Communications Office, CBC-Radio-Canada and Science RendezVous event. They include:

**Written group project:** Students will work in groups to develop a science communication project that showcases the writing skills developed during the course.

**Written explainers:** An explainer is a 300-400-word explanation of a scientific concept, instrument or method.

**Press release:** A press release is a media release where quotes and the importance of the research to the public are mentioned and sent from a university or company to the media.

**News brief:** A news brief is a 500-700-word piece about a research article that can be read on the radio. The goal is to make a detailed study accessible (easy to understand) and engaging (interesting) for a non-expert audience without illustrations.

**Visual label explainer:** Students will work to create good and bad labels for a new innovative product.

**Multimedia Group project:** Students will work in groups to develop a science communication project that showcases the writing and presentation skills developed during the course. Group projects include: designing and creating short videos (animated, live-action, lightboard, whiteboard ...), developing hands-on activities low-cost activities (K-12 curriculum) that can be presented at Science RendezVous (limited spots for the event), or producing a video or podcasts.

**3MT®:** This is a 180 seconds oral summary of research (our own or from an article) for a non-expert audience. The purpose is to engage the audience from the start and provides sufficient rationale for the research question. Participation to the French “Ma these en 180sec” is also possible if requested by the student.

9. **Academic Regulations**
(Detail any new academic regulations for the program that are not addressed in existing Faculty/School/College/Division regulations. For graduate-level micro-diplomas, append revised supplemental regulations.)
Does the program allow part-time study: Yes ☒ No ☐

10. Entrance Requirements
(Detail program specific entrance requirements for the program that are in addition to the minimum university entrance requirements. Please refer to the UM Certificate and Diploma Framework for minimum requirements.)

Admission process will be aligned on 1. The assessment of the writing/video sample requested (60%), and 2. The GPA (40%). GPA will be calculated and based on the last 30 credit hours.

- Currently registered University of Manitoba graduate students in any science-related Master’s or Ph.D. program who are in good standing in their program are eligible to apply and should provide approval to enrol in the microdiploma program from their “home” program/unit/department.
- Appendix “Access Graduate Programs List” provides a non-exhaustive list of approved science-related programs. Students who are engaged in a science-based or -related non-science program are welcome to apply. If not approved within the list, others programs will be considered upon request.
- A writing or video segment sample as part of their application materials (see appendix “Selection Criteria and Specifications”).

11. Recognition for Credit
(Outline how completion of this program may be recognized and used to satisfy requirements in other programs. Describe whether the program is stackable or whether it can be laddered into other programs. Append letters of support, as appropriate. See Request for Support form at https://umanitoba.ca/governance/forms.)

N/A

12. Mode of Delivery
This program is available: In-person ☒ On-line ☐ Combination ☐

Section D: Program Development and Demand

13. Alignment with Strategic Direction and Priorities
(Comment on how the program fits within unit level and institutional strategic priorities and plans.)

The proposed graduate microdiploma in Science Communication aligns with one of the pillars of the strategic plan developed by the University of Manitoba: to understand and to communicate information. We seek to create an exceptional student experience with a program of study that situates directly with such pillar. In addition, this new program is aligned with the provincial directives, enhancing focus on skill, talent and knowledge strategy, by aligning

1 Credit recognition of a micro-credential in another program is subject to Senate approved program regulations. Units are encouraged to review degree requirements and regulations and submit any necessary revisions concurrent with the program proposal.

2 Stackable credentials are credentials that are modular in nature, and when combined with others, result in the awarding of a larger credential; laddering of credentials is when one credential articulates into another resulting in students receiving established credit within the program, shortening the path to program completion.

v. 2021-10-11
education and training to labour market needs and help students succeed. According to the 2019 Manitoba occupational forecast report, the Manitoba economy will see a total of around 160,000 job openings between 2019 and 2025, with an estimate of 5.9 per cent growth in labour demand, or an average of 0.8 per cent each year. The double competency of the microdiploma would include person classified in two different occupational categories of the national occupational classification (NOC) skill level A (2: information technology and 5: journalism, writing). Including the expansion and replacement, the total job opening in Manitoba would be 6,900 and 3,300 respectively for these two NOC. In these two categories job openings by two-digit NOC will follow the trend with at least a minimum demand of 1,500 per category. Moreover, this sector will experience market tightness in at least 3 years - 2019 to 2025. In addition, the Rady Faculty of Health Sciences is actively working to fill a need in Canadian training by offering professional development and career readiness opportunities in graduate education toward careers in academic and other sectors.

14. Student Demand for Program

a. Outline expected student demand and interest in the program.

The University of British Columbia, McMaster University, University of Ottawa, Laurentian University, and University of the Fraser Valley have such type of course. A discussion with course coordinator Dr Bondar (UFV) highlighted that around 50-75 application are received per session. Therefore, selection has to be made to select 20 candidates. Considering the number of registrations seen at other Canadian universities for that type of certificate, we are expecting more than 20 applicants per session.

b. What is the expected enrolment in the program?

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<tr>
<th>Year 1</th>
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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tr>
<td>Graduates</td>
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<td>20</td>
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</table>

By year 3, we expect to reach the program’s maximum capacity with 20 students registering for the first course. Full maturity of the program is anticipated by 2025.

c. What is the maximum capacity, if applicable? (Defined as first-year enrolment capacity.)

15. Community and Industry Need

(Describe the current community and/or industry need for the program.)

With the explosion of the use of social media and virtual communication, training in science communication to a layperson audience early on in curricula will promote a culture of contact with the general public and will foster the idea that it is essential to develop communication skills in parallel with scientific reasoning and research skills. As there is no current microdiploma in science and communication in the province of Manitoba, in the short term, this proposed microcredential will be attractive to anyone who up to now would need to leave the province to pursue a certificate of that type offered by other universities in Canada. In addition, in long term, the microdiploma will target foundational skill, but also reskilling (training employees on new skills/competencies) or upskilling (employees refining existing skills).

16. Internal Consultation

(Outline the results of internal consultations, including (i) relevant departments/faculties/colleges/school in respect to use of courses and/or recognition of credit; (ii) the libraries to determine resource needs; (iii) the Office of the Registrar and Enrolment Services to determine system needs; and (iv) other units in relation to resource needs, as appropriate. Append letters of support, as appropriate. See Request for Support form at https://umanitoba.ca/governance/forms)

v. 2021-10-11
Rady Faculty of Health Sciences
1. Hope Anderson, Vice-Dean, Graduate Studies
2. Raman Dhaliwal, Director of Administration/Operations (April 22, 2021)
3. Marcia Langhan, Director of Planning and Priorities (April 22, 2021)
4. Samantha Pauls, Programming Lead Graduate Professional Development (April 22, 2021)

Associate Deans, Research -RFHS Colleges (April 19, 2021)
1. Raj Bhullar (Dentistry)
2. Jude Uzonna (Medicine)
3. Susan McClement (Nursing)
4. Jacque Ripat (Rehabilitation Sciences)
5. Hope Anderson (Pharmacy)

Department Heads – College of Medicine (April 20, 2021)
1. Sharon Bruce (Community Science)
2. Peter Cattini (Physiology and Pathophysiology)
3. Gabor Fisher (Pathology)
4. Sabine Hombach-Klonisch (Human Anatomy and Cell Sciences)
5. Sam Kung (Acting Head, Immunology)
6. Note regrets: Barbara Triggs-Raine (Biochemistry and Medical Genetics); Paul Fernyhough (Pharmacology and Therapeutics)

Department Head – College of Medicine (September 24, 2021)
1. Aaron Marshall

Immunology Department Council meeting (October 12, 2021)

UN Libraries (September 13, 2021)

How have faculty, staff and students within the unit been consulted as part of the process?

Verbal and email consultations, in addition to online presentation to Health Sciences Graduate Students’ Association (see letter of support).

17. External Consultation
(Outline any consultations with community and industry partners, and other external stakeholders in the development of this program. Append letters of support, as appropriate.)

Consultations have been made with Science Writers and Communicators of Canada about the need and the importance of recognizing and developing that kind of skills and competencies with this kind of training (see letter of support).

Section E: Resource Requirements
18. Projected costs
(For each of the sections below, outline the resource requirements for the program.)

   a. Staffing Requirements
(Comment on the staffing requirements to deliver the program, including instructional, administrative, or
advising requirements. Indicate whether any new staffing resources are required to deliver the program.)

   The program design and instruction will be delivered primarily by Dr Jean-Eric Ghia, a Faculty member in the
Department of Immunology. Administrative support will be provided from the Department of Immunology. The
Rady Faculty of Health Sciences will provide the required resources to the Department to cover the instructor and
administrative time.

   b. Infrastructure/Equipment/IT Requirements
(Comment on how the proposed program will impact on the use of current infrastructure, equipment, and
IT resources, including student systems.)

   The program of study does not require additional IT, space, practicum liability insurance, or student services.

   c. Library Resources
(If the program requires new courses or courses that are not offered on a regular basis, comment on the
adequacy of existing library resources. Append a letter of support from the Libraries.)

   See letters of support

   d. Other Resources
(Outline any other resources required for ongoing delivery of the program. This could include, but is not
limited to, costs associated with supplies and administrative costs, travel costs, and/or marketing costs.)

   Resource needs for creating new program categories in Aurora/Banner in the RO may be required.
Other resources include personal cell phone and computer, marketing costs, and honorarium costs.

19. Program Funding
(Outline how the program will be funded and indicate whether new funds are required for the program. If
yes, provide details.)

In addition to providing the required resources to the Department of Immunology to cover the instructor and
administrative time, the Rady Faculty of Health Sciences Dean has committed to supporting the program by $5,000
(five thousand) to offset honorarium and miscellaneous material and fees covering the external trip to the Manitoba
Museum needed. See letter of support.
# Graduate Program List - Access to Micro-Diploma Science Communication

*Other programs would be considered upon request*

<table>
<thead>
<tr>
<th>Microdiploma access</th>
<th>Program</th>
<th>Microdiploma access</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>Agribusiness and Agricultural Economics</td>
<td>✓</td>
<td>Law</td>
</tr>
<tr>
<td>✓</td>
<td>Animal Science</td>
<td>✓</td>
<td>Linguistics</td>
</tr>
<tr>
<td>✓</td>
<td>Anthropology</td>
<td>✓</td>
<td>Management (M.B.A.)</td>
</tr>
<tr>
<td>✓</td>
<td>Applied Health Sciences</td>
<td>✓</td>
<td>Mathematics</td>
</tr>
<tr>
<td>✓</td>
<td>Architecture</td>
<td>✓</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>✓</td>
<td>Biochemistry and Medical Genetics</td>
<td>✓</td>
<td>Medical Microbiology &amp; Infectious Diseases</td>
</tr>
<tr>
<td>✓</td>
<td>Biological Sciences</td>
<td>✓</td>
<td>Microbiology</td>
</tr>
<tr>
<td>✓</td>
<td>Biomedical Engineering</td>
<td>✓</td>
<td>Music</td>
</tr>
<tr>
<td>✓</td>
<td>Biosystems Engineering</td>
<td>✓</td>
<td>Indigenous Studies</td>
</tr>
<tr>
<td>✓</td>
<td>Canadian Studies (Université de Saint-Boniface)</td>
<td>✓</td>
<td>Natural Resources and Environment</td>
</tr>
<tr>
<td>✓</td>
<td>Chemistry</td>
<td>✓</td>
<td>Natural Resources Institute</td>
</tr>
<tr>
<td>✓</td>
<td>City Planning</td>
<td>✓</td>
<td>Nursing</td>
</tr>
<tr>
<td>✓</td>
<td>Civil Engineering</td>
<td>✓</td>
<td>Occupational Therapy</td>
</tr>
<tr>
<td>✓</td>
<td>Classics</td>
<td>✓</td>
<td>Oral and Maxillofacial Surgery</td>
</tr>
<tr>
<td>✓</td>
<td>Collaborative PhD</td>
<td>✓</td>
<td>Oral Biology</td>
</tr>
<tr>
<td>✓</td>
<td>Community Health Sciences</td>
<td>✓</td>
<td>Orthodontics</td>
</tr>
<tr>
<td>✓</td>
<td>Computer Science</td>
<td>✓</td>
<td>Pathology</td>
</tr>
<tr>
<td>✓</td>
<td>Design and Planning (Architecture)</td>
<td>✓</td>
<td>Peace and Conflict Studies</td>
</tr>
<tr>
<td>✓</td>
<td>Disability Studies</td>
<td>✓</td>
<td>Pediatric Dentistry</td>
</tr>
<tr>
<td>✓</td>
<td>Economics</td>
<td>✓</td>
<td>Periodontics</td>
</tr>
<tr>
<td>✓</td>
<td>Education</td>
<td>✓</td>
<td>Pharmacology and Therapeutics</td>
</tr>
<tr>
<td>✓</td>
<td>Education (Université de Saint-Boniface)</td>
<td>✓</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>✓</td>
<td>Electrical and Computer Engineering</td>
<td>✓</td>
<td>Philosophy</td>
</tr>
<tr>
<td>✓</td>
<td>English</td>
<td>✓</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td>✓</td>
<td>Entomology</td>
<td>✓</td>
<td>Physician Assistant Studies</td>
</tr>
<tr>
<td>✓</td>
<td>Environment and Geography</td>
<td>✓</td>
<td>Physics and Astronomy</td>
</tr>
<tr>
<td>✓</td>
<td>Finance</td>
<td>✓</td>
<td>Physiology and Pathophysiology</td>
</tr>
<tr>
<td>✓</td>
<td>Fine Art</td>
<td>✓</td>
<td>Plant Science</td>
</tr>
<tr>
<td>✓</td>
<td>Food Science</td>
<td>✓</td>
<td>Political Studies</td>
</tr>
<tr>
<td>✓</td>
<td>French</td>
<td>✓</td>
<td>Prosthodontics</td>
</tr>
<tr>
<td>✓</td>
<td>Genetic Counseling</td>
<td>✓</td>
<td>Psychology</td>
</tr>
<tr>
<td>✓</td>
<td>Geography</td>
<td>✓</td>
<td>Public Administration</td>
</tr>
<tr>
<td>✓</td>
<td>Geological Sciences</td>
<td>✓</td>
<td>Rehabilitation Sciences</td>
</tr>
<tr>
<td>✓</td>
<td>German</td>
<td>✓</td>
<td>Religion</td>
</tr>
<tr>
<td>✓</td>
<td>History</td>
<td>✓</td>
<td>School Psychology</td>
</tr>
<tr>
<td>✓</td>
<td>Human Anatomy and Cell Science</td>
<td>✓</td>
<td>Slavic Studies</td>
</tr>
<tr>
<td>✓</td>
<td>Human Nutritional Sciences</td>
<td>✓</td>
<td>Social Work</td>
</tr>
<tr>
<td>✓</td>
<td>Human Rights</td>
<td>✓</td>
<td>Social Work - Indigenous Knowledges</td>
</tr>
<tr>
<td>✓</td>
<td>Immunology</td>
<td>✓</td>
<td>Sociology</td>
</tr>
<tr>
<td>✓</td>
<td>Interdisciplinary Graduate Programs</td>
<td>✓</td>
<td>Soil Science</td>
</tr>
<tr>
<td>✓</td>
<td>Interior Design</td>
<td>✓</td>
<td>Statistics</td>
</tr>
<tr>
<td>✓</td>
<td>Kinesiology and Recreation Management</td>
<td>✓</td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>✓</td>
<td>Landscape Architecture</td>
<td>✓</td>
<td>Surgery</td>
</tr>
</tbody>
</table>
Selection criteria & specifications – Entrance Requirements Micro-Diploma Science Communication

Assessment of the writing/video sample (60%)

Applicants are requested to provide a writing (maximum 250 words) or video segment (maximum 120sec) samples of the topic of their choice (science-related) as part of their application materials.

Criteria of assessment (max 6pts per criteria)
Did the writing/video sample:
- Provide an understanding of the background and significance of the topic question being addressed
- Follow a clear and logical sequence?
- Use appropriate language directed to a non-specialist audience?
- Make the audience want to know more?
- Capture and maintain their audience’s attention?

Scale of assessment:
0: Does not meet expectations
1: Competency but some major weaknesses
2: Competency but some weaknesses
3: Good
4: Very good
5: Excellent
6: Outstanding

GPA (40%)

GPA will be calculated and based on the last 30 credit hours
# Graduate Micro-Diploma: Shortened Supplementary Regulations 21/22

The Graduate Micro-Diploma is a short, flexible program of studies focused on core knowledge in a field or interdisciplinary field-of-study at a graduate level.

<table>
<thead>
<tr>
<th>Certificate and Diploma Framework Per Feb. 3.21 Senate Agenda</th>
<th>FGS Academic Guide Regulation 21/22</th>
<th>Supplementary Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Requirements</strong></td>
<td><strong>Micro-Diploma Program Requirements</strong></td>
<td><strong>Provide details on all required and elective course numbers, titles, credit hours</strong></td>
</tr>
<tr>
<td>Consisting of graduate courses equivalent to a minimum of 6 credit hours and to a maximum of 9 credit hours.</td>
<td>A minimum of six (6) credit hours to a maximum of nine (9) credit hours of coursework at the 7000-level or above is required.</td>
<td>To complete the Micro-diploma Science Communication, students need to complete the minimum course load which consists of 6 credit hours presented in two courses:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IMMU 7000 Science Communication: Foundations &amp; writing methodologies – 3 credit-hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IMMU 7010 Science Communication: Audio-video methodologies – 3 credit-hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Requirements</th>
<th>May be: 1. Stand alone; and/or 2. Embedded in a graduate degree.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Defaults to Certificate and Diploma Framework--</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Will your unit’s Graduate Micro-Diploma be Stand alone, Embedded in a graduate degree (specify degree), or both? Elaborate.</strong></td>
</tr>
<tr>
<td></td>
<td>The Micro-Diploma in Science Communication is a stand-alone program (that requires a student to be concurrently admitted to and registered in a University of Manitoba graduate program).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entrance Requirements</th>
<th><strong>Admission</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Faculty of Graduate Studies entrance requirements. Degree in related field.</td>
<td>Students who are eligible to be considered for direct admission to a program of study leading to the Graduate Micro-Diploma include:</td>
</tr>
<tr>
<td></td>
<td>• Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:</td>
</tr>
<tr>
<td></td>
<td>o Canadian institutions empowered by law to grant degrees; or</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• will the unit require higher standards than FGS regulations; and</td>
</tr>
<tr>
<td></td>
<td>• will the applicant require a prior degree in what specific discipline(s)?</td>
</tr>
<tr>
<td></td>
<td>University of Manitoba graduate students currently registered in any science-related Master’s or Ph.D. program and who are</td>
</tr>
</tbody>
</table>
### Graduate Micro-Diploma Shortened Supplementary Regulations 21/22

<table>
<thead>
<tr>
<th>Condition</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.</td>
<td>Students should provide approval to enroll in the microdiploma program from their “home” program/unit/department.</td>
</tr>
<tr>
<td>• Graduates from first-cycle Bologna compliant degrees.</td>
<td>Appendix “Access Graduate Programs List” provides a non-exhaustive list of approved science-related programs at the University of Manitoba. If not within the list, other programs will be considered upon request.</td>
</tr>
<tr>
<td>• Students who have completed a Pre-Master’s program from:</td>
<td>A writing/video segment sample as part of their application materials is required. Only full applications will be considered by the Microdiploma in Science Communication Admissions Committee. For more information, please contact the Immunology Graduate Chair or Micro-Diploma Science Communication Director.</td>
</tr>
<tr>
<td>o The University of Manitoba (see General Regulations - Pre-Master’s);</td>
<td>Admission to the Program will be determined by:</td>
</tr>
<tr>
<td>o Canadian institutions empowered by law to grant degrees; or</td>
<td>1.  Assessment of the submitted writing/video sample (60%):</td>
</tr>
<tr>
<td>o Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.</td>
<td>Applicants are requested to provide a writing (maximum 250 words) or video segment (maximum 120sec) samples of the topic of their choice (science-related) as part of their application materials.</td>
</tr>
</tbody>
</table>

All students applying for a Graduate Micro-Diploma program must have attained a minimum GPA of 3.0 in the last two (2) full years (60 credit hours) of study. This includes those applying for direct admission and those entering from a Pre-Master’s program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

**Note:** This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

<table>
<thead>
<tr>
<th>Criteria of assessment (max 6pts per criteria)</th>
<th>Scale of assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the writing/video sample:</td>
<td>0: Does not meet expectations</td>
</tr>
<tr>
<td>• Provide an understanding of the background and significance of the topic question being addressed</td>
<td></td>
</tr>
<tr>
<td>• Follow a clear and logical sequence?</td>
<td></td>
</tr>
<tr>
<td>• Use appropriate language directed to a non-specialist audience?</td>
<td></td>
</tr>
<tr>
<td>• Make the audience want to know more?</td>
<td></td>
</tr>
<tr>
<td>• Capture and maintain their audience’s attention?</td>
<td></td>
</tr>
</tbody>
</table>
### Student Performance Requirements

1. Student work is formally evaluated.
2. Letter or pass/fail grades are assigned.
3. Minimum performance requirements are determined by the Faculty of Graduate Studies.

### Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades will be required to withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

A student may be permitted to remove deficiencies in grades by repeating the course or replacing it with an equivalent substitute course. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of three (3) credit hours of coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of “C” or less in more than three (3) credit hours of coursework are normally required to withdraw, unless otherwise stated in the department/unit’s supplementary regulations.

### GPA (40%):

GPA will be calculated and based on the last 30 credit hours.

Provide details on program-specific requirements, e.g., will the unit require higher standards than FGS regulations.

Students are required to achieve a minimum grade of “B” in mandatory courses. In the case where a student fails to achieve a “B” in the mandatory courses, they will be required to withdraw. However, in marginal cases (as agreed upon by the advisory committee and Department Head), such students may be permitted to undertake an additional remedial project developed in consultation with the course coordinator and Micro-Diploma Director. If the remedial project is completed satisfactorily (as judged by the course coordinator and Micro-Diploma director), the student’s mark will be reported as “B” and they will be allowed to remain in the program.
Students are normally expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to [Master’s Degree General Regulations](#) and [Doctor of Philosophy General Regulations](#)).

**Note:**

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Graduate Micro-Diploma program, unless otherwise stated in the department/unit’s supplementary regulations.

<table>
<thead>
<tr>
<th>Student Performance Requirements – Time Limit</th>
<th>Time in Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Faculty of Graduate Studies determines maximum time limit.</td>
<td>The expected time-to-completion for students in the Micro-Diploma program is one (1) academic year (i.e., three (3) consecutive terms). Micro-Diploma students are subject to the same re-registration requirements as all other graduate students.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U of M Delivered Content</th>
<th>Transfer Credit</th>
</tr>
</thead>
</table>
| Minimum of 6 credit hours must be delivered by U of M | Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:  
  - must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;  
  - are considered on an individual basis; |
<table>
<thead>
<tr>
<th>Graduate Micro-Diploma</th>
<th>Shortened Supplementary Regulations 21/22</th>
</tr>
</thead>
<tbody>
<tr>
<td>• cannot be used for credit towards another degree;</td>
<td></td>
</tr>
<tr>
<td>• may not exceed three (3) credit hours of coursework required of the student’s graduate Micro-Diploma program at The University of Manitoba.</td>
<td></td>
</tr>
</tbody>
</table>

Permission is granted in the form of a [Letter of Permission](#) which may be obtained by making an application to the Registrar’s Office; an original transcript and course equivalency must be provided.
April 21, 2022

Aaron J. Marshall, Ph.D.
Professor and Head, Department of Immunology
Rady Faculty of Health Sciences, University of Manitoba
Room 471 Apotex Centre, 750 McDermot Avenue
Winnipeg, MB R3E 0T5

Dear Dr. Marshall,

I’m writing to confirm my support for the Microdiploma in Science Communication program led by Dr. Jean-Eric Ghia. Specifically, the Faculty has committed $5000 to cover expenses associated with delivering the unique content in two new courses that form the core of the Microdiploma. I understand that our financial support will help cover honoraria for some external speakers, as well as materials and studio fees related to IMMU 7000 Science Communication: Foundations & Writing Methodologies and IMMU 7010 Science Communication: Audio-Video Methodologies.

I also recognize that Dr. Ghia will need to commit a significant portion of his time toward delivery of this new program, in addition to his already substantial commitments to undergraduate teaching and external service. I will provide additional support as needed to cover the core research and graduate education activities of the Immunology Department, in order to free up Dr. Ghia’s time to lead this exciting new initiative.

Yours sincerely,

Brian Postl, CM, OM, MD, FRCP(C), FCAHS
Dean, Max Rady College of Medicine
Dean and Vice-Provost, Rady Faculty of Health Sciences
Dear Dr. Main:

On behalf of the Science Writers and Communicators of Canada (SWCC), I would like to express our support for the proposal to develop a new graduate microdiploma in science communication in the Max Rady College of Medicine in the Rady Faculty of Health Sciences.

The SWCC is a national association of more than 300 media professionals, communications officers in science and technology-related institutions, technical writers and educators – all of whom are involved in communicating science and technology to non-specialist audiences. Since our founding in 1970, our mission has been to cultivate excellence in science communication in all media and to increase public awareness and accessibility of science in Canadian culture.

The proposed University of Manitoba microdiploma fits well with the SWCC mission and values as it would enable Max Rady College of Medicine graduate students to learn to communicate the results of their research to the broader public in a way that is engaging, accurate and accessible. Such skills are crucial as scientific and medical research becomes increasingly subject to public scrutiny and interest.

Thank you for the opportunity to comment on this exciting and innovative proposal. Should you wish to discuss further, do not hesitate to reach out to me at 1.604.351.8906 or president@sciencewriters.ca

Sincerely,

Terry Lavender
President
January 13, 2022

The Dean’s office
Rady Faculty of Health Sciences
University of Manitoba, Winnipeg
Manitoba, Canada

On behalf of the Health Sciences Graduate Students’ Association (HSGSA), I would like to thank Dr. Jean-Eric Ghia very much for presenting his proposal of Effective Communication in Science micro-diploma course to us and to the University of Manitoba. Dr. Ghia presented a well thought out and strong case and we agree that such a course is important and will surely be well received by the graduate students at the UofM.

We believe the need to bring effective scientific communication to the public is important for improving society’s scientific literacy. Training current researchers to able to do this effectively will be beneficial to both parties for years to come. This is of utmost importance to health sciences graduate students in particular, especially in light of recent events but not limited to other facets of health care such as cardiovascular health, gut health, medication literacy and others.

Our only concern that we at HSGSA have, and this may be the case with the RFHS as well, is that this program will be funded by the RFHS but the 20 students to be enrolled will be invited from all UofM faculties. I would like to suggest that priority be given to RFHS students first.

Other than that, the HSGSA is happy to endorse this endeavor and do agree that this is something that will be beneficial both to our students and society at large.

We look forward to be working with Dr. Ghia and his team to enhance graduate students’ training and experience at UofM.

Sincerely,

Akshi Malik
HSGSA President 2021-22
Report of the Senate Committee on Admissions concerning a proposal from the Max Rady College of Medicine to modify the admission requirements for the Undergraduate Medical Education program (2022.06.28)

Preamble:
1. The terms of reference for this committee can be found at: http://umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/490.htm.

2. The Max Rady College of Medicine is proposing three modifications to the admission requirements for the Undergraduate Medical Education (UGME) program:
   i. The introduction of a 3-credit hour Indigenous course prerequisite requirement.
   ii. Revision of the adjusted grade point average (AGPA) calculation to ensure that prerequisite courses must be included in the calculation.
   iii. Revision of the request for elimination of the first program of study criteria.

3. The proposal was approved by the Max Rady College of Medicine Executive Council on May 3rd, 2022 and was endorsed by SCADM June 28th, 2022.

Observations:
1. The first change requires that all applicants complete a 3-credit hour university level course that satisfies the Faculty of Arts Indigenous course content requirement with a minimum grade of C.

2. The AGPA calculation used as part of the admission requirements into the UGME program permits students to drop a pre-determined number of courses from the calculation based on the number of credit hours completed. The second change in this proposal ensures that specific pre-requisite courses are not dropped from the AGPA calculation. Since the Indigenous course requirement is being identified as a pre-requisite course it will automatically be included in the AGPA calculation.

3. Applicants to the UGME program can request elimination of their first program of study if a five-year gap exists between the last registration in the first program and the beginning of the second program of study. In these instances, none of the coursework completed in the first program of study can be used towards fulfilling any admission requirements. The third change in this proposal ensures that applicants will not be allowed to use pre-requisite courses from a first program of study to fulfill admission requirements; since the Indigenous course requirement is a pre-requisite course it would have to be completed in the second program of study.
Recommendation:
The Senate Committee on Admissions recommends that the proposal to modify the admission requirements for the Undergraduate Medical Education program be approved effective for the fall 2025 intake.

Respectfully submitted
Laurie Schnarr, Chair, Senate Committee on Admissions
MEMORANDUM

DATE: June 9, 2022

TO: Mr. Jeff Adams, Executive Director, Enrolment Services

FROM: Dr. Sara Goulet, Associate Dean, Admissions, Max Rady College of Medicine

RE: *Amended Senate proposal recommending a new academic requirement for Admissions

The Admissions Committee of the Undergraduate Medical Education (UGME) Program, Max Rady College of Medicine, is seeking the support of the Senate Committee on Admissions (SCADM) to revise the appeal process related to admissions decisions.

The Admissions Committee of the Max Rady College of Medicine is proposing amendments to the existing admissions policies as follows:

A) Implementation of a 3-credit hour Indigenous course prerequisite as a new academic requirement for admission into the Undergraduate Medical Education (UGME) Program, Max Rady College of Medicine. A minimum grade of C will be required.

B) Revision of the Adjusted Grade Point Average (AGPA) calculation to prohibit prerequisite courses from being dropped in the AGPA calculation.

C) Revision of the Request for Elimination of First Program of Study criteria to specify that all prerequisite courses outlined in the academic requirements for admissions are completed within the second program of study.

These recommendations were passed by the Admissions Committee on April 7 and April 24, 2022. The recommendations were subsequently presented and accepted by the Max Rady College of Medicine College Executive Council on May 3, 2022.

*This proposal has been amended to clarify that all applicants must complete a 3-credit hour university level Indigenous course that satisfies the Faculty of Art’s Indigenous course content requirement, found in the Undergraduate Academic Calendar chapter for the Faculty of Arts Faculty Academic Regulations.
A Proposal to the Senate Committee on Admissions from the Admissions Committee, Max Rady College of Medicine, Recommending a New Academic Requirement for Admissions

Submitted By: Sara Goulet, MD, Associate Dean, Admissions, Max Rady College of Medicine, Rady Faculty of Health Sciences, June 9, 2022
Description of Change

Observations:

The University of Manitoba campuses are located on original lands of the Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation. The University of Manitoba is also home to the National Centre of Truth and Reconciliation (NCTR), a national archive of the records collected from the Truth and Reconciliation Commission of Canada (TRC).

The University of Manitoba is committed to advancing the TRC Calls to Actions, as reflected in its Strategic Plan: Taking Our Place. One of the strategic priorities, Creating Pathways to Indigenous Achievement, outlines goals and corresponding supporting actions that will promote the inclusion of Indigenous perspectives into our program, from admission to graduation. The first goal in creating pathways to Indigenous achievement is the fostering of “… a greater understanding of Indigenous knowledge, cultures and traditions among students, faculty and staff” by providing opportunities for students, faculty, and staff to learn through various delivery methods, such as courses (refer to page 16, Appendix A: “um-strategic-plan-2015-2020.pdf”).

As the population of Indigenous peoples continues to grow in Manitoba, along with the thousands of Inuit people visiting Manitoba each year for health care, so too does the need for medical students to enter medical school with a baseline knowledge of colonial policies, the history and legacy of residential schools, and their impact on Indigenous health. As presented in the AFMC Joint Commitment to Action on Indigenous Health, providing this baseline knowledge to medical students is out of the scope of medical school and should be obtained prior to admission. Once the medical students have been admitted with the baseline knowledge, the undergraduate medical education curriculum can “…focus on the health impacts of colonization, anti-racism, and culturally safe practice” (refer to page 10, Appendix B: “AFMC Position Paper JCAIH_EN.pdf”).

The Admissions Committee deliberated the change in academic requirement and consulted with Undergraduate Admissions, Enrolment Services, the Department of Native Studies, the Faculty of Arts, and the Faculty of Sciences to determine the best approach to implement this new academic requirement. This new academic requirement would help the Max Rady College of Medicine achieve the TRC Call to Action 24, as well as the first goal in the University of Manitoba’s Creating Pathways to Indigenous Achievement strategic priority. The content of the undergraduate prerequisite Indigenous courses would provide incoming medical students with the baseline knowledge recommended by the AFMC Joint Commitment of Action on Indigenous Health, enabling the undergraduate medical education curriculum to focus on understanding Indigenous health because of previous government policy (TRC Call to Action 18).
A) **Revision of Academic Admissions Requirement to the UGME Program**

**Current Eligibility Requirements:**

There are no specific prerequisite course requirements.

**Proposed Eligibility Requirements:**

To add an **Indigenous content course requirement**. This will become an academic requirement for applicants to all applicant pools and streams commencing with the application cycle for the 2025/2026 academic year. All applicants must complete a 3-credit hour university level Indigenous course that satisfies the Faculty of Art’s Indigenous course content requirement with a minimum grade of C. The current list of courses is found in the *Undergraduate Academic Calendar* chapter for the Faculty of Arts Faculty Academic Regulations. A course that satisfies the Indigenous course prerequisite will not be dropped from the AGPA calculation. If an applicant completes more than 3 credit hours of Indigenous course content, the highest graded 3 credit hours will fulfill the prerequisite and be used in the calculation of the AGPA. The remaining Indigenous course credit hours completed can be dropped from the calculation if applicable.

B) **Revision of the Calculation of the Adjusted Grade Point Average (AGPA)**

**Current Calculation of the AGPA:**

The University of Manitoba assigns credit hours as follows: a full course, normally two terms, is assigned 6 credit hours; a half course, normally one term, is assigned 3 credit hours. Credit hours from other institutions will be assigned based on this scale in order to determine the number of credit hours completed, and the number of credit hours that will be dropped from the calculation of the AGPA.

The University of Manitoba assigns grades on a 4.5 scale and will convert grades from other institutions for admission purposes.

The undergraduate courses with the lowest marks are dropped from the AGPA calculation providing that an applicant has completed ninety (90) or more undergraduate credit hours, to a maximum of 30 credit hours. The lowest grades are dropped from the AGPA calculation as identified in the following table.

<table>
<thead>
<tr>
<th>CREDIT HOURS COMPLETED</th>
<th>CREDIT HOURS DROPPED</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 95</td>
<td>15</td>
</tr>
<tr>
<td>96 – 101</td>
<td>18</td>
</tr>
<tr>
<td>102 – 107</td>
<td>21</td>
</tr>
<tr>
<td>108 – 113</td>
<td>24</td>
</tr>
<tr>
<td>114 – 119</td>
<td>27</td>
</tr>
<tr>
<td>120 or more</td>
<td>30</td>
</tr>
</tbody>
</table>

SCADM Proposal Document
All graded undergraduate university degree level courses completed by the application deadline will be used to calculate the AGPA. The AGPA will include summer courses, part-time, extended education, repeated courses and 2nd degrees. Calculation of the AGPA will not include courses completed after the application deadline. Pass grades and credit hours will not be used in the AGPA calculation or in the total hours completed. Graduate courses will not be used.

Proposed Revision to the Calculation of the AGPA:

The University of Manitoba assigns credit hours as follows: a full course, normally two terms, is assigned 6 credit hours; a half course, normally one term, is assigned 3 credit hours. Credit hours from other institutions will be assigned based on this scale in order to determine the number of credit hours completed, and the number of credit hours that will be dropped from the calculation of the AGPA.

The University of Manitoba assigns grades on a 4.5 scale and will convert grades from other institutions for admission purposes.

The undergraduate courses with the lowest marks* are dropped from the AGPA calculation providing that an applicant has completed ninety (90) or more undergraduate credit hours, to a maximum of 30 credit hours.

* Undergraduate courses that satisfy specific prerequisites as outlined in Section A (Academic Requirements) will not be dropped from the AGPA calculation. Therefore, if the applicant’s prerequisite courses are the applicant’s lowest marks, marks from other courses will be dropped in lieu of the prerequisite course marks. In the event the applicant has completed more than 3 credit hours of Indigenous course content, the highest graded 3 credit hours will fulfill the prerequisite and be used in the calculation of the AGPA. The remaining credit hours will be eligible to be dropped from the calculation of the AGPA where applicable.

The lowest grades from non-prerequisite courses are dropped from the AGPA calculation as identified in the following table.

<table>
<thead>
<tr>
<th>CREDIT HOURS COMPLETED</th>
<th>CREDIT HOURS DROPPED</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 95</td>
<td>15</td>
</tr>
<tr>
<td>96 – 101</td>
<td>18</td>
</tr>
<tr>
<td>102 – 107</td>
<td>21</td>
</tr>
<tr>
<td>108 – 113</td>
<td>24</td>
</tr>
<tr>
<td>114 – 119</td>
<td>27</td>
</tr>
<tr>
<td>120 or more</td>
<td>30</td>
</tr>
</tbody>
</table>

SCADM Proposal Document
All graded undergraduate university degree level courses completed by the application deadline will be used to calculate the AGPA. The AGPA will include summer courses, part-time, extended education, repeated courses and 2nd degrees. Calculation of the AGPA will not include courses completed after the application deadline. Pass grades and credit hours will not be used in the AGPA calculation or in the total hours completed. Graduate courses will not be used.

C) Revision of the Request for Elimination of First Program of Study

Current Requirement:

Applicants can request for elimination of their first program of study if there is a five-year gap between last registration and the beginning of registration in their second program of study. To be eligible for this request, the coursework completed in the first program of study cannot be used towards fulfilling degree requirements in the second program of study. None of the courses from the first program of study will be used in the AGPA, therefore any specific course prerequisite requirements must be completed within the second program of study. If the prerequisite requirements were completed in the first program of study and not in the second program of study, those courses will need to be repeated to satisfy all academic requirements. Applicants will be required to submit a letter from the degree granting faculty confirming the courses from the first program of study were not used towards fulfilling degree requirements in the second program of study.

Proposed Revision to the Request for Elimination of First Program of Study Requirement:

Applicants can request for elimination of their first program of study if there is a five-year gap between last registration and the beginning of registration in their second program of study. To be eligible for this request, the coursework completed in the first program of study cannot be used towards fulfilling degree requirements in the second program of study. All prerequisite course(s) outlined in the academic requirements for admissions must be completed within the second program of study. None of the courses from the first program of study will be used in the AGPA, therefore any specific course prerequisite requirements must be completed within the second program of study. If the prerequisite requirements were completed in the first program of study and not in the second program of study, those courses will need to be repeated to satisfy all academic requirements. Applicants will be required to submit a letter from the degree granting faculty confirming the courses from the first program of study were not used towards fulfilling degree requirements in the second program of study.

Consultation with other Faculties:

Faculty of Arts

The Admissions Committee has deliberated the change in academic requirement and consulted with the Head, Department of Indigenous Studies and the Dean and Associate Deans, Faculty of Arts, to determine the best approach to implement this new academic requirement.
Refer to Appendix C: Letter of Support from the Dean, Faculty of Arts dated April 14, 2022.

Faculty of Sciences

The Admissions Committee has deliberated the change in academic requirement and consulted with the Dean, Associate Deans, and Lead Academic Advisor, Faculty of Science, to determine the best approach to implement this new academic requirement. Refer to Appendix D: Letter of Support from the Dean, Faculty of Sciences dated April 11, 2022.

Recommendations:

The Admissions Committee of the Max Rady College of Medicine recommends the following academic requirement changes for consideration by the Senate Committee on Admissions:

A) Implementation of a 3-credit hour Indigenous course prerequisite as a new academic requirement for admission into the Undergraduate Medical Education (UGME) Program, Max Rady College of Medicine. A minimum grade of C will be required.
B) Revision of the Adjusted Grade Point Average (AGPA) calculation to prohibit prerequisite courses from being dropped in the AGPA calculation.
C) Revision of the Request for Elimination of First Program of Study criteria to specify that all prerequisite courses outlined in the academic requirements for admissions are completed within the second program of study.

All changes are to come into effect for the 2025-26 application cycle. Applications open in August 2024, with matriculation in August 2025.

These recommendations were passed by the Admissions Committee on April 4 and April 27, 2022, (Appendix E: Admissions Committee Votes on Proposed Recommendations, April 4 & 27, 2022.) The recommendations were subsequently presented and accepted by the Max Rady College of Medicine College Executive Council on May 3, 2022.

Appendices

Appendix A: UM Strategic Plan 2015 – 2020
Appendix B: AFMC Position Paper JCAIH_EN
Appendix C: Faculty of Arts Indigenous Course Content Requirement Course List
Appendix D: Letter of Support: Faculty of Arts
Appendix E: Letter of Support: Faculty of Sciences
Appendix G: Memorandum, Max Rady College of Medicine, College Executive Council

SCADM Proposal Document
Faculty of Arts - Indigenous Content Requirement List:

(The current list of courses is found in the Undergraduate Academic Calendar chapter for the Faculty of Arts Faculty Academic Regulations.)

- Students may complete any of the courses listed below in order to satisfy the Indigenous Content Requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 2300</td>
<td>Indigenous Issues in Food Systems</td>
<td>3</td>
</tr>
<tr>
<td>INDG 1200</td>
<td>Indigenous Peoples in Canada</td>
<td>6</td>
</tr>
<tr>
<td>INDG 1220</td>
<td>Indigenous Peoples in Canada, Part 1</td>
<td>3</td>
</tr>
<tr>
<td>INDG 1240</td>
<td>Indigenous Peoples in Canada, Part 2</td>
<td>3</td>
</tr>
<tr>
<td>INDG 2012</td>
<td>Indigenous History in Canada</td>
<td>6</td>
</tr>
<tr>
<td>INDG 2020</td>
<td>The Métis in Canada</td>
<td>3</td>
</tr>
<tr>
<td>INDG 2080</td>
<td>Inuit Society and Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2010</td>
<td>Indigenous History in Canada (C)</td>
<td>6</td>
</tr>
<tr>
<td>HIST 2020</td>
<td>The Métis in Canada (C)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4120</td>
<td>History of Aboriginal Rights (C)</td>
<td>6</td>
</tr>
<tr>
<td>POLS 2802</td>
<td>Introduction to Indigenous Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 3870</td>
<td>Politics of Indigenous-Settler Relations</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2200</td>
<td>Canadian Indigenous Theatre</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3762</td>
<td>Law, Justice, and Indigenous Peoples</td>
<td>3</td>
</tr>
<tr>
<td>WOMN 2630</td>
<td>Indigenous Feminisms</td>
<td>3</td>
</tr>
</tbody>
</table>
April 14, 2022

To: Brian Postl, Dean and Vice-Provost, Rady Faculty of Health Sciences

From: Jeff Taylor, Dean, Faculty of Arts

Subject: New academic requirement for admission into the Doctor in Medicine program

The Faculty of Arts supports the proposal from the College of Medicine, Rady Faculty of Health Sciences to introduce a new academic admissions requirement to come into effect for the 2025-26 application cycle of a minimum of three credits or equivalent of undergraduate Indigenous content courses, with a minimum of a C grade. This support is based on the understanding that, in order to satisfy the Indigenous content requirement, the College of Medicine will use, with respect to Faculty of Arts courses, the courses on the Faculty of Arts Indigenous content requirement, and will not limit the list of eligible Faculty of Arts courses to courses in the Department of Indigenous Studies.

Should anything further be required, please feel free to contact my office.

Thank you

Cc Heidi Marx, Associate Dean
April 11, 2022

Dr. Brian Postl  
Dean and Vice-Provost (Health Sciences)  
Rady Faculty of Health Sciences  
727 McDermot Avenue  
University of Manitoba, Bannatyne Campus

Re: Max Rady College of Medicine’s Proposal to Modify the Admission Requirements to the MD Program effective Fall 2025

Dear Dean Postl,

The Faculty of Science supports the Max Rady College of Medicine’s proposal to modify the admission requirements to the MD program effective Fall 2025. Specifically, to require MD program candidates to have completed a minimum of 3 credit hours, or equivalent, of any undergraduate Indigenous course.

Many Faculty of Science students work toward qualifying for admission to the Max Rady College of Medicine. We have reviewed our programs, and all Faculty of Science programs can accommodate this requirement within their existing structure.

Sincerely,

Dr. Brian Mark  
Dean, Faculty of Science  
Professor, Department of Microbiology &  
Department of Biochemistry and Medical Genetics
Report of the Senate Committee on Admissions concerning a proposal from the College of Nursing to modify the admission requirements for the Bachelor of Midwifery degree program (2022.06.28)

Preamble:
1. The terms of reference for this committee can be found at: http://umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/490.htm.

2. The College of Nursing is proposing a modification to the admission requirements for the Bachelor of Midwifery degree program. The proposal will permit students who complete BIOL 2410 and BIOL 2420 in lieu of BIOL 1412 to use the additional 3 credit hours toward the 3 credit hours Science elective requirement.

3. The proposal was endorsed by SCADM June 28th, 2022.

Observations:
1. The proposed change will be beneficial to students as those who take BIOL 2410 and 2420 will not have to take an additional 3 credit hours to fulfill elective requirements.

2. The substitution of BIOL 2410 and 2420 in lieu of BIOL 1412 was approved by Senate in May of 2021. This proposal is to provide the option to allocate some credit hours to the science elective.

Recommendation:
The Senate Committee on Admissions recommends that the proposal to modify the admission requirements for the Bachelor of Midwifery degree program be approved effective for the fall 2023 intake.

Respectfully submitted
Laurie Schnarr, Chair, Senate Committee on Admissions

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.
MEMORANDUM

Date: May 31, 2022

To: Laurie Schnarr, Chair, Senate Committee on Admissions
   cc. Olga Kuznetsova

From: Dr. Netha Dyck, Dean, College of Nursing, University of Manitoba

Re: Addition of Note Regarding Use of Extra 3 Credit Hours for Science Electives for Year 1 of the Bachelor of Midwifery Program if BIOL 2410 and BIOL 2420 are Completed in Lieu of BIOL 1412

Attached please find a submission to the Senate Committee on Admissions (SCADM). In 2021, a change to the Bachelor of Midwifery program chart was approved by the Senate Committee on Curriculum and Course Changes and then by Senate (at the May 2021 Senate meeting). This involved approval of a note to indicate that students who have completed BIOL 2410 Human Physiology 1 and BIOL 2420 Human Physiology 2 in lieu of BIOL 1412 Physiology of the Human Body as part of the program are permitted to use the additional 3 credit hours toward the requirement for 3 credit hours of Science Electives. To ensure alignment, we are proposing adding a note in the Academic Calendar to the section on Course Requirements for Admission to reflect this change. We are proposing that the change becomes effective for Fall Term 2023.

The current Academic Calendar has this note posted already, but we were made aware that this change was not approved through SCADM. We are now addressing that oversight. Please contact me if you have any questions regarding this submission.

Sincerely,

Dr. Netha Dyck
Dean, College of Nursing
Submission to the Senate Committee on Admissions (SCADM)

From: College of Nursing, Rady Faculty of Health Sciences

Date: May 31, 2022

Section I – Description of the Change

In May of 2021, Senate approved a change (brought forward through the Senate Committee on Curriculum and Course Changes) to update the Bachelor of Midwifery Program chart. At that time, a note was added regarding students who take BIOL 2410 Human Physiology 1 and BIOL 2420 Human Physiology 2 in lieu of BIOL 1412 Physiology of the Human Body as part of their Year 1 course requirements. The note reads that for these students, “the additional 3 credit hours could be used toward the requirement for 3 credit hours of Science Electives.”

To ensure alignment between the program chart and admission requirements, we are proposing adding a note in the Academic Calendar to the section on Course Requirements for Admission to reflect this change.

Current Wording in the Academic Calendar

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1410</td>
<td>Anatomy of the Human Body ¹</td>
</tr>
<tr>
<td>BIOL 1412</td>
<td>Physiology of the Human Body ¹</td>
</tr>
<tr>
<td>or BIOL 2410 and BIOL 2420</td>
<td>or Human Physiology 1 and Human Physiology 2</td>
</tr>
</tbody>
</table>

¹ All courses can be completed in University 1, or an equivalent program, if students do not wish to extend their program of study.
Proposed New Note in the Academic Calendar

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1410</td>
<td>Anatomy of the Human Body (^1)</td>
</tr>
<tr>
<td>BIOL 1412</td>
<td>Physiology of the Human Body (^1), (^2)</td>
</tr>
<tr>
<td>or BIOL 2410 and BIOL 2420</td>
<td>or Human Physiology 1 and Human Physiology 2</td>
</tr>
</tbody>
</table>

\(^1\) All courses can be completed in University 1, or an equivalent program, if students do not wish to extend their program of study.

\(^2\) If students complete BIOL 2410 and BIOL 2420, the additional 3 credit hours could be used toward the requirement for 3 credit hours of Science Electives.

There are 3 additional notes currently in the Academic Calendar and they will remain as currently written.

Science Prerequisites. Students must meet the current Science prerequisites before registration for Science courses. See the Academic Calendar for the current course prerequisites. It is recommended the above prerequisites have been completed within the last five years.

Prerequisites for CHEM 1100: [one of Chemistry 40S (50%), CSKL 0100 (P), or the former CHEM 0900 (P)] and [one of Applied Mathematics 40S (50%), Pre-calculus Mathematics 40S (50%), the former Mathematics 40S (300) (50%), or a grade of "C" or better in MSKL 0100].

Students must meet the University of Manitoba Written English and Mathematics Requirements with a University level course completed within the last 10 years, must be at the 1000 level (or higher) and with a minimum grade of C in each. It is strongly recommended that these courses be completed within the elective credits indicated above.

Effective Date:
We are proposing that, if approved, this change be implemented for Fall 2023.

Section II – Consultation with other faculties
There are no anticipated implications for other faculties given the small number of students involved. The Faculty of Science was consulted when the original change of accepting BIOL 2410 and BIOL 2420 in lieu of BIOL 1412 was made.

Section III - Recommendation
That SCADM endorse the proposed addition of a note to the Admissions section of the Academic Calendar to enable students taking BIOL 2410 and BIOL 2420 in lieu of BIOL 1412 as part of their admission requirements for the Bachelor of Midwifery Program to use the extra three credit hours toward the requirement for Science Electives. The effective term is Fall 2023.
Preamble

The terms of reference for the Senate Committee on Nominations may be found on the University Governance website at: [https://umanitoba.ca/governance/senate/committees#standing-committees-of-senate](https://umanitoba.ca/governance/senate/committees#standing-committees-of-senate)

The Committee met via Zoom videoconference on Monday, September 12, 2022 to consider nominations to fill vacancies on the standing committees of Senate.

Observation

Listed below are Senate committees with vacancies to be filled, along with the names of the nominees being proposed, their faculty/school, and the expiry date of their terms. All terms will begin immediately upon Senate approval.

Following the list is the membership list for each of those committees, including the names of the nominees, which have been highlighted.

Recommendations

The Committee recommends to Senate the following list of faculty and student nominees:

<table>
<thead>
<tr>
<th>COMMITTEE</th>
<th>NOMINEE(S)</th>
<th>FACULTY/SCHOOL</th>
<th>TERM END DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate Committee on Academic Accommodation Appeals</td>
<td>Richard Jochelson</td>
<td>Law</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>Senate Committee on Academic Freedom</td>
<td>Vaibhav Varma (student)</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>Senate Committee on Awards</td>
<td>Robert Hoppa</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>Senate Committee on Medical Qualification</td>
<td>BJ Hancock</td>
<td>Health Sciences</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>Senate Committee on University Research</td>
<td>David Herbert</td>
<td>Science</td>
<td>2023.06.30</td>
</tr>
</tbody>
</table>

Respectfully submitted,

Professor J. Paliwal, Chair
Senate Committee on Nominations
<table>
<thead>
<tr>
<th>Composition</th>
<th>Incumbents</th>
<th>Faculty/School</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair, appointed by the President</td>
<td>Robert Hoppa</td>
<td>Arts</td>
<td>2024.05.31</td>
</tr>
<tr>
<td>Vice-Chair, elected by and from the academic staff members</td>
<td>TBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ten members of the academic staff appointed by Senate</td>
<td>Terri Ashcroft</td>
<td>Health Sciences</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Carrie Madden</td>
<td>Science</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td><strong>Richard Jochelson</strong></td>
<td><strong>Law</strong></td>
<td><strong>2023.05.31</strong></td>
</tr>
<tr>
<td></td>
<td>Elizabeth Troutt</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Vanessa Warne</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Nancy Hansen</td>
<td>Education</td>
<td>2024.05.31</td>
</tr>
<tr>
<td></td>
<td>Krystyna Koczanski</td>
<td>Science</td>
<td>2024.05.31</td>
</tr>
<tr>
<td></td>
<td>Christine Kelly</td>
<td>Health Sciences</td>
<td>2024.05.31</td>
</tr>
<tr>
<td></td>
<td>Trina Arnold</td>
<td>Health Sciences</td>
<td>2024.05.31</td>
</tr>
<tr>
<td></td>
<td>Cary Miller</td>
<td>Vice-President (Indigenous)</td>
<td>2024.05.31</td>
</tr>
<tr>
<td>Two students appointed by Senate</td>
<td>Clèche Kokolo</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Zlata Odribets</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
</tbody>
</table>

Resource: Marcia Yoshida 474-6166
Terms of Office: three-year terms; students = one-year terms
<table>
<thead>
<tr>
<th>Composition</th>
<th>Incumbents</th>
<th>Faculty/School</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five members of academic staff, at least three of whom shall be Senators. At least one of the five shall be from among those excluded from collective bargaining units</td>
<td>Colette Simonot-Maiello (S)</td>
<td>Music</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Parimala Thulasiraman</td>
<td>Science</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Jeffrey Taylor (S) (Excl)</td>
<td>Arts</td>
<td>2024.05.31</td>
</tr>
<tr>
<td></td>
<td>Fenton Litwiller</td>
<td>Kinesiology &amp; Rec Mgmt.</td>
<td>2024.05.31</td>
</tr>
<tr>
<td></td>
<td>Donna Martin (S)</td>
<td>Health Sciences</td>
<td>2025.05.31</td>
</tr>
<tr>
<td>Two students, at least one of whom shall be a student Senator</td>
<td>Vaibhav Varma (S)</td>
<td>Arts</td>
<td>2023.05.31</td>
</tr>
<tr>
<td></td>
<td>Varun Gudral</td>
<td>Graduate Studies</td>
<td>2023.05.31</td>
</tr>
</tbody>
</table>

Resource: Shannon Coyston 474-6892
Terms of Office: three-year terms; students = one-year terms
### Composition

<table>
<thead>
<tr>
<th>Incumbents</th>
<th>Faculty/School</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darcy MacPherson, Vice-Chair</td>
<td>Law</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>Jennifer McLeese</td>
<td>Science</td>
<td>2023.05.31</td>
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<td><strong>Robert Hoppa</strong></td>
<td><strong>Arts</strong></td>
<td><strong>2023.05.31</strong></td>
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<td>&quot;l/r for Glenn Clark (S)&quot;</td>
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<td><strong>2024.05.31</strong></td>
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<tr>
<td>Jared Carlberg, Chair</td>
<td>Agricultural &amp; Food Sciences</td>
<td>2025.05.31</td>
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<tr>
<td>Karen Kampen</td>
<td>Arts</td>
<td>2025.05.31</td>
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<tr>
<td>Debra Beach Ducharme (S)</td>
<td>Health Sciences</td>
<td>2025.05.31</td>
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<tr>
<td>Two students (one graduate and one undergraduate)</td>
<td>Vacant</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>AKM Monsurul Alam</td>
<td>Graduate Studies</td>
<td>2023.05.31</td>
</tr>
<tr>
<td>Vice-Provost (Graduate Education) and Dean, Faculty of Graduate Studies (or designate)</td>
<td>Todd Duhamel, designate</td>
<td>Ex-officio</td>
</tr>
<tr>
<td>Associate Registrar and Director of Financial Aid and Awards (or designate)</td>
<td>Jane Lastra, designate Lesli Lucas-Aseltine</td>
<td>Ex-officio</td>
</tr>
<tr>
<td>Associate Vice-President (Alumni &amp; Donor Relations) (or designate)</td>
<td>Carolyn Basha, designate</td>
<td>Ex-officio (non-voting)</td>
</tr>
<tr>
<td>University Registrar and Executive Director of Enrolment Services (or delegate)</td>
<td>Jeff Adams</td>
<td>Ex-officio (non-voting)</td>
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<td>Up to three Awards Establishment Coordinators and one Awards Selection Coordinator from Financial Aid and Awards</td>
<td>Pamela Gareau</td>
<td>Non-voting</td>
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<td></td>
<td>Mabelle Magsino</td>
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<td>Regan Sarmatiuk</td>
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<td>Mandy Laing</td>
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### Terms of Office

- Three-year terms; students = one-year terms

### Contact Information

- Pamela Gareau: 474-9261

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**SENATE COMMITTEE ON AWARDS**

last updated September 12, 2022
<table>
<thead>
<tr>
<th>Composition</th>
<th>Incumbents</th>
<th>Faculty/School</th>
<th>Term</th>
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<tr>
<td>Dean, Max Rady College of Medicine (or designate), Chair</td>
<td>Brian Postl, designate Sara Israels</td>
<td>Health Sciences</td>
<td>Ex-officio</td>
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<tr>
<td>Provost and Vice-President (Academic) (or designate)</td>
<td>Diane Hiebert-Murphy</td>
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<td>Ex-officio</td>
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<tr>
<td>Three academic members from the Max Rady College of Medicine</td>
<td>BJ Hancock</td>
<td>Health Sciences</td>
<td>2023.05.31</td>
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<td></td>
<td>Phil St. John</td>
<td>Health Sciences</td>
<td>2024.05.31</td>
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<td></td>
<td>Eric Jacobsohn</td>
<td>Health Sciences</td>
<td>2025.05.31</td>
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<tr>
<td>One member appointed by the College of Physicians and Surgeons of Manitoba</td>
<td>Anna Ziomek</td>
<td>Registrar/CEO, College of Physicians and Surgeons</td>
<td>2024.05.31</td>
</tr>
</tbody>
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Resource: Jasmina Veinot 204-977-5647
Terms of Office: three-year terms
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<th>Faculty/School</th>
<th>Term</th>
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<tr>
<td>Vice-President (Research and International), Chair</td>
<td>Digvir Jayas</td>
<td></td>
<td>Ex-officio</td>
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<tr>
<td>President</td>
<td>Michael Benarroch</td>
<td></td>
<td>Ex-officio</td>
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<tr>
<td>Provost and Vice-President (Academic)</td>
<td>Tracey Peter, designate</td>
<td></td>
<td>Ex-officio</td>
</tr>
<tr>
<td>Associate Vice-President (Research)</td>
<td>Annemieke Farenhorst</td>
<td></td>
<td>Ex-officio</td>
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<tr>
<td>Associate Vice-President (Partnerships)</td>
<td>Jay Doering</td>
<td></td>
<td>Ex-officio</td>
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<tr>
<td>Dean, Faculty of Graduate Studies</td>
<td>Kelley Main</td>
<td></td>
<td>Ex-officio</td>
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<tr>
<td>Research Grants Officer</td>
<td>Kerrie Hayes, Director of Research Contracts</td>
<td></td>
<td>Ex-officio (non-voting)</td>
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<tr>
<td>Four Deans or Directors representing a range of research activities</td>
<td>Jeffery Taylor</td>
<td>Arts</td>
<td>2023.05.31</td>
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<td></td>
<td>Josée Lavoie (S)</td>
<td>Health Sciences</td>
<td>2024.05.31</td>
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<tr>
<td></td>
<td>Stephan Pflugmacher Lima</td>
<td>Environment, Earth &amp; Resources</td>
<td>2024.05.31</td>
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<td>Martin Scanlon Lima</td>
<td>Agricultural &amp; Food Sciences</td>
<td>2025.05.31</td>
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<tr>
<td>Eight faculty members actively engaged in research and representing a range of research activities, at least two of whom are from the Bannatyne Campus</td>
<td>Dawn Sutherland</td>
<td>Education</td>
<td>2023.05.31</td>
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<td>Shawn Clark (S)</td>
<td>Engineering</td>
<td>2023.05.31</td>
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<tr>
<td></td>
<td>Michelle Porter</td>
<td>Kinesiology &amp; Recreation Management</td>
<td>2023.05.31</td>
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<tr>
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<td>Waran Cariou</td>
<td>Arts</td>
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<td>Jason Leboe-McGowan</td>
<td>Arts</td>
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<td>Andrew Halayko</td>
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<td>2025.05.31</td>
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<td>Tamra Werbowetski-Ogilvie</td>
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<td>Two graduate students selected by GSA</td>
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<td>Graduate Studies</td>
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<td>Vacant</td>
<td>Graduate Studies</td>
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</table>

Resource: Lisa Wolfe-Ulrich 474-7952
Terms of Office: three-year terms; students = two-year terms
MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary

FROM: Digvir Jayas, Vice-President (Research and International) and Chair, Senate Committee on University Research

DATE: March 24, 2022

SUBJECT: Establishment of a New Research Centre

Attached is the report on the Manitoba Multiple Sclerosis Research Centre (MMSRC) conducted by the Senate Committee on University Research (SCUR), according to the Policy on Research Centres, Institutes, and Groups.

Please include this report and recommendation on the next Senate agenda. Please feel free to contact me should you require any further information.

Thank you.
THE SENATE COMMITTEE ON UNIVERSITY RESEARCH
REPORT ON THE ESTABLISHMENT OF THE
THE MANITOBA MULTIPLE SCLEROSIS RESEARCH CENTRE (MMSRC)

Preamble:

1. The Policy for Research Centres, Institutes and Groups, stipulates that all new research
Centres/Institutes are to be reviewed by the Senate Committee on University Research (SCUR)
prior to being transmitted to the Senate Planning and Priorities Committee and to Senate, in order
to be established by the Board of Governors.

2. The Senate Committee on University Research established a review sub-committee for each new
Centre/Institute proposed. In accordance with the Policy, the task of each sub-committee was to
review the proposal to determine if the Centre/Institute should be established. The Committee
was further charged with recommending to SCUR the establishment of the Centre/Institute.

Observations:

1. The review process followed that which is outlined in sections 2.3 and 2.4 of the Policy Research
Centres, Institutes and Groups. The following was noted:

a) Name of Research Centre/Institute:
Manitoba Multiple Sclerosis Research Centre (MMSRC)

b) Description and Justification:
   i) Mission and Objectives
   Mission:
   To bring local researchers, clinicians, trainees and knowledge users committed to advancing
   MS research and care in Manitoba. The chief goal is to facilitate and strengthen interactions, to
   promote collaborations, networking, outreach and knowledge dissemination and mentorship of
   trainees, researchers and other health professionals in the MS field.
   Objectives:
   1. Increase visibility of Manitoba MS researchers on local, national and international stages, and
   show case research conducted in the province
   2. Foster interactions and collaborations between basic, translational and clinical researchers
   at UofM, Manitoba Shared Health and other provincial universities and research centres
   3. Enrich the training environment for students, residents and fellows at UofM, Manitoba Shared
   Health, and other Manitoba-based institutions.

   ii) Scope of Activities
   • Creating website on RFHS platform to highlight members, local news and
   accomplishments (grants, papers, trainees)
   • Annual Manitoba MS Research Day (in person)
   • Monthly MS Seminar Series (local and external MS researchers and trainees) – virtual
   platform to engage members across Manitoba
   • Enrich the training environment for students, residents and fellows, working with the endMS
   National Training Program (MS Society of Canada) (eg. will host endMS Summer School
   in Winnipeg in 2024)
   • Foster recruitment of trainees and faculty and staff in MS-related disciplines relevant to
   health and clinical sciences, including STEM (bioinformatics, machine learning, and data
   science to bridge clinical and computational sciences). Long-term aspirational goal to
   create opportunity to attract a new Canada Research Chair in MS research.
   • Networking with local, national and international organizations (e.g., Canadian Prospective
   Cohort Study to Understand Progression in Multiple Sclerosis; NAIMS - North American
   Imaging in MS Cooperative) in part to create access to large databases and human
   samples for translational research and multicenter research in MS.
• Promote membership KT and outreach activities with public, funding bodies and private
donors through public presentations and outreach activities. (e.g., fundraising and public
awareness events with the MS Society of Canada (MSSOC), Health Sciences Centre
Foundation (HSCF), and Research Manitoba)

iii) Description of research benefits and opportunities
The activities described above will promote local networking and enhance the trainee
experience. Enhanced interaction of researchers will foster more innovative and translational
projects, which will increase individual researcher funding success and enable development of
competitive team and network research proposals. Furthermore, the linkage of the Centre to
external research networks will facilitate a broadening of scope and research capacity for
Manitoba researchers. Involvement and focus on training will enable development of a
compelling proposal for a national training hub via the NSERC CREATE program. The Network
is likely to raise the profile and foster enhanced recruitment of clinical and research trainees,
and with success will become a priority for allocation of future recruitment initiatives in RFHS
and UofM. The Centre will have a high profile in the local research community, and with a close
formal association with the MS Society, should have a public facing profile that gets attention
when major achievements are reported.

c) Constitution:
  i) Organizational Structure
MMSCR will be based at RFHS and led by a Director (Dr. Karimi) and Associate Director (Dr.
Figley). All committees report to these leaders. The Director will chair a Membership
Committee responsible for determining membership status and category of applicants, and will
work closely with the Outreach Committee to identify Stakeholder Members. An Outreach and
Public Relations Committee will organize awareness and outreach activities such as media
interviews, fundraising and donor engagement events, as well as leading Twitter and Instagram
accounts. This includes advertising of the Annual MS Research Day. An MS Research Day
and Trainee Awards Committee will organize the annual research day in Winnipeg (scientific
program, local and external speakers), and will adjudicate MMSRC trainee awards. A new Chair
is to be named annually by members. A Mentorship and Internal Peer-review Committee will
foster mentee-mentor relationships between ECRs and established researchers, and will
orchestrate an internal grant peer-review platform. An External Advisory Committee will meet
annually to provide oversight and critique regarding organizational structure, key initiatives and
overall direction of the MMSRC. Members are already named and represent diverse
stakeholders of national repute.

  ii) Categories of Membership
Four well-defined opt-in (application) categories: Core Members: faculty at Manitoba
universities, laboratory heads at Manitoba-based government agency, and Manitoba Shared
Health physicians actively involved in MS research. Affiliated Members: Manitoba-based
research staff (research associates, technicians, program/facility managers, etc.), physicians,
nurses and health care professionals at clinics AND outside-of-Manitoba research faculty,
clinicians and laboratory heads. Trainee Members: undergraduate & graduate, and clinical and
postdoctoral research fellows. Knowledge Users and Stakeholders: representatives of
government and nonprofit funding agencies, patient organizations, industry partners, and
healthcare policy decision makers.

  iii) Procedures for Appointments
Members submit an expression of interest and CV and are assessed based on active involvement
in MS-relevant research, patient care, community activities. Committee determines membership
and category by vote. Renewal is annually on an opt-in basis.

  iv) Responsibilities of Membership
Participate regularly in the monthly Seminar Series and Annual Research Day. Actively contribute
to content on website (research achievements, outreach etc.), participate in MMSRC outreach
initiatives, and list MMSRC as an affiliation for MS-related publications, presentations and/or grant applications.

d) Management:
Oversight by the Director, who reports to Vice-Dean of Research RFHS.

e) Proposed Membership
In addition to the Director and Associate Director, seven core members have been identified. They represent a wide range of research and clinical expertise related to MS. Precise numbers of members have not yet been determined. These will be drawn from a large pool: currently > 30 trainees and staff in labs of MMSRC Core Members, and up to 50 more in labs of prospective affiliated members. A four-member External Advisory Committee is already in place.

f) Physical Resources
Initially MMSRC facilities and equipment include well-funded existing labs and clinical spaces of Core Members at UofM and HSC. This is broad in scope and of high quality and capacity (e.g., biomedical labs, animal models, human MRI and computational analysis, and genomics). The administrative home appears to be the offices of the Director, Associate Director and the Chairs of individual committees. Website home and support provided by RFHS communications.

g) Financial Resources
Overall, a modest initial five-year budget, with balanced revenue and expenditures. Significant in-kind contributions are expected from members (in leadership roles). Revenue $40,000, includes RFHS Dean’s Office, HSC Research Department, and expected registration from Annual MS Research Day. The majority of funds will be used for Research Day activities. In-kind support from RFHS tor website development and maintenance as well a visiting speaker sponsorship by MNN. Expenditures relate chiefly to Annual MS Research Day, and Annual Trainee Awards.

h) Statements of Support and Commitment
Multiple relevant letters of support provided – all strongly endorse the MMSRC initiative, confirming partnership, collaboration and potential for impact and growth.

2. The membership of the sub-committee was as follows:
   - Andrew Halayko, Rady Faculty of Health Sciences (Chair)
   - Tamra Werbowetski-Ogilvie, Rady Faculty of Health Sciences
   - Jay Doering, Office of the Vice-President (Research and International)

3. The assessment of the sub-committee was as follows:
The committee unanimously endorse this proposal, and we compliment the submitters for compiling a comprehensive proposal that directly addressed all the relevant and required elements for assessment. MMSRC aligns with the university strategic framework including investment in emerging and established areas of research excellence in Manitoba, and promoting the development and expansion of collaborations at institutional, regional, national and international levels. Research on MS is needed, timely and has a particular Manitoba-focus that is highly relevant. This initiative will establish a new multidisciplinary research "Cluster", building broad excellence that exists among a cadre of local researchers. Multiple Core Members are highly successful, and are recognized leaders locally, nationally and internationally. This includes the Director Dr. Karimi who is fully capable of being a diligent and effective leader. The committee is convinced that the proposal will lead to greater networking and recognition nationally and internationally, which should enhance the breadth and quality of research, scholarly works and knowledge dissemination/translation through close association with public facing stakeholders, including the MS Society of Canada. MMSRC is committed to an Equity, Diversity and Inclusivity (EDI) vision in principle. This is reflected in its core membership profile, but specific activities in this space are not yet developed and specifically entrenched. MMSRC also has a committed External Advisory Committee that represents a national who’s who of researchers, MS advocacy and the MS Society of Canada.
The structure is appropriate, and governance and reporting is quite clear. The committees to be developed have clear mandates, with complementary roles and objectives. Committee membership is well developed.

A particular strength is the considerable evidence of existing collaboration among Core Members, proposed Affiliated Members and an extended collaborator network. This is a significant asset for supporting intellectual and physical resource growth, training opportunities and future team grant opportunities. Existing and anticipated strengthened affiliations and collaborations with other neuroscience centers and networks include the Spinal Cord Research Center (SCRC), the Neuroscience Research Program at HSC, the Division of Neurodegenerative Disorders at St. Boniface, the Manitoba Neuroscience Network (MNN), and the Medical Rehabilitation and Kinesiology Groups at Fort Garry, HSC Manitoba Brain Institute.

Further to this point, in its construct, MMSRC will build an excellent interactive and diverse training environment to develop and attract students, residents and fellows. As outlined in the proposal a medium term goal is to establish a national training program using the NSERC CREATE opportunity. There are encouraging signs to predict success. For instance, plans are already in place to host a 2024 Summer School with the endMS National Training Program of the MS Society of Canada. Commitment to training is a main feature of the proposal, and is highlighted by having a Trainee Member category and a MS Research Day and Trainee Awards Committee. It appears that trainees will be included in most MMSRC committees.

Another strength is that partnership with public-facing stakeholders is a primary objective and feature of MMSRC. The intended activities will bring together MS researchers, knowledge users and stakeholders, with efforts supported by a Knowledge User and Stakeholder Member category, and an Outreach and Public Relations Committee.

The committee noted a few areas that were either unclear or not well developed within the proposal. Chief among these was a rather modest budget that did not include administrative support. It thus falls to the Director, Associate Director and committee Chairs to plan and co-ordinate activities on an ongoing basis. These include website maintenance, planning scientific meetings, orchestrating internal grant reviews, and coordinating membership applications and database upkeep. RFHS will support the website, but there will still need to be a MMSRC content liaison. Conference planning can be very time consuming and complex, so there is need to have administrative support for this activity. Support letters from RFHS and MNN indicate that some in-kind support is available but it was not easy to sort out. We reached out to the Director and Associate Director for clarity on this issue, and received a satisfactory response. They provided the following feedback related to MMSRC administrative supports:

1. Administrative support from the Manitoba Neuroscience Network to organize and advertise two external speaker seminars annually;
2. MNN will coordinate the MS-focused Annual Meeting as in-kind contribution;
3. A portion of the $27,000 budget from RFHS and HSC will support hire UofM Conference and Catering Services for logistics of annual conferences;
4. Chairs of each committee will schedule their own meetings (note: committees are small); and
5. Delegation of certain tasks will be a core operational strategy (e.g., monthly MS Seminars) that will engage trainees and staff volunteers, which will enhance professional development.

Other minor issues for the attention of the MMSRC leadership to address:

1. Intake of membership: logistics are somewhat underdeveloped. Will there be an open application approach, or a limited number of specific intake dates annually? What will be the process if a member does not renew?
2. MMSRC is committed to engaging UofM members on Fort Garry campus, but the strategy to do so is not clear. How will this group be targeted (specific events to give greater profile of the centre on "main campus"?).
3. There is a commitment to engage members outside UofM, but there are no specific plans to do so. It is not clear how many potential members may exist outside the RFHS campus, so the impact of these outreach activities is difficult to gauge.

4. Trainee Members – will students and other trainees who work with supervisors who are NOT members of MMSRC be eligible to be Trainee Members of centre?

Recommendation:

THAT the Manitoba Multiple Sclerosis Research Centre (MMSRC), be established for a term of 5 years, from July 1, 2022 through June 30, 2027.

Respectfully submitted,

Dr. Digvir Jayas, Chair
Senate Committee on University Research

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.
March 24, 2022

Report of the Senate Planning and Priorities Committee on a Proposal to Establish the Manitoba Multiple Sclerosis Research Centre

Preamble:
1. The terms of reference of the Senate Planning and Priorities Committee (SPPC), which are found on the University Governance website, charge SPPC with making recommendations to Senate regarding any such studies, proposals or reports that it may initiate within itself, have referred to it by Senate, other Councils, Committees or Bodies, formal or otherwise.

2. The process for approving research institutes set out in section 2.1 of the procedure for Research Centres, Institutes, and Groups specifies the authority to establish research institutes resides with the Board of Governors, normally on the recommendation of Senate. Proposals for research institutes are transmitted from SCUR to the Chair of the SPPC to determine if SPPC review is required, and to Senate through its Executive Committee.

3. At its meeting on May 30, 2022, the SPPC considered a proposal to establish the Manitoba Multiple Sclerosis Research Centre within the Rady Faculty of Health Sciences. The proposal was also considered and endorsed by the Faculty Executive Council of the Rady Faculty of Health Sciences on August 23, 2022, and the Senate Committee on University Research

Observations:
1. The Centre’s mission would be to bring local researchers, clinicians, trainees, and knowledge users committed to advancing multiple sclerosis (MS) research and care in Manitoba, to facilitate and strengthen research interactions, collaborations, networking, outreach, knowledge dissemination and translation, recruitment and retention, and enrich mentorship and training of highly qualified researchers and professionals in MS research. In pursuit of the mission, the Centre would also promote the position of the province in national and international MS research communities.

2. The objectives of the Centre would be to: (i) increase the visibility of Manitoban MS researchers locally, nationally, and internationally, and showcase the cutting-edge MS research conducted in the province; (ii) foster interactions and collaborations between basic, translational, and clinical researchers within the University, Shared Health Manitoba, and other universities and research centres in the province; (iii) provide an enriched training environment for the next generation of MS researchers and clinician-scientists; (iv) participate in public awareness, outreach, and fundraising activities organized by the MS Society of Canada – Manitoba Division; (v) provide mentorship and support to early career faculty members and clinicians actively engaged in MS-related research in Manitoba; (vi) provide internal peer-review for individual and team applications for external grants by members of the Centre; (vii) facilitate team building and preparation of large team operating and infrastructure funding opportunities available through external granting agencies.

3. Establishment of the Centre would promote the visibility of MS researchers in the province and strengthen their efforts toward the collective goal of finding effective treatments for MS. It would be significant in the context of recent growth of basic, translational, and clinical MS research in Manitoba, where the prevalence of MS in the population is higher than in other jurisdictions within Canada and globally.
4. The Centre will comprise various committees each with responsibility for specific activities of the Centre, as detailed in section C (i) of the proposal, including the Membership Committee, Outreach and Public Relations Committee, MS Research Day and Trainee Awards Committee, and Mentorship and Internal Peer-Review Committee. An External Advisory Committee, chaired by the Director, will provide advice to the Director and Associate Director on the organizational structure, key initiatives, and overall direction of the Centre. The Director, who will report to the Dean, Rady Faculty of Health Sciences, through the Vice-Dean (Research), will serve as Chair of the of the Membership Committee and will appoint the Chair of the Outreach and Public Relations. The Associate Director will serve as Chair of the Mentorship and Internal Peer-review Committee and will appoint the Chair of the MS Research Day and Trainee Awards Committee.

5. Membership categories would include (i) core members who are actively involved in MS research, including faculty members at any Manitoba university, laboratory heads at any Manitoba-based government agency, and Manitoba Shared Health physicians; (ii) affiliated members, including research staff at any Manitoba university, government agency, research institute or company, or any healthcare professional at private clinic in Manitoba; (iii) trainee members, including undergraduate and graduate students, medical residents/fellows, and postdoctoral research fellows who are actively involved in MS research or patient care; and (iv) knowledge users and stakeholders, such as representatives of government and non-government funding agencies, patient organizations, industry partners, and healthcare policy decisions makers. Applications for membership will be reviewed by the Membership Committee.

6. In the first five years, the Centre would have a budget of $40,000, including allocations of $7,500 in each of the first two years from the Rady Faculty of Health Sciences, a one-time allocation of $12,000 from Shared Health Research and Innovation, and $2,600 annually from registration fees for the Annual MS Research Day to be hosted by the Centre. The revenue would be used to fund the Annual MS Research Day ($7,500 per year for four years) and Annual Trainee Awards ($2,000 per year).

Start-up costs associated with the development of a website and annual operating costs related to website hosting and maintenance would be borne by the Rady Faculty of Health Sciences. An in-kind contribution from the Manitoba Neuroscience Network would support two external visiting speakers per year.

7. The Centre would not require additional space, facilities, or equipment as it would initially rely on members’ existing laboratories and clinical spaces.

**Recommendation**

The Senate Planning and Priorities Committee recommends:

THAT Senate recommend that the Board of Governors approve the establishment of the Manitoba Multiple Sclerosis Research Centre, for a five-year term. The Senate Planning and Priorities Committee recommends that the Vice-President (Research and International) not implement this Institute until satisfied that there would be sufficient existing space and sufficient existing resources.

Respectfully submitted,

Professor David Watt, Chair
Senate Planning and Priorities Committee
The Policy for Research Centres, Institutes and Groups, stipulates that all new research Centres/Institutes are to be reviewed by the Senate Committee on University Research (SCUR) prior to being transmitted to the Senate Planning and Priorities Committee and to Senate, in order to be established by the Board of Governors.

2.3 Proposals must be comprehensive enough to allow the merits and feasibility of establishing a research center/institute to be assessed, and shall include the following:

(a) **Name of Research Centre/Institute:**

Manitoba Multiple Sclerosis Research Centre (MMSRC)

(b) **Description and Justification:**

(i) Concise statement of the mission and objectives of the proposed research center/institute and their relationship to the strategic plan of the University;

The mission of the MMSRC is to bring together researchers, clinicians, trainees and knowledge users committed to advancing MS research and care in Manitoba. The MMSRC will facilitate and strengthen research interactions, collaborations, networking, outreach, knowledge dissemination and translation, recruitment and retention, and will enrich mentorship and training of highly qualified researchers and professionals in the MS field. In pursuit of this mission, the MMSRC will also promote the position of Manitoba in the national and international MS research communities.

Impact of multiple sclerosis in Canada and Manitoba: MS has often been referred to as “Canada’s disease” because we have among the highest prevalence of MS globally, and the prevalence of MS in Manitoba is particularly high within Canada. Each day, 12 individuals are diagnosed with MS in Canada, and because disease onset is typically between the ages of 20-50 years, MS has long-term effects on the quality of life for affected individuals and their families, and poses large economic impacts for social services and healthcare systems. Nearly 80% of Canadians with MS have reduced work hours or are prematurely disabled from employment, and it is projected that MS-related Canadian health care costs will exceed $2 billion annually within the next 10 years. Due to this high socioeconomic impact, Canada has positioned itself at the forefront of MS research and care globally. Over the past few decades, an increased number of MS-focused organizations and research groups have emerged across the country to promote MS research and health care, knowledge transfer, public outreach and education. Given the recent growth of MS basic, translational and clinical research in Manitoba, and the impact of MS on Manitobans, establishment of a focused centre for MS research is timely to promote the visibility of Manitoba MS researchers, and strengthen their efforts towards the collective goal of finding effective treatments for this debilitating condition.

Relationship to UM Strategic Plan: The mandate of MMSRC is directly aligned with several pillars of the latest University of Manitoba strategic vision, including investment in emerging and established areas of research excellence in Manitoba, and promoting the development and expansion of collaborations at institutional, regional, national and international levels.
Vision to establish the MMSRC is aligned with the UM strategic research plan to form research “Clusters” of researchers within multidisciplinary areas. MS research and patient care is an area of high importance for Canada and Manitoba. The MMSRC will build on the vast expertise and strength of existing MS basic, translational and clinical research programs within Manitoba with the vision to form the necessary clusters and network to foster partnership and collaboration among various disciplines/sectors within the field of MS in Manitoba. Importantly, the MMSRC will help attract top students, residents and fellows to Manitoba by providing outstanding training opportunities; and it will increase knowledge dissemination and translation. Formation of the MMSRC will strengthen the UM Strategic Plan by providing the critical structure to enhance our national and international research recognition and the quality and impact of our research, scholarly works and creative activities. The MMSRC will also provide opportunities for researchers, clinicians and trainees to connect with the broader community through active participation in public awareness, outreach programs and fundraising events.

Equity, Diversity and Inclusivity (EDI) Statement:
The MMSRC will implement and practice equity, diversity, parity, meritocracy and ingenuity in MS research and patient care. The MMSRC will be dedicated to providing a productive and inclusive platform, with the goal of enhancing opportunities for collaboration throughout its membership, with the tenet that working together will enhance our efforts toward a common goal. As a professional entity, the MMSRC will be committed to providing equal opportunities for all members and creating an environment that encourages free expression and the exchange of scientific and educational ideas.

(ii) Specific objectives of the MMSRC over the next five years:

As the MMSRC establishes and develops over time, the specific goals are:

a) To increase the visibility of Manitoba MS researchers on the local, national and international stages, and showcase the cutting-edge MS research being conducted within the province. This will be accomplished by creating a website with member profiles and local news/announcements about recent publications, grants, trainee accomplishments, local outreach activities, etc. The Vice Dean of Research at the Rady Faculty of Health Sciences, Dr. Peter Nickerson, has offered support for the creation and maintenance of a dedicated website for the MMSRC to be hosted on the University of Manitoba server.

b) To foster interactions and collaborations between basic, translational and clinical researchers within the University of Manitoba, Manitoba Shared Health and other universities and research centres throughout the province. The MMSRC will establish an Annual Manitoba MS Research Day in Winnipeg in addition to a monthly MS Seminar Series featuring both local and external MS researchers and trainees. The monthly research seminars will be held virtually through Zoom to facilitate participation of all members across Manitoba, while the Annual MS Research Day will be held in-person (if allowed under provincial, local, and university COVID policies) to foster more collegial interactions between all of the attendees. These regular gatherings will facilitate knowledge exchange, identify common research interests, promote team building, and foster internal and external collaborations.
Proposal to establish Manitoba Multiple Sclerosis Research Centre (MMSRC)

c) To provide an enriched training environment for the next generation of MS researchers and clinician-scientists. One major goal of the MMSRC is to act as a springboard for a collaborative training program. To this end, the MMSRC will facilitate formation of a team grant application for the Tri-council Collaborative Research and Training Experience (CREATE) program that would support the training and mentoring of teams of highly qualified students and fellows. This would further strengthen collaborations among MMSRC members and facilitate development of academic courses/lectures focused on MS pathophysiology, epidemiology, diagnosis, genomics, disease mechanisms and therapeutics.

d) To participate in public awareness, outreach and fundraising activities organized by the MS Society of Canada-Manitoba Division, including MS Research Connect, the endMS National Training Program and Summer School events, the annual MS Walk, and various local fundraising events such as the HSCF Radiothon, HSCF Home Lottery, HSCF Legacy Circle, etc. The MMSRC will also assemble an MS expert speaker list for local and national media interviews, community presentations and other public outreach activities.

e) To provide mentorship and support to early career faculty members and clinicians actively engaged in MS-related research in Manitoba.

f) To provide internal peer-review for individual and team grant applications by MMSRC members to the MS Society of Canada, National MS Society, CIHR, NSERC, etc.

g) To facilitate team building and preparation of large team operating and infrastructure funding opportunities, such as the New Frontiers in Research Fund and Canada Foundation for Innovation grants.

(iii) A description of the research benefits and opportunities likely to result from the establishment of the research center/institute, including an indication of how the proposed research center/institute would facilitate research among scholars within the University and in the wider community.

- There is currently no formal MS research organization in Manitoba. This is despite the groundbreaking and influential basic, translational and clinical research that has been generated and is ongoing in Manitoba, as well as the demographic impact of MS in the province. Thus, establishment of the proposed MMSRC is timely to provide much-needed structure to the growing local MS research community and to connect it to other Canadian centres.

- The MMSRC will facilitate knowledge exchange, mentorship, interdisciplinary collaborations and team building by bringing basic, translational, and clinical scientists together for regularly scheduled seminars and research days. This, combined with the formal recognition by the University of Manitoba that MS is a priority area, will place local MS researchers in a stronger position for individual, team, training and large operational and infrastructure funding opportunities. While the MMSRC is primarily a RFHS initiative, its mission is to provide opportunities for all researchers across the University of Manitoba and other Manitoba-based universities and other institutions that are interested in MS and related fields.
- The MMSRC will enrich the training environment for students, residents and fellows within universities in Manitoba, Manitoba Shared Health, and other Manitoba-based institutions. Trainees are a major force in any research enterprise, so optimizing their experience is an investment in the future of health research in Manitoba and Canada. In this regard, the MMSRC will work closely with the endMS National Training Program of the MS Society of Canada in their mission to promote knowledge and skills of MS trainees from across Canada. Several core members of the MMSRC have actively collaborated with the MS Society of Canada and the endMS Training Program over the past decade in different capacities (Drs. Karimi, Marrie, Figley, Marriot and Kowalec). Of note, the MMSRC will host an endMS Summer School in Winnipeg as early as 2024 (Please see the letter from Dr. Kanellis, Assistant VP Research, MSSOC and Dr. Wolfson, Director of the endMS National Training Program). Overall, the presence of the MMSRC will enhance the experience of Manitoba MS trainees through local, national and international collaborations that will help in attracting and retaining high-quality trainees interested in MS research in Manitoba.

- By elevating the visibility of our collective strengths in MS research, the MMSRC will also help to recruit faculty and staff in related disciplines to Manitoba. While this has obvious relevance for the health and clinical sciences (e.g., physiology, neurology, etc.), it may also have an impact on cutting edge STEM (science, technology, engineering and mathematics) fields such as bioinformatics, machine learning, and data science for researchers who are interested in bridging between clinical and computational sciences. In the longer term, the MMSRC could also create an opportunity to attract a new Canada Research Chair in an area of MS research.

- The MMSRC will facilitate integration of local investigators with other national and international MS research studies or consortia, such as the CanProCo (Canadian Prospective Cohort Study to Understand Progression in Multiple Sclerosis), the NAIMS (North American Imaging in MS) Cooperative, etc. Networking and collaborations with these external organizations will enhance the existing capacity of Manitoba MS researchers by providing access to large databases and human samples for translational research. Importantly, these activities will provide opportunities for multicenter research in MS that will also promote and enrich trainee experiences in Manitoba through collaborative research and networking.

- The MMSRC will build a platform for its membership to engage actively in knowledge translation through public presentations and outreach activities, and participation in fundraising and public awareness events with the MS Society of Canada (MSSOC), Health Sciences Centre Foundation (HSCF), Research Manitoba, etc. This will provide a great opportunity for MMSRC members, including trainees, to actively connect with the general public (including MS patients and their families), funding bodies, potential private donors and other stakeholders. Importantly, this positions the centre to conduct research that responds to the needs of knowledge users, thereby enhancing research impact, training, outreach activities, commercialization and knowledge translation.
Proposal to establish Manitoba Multiple Sclerosis Research Centre (MMSRC)

(c) Constitution.

(i) The organizational structure of the proposed research center/institute, including the roles and responsibilities of its various committees;

The MMSRC will be established within the Rady Faculty of Health Sciences (RFHS) at the University of Manitoba, where its core membership resides, providing a collaborative platform for multiple units including the Max Rady College of Medicine, the College of Pharmacy, and the Departments of Physiology and Pathophysiology, Radiology, Internal Medicine, Clinical Health Psychology, and Pharmacology and Therapeutics. Through its networking activities and seminar series, the MMSRC will also provide the opportunity to increase interactions and facilitate collaborations with existing neuroscience and biomedical groups based in various faculties at the Fort Garry campus (e.g., Faculty of Sciences, Faculty of Kinesiology and Recreation Management, Faculty of Engineering, and the Biomedical Engineering Group, which is technically within the Faculty of Graduate Studies). The MMSRC will consist of various internal committees reflecting its activities. Formation of MMSRC Committees will follow an EDI mandate and include trainee representatives. The MMSRC committees will meet twice a year or more as needed to govern various activities of the centre.

An External Advisory Committee will also provide advice about the administration, organization, and initiatives of the MMSRC. The External Advisory Committee will meet with the MMSRC Director and Associate Director annually in June to: 1) review the activities and progress made by the Centre, 2) discuss any recommended changes/updates to the Centre’s initiatives, governance structure, etc. and 3) set specific goals for the next year.

**Director:** Will be responsible for establishing and chairing the MMSRC Membership Committee, appointing the Chair of the Outreach and Public Relation Committee (see below), identifying key priorities, coordinating with local funding bodies such as Research Manitoba, Health Sciences Center Foundation (HSCF), Manitoba Medical Services Foundation (MMSF), and stakeholders including the University of Manitoba, Shared Health, MS Society of Canada, Chaining the External Advisory Committee and managing the MMSRC finances.

**Associate Director:** Will be responsible for appointing the Chair of the Annual MMSRC Research Day and Trainee Awards Committee (see below), chairing the Mentorship and Internal Peer-review Committee (see below), appointing the coordinator of the monthly MS Seminar Series, and assisting the Director with their duties as necessary.

**Membership Committee:** Will be responsible for reviewing all MMSRC membership applications, granting membership, and assigning membership categories. The membership committee will be chaired by the MMSRC Director.

**Outreach and Public Relations Committee:** Will be responsible for organizing knowledge translation through public presentations and awareness, outreach activities, media interviews, fundraising and donor engagement events. The MMSRC will create
Twitter and Instagram accounts to promote its scientific, outreach, and networking activities on local, national and international stages. Members of this committee will oversee these activities.

**MS Research Day and Trainee Awards Committee:** Will be responsible for organizing an Annual MMSRC Research Day that will be held every Spring in Winnipeg and also adjudicating MMSRC trainee awards (e.g., Research Day Trainee Research Day Awards, Trainee Travel Awards, etc.). Each year, an MMSRC core or affiliated member will be identified (on a voluntary basis) to chair the annual MMSRC meeting in Winnipeg. The Chair will form a small committee of 2-3 members from MMSRC faculty members and trainees to organize a scientific program, and select and invite an external keynote speaker as well as local presenters. This committee will also work with the Outreach and Public Relation Committee to facilitate the attendance of knowledge users and stakeholders in the Annual MMSRC Research Day.

**Mentorship and Internal Peer-review Committee:** Will be responsible for identifying a more senior mentor for early career faculty members and clinician-scientists, and organizing internal grant peer-review for MMSRC members who wish to obtain preliminary feedback before submitting proposals to external funding agencies.

**External Advisory Committee:** Will provide external advice to the Director and Associate Director regarding the organizational structure, key initiatives and overall direction of the MMSRC. The External Advisory Committee will be composed of leaders in MS research, public health, knowledge users and stakeholders, and from the MS community. The committee will meet annually to review the performance of the MMSRC and offer guidance for the MMSRC strategic direction. **[Please note: The External Advisory Committee has already been formed. Details about its members are provided below in a subsequent section, and letters of support are attached to the application.].**

(ii) **The categories of membership and the criteria of each of these categories:**

The membership of MMSRC will include basic science and clinical researchers; clinicians and health care professionals; trainees in undergraduate, graduate, professional, and postgraduate residency and fellowship programs; and knowledge users and stakeholders who are committed to MS research, care, treatment, outreach, community engagement and knowledge translation in Manitoba. To reflect this breadth, there will be four main membership categories as outlined below.

**Core Members:** Will include faculty members at any Manitoba university, laboratory heads at any Manitoba-based government agency, and/or Shared Health physicians who apply for membership and self-identify as being actively involved in MS research.

**Affiliated Members:** Will include all other research staff (research associates, technicians, program/facility managers, etc.) any Manitoba-based university, government agency, research institute or company, as well as physicians, nurses and health care professionals at any Manitoba-based private clinic, who apply for membership and self-
identify as being actively involved in MS research and care; OR anyone who applies for membership who would otherwise meet the criteria for principal membership (above), but holds a primary appointment at a university, government agency and/or health region outside of Manitoba.

**Trainee Members:** Will include undergraduate/graduate students, medical residents/fellows, or postdoctoral research fellows who apply for membership and self-identify as being actively involved in MS research and/or patient care.

**Knowledge Users and Stakeholders:** A major goal of the MMSRC is to create a platform for bringing together MS researchers, knowledge users and stakeholders. This will engage MS stakeholders in Manitoba and promote knowledge translation. To this end, the MMSRC membership will include a category for representatives of government and non-profit funding agencies, patient organizations, industry partners, healthcare policy decision-makers, etc. The MMSRC Outreach and Public Relations Committee will take leadership in identifying and approaching stakeholders and knowledge users to join the centre. [Please note, Dr. Pamela Kanellis, the Assistant Vice President of Research of the Multiple Sclerosis Society of Canada, and Mr. Brian Lerner, a public figure in MS advocacy are both confirmed members of the MMSRC External Advisory Committee.]

(iii) Procedures whereby appointments will be made for each membership category;

All membership applications – consisting of a written expression of interest and a current CV (along with any optional letters of support) – will be reviewed by the MMSRC Membership Committee (chaired by the Director). Criteria for membership will include active involvement in MS research and related areas, MS patient care and treatment, MS outreach and community activities, etc. Membership and membership category will then be determined by at least a 2/3 (66%) majority vote of the committee. The MMSRC membership in all member categories will be renewed annually based on the continued interest of the members and their participation in various activities of the MMSRC.

(iv) The privileges and responsibilities of membership.

Membership privileges, for all member categories, will include a free member profile on the MMSRC website (which will feature member publications and other news/announcements), free participation in the monthly MS Seminar Series, discounted registration fees for the Annual MMSRC Research Day, eligibility to participate in any internal grant review initiatives, mentorship opportunities, and access to MMSRC shared facilities.

MMSRC members are expected to participate regularly in the monthly Seminar Series and Annual Research Day, submit newsworthy events (about MS-related research achievements, etc.) to be announced on the MMSRC website, to participate in MMSRC public outreach initiatives, and to list the MMSRC in their affiliations for any MS-related publications, presentations and/or grant applications.
(d) **Management.** This should identify the University officer to whom the proposed research center/institute reports and in whom financial responsibility is vested.

Financial responsibility for the MMSRC will be vested in the Director, who will report annually to the Dean of Rady Faculty of Health Sciences through Vice-Dean of Research.

(e) **Proposed MMSRC Core Membership.** This shall include a listing of the proposed membership of the research center/institute broken down by the various membership categories, where applicable. For each proposed member, an abbreviated curriculum vitae shall be provided which details the following information: degree held, employment experience, professional activities, research interests, research funding record (last five years), and record of research achievements (last five years).

*Please find abbreviated CVs for each of the members attached at the end of the application.*

**Founding Director:**

**Dr. Soheila Karimi**
Professor, Department of Physiology and Pathophysiology, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba

Areas of expertise: Basic science research in multiple sclerosis, spinal cord regeneration, neuroprotection and neuroregeneration, neuroinflammation, myelin repair, stem cells and regenerative medicine.

**Associate Director:**

**Dr. Chase Figley**
Associate Professor, Department of Radiology, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba

Areas of expertise: Basic and translational research in multiple sclerosis, cognitive neuroscience and disease related cognitive decline, diffusion tensor imaging, functional magnetic resonance imaging.
Core Members:

**Dr. Heather Armstrong**
Assistant Professor, Department of Internal Medicine, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba

Areas of expertise: Basic, translational, and clinical research, personalized medicine, diet, microbiome, epithelial barrier, chronic inflammation and cancer; focus on diseases of dysbiosis including multiple sclerosis.

**Dr. Jennifer Kornelsen**
Assistant Professor, Department of Radiology, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba

Areas of expertise: Translational research in multiple sclerosis, brain and spinal cord neuroimaging, chronic pain and psychiatric comorbidity associated with multiple sclerosis.

**Dr. Kaarina Kowalec**
Assistant Professor, College of Pharmacy, Rady Faculty of Health Sciences, College of Pharmacy, University of Manitoba

Areas of expertise: Translational and clinical research in multiple sclerosis, pharmacoepidemiology, pharmacogenomics, psychiatry.

**Dr. Ruth Ann Marrie**
Professor and Neurologist, Department of Internal Medicine, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba

Areas of expertise: Translational and clinical research in multiple sclerosis, comorbidity, etiologic factors for MS, patient-reported outcomes, pediatric MS.
Dr. James Marriott  
Assistant Professor and Neurologist, Department of Internal Medicine, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba  

Areas of expertise: Clinical research in multiple sclerosis, multiple sclerosis patient care, clinical trial design and developing endpoints for evaluating MS disability.

Dr. Ronak Patel  
Assistant professor, Department of Clinical Health Psychology, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba  

Areas of expertise: Clinical research, Neuropsychology, cognition and neuroimaging, neurological and psychiatric disorders.

Dr. Galen Wright  
Assistant Professor, Department of Pharmacology and Therapeutics, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba  

Areas of expertise: Basic and translational research, neurogenomics, precision medicine approaches in neurological disorders including multiple sclerosis.

Affiliated Members:  

In addition to the MMSRC Core members who are primarily involved in MS basic, translational and clinical research, there are a number of neuroscientists and clinicians at the University of Manitoba who are working on other areas related to MS. These areas include neurodegeneration, neuroinflammation, spinal cord and brain injury, rehabilitation and locomotion, neuroimaging, bioengineering and drug development, stem cells and regenerative medicine, etc. Due to shared research interests, it is anticipated that the MMSRC will attract additional members from the University of Manitoba and other Manitoba universities and institutions after its establishment.
Trainees and Staff:

There are currently over 30 trainees and staff within the laboratories of the MMSRC Core members, and up to 50 more in the laboratories of prospective affiliated members. These trainees and staff will constitute an important membership of the centre as they are the major force driving MS research in Manitoba. We expect that 80-100% of these trainees and staff will join the MMSRC. Formation of the MMSRC will be instrumental in providing a platform to engage these trainees in various scientific, mentorship, networking, outreach and leadership activities within the centre that will improve their skills and promote their career development. Scientific interactions facilitated through the MMSRC seminar series and research days, as well as internal/external collaborative opportunities, will enrich their training experience and leadership capacities.

Overview of Research Themes, Existing and Potential Future Internal Collaborations, and External Collaborations:

The MMSRC members and their research groups span a wide breadth of research themes, and include foci spanning basic, translational, and clinical research (summarized in Figure 1A). They are at different stages of their career and bring diverse, complementary expertise. Dr. Karimi's research team has extensive experience in conducting preclinical studies to study MS pathogenesis and disease mechanisms. The gained knowledge is used to develop neuroprotection and neuroregenerative therapeutic approaches with translational feasibility for MS treatment. Dr. Figley's research team has expertise in developing and applying novel MRI methods to study structural and functional brain damage, and their relation as prognostic biomarkers for MS-related cognitive decline. Dr. Armstrong's research program utilizes a multi-omics approach to develop novel personalized dietary and microbe-altering interventions; examining diseases of dysbiosis (altered gut microbiome), including multiple sclerosis in animal models and patient samples. Dr. Kornelsen's research team brings expertise in human studies involving task-based and/or resting-state fMRI, and how changes in functional brain connectivity relate to individual differences. Dr. Wright and his group employ neurogenomic and bioinformatic approaches to fine-map and identify genetic variants and genes that may act as novel prognostic biomarkers and drug targets in MS and other neurodegenerative conditions. Similarly, Dr. Kowalec and her research team focus on precision medicine approaches to neurology and psychiatry, including predictive polygenic scores. Her program uses large administrative health datasets and genomic data to identify individuals with neurological or psychiatric disorders who are at high risk for experiencing poor outcomes (e.g., treatment outcomes, mortality, etc.). Dr. Marrie is a world-renowned neurologist and expert in MS-related comorbidities, and how their treatment can improve patient outcomes. Her research team also studies etiologic factors for MS, patient-reported outcomes and pediatric MS. Dr. Patel has expertise related to detecting, measuring and treating MS-related cognitive decline, cognitive fatigue, and neuropsychiatric conditions such as depression and anxiety. Dr. Marriott has extensive experience evaluating treatment outcomes, and has been involved in several large-scale clinical trials in MS.
Given the depth and breadth, as well as the complementary interests and expertise, several of the proposed MMSRC members have already established active internal collaborations (Figure 1A; solid black lines). For example, Drs. Marrie, Figley, Kornelsen, Marriott, and Patel are members of the Comorbidity and Cognition in Multiple Sclerosis (CCOMS) Study, and have jointly published several peer-reviewed papers over the past few years. Drs. Marriot and Marrie have also collaborated for a number of years on various human clinical trials. Drs. Karimi and Marrie have been collaborating on work to identify early disease markers and potential treatments for MS using parallel preclinical and clinical studies, and the results of their first project have recently been published in peer-reviewed form. Drs. Marrie and Kowalec have been actively collaborating on unraveling bidirectional relationship between psychiatric comorbidity and MS. Drs. Armstrong, Karimi, Marrie, and Marriott are collaborating to uncover the role of microbial dysbiosis and select dietary factors in mediating inflammatory processes in MS in both preclinical MS animal models and MS patients. Drs. Kowalec and Wright also have a history of collaboration on genome wide approaches in identifying disease activity and risk factors in MS. However, in addition to these existing collaborations, there are several potential/likely collaborations that could/should be formed (Figure 1A; grey dashed lines), and one of the central goals of the centre will be bringing MS researchers together for knowledge dissemination about the local MS research landscape. In so doing, the establishment of the MMSRC should facilitate several new and exciting collaborations among local members resulting in future competitive multidisciplinary team projects and grant applications.

Finally, in addition to internal collaborations, each of our members has ongoing collaborations with multiple external researchers and groups from other institutions (Figure 1B). This extended collaborator network is an obvious asset in terms of both intellectual and physical resources, and could lead to additional cross-collaborations among internal and external members. This extensive network can also enhance the MMSRC seminar series and annual research day to feature research from members of the extended external collaborating groups.

In summary, the proposed core members of the MMSRC, with their complementary expertise in several critical areas of basic, translational and clinical MS research and their access to an extensive local and external collaborating network, will help make the centre competitive in obtaining large team grants. Membership of MS clinician-scientists will facilitate translation of preclinical discoveries from the laboratories in Manitoba to help treat and care for people living with MS. Importantly, this multidisciplinary centre will provide a productive and stimulating environment for training highly qualified personnel in MS research and patient care that would increase the likelihood of their recruitment and retention in Manitoba.
Figure 1: Classification of the primary MS research focus within each member’s lab, along with (A) existing and future internal collaborations and (B) established external collaborations for each of the core members.
Physical Resources. This shall include:

A listing of available research facilities (e.g. library holdings, laboratories, space, equipment), including an indication of current strengths and weaknesses.

At the initial stages, MMSRC facilities and equipment will be composed of existing laboratories and clinical spaces of the individual MMSRC members. This already spans a broad range, from biomedical research laboratory and animal models (Karimi and Armstrong), human MRI and computational analysis (Figley and Kornelsen), genomics (Kowalec and Wright) at various units within the University of Manitoba, and Health Sciences Centre Winnipeg (Marrie, Marriott, and Patel). Below is a brief overview of the primary spaces and resources that are currently available to each member.

Dr. Karimi

Dr. Karimi’s research program is located on the 6th floor of the Basic Medical Sciences Building within the Rady Faculty of Health Sciences at the University of Manitoba. The dedicated lab space including the main bench lab space and tissue culture area is about 1000 ft² with extra space for imaging, tissue culture and lentiviral rooms, and access to the institutional facilities for MRI, flow cytometry and electron microscopy. Karimi’s laboratory is fully equipped to conduct in vivo and in vitro studies through the infrastructural funds received from the Canada Foundation for Innovation, the Research Manitoba and the University of Manitoba. This infrastructure includes:

**Surgical and neurological units** including microscope with video capability, surgical tools, stereotaxic frame and six platforms for assessment of neurological and neurobehavioural parameters in animal models.

**Two tissue culture units**: biosafety cabinets, incubators, Nikon dissecting microscope, inverted Zeiss fluorescent microscope, ultra-centrifuge, water bath and other small equipment for tissue culture.

**Histopathology unit**: Cryostat, vibratome, tissue chopper and a dedicated microscope for tissue sectioning and staining.

**Imaging and tissue analyses unit**: Three microscopy systems: Upright Zeiss fluorescent microscope with Apotome and MBF StereoInvestigator system for unbiased tissue analysis, Zeiss confocal microscope and an inverted Zeiss Axio Vision Fluorescent microscope with time-lapse imaging module.

**Molecular biology platform**: gel imaging, high-throughput microplate reader, Immunoblotting systems, PCR system, four -20 and -80 freezers. The team also has full access to the flow cytometry platform located at the Apotex Building within the Bannatyne Campus.
Computing equipment and specialized software: Nine (9) desktop and laptop computers with relevant software for image processing and statistical analysis.

Preclinical Animal Facility: Dr. Karimi’s laboratory performs extensive animal studies in MS and spinal cord disorders. The laboratory has full access to a dedicated state-of-art animal housing and mouse transgenic facility that is equipped with animal surgery and recovery units, procedure rooms, post-operating housing, MRI and live fluorescent imaging. Animals are monitored by veterinary clinicians regularly.

Drs. Figley and Kornelsen

Dr. Figley and Dr. Kornelsen’s research programs are located on the 7th Floor of the Thorlakson Building, and in addition to their office spaces, the lab space and equipment includes:

Core Neuroimaging Lab: Approx. 600 ft² of lab space for staff and students located in Room MS-793 (Thorlakson Building) of the Health Sciences Centre Winnipeg. [Established with a $300,000 Brain Canada Platform Grant]

High Performance Computing: Own an in-house Lambda Quad-GPU Image Processing and Computational Analysis Workstation (36 CPU Cores, 4 NVIDIA RTX-8000 GPU Nodes, 256 GB RAM, 2TB Solid-State Hard Disk). [Purchased with a $30,000 Thorlakson Grant, part of a NSERC Discovery Grant, and a $20,000 Industry Partner Contribution]. We routinely use WestGrid and Compute Canada high performance computing resources (free for researchers at Canadian Universities).

Human MRI Facilities: One 3T IMRIS/Siemens Verio MRI System (with 12-channel head coil), as well as physiological monitoring and an MRI-compatible stimulus delivery/response system for fMRI experiments is housed within the Kleysen Institute for Advanced Medicine; and another 3T Siemens Magnetom Trio MRI System (with 32-channel head coil), as well as physiological monitoring and an MRI-compatible stimulus delivery/response system for fMRI experiments is housed within the Department of Radiology and Division of Diagnostic Imaging Satellite Clinic on Ellis Avenue. [Note the second (Trio) system is scheduled to receive a cutting-edge, $1,200,000 PrismaFit upgrade in early 2021.]

Dr. Armstrong

Dr. Armstrong is a newly recruited faculty member at the University of Manitoba. Her laboratory is located on level 7 of the John Buhler Research Centre within the Manitoba Centre for Proteomics and Systems Biology, Rady Faculty of Health Sciences at the University of Manitoba. The centre is a level 2+ biosafety facility and includes a state-of-the-art 10,000 ft² open concept laboratory space with full access to resources including mass spectrometers, proteomics, liquid chromatography, single cell sequencing, tissue culture and lentiviral rooms, basic and confocal microscopy, bioinformatics and computational servers, and basic research equipment (gel imaging, chemidoc, qPCR, mesoscale discovery). Dr Armstrong’s space is further equipped with an anaerobic chamber, microinjection systems for use in organoid models, and pathology equipment; her team is fully equipped to conduct, in vitro, in vivo, and ex vivo studies through funding
received from Weston Family Foundation and the University of Manitoba.

**Dr. Kowalec**

Dr. Kowalec’s laboratory is based out of the University of Manitoba, Rady Faculty of Health Sciences, College of Pharmacy. The College of Pharmacy occupies space in the Apotex Building of the University of Manitoba, Bannatyne Campus. This includes four floors of the building (70,000 ft² of usable space and 13,125 ft² of research dedicated space). The office space is solely for those in the College of Pharmacy (28 Faculty offices), and have locked, dedicated, video surveillance, climate-controlled server room, and shared access to 12 conference rooms. All of the College of Pharmacy Faculty, Professional, and classified Staff have private offices in this space, including Dr. Kowalec (200 ft²) and a shared office for an associate (100 ft²). Other resources include:

**Computing Equipment:** All faculty at the University of Manitoba have secure computers (either Microsoft or Macintosh based) with encrypted hard drives and protected by firewalls. The server room at the Rady Faculty of Health Sciences facility is locked, monitored by video surveillance, and is climate-controlled. Any data for this project will be stored on a secure server located at the Rady Faculty of Health Sciences. All computer workstations at the University of Manitoba feature encrypted hard drives. Specifically, for Macintosh computers, FileVault 2, a disk encryption program is installed. FileVault 2 uses an encryption method known as “XTS-AES-128 encryption with a 256-bit key” to encode the information on a disk. This method is recommended by National Institute of Standard and Technology, the non-regulatory agency of the US Department of Commerce. Specialized computers possess the computational requirements for data analysis and parallel processing for this proposal. Additionally, as a member of the University of Manitoba, Dr. Kowalec can access Compute Canada, which features 5 computer clusters: Arbutus, Beluga, Cedar, Graham, and Niagara. Arbutus is a cloud computing system which allows for launching and customizing virtual machines. Beluga, Cedar, and Graham are general purpose clusters and accessible via SSH. The available storage for Cedar (the largest server) is as follows: 250TB (total home space, with daily backup), 3.7PB (scratch space, parallel high-performance filesystem) and 10PB (project space, external persisting storage). Niagara is a homogeneous cluster designed for large parallel jobs (1,040 cores) with 1,548 nodes each with 40 Intel Skylake cores at 2.4GHz, for a total of 61,920 cores. All nodes have available secure storage and computing for handling HIPAA-protected personal health data, including administrative health data and genetic data. Software necessary for the analysis, interpretation, and reporting of genetic and clinical data available to the study investigators include Microsoft Office, RedHat, SAS, SPSS, and R-Studio. This is in addition to hundreds of genetics and bioinformatics software available through the Compute Canada servers.

**Province of Manitoba Administrative Data Linkages:** One of the most extensive and comprehensive administrative data linkages in Canada is housed at the University of Manitoba: The Manitoba Centre for Health Policy (MCHP). Population-based administrative health and non-health data for the entire Province of Manitoba, which is approximately 1.2 million individuals is managed and stored within the Manitoba Population Research Data at MCHP. MCHP is a research unit within the Department of Community Health Sciences, in the Max Rady College of Medicine, Rady Faculty of Health Sciences at the University of
Manitoba. MCHP is a team of more than 60 University researchers, data managers, systems analysts, and research support staff, including Dr. Kowalec.

Examples of databases and other resources available through MCHP include:

**Registries:** the Manitoba Health Insurance Registry and Vital Statistics Mortality Registry.

**Healthcare:** hospital visits, physician visits, emergency departments and specialists, homecare, long term care, and personal care homes, and pharmaceutical drug prescriptions.

**Education:** school programs, grades, graduation rates, child support programs, and adult education program.

**Social:** services provided to families, children in care, employment/income assistance and social housing.

**Justice and Criminality:** prosecutions and court appearances.

**Mental Health:** diagnostic information (according to the International Classification of Diseases, ICD), encounter information, programs, therapists, therapies, and demographic information such as living arrangements, marital status, and education.

*Note: For a complete list of MCHP resources, please see the following link:*

**Province of Manitoba Newborn Screening Program:** Using administrative data identifiers, we can anonymously identify stored samples for genotyping. Newborn screening in Manitoba began in 1964, whereby dried blood spots are obtained by heel poke shortly after birth from ~100% of babies born in Manitoba for screening of treatable metabolic and endocrine disorders. Parents may refuse newborn screening and have the option of excluding samples for future research. These blood cards are stored ≥25 years and are available for research, upon ethics and committee approvals. A small punch (~3 mm) will be extracted for each sample, equivalent to 5-6 μl of whole blood, and the remaining sample is returned to the archives. The Danish and Swedish dried blood spot programs do not require explicit consent from individuals (similar to the Manitoban Newborn Screening spots) and have facilitated vital research.

**Statistical Consulting Resources:** Also located at the Rady Faculty of Health Sciences is the Centre for Healthcare Innovation, which offers support on a per project-basis for the following: consults on research design, data collection, data analysis, and results interpretation; advice on statistical computing for a variety of software, including SAS, SPSS, R and lastly, sample size and power calculations.

**Dr. Wright**

Dr. Wright’s research space is located in the Neuroscience Research Program (NRP) within the Kleysen Institute for Advanced Medicine. This 7,500 ft² facility was established with $65M in infrastructure and faculty recruitment. The NRP is equipped with state-of-the-art infrastructure, including tissue culture facilities, gene editing, advanced fixed and live cell imaging, MRI and PET imaging, proteomics and animal modeling. Shared facilities include cryostat, level 2 and 2+ biosafety cabinets, tissue culture facility with incubator, autoclave,
automated glass washer, ultracentrifuge, gel documentation system, BioRad Chemidoc imager, real-time PCR, tissue homogenizers, vibrating microtomes and -80 freezers. Dr. Wright has dedicated computational server space in the John Buhler Research Centre for the analysis of high throughput genomic data.

Drs. Marrie, Marriot, and Patel

Drs. Marrie, Marriot, and Patel are clinician-scientists who hold faculty positions within the University of Manitoba and clinical appointments within Shared Health. They have access to patient exam rooms throughout Health Sciences Centre Winnipeg (i.e., MS Clinic, 7th Floor of the Thorlakson Building, and PsychHealth), and collectively employ 2 Research Coordinators, and a Research Nurse for research involving human participants.

(ii) An indication of future requirements, including a proposed strategy for obtaining these resources.

Although not a requirement, it is foreseeable (and indeed one of the primary goals motivating the formation of the MMSRC) to better position this group of MS researchers to enhance our competitive edge in applying for large-scale team grants (e.g., New Frontiers, etc.), infrastructure grants (e.g., CFI Innovation Fund, etc.), and potentially attract private donations that could/would be used to acquire new state-of-the-art research equipment and perhaps even infrastructure to physically bring our members closer together in a shared research space. Another, longer-term goal (again, not a requirement per se) would be to expand our collaborative network – and perhaps eventually recruit new staff/faculty members – to bring in experts in “big data” analytics (e.g., data science, predictive modeling, machine learning, etc.). Although working within our established research domains can lead to exciting new advances, combining findings across studies and from multiple modalities has the potential to fill in gaps between basic and clinical research, and leads to transformative breakthroughs in disease mechanisms and treatments.

Relationship with other research groups within the University of Manitoba

Establishment of the MMSRC will further strengthen the neuroscience research community in Manitoba. Existing affiliations and collaborations of the MMSRC core membership with other neuroscience centers and networks include the Spinal Cord Research Center (SCRC), the Neuroscience Research Program at HSC, the Division of Neurodegenerative Disorders at St. Boniface, the Manitoba Neuroscience Network (MNN), and the Medical Rehabilitation and Kinesiology Groups at Fort Garry. The MMSRC will invite researchers within these groups to present at MMSRC seminar series and annual research day. Most Fort Garry faculty members and trainees with a neuroscience focus are members of the Manitoba Neuroscience Network (MNN). Establishment of the MMSRC will be announced through MNN’s email communications and social media platforms and by direct communications with the units located at the Fort Garry campus. The MSSRC will work closely with HSC leadership in the establishment of the proposed Manitoba Brain Institute (see letters from Drs. Anderson and Beaudin), with the mutual goal of promoting neuroscience research in Manitoba. Given the strength of MS basic, translational and clinical
research at the University of Manitoba and the Health Sciences Centre MS Clinic, the MMSRC will be uniquely positioned to significantly contribute to the collective goal of enriching these neuroscience training and research programs.

**Relationship with other groups and organizations outside the University of Manitoba**

The MMSRC Outreach and Public Relations Committee will take leadership in identifying stakeholders and knowledge users to join the centre. As indicated above, the MMSRC will announce its establishment through the Manitoba Neuroscience Network that has a broad membership locally including the University of Winnipeg and Brandon University. Additionally, we will send emails to the Vice President of Research of these universities to announce the establishment of MMSRC and its mission. This would facilitate engaging researchers outside of U of M.

Nationally, we will introduce MMSRC to the Canadian MS community and stakeholders through the MS Society of Canada. Drs. Karimi and Figley (MMSRC Director and Associate Director) and several other MMSRC core members serve on various scientific and advisory committees of the society. Importantly, MMSRC core members have already been engaged in outreach and networking activities organized by the MS Society of Canada and its Manitoba Division. As an example, MMSRC members have worked closely with the endMS National Training Program to promote mentorship and networking opportunities for MS trainees from across Canada. Due to these efforts, University of Manitoba has been selected to host the 2024 endMS Summer School in Winnipeg. This opportunity will provide a great platform for MMSRC to enhance its engagement at local, provincial, and national outreach activities. Moreover, Dr. Pamela Kanellis, the Assistant Vice President of Research of the Multiple Sclerosis Society of Canada, and Mr. Brian Lerner, a public figure in MS advocacy, are both confirmed members of the MMSRC External Advisory Committee.

**Composition of MMSRC External Advisory Board**

**Dr. V. Wee Yong**

Dr. Yong is a Professor and Canada Research Chair in Neuroimmunology at the Hotchkiss Brain Institute and the Departments of Clinical Neurosciences and Oncology at The University of Calgary. He is a world-renowned MS researcher who directs both the provincial Alberta MS Network and the Alberta endMS Regional Research and Training Center and co-leads the MS NeuroTeam at the University of Calgary. Dr. Yong is a past Chair of the Medical Advisory Committee of the MS Society of Canada, past President of the International Society of Neuroimmunology, and continues to co-direct its Global Schools of Neuroimmunology. He received the 2003 Queen’s Golden Jubilee Medallion for volunteer activities on behalf of the MS Society of Canada, and is an elected fellow of both the Canadian Academy of Health Sciences and the Royal Society of Canada. Dr. Yong received the 2017 Allyn Taylor International Prize in Medicine, and has published over 335 peer-reviewed articles with >24,000 citations (h-index of 89).
Dr. Sarah Morrow

Dr. Morrow is an Associate Professor in the Department of Clinical Neurological Sciences at Western University (London, ON), and a neurologist in in the London MS clinic and London Health Sciences Centre. In addition to her clinical work, Dr. Morrow has an active research program, with over 70 peer-reviewed publications in the area of MS. She established the first MS Cognitive clinic in Canada (located at the Parkwood Institute), is a Board Member for the Consortium of MS Centers, and sits on the editorial boards of both the International Journal of MS Care and the Canadian Journal of Neurological Sciences. She is on the steering committee of MS in the 21st Century, an international collaboration with the aim of defining how MS treatment and standard of care should look in the 21st century. Dr. Morrow’s research interests focus on cognition in MS and the use of corticosteroids for the treatment of relapses in MS.

Dr. Pamela Kanellis

Dr. Pamela Kanellis is the Assistant Vice President of Research with the Multiple Sclerosis Society of Canada. Over the last 10 years, she has been working with cross-sector stakeholders to support research and innovation. Most recently, she was a Senior Director, Research at the Canadian Institute for Advanced Research, a Canadian-based organization that brings together interdisciplinary research networks to address questions of global importance. In addition to working with international research networks, she also led the CIFAR Azrieli Global Scholars program that aims to develop the next generation of research leaders.

Mr. Brian Lerner

Mr. Brian Lerner practices corporate and commercial law, focusing on mergers/acquisitions, corporate finance, corporate governance, commercial real estate and other general commercial law matters. Mr. Lerner has also been an extremely active member of the MS community at both the local and national levels. He established the Hilary Kaufman Lerner Memorial Fund through the University of Manitoba, and has also previously chaired the Board of Directors of the Manitoba Division of the Multiple Sclerosis Society of Canada, served on the Board of Directors for the national Multiple Sclerosis Society of Canada (2009-2012), and is a current member of the Board of Directors for both the True North Youth Foundation and the Health Sciences Centre Foundation.
g) **Financial Resources.** This shall include a detailed budget proposal for the first three to five years, which includes the anticipated revenue from all sources (i.e. University, government, industry, recovery of indirect costs, royalties, etc.) and proposed annual operation costs, as well as plans for seeking external funding.

**BUDGETED REVENUE (First 5 Years):**

<table>
<thead>
<tr>
<th>Initial Start-Up Revenue</th>
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<tbody>
<tr>
<td>RFHS Dean’s Office</td>
<td>$15,000</td>
</tr>
<tr>
<td></td>
<td>*Outlined in LOS from Dr. Peter Nickerson</td>
</tr>
<tr>
<td>HSC Research Department</td>
<td>$12,000</td>
</tr>
<tr>
<td></td>
<td>*Outlined in LOS from Dr. Paul Beaudin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Operating Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual MS Research Day</td>
<td>$2,600 (x5 years) = $13,000</td>
</tr>
<tr>
<td></td>
<td>30 Trainees and research staff @ $20 registration</td>
</tr>
<tr>
<td></td>
<td>20 Faculty and clinicians @ $100 registration</td>
</tr>
<tr>
<td></td>
<td><strong>Total: 40,000</strong></td>
</tr>
</tbody>
</table>

**BUDGETED EXPENDITURES (First 5 Years):**

<table>
<thead>
<tr>
<th>Initial Start-Up Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MMSRC Website Development</td>
<td>$0 (in-kind contribution from RFHS)</td>
</tr>
<tr>
<td></td>
<td>*Outlined in LOS from Dr. Peter Nickerson</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Operating Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Website Hosting and Maintenance</td>
<td>$0 (in-kind contribution from RFHS)</td>
</tr>
<tr>
<td></td>
<td>*Outlined in LOS from Dr. Peter Nickerson</td>
</tr>
<tr>
<td>External Visiting Speakers (two per year)</td>
<td>$0 (in-kind contribution from MNN)</td>
</tr>
<tr>
<td></td>
<td>*Outlined in LOS from Dr. Chris Anderson</td>
</tr>
<tr>
<td>Annual MS Research Day</td>
<td>$7,500 (x4 years) = $30,000</td>
</tr>
<tr>
<td></td>
<td>$0 (1 year; in-kind contribution from MNN)</td>
</tr>
<tr>
<td></td>
<td>*Outlined in LOS from Dr. Chris Anderson</td>
</tr>
<tr>
<td>Annual Trainee Awards</td>
<td>$2,000 (x5 years) = $10,000</td>
</tr>
<tr>
<td>(1,750 for two travel awards, 300 for three poster prizes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total: $40,000</strong></td>
</tr>
</tbody>
</table>

In terms of direct financial support, The University of Manitoba Rady Faculty of Health Sciences Dean’s Office (Dr. Peter Nickerson) has committed $15,000 and The Health...
Sciences Centre Research Department (Dr. Paul Beaudin) has committed an additional $12,000. Revenue to cover all additional operating costs will be generated via registration fees for the Annual MS Research Day, where exact registration rates can be determined depending on anticipated registration numbers.

**In addition to direct costs, a number of commitments have been made for significant in-kind contributions.** In particular, The University of Manitoba Rady Faculty of Health Sciences Dean’s Office (Dr. Peter Nickerson) has committed to support the development and maintenance of the MMSRC website, and to host it on the University server. The Manitoba Neuroscience Network (MNN; Dr. Chris Anderson) has committed to allot two external speakers per year to the MMSRC from the MNN Seminar Series. The other Monthly MNN Seminars will be held virtually to minimize cost and facilitate participation from MMSRC members across Manitoba; however, while these two presentations will be broadcast online as well, this will provide a fantastic opportunity to bring in high-profile MS researchers to Winnipeg to meet local MS researchers (including trainees) and discuss current/future collaborations. Moreover, the MNN (Dr. Chris Anderson) has committed to feature MS during one of the upcoming Annual MNN Conferences (in lieu of that year’s Annual MS Research Day). This will be an incredible opportunity to bring in an additional, world-renowned MS Researcher, and to highlight all of the cutting-edge MS research happening right here in Manitoba with not only all of the MMSRC members, but also the broader Manitoba neuroscience research community.

Finally, although external funding is not required to support any of the proposed MMSRC initiatives within the first five years, pursuing large team operating/infrastructure/training grants is certainly one of the longer-term goals of the centre. Once established, MMSRC leadership and members (with the advice of the External Advisory Committee) will discuss strategic opportunities for external funding through outreach and fundraising activities and industry partnerships.

**(h) Statements of Support and Commitment.** Letters of support and commitment should be signed by the appropriate University officer(s) (i.e. department head, dean/director, the Vice-President (Research and International)). Any commitments or agreements to provide space, teaching release time or other resources, including the recovery of indirect costs from contract research, should be documented and signed by those authorized to make such commitments in the absence of such statements, it will be assumed that no such commitments or agreements have been made.

Support letters have been provided by:

Internal
- Dr. Peter Nickerson, Vice Dean of Research, RFHS, University of Manitoba
- Dr. Paul Beaudin, Director of Research and Innovation at Shared Health/Health Sciences Center Winnipeg
- Dr. Christopher Anderson, Head of the Department of Pharmacology and Therapeutics, University of Manitoba, and the President of the Manitoba
Neuroscience Network
- **Dr. Peter Cattini**, Head of the Department of Physiology and Pathophysiology, RFHS, University of Manitoba

**External**
- **Dr. Wee Yong** (External Advisory Committee Member), Director, Alberta MS Network, at the Hotchkiss Brain Institute and the Departments of Clinical Neurosciences and Oncology at The University of Calgary
- **Dr. Sarah Morrow** (External Advisory Committee Member), Associate Professor in the Department of Clinical Neurological Sciences at Western University
- **Dr. Pamela Kanellis** (External Advisory Committee Member), Assistant Vice-President Research, The Multiple Sclerosis Society of Canada
- **Mr. Brian Lerner** (External Advisory Committee Member), B D Lerner Law Corporation, Past Director, Multiple Sclerosis Society of Canada, and past Chair of the Board of Directors, Multiple Sclerosis Society of Canada (Manitoba Division)
- **Dr. Christina Wolfson**, Director of endMS Training Program, the Multiple Sclerosis Society of Canada.
October 18, 2021

Dr Digvir Jayas  
Vice-President (Research & International)  
University of Manitoba  
207 Administration Building  
Fort Garry Campus

Dear Dr Jayas,

On behalf of the Rady Faculty of Health Sciences, it is my pleasure to lend strong support for the establishment of the Manitoba Multiple Sclerosis Research Centre (MMSRC) as a Senate and University approved centre at the University of Manitoba. This centre will build on the strength of the existing world-class basic, translational and clinical research programs in multiple sclerosis (MS) in Manitoba. The vision of bringing together researchers, clinicians, knowledge users and stakeholders to facilitate collaborations and knowledge translation in MS research and care is innovative and timely for the University of Manitoba and the Province. MS is a chronic disease of the central nervous system that results in severe long-life disabilities in affected individuals who are often diagnosed at young age. Due to its high prevalence in Canada and the Prairie Provinces in particular, MS represents one of the greatest health challenges in Canada with high socioeconomic impact on Canadians and the health care system. As such, the MMSRC mission is closely aligned with the RFHS and the strategic plan of the University of Manitoba to promote translational research and knowledge mobilization in established areas of research excellence in Manitoba.

The MMSRC will integrate all three major areas of research in the MS field: basic, translational and clinical. Within these pillars, there are cutting-edge research programs within the RFHS with strong track records of accomplishments and histories of successful collaborations locally and externally. Formation of the MMSRC will create the necessary platform to promote the visibility of Manitoba MS researchers and position Manitoba and the University as a leading centre in the field of MS to attract top trainees and researchers to Manitoba. Neuroscience is an area of research priority for the University of Manitoba and the MMSRC will strengthen the existing neuroscience groups across the university and affiliated institutions such as the Spinal Cord Research Centre at RFHS, the Division of Neurodegenerative Disorders at St. Boniface, the Neuroscience Research Program in KIAM, as well as the Biomedical Engineering Program at the Fort Garry Campus. Importantly, the MMSRC will form a close partnership with community stakeholders including the MS Society of Canada and the Health Sciences Centre Foundation, among others, that will facilitate knowledge mobilization, public outreach, commercialization and fundraising activities.
In summary, RFHS will strongly and unreservedly support this initiative and is committed to facilitate establishment of this centre. We will also support creation and maintenance of a dedicated website for the MMSRC on the university server. Moreover, the Dean will provide $7500 per year for 2 years to support initial MMSRC investigator meetings to help launch the research agenda of the Centre.

I would be happy to provide further information if required.

Peter Nickerson, MD, FRCPC, FCAHS
Vice-Dean (Research) and Distinguished Professor
Flynn Family Chair in Renal Transplantation
Rady Faculty of Health Sciences | University of Manitoba

Medical Director, Transplant Manitoba
Medical Consultant, Transplant Immunology Laboratory
Date: October 28, 2021

Dear Committee Members:

This letter is in strong support of establishing the Manitoba Multiple Sclerosis Research Centre (MMSRC). We know the prevalence of MS in Manitoba is particularly high compared to other Canadian jurisdictions. With a relatively early onset of disease, MS has long-term effects with significant impacts on quality of life for individuals and their families. MS also has ongoing impacts on health systems regarding treatment and management of the disease over the patient’s lifespan.

Research in basic, translational, and clinical areas surrounding MS has been growing in recent years throughout Manitoba. Establishing the MMSRC is an excellent opportunity to harness and emphasize the potential for exponential gains in MS research knowledge via deliberate collective efforts among researchers in Manitoba. Our healthcare system strives to improve patient quality of life, while also seeking to reduce the impact of care on increasingly constrained health services. Finding effective treatments for this debilitating disease is an excellent example of how this can be accomplished and has a high value in our healthcare system.

Shared Health Research and Innovation is moving towards developing and supporting more collaborative ‘bench to bedside’ programs of research. The MMSRC is an excellent example of a collective approach to coordinating research on complex disease and the impact on patients. As part of a larger collaborative vision, discussions are underway between the Rady Faculty of Health Sciences, Shared Health and the HSC Foundation to develop a larger strategic institute in neurosciences research. In this greater collaborative vision, MS research via the MMSRC would be well poised to fit within this institute model as a major area of research emphasis.

As the Director of Shared Health Research and Innovation, I am highly supportive of this application and am happy to provide financial assistance in the sum of $12,000 towards the development and establishment of the MMSRC.

Sincerely,

Paul Beaudin, MSc-SLP, PhD
Director of Research and Innovation
Shared Health
HSC MS750-820 Sherbrook Street, Winnipeg, MB R3E 1R9
O (204) 787-4128 | C (204) 391-1582 | F (204) 787-4547
Senate Committee for University Research  
University of Manitoba  

October 12, 2021  

Dear Committee Members:  

This letter is intended to support the application to establish the Manitoba Multiple Sclerosis (MS) Research Centre at the University of Manitoba (MMSRC). The latest University of Manitoba strategic research plan established integrative research in health and well-being as a major theme of emphasis. It articulates a vision to form research “Clusters” comprised of multidisciplinary, multi-pillar researchers who consolidate strengths and engage patients and decision makers to address specific gaps in health research.  

This application epitomizes that strategy by bringing together exceptional individual researchers from several separate but related disciplines, to forge a focused research team dedicated to improving outcomes for patients with MS and their caregivers. The MMSRC combines a diverse group of male and female researchers at all career stages, with world-class expertise in fundamental neurosciences, therapeutic development, neuroimaging, clinical MS care, clinical trials, epidemiology, genetics and precision medicine. While each team member has an established or emerging track record of research excellence, together they have strong synergistic potential to produce transformational outcomes that generate tangible improvements in clinical care for Manitobans with MS. In doing so, they are likely to advance their collective international footprint in MS research and thrive in national and international MS research networks of excellence.  

The MMSRC also fits the overarching vision for neurosciences research in Manitoba. Over 65 neuroscientists are currently distributed throughout several UM faculties, colleges and departments. Since the 2010 founding of the Manitoba Neuroscience Network (MNN), there has been collective intent to unite the research, outreach, training and fundraising visions of Manitoba neuroscientists. Between 2009 and 2015, the UM and Shared Health Manitoba earmarked over $65 million to create state-of-the-art infrastructure and recruit world-class neuroscientists to the Kleysen Institute for Advanced Medicine. This group is powered by a collaborative partnership among the Rady Faculty of Health Sciences, Shared Health Manitoba and the Health Sciences Centre Foundation. Emergence of this program and these partnerships is empowering the next step, with a vision to create a brain sciences institute at the HSC. The institute model in development will unite UM and HSC areas of strength in clinical areas important to Manitobans, including traumatic brain injury, autism spectrum disorders, Parkinson's disease, stroke, dementia and mental health disorders. Establishment of the MMSRC, with HSC and UM experts, will enable extension of the institute model to incorporate MS as a major area of emphasis.  

Emergence of the MMSRC is timely and helps underpin development of an institute as a major emerging strategic neurosciences initiative. Accordingly, the MNN would like to support the initiative in any way possible. The MNN has an established seminar and visiting speaker program, and is pleased to dedicate support for 2 visiting speakers per year related to MS research. The in-kind value of this contribution is estimated at $5000 per annum and is intended to fuel collaboration and connectivity that further strengthens MS research in Manitoba. In addition, the MNN will support MS research by agreeing to establish MS as the theme of its 2022 or 2023 annual scientific meeting, and is open to finding ways of
highlighting MS research each year at this event.

Overall, I am very supportive of this application. MS affects Manitobans disproportionately compared to other regions of the world. Thus, it is important for our Manitoban research community to establish MS as a research focus. That has been happening with the gradual recruitment and now emergence of a strong group of individuals with common ties in MS. Now is an opportune time for these individuals to unite with the objective to improve health and well-being of Manitobans by integrating basic, clinical, health systems and population-based research. As Director of the Kleysen Institute for Advanced Medicine Neuroscience Research Program and President of the Manitoba Neuroscience Network, I am pleased to help this effort in any and all ways that I can.

Sincerely,

Chris Anderson
Director, Neuroscience Research Program
Kleysen Institute for Advanced Medicine
University of Manitoba and Shared Health Manitoba

Chris Anderson, PhD
Director, Neuroscience Research Program
Kleysen Institute for Advanced Medicine
University of Manitoba and Shared Health Manitoba

Digitally signed by Chris Anderson
Date: 2021.10.16 10:04:09 -05'00'
October 5, 2021

Dr. Digvir Jayas
Vice-President (Research and International)
202 Administration Bldg.
66 Chancellors Circle
University of Manitoba
Winnipeg, MB R3T 2N2 Canada

Dear Dr. Jayas:

I am writing this letter to strongly and enthusiastically support the creation and establishment of the Manitoba Multiple Sclerosis Research Centre (MMSRC) and its research team, under the leadership of Dr. Soheila Karimi as Director.

Dr. Karimi is a Professor in the Department of Physiology & Pathophysiology with a documented history of competitive research funding focused on multiple sclerosis, including neuroinflammation, myelin repair, stem cells and regenerative medicine. Dr. Karimi is a natural leader, highly motivated, with demonstrated organizational skills and a strong work ethic. Dr. Chase Figley, an Associate Professor in the Department of Radiology is identified as the Associate Director. The research team includes an additional six core members; specifically, three active biomedical scientists (Dr. J. Kornelson/Radiology, Dr. K. Kowalec/Pharmacy, and Dr. G. Wright/Pharmacology & Therapeutics) and three clinicians (Dr. R.A. Marrie and Dr. J. Marriott/Internal Medicine, and Dr. R. Patel/Clinical Health Psychology). Their common interest, complementary expertise and commitment to collaborate will increase competitiveness for funding as well as the potential for knowledge discovery and translation to treat, reverse and/or hopefully cure multiple sclerosis.

This proposal is also timely and fills a void at our University and in Manitoba. I am convinced that the MMSRC will provide an opportunity for greater networking across the country and internationally, as well as the basis for new research and training opportunities at our Institution because of its multidisciplinary focus on a highly relevant disease in Manitoba and Canada. The MMSRC will certainly enrich the overall education and training programs within our Department. The quality of the research team and its leadership makes me confident that once a centre focussed on multiple sclerosis is established, it will help attract top trainees that are interested in basic, clinical and translational research in multiple sclerosis to the Department and the University of Manitoba. Drs. Karimi, Figley and Kornelson already have a track record of recruiting and supervising trainees in our Graduate Program.

Once again, I strongly and enthusiastically support this initiative.

Sincerely,

[Signature]

Peter A. Cattini
Professor & Head
Physiology & Pathophysiology
Henry G. Friesen Chair
Endocrine & Metabolic Disorders
University of Manitoba
October 2, 2021

Dr. Soheila Karimi  
Professor  
Department of Physiology and Pathophysiology,  
Rady Faculty of Health Sciences, Max Rady College of Medicine,  
University of Manitoba

Dear Dr. Karimi:

This letter is to confirm my strong enthusiasm and support in the establishment of the Manitoba Multiple Sclerosis Research Centre (MMSRC), where you will be the founding director. Having gone through a similar experience here at the University of Calgary in co-directing the Hotchkiss Brain Institute’s Multiple Sclerosis Program since its inception in 2004, and also in founding and directing the Alberta MS Network in 2009, I cannot emphasize enough the importance of your initiative. Let me predict some of your forthcoming successes as a result of having a center dedicated to MS research and training, based on my own experience here.

With a center dedicated to MS research activities, you will elevate your capacity to attract new talents (scientists and trainees) to the University of Manitoba. You will have a number of laboratories currently working on inflammatory and neuroscience research transfer some of their expertise to the MS network, further increasing your critical mass. The center will become a home for interdisciplinary basic science, clinical and translational collaborations, thereby facilitating the translation of bench findings to the clinic to improve the prognosis of MS. Donors will now have an identifiable focus and center to contribute to, providing much needed resources to escalate your university’s already strong activities in MS. Pharmaceutical companies with programs in MS will seek you out, in an effort to conduct innovative academic-industry collaboration and discoveries that benefit all sectors. MMSRC will also serve as a beacon of hope for people living with MS. Your trainees at MMSRC will also have a dedicated focus of giving back to the community, thereby teaching the next generation on conducting science that is not only fundamental in nature, but also socially responsible.
I can go on elaborating on some more benefits, but I hope that I have highlighted enough the importance of MMSRC. Moreover, with you leading the helm, and with your well known international reputation in neuroscience and your dynamic energy, I have no doubt that Manitobans and Canadians will reap the benefits of the discoveries at MMSRC for many years to come.

Thank you also for the honor of serving on your External Advisory Committee. I am very happy to accept your invitation. I look forward to the many discoveries and contributions that will be made at MMSRC for many years to come.

Yours sincerely,

V. Wee Yong, PhD, FCAHS, FRSC
Professor
Co-Director, Hotchkiss Brain Institute MS Brain and Mental Health Team
Director, Alberta MS Network
President (2014-2016), International Society of Neuroimmunology
September 28, 2021

Dr. Soheila Karimi, PhD  
Professor, Department of Physiology & Pathophysiology  
Rady Faculty of Health Sciences  
University of Manitoba  
Room 629 BMSB - 745 Bannatyne Avenue  
Winnipeg, MB, R3E 0J9

Dear Professor Karimi:

I am pleased to write this letter in support of the proposed Manitoba Multiple Sclerosis Research Centre (MMSRC) and serve as an External Advisory board member. Based on the history of MS research, as well as the growing number of MS researchers in Manitoba, the formation of this Centre is timely and should help to elevate the profile of important basic, translational, and clinical work being conducted at the University of Manitoba, Health Sciences Centre – Winnipeg, and elsewhere throughout the province. I certainly agree that bringing together basic scientists, clinician scientists and trainees will enhance the quality and quantity of local collaborations, as well as improve the training environment and networking opportunities for graduate students, residents, and fellows in MS.

Other prairie provinces with established MS research networks and centres (i.e., the Alberta MS Research Network and the Cameco MS Research Centre in Saskatchewan) have also had excellent success in terms of public outreach and raising local awareness among MS patients and other community members about the importance of MS research, so I commend the comprehensive public outreach plan of the MMSRC to do the same in Manitoba.

For these reasons, I gladly accept your invitation to serve on the External Advisory Board, and look forward to working together to guide the exciting efforts of the MMSRC.

Sincerely,

Warm regards,

Sarah A. Morrow MD, MS, FRCPC, FAAN  
Associate Professor of Neurology  
Director, London (ON) MS Clinic  
Department of Clinical Neurological Sciences  
University of Western Ontario (Western)
August 26, 2021

Soheila Karimi, PhD
Professor, Dept. of Physiology & Pathophysiology
Chair, Departmental Award and Recognition Committee
Scientist, Children’s Hospital Research Institute of Manitoba
Principal Investigator, Spinal Cord Research Center, Rady Faculty of Health Sciences, Max Rady College of Medicine
University of Manitoba
745 Bannatyne Avenue, 629 BMSB
Winnipeg, MB R3E 0J9

Dear Dr. Soheila Karimi,

The Multiple Sclerosis Society of Canada is writing a letter of support for the proposal to establish the first Manitoba Multiple Sclerosis Research Centre (MMSRC). The mission of the MMSRC will be to bring together researchers, clinicians, trainees and knowledge users committed to advancing MS research and care in Manitoba.

The MS Society of Canada is an organization with a mission to connect and empower the MS community to create positive change. Since 1948 the MS Society of Canada has provided over $200 million in funding for MS research. As part of our mission, the MS Society of Canada aims to accelerate, disseminate and support research in MS. The MS Society of Canada supports research that is fundamental as well as applied, non-clinical or clinical in nature, including projects in patient management, care and rehabilitation.

The MS Society is in support of the establishment of this new centre focused on multiple sclerosis and believe this is timely and has the potential to promote collaboration among the exceptional researchers in Manitoba. The MMSRC has the potential to increase the visibility of Manitoba MS research in both national and international MS research communities. Additionally, the MS Society is pleased to be offered a position to serve on the External Oversight Advisory Board for the MMRSC where we can help amplify the centre’s successes and work together to help translate research findings to the broader MS community.

Sincerely,

Pamela Kanellis, PhD
Assistant Vice-President, Research
Multiple Sclerosis Society of Canada
October 18, 2021

Dr. Soheila Karimi, PhD
Professor, Department of Physiology & Pathophysiology
Rady Faculty of Health Sciences
University of Manitoba
Room 629 BMSB - 745 Bannatyne Avenue
Winnipeg, MB, R3E 0J9

Dear Dr. Karimi:

Re: Manitoba Multiple Sclerosis Research Centre

I am pleased to provide this letter in support of the proposed Manitoba Multiple Sclerosis Research Centre.

By way of background, I am a former member of the national board of directors of the MS Society of Canada, as well as a former chair of the Manitoba Division. More importantly, my late wife, Hilary, lived with MS for over 30 years from her diagnosis until her passing in 2016. I was privileged to share in her life, and the many challenges she faced in dealing with her illness and with the limited medical options available to her in Manitoba during that time.

I believe my experiences give me some degree of insight into the importance of having a local centre of research excellence. With full knowledge of the high rate of incidence of MS in Manitoba, it never ceased to amaze both Hilary and me how little research was being undertaken here. In particular, while some incredible efforts were and are being made on an individual basis, the lack of a comprehensive and coordinated approach to research in Manitoba has been a sore point in our general “MS community of stakeholders” for far too long.

A centre focused on bringing together dedicated researchers and other medical professionals, in an organized and collaborative manner, is long overdue in Manitoba. From a community perspective, this would be a game changer. To start, it would elevate expectations and provide greater hope for those most affected in our province, simply by virtue of the knowledge that we choose to make research a priority. More tangibly, an expanded and dedicated team of researchers would undoubtedly strengthen and increase the scope of collaboration, recruitment and training, and move Manitoba to a position of prominence in national and global research. This in turn cannot but help to lead to better access to funding sources outside Manitoba and ultimately, real and timely improvements in the treatment and care directly available for Manitobans.
I have no doubt that this proposed research centre will be embraced by stakeholders and the community at large. It will serve as a beacon of hope and a rallying point for all those in our province whose lives have been affected by MS. This project deserves the full support of those who make health policy and funding decisions. I humbly offer my full support and promise to do what I can to help make this project a success.

Yours truly,

MLT AIKINS LLP

Per:  
Brian D. Lerner

BDL: cw
October 5, 2021

Dr. Soheila Karimi, PhD
Professor
Dept. of Physiology & Pathophysiology
Scientist, Children’s Hospital Research Institute of Manitoba
Rady Faculty of Health Sciences, Max Rady College of Medicine
University of Manitoba
745 Bannatyne Avenue, 629 BMSB
Winnipeg, MB R3E 0J9 Canada

Dear Dr. Karimi,

On behalf of the endMS National Training Program, I am writing to provide the Program’s strong support for your upcoming application for the creation of an MS Centre in Manitoba (the Manitoba Multiple Sclerosis Research Centre MMSRC).

The goals of the endMS Training Program are threefold: to enhance knowledge and skills relevant to MS research; to increase and sustain intent to pursue MS research; and to foster opportunities to conduct MS research in Canada. There is no doubt that the proposed MMSRC will share these goals and will certainly expand these goals as part of its mission to bring together researchers, clinicians, trainees and knowledge users to advance MS research and care in Manitoba.

Since the endMS Training Program’s launch in 2010, trainees from across Canada have benefitted in several ways from the dynamic, growing MS research community in Manitoba, including the development of the program’s curriculum (Dr. Ruth Ann Marrie), hosting the 2012 endMS Summer School (Dr. Ruth Ann Marrie), contribution as a SPRINT mentor (yourself) and a SPRINT alumni who is now on faculty at the University of Manitoba (Dr. Kaarina Kowalec). This does not include the trainees in Manitoba who have attended endMS Summer Schools and engaged in the Program’s outreach and networking activities. We are excited for this to continue and be enriched through the creation of the MMSRC.

We are also delighted that you are interested in hosting a second endMS Summer School in Manitoba as early as 2024 (contingent, of course, on the continued funding of the endMS Training Program).

Best wishes,

Christina Wolfson, PhD
Director, endMS National Training Program
MEMORANDUM

From: Jeff M. Leclerc, University Secretary
To: Members of Senate Executive
Date: September 6, 2022
Subject: GOVERNING DOCUMENT DEVELOPMENT AND REVIEW POLICY REVISIONS

The Governing Document Development and Review Policy and Procedure sets out the process by which University-level governing documents are approved. The Policy also provides for an articulated approval and periodic review process for all governing documents.

Recent discussions with the Executive Lead, Equity, Diversity and Inclusion, the University’s General Counsel, and the Vice-Provost (Academic Affairs) have demonstrated the number of university-level governing documents and other university and unit-level documents that incorporate out-of-date, or non-inclusive language. The University is a constantly evolving organization in a continuously changing world. There is a need for University governing documents to reflect up-to-date language as part of its stated goals of advancing equity, diversity and inclusion.

Senate approval is required in order to proceed with the revisions to the Governing Document Development and Review Policy. The proposed update will facilitate the efficient updating of University governing documents, building upon the existing provisions of Section 2.14 of the Governing Document Development and Review Policy. A recommended resolution to be brought forward to the October 6, 2022 meeting of Senate is below:

THAT Senate approve the revisions to Section 2.14 of the Governing Document Development and Review Policy as noted below:

Previous Version:
2.14 The Office of the University Secretary is authorized to update contact information, cross references and to correct typographical errors in Governing Documents, provided that such changes do not materially affect their substance or content.

Proposed Revision:
2.14 The Office of the University Secretary is authorized to approve minor changes to university Governing Documents, provided that such changes do not materially affect the substance or content of the Governing Document. Such minor changes include:
(a) corrections of typographical errors
(b) changes in contact information or position titles;
(c) changes in names of units or departments;
(d) amendments to reflect new or amended Governing Document titles;
(e) amendments to incorporate inclusive language with respect to persons with disabilities and accessibility, and inclusion as it relates to gender identity and sexual orientation, race and ethnicity and Indigenous peoples and nations; and
(f) amendments to update references to website links included within the Governing Documents.

The University Secretary shall report annually to the President on any minor Governing Documents amendments approved under this section.

Further, endorsement by Senate and the Board of Governors is being sought to affirm that governing documents and other university publications should be inclusive with respect to persons with disabilities, accessibility, and inclusion as it relates to gender identity and sexual orientation, race and ethnicity and Indigenous peoples and nations.

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Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.
September 28, 2022

To:            Jeff Leclerc, University Secretary

From:        Diane Hiebert-Murphy, Provost and Vice-President (Academic)

Re:        Election of Senate Members to the Strategic Planning Committee

The University is undertaking a strategic planning process which will begin this fall. President Benarroch and I will be co-chairing a Strategic Planning Committee that will engage in broad consultation with the community and provide advice on a new strategic plan for the University. The plan will be brought back for review and approval by Senate and the Board of Governors.

This is an important process that will lead to a strategic plan that will help set the direction for the University of Manitoba over the next number of years. We are seeking diversity among the membership which will include representatives of various stakeholder groups across the University community. Three members of Senate elected by Senate are proposed to be among the members of the committee. These individuals will join a representative from the Board of Governors, student representatives, academic members at large, dean representatives, a representative from the broader community, and senior administrators on the Planning Committee.

The Strategic Planning Committee will meet beginning this fall and throughout the winter and spring terms, with the objective of presenting a draft report for comment in May or June, 2023 with the final plan for approval in the fall.

I would ask that Senate elect three members to serve on the Committee at its October 6, 2022 meeting with consideration to electing members from different faculties/schools.

c.c.    President Michael Benarroch