

A G E N D A

I MATTERS TO BE CONSIDERED IN CLOSED SESSION - none

II MATTERS RECOMMENDED FOR CONCURRENCE WITHOUT DEBATE

1. 2023-2024 Academic Schedule Page 3
2. Report of the Senate Committee on University Research Page 25
RE: Periodic Review, University of Manitoba Transport Institute,
Request for Extension of Term

III MATTERS FORWARDED FOR INFORMATION

1. Report of the Senate Committee on Appeals Page 26
[October 5, 2022]
2. Items Approved by the Board of Governors Page 28
[September 28, 2022]

IV REPORT OF THE PRESIDENT

V QUESTION PERIOD

Senators are reminded that questions shall normally be submitted in writing to the University Secretary no later than 10:00 a.m. on the Friday preceding the meeting.

VI CONSIDERATION OF THE MINUTES OF THE MEETING OF OCTOBER 6, 2022

VII BUSINESS ARISING FROM THE MINUTES - none

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

1. Report of the Senate Executive Committee Page 29

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.

IX	<u>REPORTS OF OTHER COMMITTEES OF SENATE, FACULTY AND SCHOOL COUNCILS</u>	
1.	<u>Reports of the Faculty Council of the Faculty of Graduate Studies</u>	
a)	RE: Proposals for a Master of Science and a Doctor of Philosophy in Pediatrics and Child Health, Department of Pediatrics and Child Health	Page 30
(i)	<u>Report of Senate Planning and Priorities Committee</u>	Page 35
b)	RE: Proposal for a Doctor of Philosophy in Pathology and Laboratory Medicine, Department of Pathology	Page 217
(i)	<u>Report of Senate Planning and Priorities Committee</u>	Page 218
2.	Report of the Senate Committee on Admissions RE: Revised Admission Requirements, Bachelor of Education, Faculty of Education	Page 304
3.	<u>Reports of the Senate Committee on University Research</u>	
a)	RE: Proposal to Convert Manitoba Public Insurance Professorship in Neuroscience to a Chair	Page 308
b)	RE: Periodic Review of Centre for Earth Observation Science	Page 315
X	<u>ADDITIONAL BUSINESS</u> - none	
XI	<u>ADJOURNMENT</u>	

Please regrets send to shannon.coyston@umanitoba.ca.



**University
of Manitoba**

Office of the Registrar and
Enrolment Services

400 University Centre
Winnipeg, Manitoba
Canada R3T 2N2
T: 204-474-8820
F: 204-474-7554

TO: Jeff Leclerc, University Secretary

FROM: Jeff Adams, University Registrar and Executive Director, Enrolment Services

DATE: October 5, 2022

SUBJECT: Proposed Academic Schedule for 2023-24

The attached proposed 2023-24 Academic Schedule has been updated based on changes in days and/or dates to conform to the 2023 and 2024 calendars and University Closure dates, along with revised information received from academic units. The proposed schedule has been reviewed by all Faculties, Colleges, and Schools. Please note the following:

1. Labour Day in 2023 is September 4; Welcome Day will take place on Tuesday, September 5 (see Section 1.2.1). Fall Term classes in most faculties, colleges and schools will begin on Wednesday, September 6 and end on Monday, December 11 (see Section 1.2.2).
2. The last day to drop a Fall Term or Fall/Winter term spanning course without academic or financial penalty is September 19. The last day to register for a Fall Term or Fall/Winter term spanning course is September 20.
3. There are three statutory holidays in the 2023 Fall Term: The National Day for Truth and Reconciliation on September 30 will be observed on October 2nd, Thanksgiving Day on October 9, and Remembrance Day on November 11 will be observed on November 13 (see Section 1.1.1).
4. The Fall Term Break, for most students, is November 13 to November 17 (see Section 1.2.5).
5. There are 62 days available for instruction in Fall Term.
6. The 2023 December Examination Period will be from December 12 through December 22 (see Section 1.2.6).
7. The university will re-open after the Winter Holiday on January 3, 2024. Winter Term classes for most faculties, colleges and schools will commence on January 8, 2024, and end on April 10. (see Section 1.2.2).
8. The last day to drop a Winter Term course without academic or financial penalty is January 19, 2024. The last day to register for a Winter Term course is January 22.

9. There are two statutory holidays in the 2024 Winter Term: Louis Riel Day on February 19, and Good Friday on March 29.
10. Winter Term Break in 2024 is February 19 to February 23 (see Section 1.2.5).
11. There are 62 days available for instruction in Winter Term.
12. The 2024 April Examination period will be from April 12 through April 26 (see Section 1.2.6).
13. The deadline for Voluntary Withdrawal is the 48th teaching day of the term for single term courses. In 2023-24 these dates are November 21 for Fall Term courses and March 20 for Winter Term courses (see Section 1.2.3).
Note: Faculties, colleges and schools offering courses with irregular schedules and withdrawal dates must ensure these are well publicized to students.
14. The Voluntary Withdrawal deadline for Fall/Winter term spanning classes is January 19. The Voluntary Withdrawal deadline for Winter/Summer term spanning distance and online courses is May 16 (see Section 1.2.3).
15. Summer Term (see Section 2) includes four standard parts of term (see Section 2.1.1). Courses may be offered outside of the standard parts of terms by exception. These include courses offered to a specific student population, field and travel-based study, intensive institutes.
 - a. May-June 3 credit hour courses begin May 6 and end June 13
 - b. July-August 3 credit hour courses begin July 1 and end August 9
 - c. May-August 3 and 6 credit hour courses begin May 6 and end August 9
16. Add/drop dates and Voluntary Withdrawal dates vary by part of term as listed (Section 2.1.2).
17. Final Examinations for May-June courses will be held June 17 – 22. Final Examination for July-August and May-August courses will be held August 12 – 17. (see Section 2.1.4)
18. There are three statutory holidays in the 2024 Summer Term: Victoria Day on May 20, Canada Day on July 1, and Terry Fox Day on August 5. Classes normally held on Monday, May 20 may be held on Friday, May 24. Classes normally held on Monday July 1 may be held on Friday, July 5. Classes normally held on Monday, August 5 may be held on Friday, August 9.
19. Convocation ceremonies (see Section 1.2.9) will be held as follows:

a. Fall Convocation (Fort Garry Campus)	October 17 - 19, 2023
b. Fall Convocation (Bannatyne Campus)	October 26, 2023
c. Spring Convocation (Bannatyne Campus)	May 16, 2024
d. Spring Convocation (Fort Garry Campus)	June 4-7, 2024
e. Université de Saint-Boniface Convocation	June 10, 2024

In addition to Convocation ceremonies, the Annual Traditional Graduation Pow Wow in honour of Indigenous students will be held on Saturday, May 4, 2024.

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.



2023-2024 Academic Schedule (updated October 5, 2022)

Admission application deadlines are found online at umanitoba.ca/student/admissions. Additional important date information for Faculty of Graduate Studies students is available at <https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum#submitting-your-thesis-to-committee-members>

Faculties, schools, colleges and/or programs may have other important dates and deadlines that are not included in the Academic Schedule.

Section 1: Dates for Fall/Winter Term	2
1.1 Dates applicable to all U of M students	2
1.2 Dates applicable to most U of M students	2
1.2.1 Orientation	2
1.2.2 Start and End Dates	3
1.2.3 Registration and Withdrawal Dates	3
1.2.4 Fee Deadlines	4
1.2.5 Term Breaks	4
1.2.6 Examination and Test Dates	4
1.2.7 Challenge for Credit	4
1.2.8 Final Grade Appeal Deadlines	5
1.2.9 Graduation and University Convocation	5
1.3 Dates applicable to Agriculture (Diploma)	6
1.4 Dates applicable to Art(School of)	7
1.5 Dates applicable to Dental Hygiene	7
1.6 Dates applicable to Dentistry (including International Dentist Degree Program)	8
1.7 Dates applicable to Education (B.Ed. only)	10
1.8 Dates applicable to Management	10
1.9 Dates applicable to Medicine (excludes Family Social Sciences)	11
1.10 Dates applicable to Nursing	12
1.11 Dates applicable to Occupational Therapy	12
1.12 Dates applicable to Pharmacy	13
1.13 Dates applicable to Physical Therapy	14
1.14 Dates applicable to Physician Assistant Studies	15
1.15 Dates applicable to Respiratory Therapy	16
1.16 Dates applicable to Social Work	17
Section 2: Dates for Summer Term	17

Section 1: Dates for Fall/Winter Term

This section contains information for Fall and Winter Terms, including distance and online courses. See section 2 for Summer Term information, including information for distance and online courses offered over Summer Term.

1.1 Dates applicable to all U of M students:

1.1.1 University Closure

When the University is closed no classes/examinations will be held.

Canada Day (observed).....	July 3, 2023
Terry Fox Day (Civic Holiday).....	Aug 7, 2023
Labour Day.....	Sept 4, 2023
National Day for Truth and Reconciliation (observed).....	Oct 2, 2023
Thanksgiving Day.....	Oct 9, 2023
Remembrance Day (observed).....	Nov 13, 2023
Winter Holiday.....	Dec 23, 2023 to Jan 2, 2024
Louis Riel Day.....	Feb 19, 2024
Good Friday.....	Mar 29, 2024
Victoria Day.....	May 20, 2024
Canada Day.....	July 1, 2024
Terry Fox Day (Civic Holiday).....	Aug 5, 2024

1.2 Dates applicable to most U of M students:

*Some additional or differing date information is included in separate sections for: **Agriculture Diploma, Architecture, Art (School of), Dental Hygiene, Dentistry (includes IDDP), Education (B.Ed. only), Management, Medicine (excludes Family Social Sciences), Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant Studies, Respiratory Therapy, and Social Work.** Students in these programs should also see their respective section of the Academic Schedule.*

1.2.1 Orientation

*Additional or differing dates exist for: **Agriculture Diploma, Dental Hygiene, Education (B.Ed. only), Management, Medicine, Nursing, Occupational Therapy, Physical Therapy, Physician Assistant Studies, Respiratory Therapy, and Social Work.** Students in these programs should also see their respective section of the Academic Schedule.*

Welcome Day Fall Term.....	Sept 5, 2023
Welcome Day Winter Term.....	Jan 5, 2024

Faculty of Architecture.....	August 25, 2023 (subject to change)
Faculty of Kinesiology and Recreation Management.....	July 6 & 11, 2023

1.2.2 Start and End Dates

Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Education, Management, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant Studies, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

Fall Term.....Sept 6 to Dec 11, 2023
Winter Term (No classes, examinations or tests will be held Mar.29, 2024).....Jan 8 to Apr 10, 2024
Winter/Summer Term spanning distance and online courses.....Jan 8 to July 4, 2024

1.2.3 Registration and Withdrawal Dates

Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Pharmacy, Physical Therapy and other faculties, colleges and/or schools offering irregularly scheduled courses. Agriculture Diploma, Dental Hygiene, Dentistry, Pharmacy, Physical Therapy students should also see their respective section of the Academic Schedule; all others should also refer to the Class Schedule.

Regular Registration Period

Fall Term and Fall/Winter Term classes.....Ends Sept 5, 2023
Winter Term classes and
Winter/Summer term spanning distance and online courses.....Ends Jan 7, 2024

Registration Revision Period

Students may use this period of time to make changes to their selected courses or class schedule. Last day to drop is 1 business day prior to the end of the Registration Revision Period.

Fall Term and Fall/Winter Term classes.....Sept 6 to 20, 2023
Winter Term classes and
Winter/Summer term spanning distance and online courses.....Jan 8 to 22, 2024

Last Date to Drop without Penalty

Last date to drop and have course excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date. There will be no refunds for courses dropped after this date. Additional or differing dates exist for Agriculture Diploma; students in this program should also see their respective section of the Academic Schedule.

Fall Term.....Sept 19, 2023
Fall/Winter Term classes Part A.....Sept 19, 2023
Fall/Winter Term classes Part B (VW recorded if dropped after Sept. 18, 2023)....Jan 19, 2024
Winter Term classes and
Winter/Summer term spanning distance and online courses.....Jan 19, 2024

Last Date to Register/Registration Revision Deadline

Fall Term and Fall/Winter Term classes.....Sept 20, 2023
Winter Term classes and
Winter/Summer term spanning distance and online courses.....Jan 22, 2024

Voluntary Withdrawal (VW) deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date.

Fall Term classes.....	Nov 21, 2023
Fall/Winter Term spanning classes.....	Jan 19, 2024
Winter Term classes.....	Mar 20, 2024
Winter/Summer Term spanning distance and online courses.....	May 16, 2024

1.2.4 Fee Deadlines

Fee Payment Deadline

A financial penalty will be assessed on accounts with an outstanding balance after this date.

Fall Term.....	Oct 4, 2023
Winter Term.....	Feb 6, 2024

***See Section 1.2.3 for the Last Day to Drop without Penalty**

1.2.5 Term Breaks

*Academic and administrative offices will be open during this period; no classes, tests or assignment due dates occur during this time. Additional or differing dates exist for: **Dental Hygiene, Dentistry, Education (B.Ed. only), Medicine, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant Studies, and Respiratory Therapy.** Students in these programs should also see their respective section of the Academic Schedule.*

Fall Term Break The U of M will be closed Monday, Nov. 13 for Remembrance Day (see 1.1.1). Nov 13 to 17, 2023

Winter Term Break The U of M will be closed Monday Feb. 19 for Louis Riel Day (see 1.1.1).....Feb 19 to 23, 2024

1.2.6 Examination and Test Dates

*Students are reminded that they must remain available until all examination and test obligations have been fulfilled. Additional or differing dates exist for: **Agriculture Diploma, Dental Hygiene, Dentistry, Education, Medicine, and Pharmacy.** Students in these programs should also see their respective section of the Academic Schedule. Students in faculties, colleges, schools or programs offering irregularly scheduled courses should also see the exam timetable available through their program office.*

Fall Term (includes tests and midterm exams for Fall/Winter Term classes).....Dec 12 to 22, 2023

Winter Term (includes final exams for Fall/Winter Term classes).....Apr 12 to 26, 2024

1.2.7 Challenge for Credit

Challenge for Credit application deadline:

For classes offered Fall Term 2023
and spanning Fall/Winter 2023-2024.....Sept 20, 2023

For classes offered Winter Term 2024.....Jan 22, 2024

1.2.8 Final Grade Appeal Deadlines

For final grades received for Fall Term 2023 classes.....Jan 26, 2024
For final grades received for Winter Term 2024
and Fall 2023/Winter 2024 classes.....June 10, 2024

1.2.9 Graduation and University Convocation

*Degrees, Diplomas and Certificates will be awarded at Convocation. Graduation date may differ from Convocation Ceremony date. Additional or differing dates exist for **Dental Hygiene, Dentistry, Medicine, Occupational Therapy, Pharmacy, Physical Therapy, and Respiratory Therapy**; students in these programs should also see their respective section of the Academic Schedule.*

For students graduating Fall 2023:

Deadline to apply online to graduate for most Undergraduate students...July 27, 2023
Faculty of Graduate Studies Submission Deadline*Aug 24, 2023
Convocation Ceremony (Fort Garry Campus).....Oct 17 to 19, 2023
Convocation Ceremony (Bannatyne Campus).....October 26, 2023

For students graduating February 2024:

Deadline to apply online to graduate for most Undergraduate students...Sept 19, 2023
Faculty of Graduate Studies Submission Deadline*Jan 4, 2024
Graduation date for students graduating in February.....Feb 7, 2024
Convocation Ceremony (Fort Garry Campus).....June 4 to 7, 2024

For students graduating Spring 2024:

Deadline to apply online to graduate for most Undergraduate students...Jan 19, 2024
Faculty of Graduate Studies Submission Deadline*March 28, 2024
Convocation Ceremony –Bannatyne Campus.....May 16, 2024
Convocation Ceremony – Fort Garry Campus.....June 4 to 7, 2024
Convocation Ceremony – Université de Saint-Boniface.....June 10, 2024
Graduate Studies Submission Deadline* for students graduating Fall 2024.....Aug 27, 2024
Annual Traditional Graduation Pow Wow in honour of Indigenous graduates...May 4, 2024

** Last date for receipt by Graduate Studies of Theses/Practica and reports on Theses/Practica, comprehensive examinations, and project reports from students, and lists of potential graduands from departments.*

1.3 Dates applicable to Agriculture (Diploma):

1.3.1 Orientation Sept 7 to 8, 2023

1.3.2 Start and End Dates

Fall Term.....Sept 11 to Dec 8, 2023

Experiential Learning.....Oct 10 to 13, 2023

(Subject to change)

Winter Term.....Jan 8 to Apr 5, 2024

Experiential Learning.....Jan 18, 22 to 24, 2024

(Subject to change)

1.3.3 Registration and Withdrawal Dates

Regular Registration Period

Fall Term and Fall/Winter Term classes.....Ends Sept 10, 2023

Winter Term classes.....Ends Jan 7, 2024

Late Registration/Registration Revision Period

A financial penalty may be assessed on late registrations. Students may use this period of time to make changes to their selected courses or class schedule.

Fall Term and Fall/Winter Term classes.....Sept 11 to Sept 22, 2023

Winter Term classes.....Jan 8 to Jan 25, 2024

Last Day to Drop without Penalty

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for classes dropped after this date.

Fall Term and Fall/Winter Term classes.....Sept 21, 2023

Winter Term classes.....Jan 19, 2024

Last Date to Register/Registration Revision Deadline

Fall Term and Fall/Winter Term classes.....Sept 22, 2023

Winter Term classes.....Jan 25, 2024

Voluntary (VW) Withdrawal deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from classes after this date.

Fall Term classes.....Nov 21, 2023

Winter Term and Fall/Winter Term classes.....Mar 18, 2024

1.3.4 Examination and Test Dates

Fall Term (includes tests and midterm exams for Fall/Winter Term classes).....Dec 11 to 21, 2023

Winter Term (includes final exams for Fall/Winter Term classes).....Apr 8 to 17, 2024

1.4 Dates applicable to Art (School of):

1.4.1 Important Dates

First Year Field Trip.....Dates TBD

1.5 Dates applicable to Dental Hygiene:

1.5.1 Orientation

Year 2 & 3.....Jan 4 & 5, 2024

1.5.2 Start and End Dates

Year 2

Fall Term Classes.....Aug 21 to Dec 1, 2023

Fall Term Clinics.....Sep 21 to Dec 8, 2023

Winter Term Classes.....Jan 8 to Apr 12, 2024

Winter Term Clinics.....Jan 8 to Apr 12, 2024

Year 3

Fall Term Classes.....Aug 14 to Dec 1, 2023

Fall term Clinics.....Aug 28 to Dec 8, 2023

Winter Term Classes.....Jan 8 to Apr 26, 2024

Winter Term Clinics.....Jan 8 to Apr 19, 2024

1.5.3 Registration and Withdrawal Dates

Last Date to drop without Penalty

Year 2

Fall Term.....Sep 5, 2023

Winter Term.....Jan 22, 2024

Year 3

Fall Term.....Aug 28, 2023

Winter Term.....Jan 22, 2024

Voluntary Withdrawal Deadline

Year 2

Fall Term.....Nov 6, 2023

Winter Term.....Mar 25, 2024

Year 3

Fall Term.....Nov 6, 2023
Winter Term.....Apr 1, 2024

1.5.4 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term Break.....N/A
Winter Term Break.....Feb 26 to Mar 1, 2024

1.5.5 Examination and Test Dates

Year 2

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)....Dec 4 to 15, 2023
Winter Term.....Apr 8 to 12, 2024

Year 3

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)....Dec 11 to 15, 2023
Winter Term.....Apr 15 to 19, 2024

1.5.6 Convocation Ceremony – Bannatyne Campus

May 16, 2024

1.6 Dates applicable to Dentistry (including International Dentist Degree Program):

1.6.1 Start and End Dates

Years 1 and 2

Fall Term Classes.....Aug 14 to Dec 1, 2023
Fall Term Clinics.....Sep 5 to Dec 1, 2023
Winter Term Classes and Clinics.....Jan 3 to May 3, 2024

Year 3/IDDP 1 Classes and Clinics

Fall Term Classes.....Aug 8 to Dec 1, 2023
Fall Term Clinics.....Sep 5 to Dec 8, 2023
Winter Term.....Jan 3 to May 3, 2024

Year 4/IDDP 2 Classes and Clinics

Fall Term Classes.....Aug 8 to Dec 1, 2023
Fall Term Clinics.....Sep 5 to Dec 8, 2023
Winter Term.....Jan 3 to Apr 26, 2024

1.6.2 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term Break.....N/A
Winter Term Break.....Feb 26 to Mar 1, 2024

1.6.3 Registration and Withdrawal Dates

Last Date to drop without Penalty

Year 1

Fall Term.....Aug 28, 2023

Winter Term.....Jan 24, 2024

Year 2

Fall Term.....Aug 28, 2023

Winter Term.....Jan 24, 2024

Year 3

Fall Term.....Aug 29, 2023

Winter Term.....Jan 24, 2024

Year 4

Fall Term.....Aug 29, 2023

Winter Term.....Jan 24, 2024

Voluntary Withdrawal Deadline

Year 1

Fall Term.....Nov 6, 2023

Winter Term.....Apr 10, 2024

Year 2

Fall Term.....Nov 6, 2023

Winter Term.....Apr 10, 2024

Year 3

Fall Term.....Nov 7, 2023

Winter Term.....Apr 10, 2024

Year 4

Fall Term.....Nov 7, 2023

Winter Term.....Apr 3, 2024

1.6.4 Examination and Test Dates

Years 1, 2 and 3/IDDP 1

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)....Dec 4 to 15, 2023

Winter Term.....May 6 to 17, 2024

Year 4/IDDP 2

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)....Dec 11 to 15, 2023

Winter Term.....Jan 8 to 12, 2024

1.6.5 Convocation Ceremony – Bannatyne Campus

May 16, 2024

1.7 Dates applicable to Education (B.Ed. only *):

Note: Unless registered in a B.Ed. course, PBDE students follow the dates listed in Section 1.2: Dates applicable to most U of M students.

1.7.1 Orientation

Sept 1, 2023

1.7.2 Start and End Dates *Note: Practicum dates may vary by practicum placement.*

Fall Term

Practicum Block.....	Sep 5 to 8, 2023
Practicum Mondays.....	Sep 11, 18, 25, Oct 23, 30, 2023
Day Classes.....	Sep 12 to Nov 10, 2023
MTS PD Day.....	Oct 20, 2023
Program Day.....	Nov 6, 2023
Practicum Block.....	Nov 20 to Dec 19, 2023

Winter Term

Program Day.....	Jan 8, 2024
Practicum Mondays.....	Jan 15, 22, 29 Feb 5, 12, 26, Mar 4, 11, 2024
Day Classes.....	Jan 9 to Mar 15, 2024
Practicum Block.....	Mar 18 to 22; Apr 1 to 24, 2024

1.7.3 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term Break *Note: Dates may vary by practicum placement.....* See section 1.2.5

Winter Term Break..... See section 1.2.5

Winter Practicum Break *Note: Dates may vary by school division and/or practicum placement.* Mar 25 to 29, 2024

1.7.4 Examination and Test Dates

Fall Term (as required)..... Nov 18, 2023

Winter Term (as required)..... Mar 16, 2024

1.8 Dates applicable to Management (Graduate Level):

1.8.1 Orientation (M.B.A., M.Fin., and M.S.C.M.)

Early August 2023

1.8.2 Start and End Dates (M.B.A., M.Fin., and M.S.C.M.)

Fall Term..... Aug 1 to Dec 21, 2023

Winter Term..... Jan 3 to Apr 10, 2024

1.9 Dates applicable to Medicine (excludes Family Social Sciences and Interdisciplinary Health Programs):

Note: Family Social Sciences and Interdisciplinary Health Programs students follow the dates listed in Section 1.2: Dates applicable to most U of M students.

1.9.1 Orientation

Year 1.....Aug 22 to 25, 2023
Year 3.....TBD

1.9.2 Start and End Dates

Year 1

Fall Term.....Aug 28 to Dec 22, 2023
Winter Term.....Jan 8 to May 31, 2024
Rural Week.....May 27 to 31, 2024

Year 2

Fall Term.....Aug 28 to Dec 22, 2023
Winter Term.....Jan 8 to May 24, 2024

Year 3

Fall Term.....TBD
Winter Term.....TBD

Year 4

Fall Term.....TBD
Winter Term.....TBD

1.9.3 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Year 1 & 2

Fall Term Break.....N/A
Winter Term Break.....Mar 18 to 22, 2024

Year 3 & 4

Fall & Winter Term Break.....TBD

1.9.4 Examination and Test Dates

N/A

1.9.5 Convocation Ceremony – Bannatyne Campus

May 16, 2024

1.10 Dates applicable to Nursing:

1.10.1 Orientation

Fall Term.....	Aug 29 to 30, 2023
Winter Term.....	Dec 13 to 14, 2024
Summer Term.....	Apr 23 to 24, 2024
Midwifery.....	TBD

1.10.2 Start and End Dates

Year 4 Classes.....	Dates vary, see class schedule
Nursing Practice 1 to 7.....	Dates vary, see class schedule
Midwifery Classes.....	Dates vary, see class schedule
Midwifery Clinical Practice.....	Dates vary, see class schedule

1.11 Dates applicable to Occupational Therapy:

1.11.1 Orientation

Year 1.....	Aug 28 to 29, 2023
Year 2.....	Aug 28, 2023

1.11.2 Start and End Dates

Year 1

Fall Term Classes.....	Aug 28 to Nov 17, 2023
Basic Fieldwork.....	Nov 20 to Dec 15, 2023
Winter Term Classes.....	Jan 4 to Apr 26, 2024

Year 2

Fall Term Classes.....	Aug 28 to Dec 15, 2023
Intermediate Fieldwork 2.....	Jan 1 to Feb 23, 2024
Winter Term Classes.....	Mar 4 to June 21, 2024

1.11.3 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term BreakN/A

Winter Term BreakFeb 26 to Mar 1, 2024

**Note: Some students may need to complete fieldwork during the mid-term break depending on availability of fieldwork sites.*

1.11.4 Convocation Ceremony – Bannatyne Campus

October 26, 2023

1.12 Dates applicable to Pharmacy:

1.12.1 Orientation

Year 1

Aug 28, 2023

1.12.2 Start and End Dates

Year 1

Fall Term Classes.....Aug 29 to Dec 11, 2023

Winter Term Classes.....Jan 8 to Apr 12, 2024

Year 2

Fall Term Classes.....Aug 28 to Dec 4, 2023

IPPE Community.....Jan 2 to 26, 2024

Winter Term Classes.....Jan 29 to May 3, 2024

Year 3

Fall Term Classes.....Sept 5 to Dec 11, 2023

Winter Term Classes.....Jan 8 to Apr 12, 2024

Year 4

Block 3 APPE Rotations.....Aug 28 to Oct 20, 2023

Block 3 Research Project.....Aug 28 to Dec 15, 2023

Block 4 APPE Rotations.....Oct 23 to Dec 15, 2023

Block 4 Research Project.....Jan 2 to Apr 19, 2024

Block 5 APPE Rotations.....Jan 2 to Feb 23, 2024

Block 6 APPE Rotations.....Feb 26 to Apr 19, 2024

1.6.3 Registration and Withdrawal Dates

Last Date to drop without Penalty

Year 1

Fall Term.....Sep 18, 2023

Winter Term.....Jan 22, 2024

Year 2

Fall Term.....Sep 11, 2023

Winter Term.....Feb 12, 2024

Year 3

Fall Term.....Sep 18, 2023

Winter Term.....Jan 22, 2024

Year 4.....see course schedule

Voluntary Withdrawal Deadline

Year 1

Fall Term.....Nov 20, 2023

Winter Term.....Mar 25, 2024

Year 2	
Fall Term.....	Nov 13, 2023
Winter Term.....	Apr 15, 2024
Year 3	
Fall Term.....	Nov 20, 2023
Winter Term.....	Mar 25, 2024
Year 4	see course schedule

1.12.3 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Year 1 & 3	See section 1.2.5
Year 2	
Fall.....	See section 1.2.5
Winter.....	Mar 11 to 15, 2024
Year 4	N/A

1.12.4 Examination and Test Dates

Year 1	
Fall Term Exams.....	See section 1.2.6
Winter Term Exams.....	Apr 15 to 26, 2024
Year 2	
Fall Term Exams.....	Dec 5 to 15, 2023
Winter Term Exams.....	May 6 to 17, 2024
Year 3	
Fall Term Exams.....	See section 1.2.6
Winter Term Exams.....	Apr 15 to 26, 2024

1.12.5 Convocation Ceremony – Bannatyne Campus	May 16, 2024
---	--------------

1.13 Dates applicable to Physical Therapy:

1.13.1 Orientation	N/A
---------------------------	-----

1.13.2 Start and End Dates

Year 1	
Fall Term Classes.....	Aug 8 to Dec 22, 2023
Winter Term Classes.....	Jan 3 to Mar 22, 2024
	1x6 week placement and 1x6 week on-line learning between
Clinical Education.....	Apr 2 to Aug 2, 2024
Year 2	
Fall Term Classes.....	Aug 8 to Sep 29, 2023
	2x6 week placements between
Clinical Education.....	Oct 2 to Dec 22, 2024

Winter Term Classes.....	Jan 3 to Mar 22, 2024
	2x6 week placements between
Clinical Education.....	Apr 2 to Aug 2, 2024

1.13.3 Registration and Withdrawal Dates

Last Date to drop without Penalty

Year 1

Fall Term.....	Aug 29, 2023
Winter Term.....	Jan 17, 2024

Year 2

Fall Term.....	Aug 15, 2023
Winter Term.....	Jan 17, 2024

Voluntary Withdrawal Deadline

Year 1

Fall Term.....	Nov 21, 2023
Winter Term.....	Mar 6, 2024

Year 2

Fall Term.....	Sep 19, 2023
Winter Term.....	Mar 6, 2024

1.13.4 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term Break.....	N/A
Winter Term Break.....	Mar 25 to 29, 2024

1.13.5 Convocation Ceremony – Bannatyne Campus

Oct 26, 2023

1.14 Dates applicable to Physician Assistant Studies

1.14.1 Orientation

Clinical Year.....	Aug 21 to 25, 2023
Academic Year.....	Aug 28 to Sept 5, 2023

1.14.2 Start and End Dates

Fall Term Academic Year.....	Sep 6 to Dec 8, 2023
Winter Term.....	Jan 3 to Apr 5, 2024
Fall Term Clinical Rotations.....	Starts Aug 28, 2023
Winter Term Clinical Year 2 Rotations.....	Starts Jan 2, 2024

1.14.3 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term BreakN/A

Winter Term Break.....See section 1.2.5

1.14.4 Convocation Ceremony – Bannatyne Campus

Oct 26, 2023

1.15 Dates applicable to Respiratory Therapy:

1.15.1 Orientation

Year 1.....Aug 31 to Sep 1, 2023

Year 3.....Aug 24, 2023

1.15.2 Start and End Dates

(Includes clinical placement and classes)

Year 1

Fall Term.....Sept 5 to Dec 22, 2023

Winter Term.....Jan 8 to Apr 26, 2024

Winter Term Clinical Placement.....Starts May 6, 2024

Year 2

Fall Term.....Sept 5 to Dec 22, 2023

Winter Term.....Jan 8 to May 31, 2024

Winter Term Clinical Placement.....Starts June 3, 2024

Year 3

Fall Term.....Aug 25 to Dec 22, 2023

Fall Term Clinical Placement.....Starts Aug 28, 2023

Winter Term.....Jan 8 to May 31, 2024

Clinical Placement.....Starts Jan 8, 2024

Note: Year 3 is mostly Clinical Placement. The month of May involves academic activities such as simulation and exams.

1.15.3 Term Breaks

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

Fall Term Break.....N/A

Winter Term Break

Year 1 & 2.....See section 1.2.5

Year 3.....N/A

1.15.4 Convocation Ceremony – Bannatyne Campus

Oct 26, 2023

1.16 Dates applicable to Social Work:

1.16.1 Orientation

Fort Garry, Inner City

Field Instruction Orientation.....Sept 5, 2023

1.16.2 Start and End Dates

Field Instruction*

Fall Term.....Sept 5 to Dec 15, 2023

Winter Term.....Jan 8 to Apr 19, 2024

*Note: Some students may need to complete fieldwork during the fall and/or winter term breaks.

Section 2: Dates for Summer Term

2.1.1 Start and End Dates (generally Monday to Thursday classes)

Classes on Monday, May 20th will be made up on Friday, May 24th

Classes on Monday, July 1st will be made up on Friday, July 5th

Classes on Monday, August 5th will be made up on Friday, August 9th

May – August courses will have no classes scheduled Monday, June 17th to Friday, June 28th.

May – June.....	May 6 to June 13, 2024	6 hours instruction/week
July – August.....	July 1 to August 9, 2024	6 hours instruction/week
May – August 3 credits.....	May 6 to August 9, 2024	3 hours instruction/week
May – August 6 credits.....	May 6 to August 9, 2024	6 hours instruction/week

2.1.2 Registration and Withdrawal Dates

Regular Registration Period

Registration start dates are to be determined by the Registrar's Office.

May – June.....Ends May 5, 2024

July – August.....Ends June 30, 2024

May – August 3 credits.....Ends, May 5, 2024

May – August 6 credits.....Ends May 5, 2024

Late Registration/Registration Revision Period

Students may use this period of time to make changes to their selected courses or class schedule.

May – June.....May 6 to May 9, 2024
 July – August.....July 1 to July 5, 2024
 May – August 3 credits.....May 6 to May 16, 2024
 May – August 6 credits.....May 6 to May 9, 2024

Last Date to Drop without Penalty

Last date to drop and have course excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date. There will be no refunds for courses dropped after this date.

May – June.....May 9, 2024
 July – August.....July 5, 2024
 May – August 3 credits.....May 16, 2024
 May – August 6 credits.....May 9, 2024

Voluntary Withdrawal (VW) deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date.

May – June.....June 4, 2024
 July – August.....July 30, 2024
 May – August 3 credits.....July 18, 2024
 May – August 6 credits.....July 18, 2024

2.1.3 Fee Deadlines**Fee Payment Deadlines**

*A financial penalty will be assessed on accounts with an outstanding balance after this date.
(determined by Financial Services)*

2.1.4 Examination and Test Dates

Students are reminded that they must remain available until all examination and test obligations have been fulfilled.

May – June.....June 17 to 22, 2024
 July – August.....Aug 12 to 17, 2024
 May – August 3 credits.....Aug 12 to 17, 2024
 May – August 6 credits.....Aug 12 to 17, 2024

2.1.5 Challenge for Credit

Challenge for Credit application deadline

For classes offered Summer Term 2024....Apr 26, 2024

2.1.6 Other Summer Term Start and End Dates

Dentistry

IDDP Intersession.....May 1 to June 23, 2024

Music

2-week courses are offered in July and August (Dates TBD)

Nursing

Dates vary, see class schedule

Occupational Therapy

Year 1 Immediate Fieldwork.....Apr 29 to June 21, 2024

Flexible start and end dates between

Year 2 Advanced Fieldwork.....June 24 to Sept 13, 2024

Pharmacy

Year 2 IPPE Hospital Rotation (1 block per student)

Block 1.....June 3 to 28, 2024

Block 2.....July 2 to 26, 2024

Block 3.....July 22 to Aug 16, 2024

Year 4

Block 1 APPE Rotations.....May 8 to June 30, 2023*

May 6 to June 28, 2024**

Block 1 Research Project.....May 8 to Aug 25, 2023*

May 6 to Aug 23, 2024**

Block 2 APPE Rotations.....Jul 4 to Aug 25, 2023*

Jul 2 to Aug 23, 2024**

Block 2 Research Project.....Jul 4 to Oct 20, 2023*

Jul 2 to Oct 18, 2024**

*For Year 4 students graduating in May 2024

**For Year 4 students graduating in May 2025

Physician Assistant Studies

Academic Year.....Apr 22 to July 12, 2024

Exams.....July 15 to 19, 2024

Clinical Year.....Ends Aug 16, 2024

Science

May offer fieldtrip courses that have different dates

20. Presented as Information: Deadlines to apply for graduation (Section 1.2.9).

CC:

Laurie Schnarr, Vice-Provost (Students)

Shannon Coyston, Associate University Secretary (Senate)



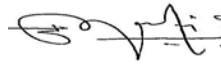
University
of Manitoba

Office of the Vice-President
(Research & International)

110/111 Administration Building
66 Chancellor's Circle
Winnipeg, Manitoba R3T2N2
T: 204 474 6915
F: 204 261 1318
vpri@umanitoba.ca

MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary

FROM: Digvir Jayas, Vice-President (Research and International)
and Chair, Senate Committee on University Research 

DATE: September 26, 2022

SUBJECT: Periodic Review of Research Centres and Institutes: University of Manitoba Transport Institute (UMTI)

According to the Policy on *Research Centres, Institutes, and Groups*, research centres and institutes will undergo reviews approximately every five years. The review of the University of Manitoba Transport Institute (UMTI) has been delayed due to the institute's staffing issues. The Senate Committee on University Research is requesting an extension for the term of the University of Manitoba Transport Institute.

The Senate Committee on University Research, at its September 22, 2022 meeting, moved to recommend that the University of Manitoba Transport Institute continue in its present form until June 30, 2023.

Please include this recommendation on the next Senate agenda. Please feel free to contact me should you require any further information.

Thank you.

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.

Preamble:

1. The terms of reference for the Senate Committee on Appeals (SCAP) are found on the web at: [University of Manitoba - Senate Committee on Appeals \(umanitoba.ca\)](http://umanitoba.ca)
2. The Committee is charged to hear and determine appeals from:
 - a) decisions made by academic administrators involving Senate regulations in which Faculty or School Councils have no jurisdiction; and
 - b) appeals against decisions taken by Awards Selection Committees of Faculties and Schools.
3. The Committee is to report to Senate on the determination of all appeals submitted to it; and advise the Executive Committee of any Senate regulations affecting students which appear to be creating particular difficulties.

Observations:

1. The Committee has received 12 new appeals since the last report to Senate in April 2022. These cases are summarized, along with the two open files previously reported, without compromising the confidentiality of the Appellant.
 - An appeal was received against a decision by the Faculty of Science. The grounds were failure of the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The appeal was denied.
 - An appeal was received against a decision by Faculty of Science. The grounds were failure of the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The committee determined that there were insufficient grounds for the appeal to proceed to a hearing.
 - An appeal was received against a decision by the Faculty of Engineering. The grounds were failure of the Faculty/School or Dean/Director to follow procedures. The committee determined that there were insufficient grounds to proceed to a hearing.
 - An appeal was received against a decision by the College of Medicine. The grounds were failure of f the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The appeal was withdrawn.
 - An appeal was received against a decision by the College of Medicine. The grounds were failure of the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The committee determined that there were insufficient grounds to proceed to a hearing.
 - An appeal was received against a decision by the Faculty of Education. The grounds were failure of the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The committee determined that there were insufficient grounds to proceed to a hearing.
 - An appeal was received against a decision by the Faculty of Engineering. The grounds were failure of the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The committee determined that there were insufficient grounds to

proceed to a hearing.

- An appeal was received against a decision by the College of Dentistry. The grounds were failure of the Faculty/School or Dean/Director to follow procedures and failure of the Faculty/School or Dean/Director to reasonably consider all factors relevant to the decision being appealed. The committee determined that there were insufficient grounds to proceed to a hearing.

Currently the Committee has 6 open files.

Respectfully submitted,
Dr. Derek Oliver, Chair
Senate Committee on Appeals




UM

Office of the University Secretary

312 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
T: 204-474-9593
F: 204-474-7511

MEMORANDUM

DATE: September 29, 2022
TO: Michael Benarroch, Chair of Senate
FROM: Jeff M. Leclerc, University Secretary 
SUBJECT: ***APPROVAL OF MOTIONS***
Board of Governors – September 28, 2022

On September 28, 2022 the Board of Governors approved the following motions:

THAT the Board of Governors approve, as recommended by Senate:

- A. Report of the Senate Committee on Awards (dated August 23, 2022)
- B. [subject to Senate approval, October 6, 2022] Proposal for Manitoba Multiple Sclerosis Research Centre, Rady Faculty of Health Sciences

JL/mw

Copy: D. Hiebert-Murphy
N. Andrew
C. Cook
D. Jayas
V. Koldingnes
P. Nickerson
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

Professor Rusty Souleymanov will be the Speaker for the Executive Committee for the November 2, 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](#)

Report of the Faculty Council of Graduate Studies on Course, Program, Supplementary Regulation and Regulation Changes

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 Pediatrics & Child Health.

Observations

1. The **Dept. of Pediatrics & Child Health** proposes an M.Sc. and a Ph.D. in Pediatrics & Child Health. The agenda contains the full program proposal documents, external reviewers' report and unit response.

The goal of the Pediatric graduate programs will be to offer students opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training that emphasizes translational impact of their findings for the children for whom they care. Research in the department and partner institutes can be broadly classified into four pillars: clinical research, basic sciences, population health, and practice & policy. Based on the student's thesis project and supervisor's research platform, the student will spend the bulk of their time in one of the four pillars. In order to increase the transdisciplinary nature of the student's training, to gain appreciation for research being performed in other pillars, and to promote knowledge translation, the student will also be required to spend two weeks in each of two of the other three pillars as part of two 1.5 credit hour courses.

The M.Sc. will consist of the following courses plus a thesis for a total of 12 credit hours:

- Required courses (9 CH total):
 - PEDS 7010 Introduction to Biostatistics in Child Health Research (3 ch)
 - PEDS 7020 Introduction to Research Methods (3 ch)
 - PEDS 7030 Equity, Diversity and Inclusion for Professionals (0 ch)
 - PEDS 7050 Ethics and Equity in Child Health Research (3 ch)
 - PEDS 7070 Reflexive Practice in Patient Engagement (0 ch)
 - PEDS 7080 Indigenous Child Health (0 ch)
 - GRAD 7500 Academic Integrity Tutorial (0 ch)
 - GRAD 7300 Research Integrity Tutorial (0 ch)
- Two required pillar courses from the following list which are not their home pillar (3 CH total):
 - PEDS 7130 Multidisciplinary Immersion in Clinical Research (1.5 ch)
 - PEDS 7150 Multidisciplinary Immersion in Basic Sciences (1.5 ch)
 - PEDS 7160 Multidisciplinary Immersion in Population Health (1.5 ch)
 - PEDS 7170 Multidisciplinary Immersion in Practice & Policy (1.5 ch)
- The following course is required for non-clinical students:
 - PEDS 7040: Introduction to a Clinical Environment (0 ch)

- The following course is required for clinical students:
 - PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics (0 ch)

The Ph.D. will consist of the following courses plus a thesis for a total of 15 credit hours:

- Required courses (3 CH total):
 - PEDS 7030 Equity, Diversity and Inclusion for Professionals (0 ch)
 - PEDS 7050 Ethics and Equity in Child Health Research (3 ch)
 - PEDS 7080 Indigenous Child Health (0 ch)
 - GRAD 7500 Academic Integrity Tutorial (0 ch)
 - GRAD 7300 Research Integrity Tutorial (0 ch)
- Two required pillar courses from the following list which are not their home pillar (3 CH total):
 - PEDS 7130 Multidisciplinary Immersion in Clinical Research (1.5 ch)
 - PEDS 7150 Multidisciplinary Immersion in Basic Sciences (1.5 ch)
 - PEDS 7160 Multidisciplinary Immersion in Population Health (1.5 ch)
 - PEDS 7170 Multidisciplinary Immersion in Practice & Policy (1.5 ch)
- The following course is required for non-clinical students:
 - PEDS 7040: Introduction to a Clinical Environment (0 ch)
- The following course is required for clinical students:
 - PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics (0 ch)
- Elective courses (9 CH total):
 - PEDS 7110 Directed Readings in Pediatric Literature (3 credit hours)
 - PEDS 7120 Foundations in Bioinformatics (3 credit hours)
 - PEDS 7140 Practical Epidemiology (6 credit hours)
 - PEDS 7180 Practical Qualitative and Mixed Methods (3 credit hours)
 - PEDS 7190 Medical Education, Ethics and Engagement (3 credit hours)
- Where a student has already completed similar courses to the Pediatric Graduate Program core courses, the student may, with the recommendation of their Advisory Committee and with the approval of the Chair of the Pediatric Graduate program, or their delegate, be exempted from taking the equivalent core courses and allowed to fulfill the three (3) ch of core courses with three (3) ch of other courses taken at the 7000-8000 level from any college or department in the Rady Faculty of Health Sciences.

Course Introductions

PEDS 7010 Introduction to Biostatistics in Child Health Research

+3

In this 3-week intensive course, students will be introduced to biostatistics theory and examples from pediatrics. Mornings will be spent in didactic lectures. In the afternoons, students will have the opportunity to practice biostatistical analyses in a lab setting. Required acceptance to the Pediatric Graduate Program and PHIA (both Shared Health and U of M).

PEDS 7020 Introduction to Research Methods

+3

Students will learn from methods experts in qualitative and quantitative methods, systematic reviews and bioinformatics, and who lead cutting edge pediatric research in Manitoba. Assignments are designed to be of practical use. There will be one cumulative final take home exam.

PEDS 7030 Equity, Diversity and Inclusion for Professionals +0

In this half day course, students learn about the importance of promoting and supporting a community that embraces equity and inclusion for all, and builds upon the strengths of diversity. Students will also be encouraged to consider their own biases. Course graded pass/fail.

PEDS 7040 Introduction to a Clinical Environment +0

In this half day course, non-clinical students will be introduced to a real or simulated clinical learning environment that aligns with their areas of study. Pre-requisites include completion of TCPS and PHIA, and approval of advisor. Course graded pass/fail.

PEDS 7050 Ethics and Equity in Child Health Research +3

Students will learn that children are not small adults, but have unique considerations and conditions. Students will also develop an appreciation for social disparities that exist within pediatric populations in Manitoba, and learn from experts who work with these communities.

PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics +0

The COVID-19 pandemic propelled virtual healthcare delivery forward. This course covers hands-on practical and ethical issues of virtual pediatric healthcare delivery. Approval of instructor required. Course graded pass/fail.

PEDS 7070 Reflexive Practice in Patient Engagement +0

Students will discuss project patient engagement activities that will inform their thesis writing and knowledge translation.

PEDS 7080 Indigenous Child Health +0

In many Indigenous cultures around the globe, children are considered sacred and spiritual. This is true for First Nation people in Manitoba. Indigenous Knowledge Keepers will share how cultural losses have impacted the health of Indigenous children. This required course is pass/fail.

PEDS 7130 Multidisciplinary Immersion in Clinical Research +1.5

Students not in the clinical pillar will spend 3 weeks in a clinical environment during which they will learn about clinically-relevant topics and concerns related to their area of study. The course follows an individual program of study. Required if not in clinical pillar. Pre-requisite: PEDS 7010, PEDS 7020, PEDS 7050, and instructor permission.

PEDS 7150 Multidisciplinary Immersion in Basic Sciences +1.5

Students not in the basic sciences pillar will spend 3 weeks in a basic sciences lab during which they will learn about techniques, methods and analyses related to their area of study. Required for students outside the basic sciences pillar. Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

PEDS 7160 Multidisciplinary Immersion in Population Health +1.5

Students not in the population health pillar will spend 3 weeks with a population health group, during which they will learn about methods and analyses and related topics. Required for students outside population health pillar. Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

PEDS 7170 Multidisciplinary Immersion in Policy and Practice **+1.5**

Students not in the policy and practice pillar will learn about healthcare policy as it relates to ethics, government, and medical education. Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

PEDS 7110 Directed Readings in Pediatric Literature **+3**

In this individualized directed readings course, the student and instructor will work together to identify areas of interest directly relevant to the student's thesis, in order to advance the student's knowledge of the topic.

PEDS 7120 Foundations in Bioinformatics **+3**

This course is intended to familiarize students with the field of bioinformatics. A broad overview of the 'omic fields, such as genomics, transcriptomics, and proteomics and common technologies, such as next-generation sequencing, mass spectrometry, and NMR will be provided. Additionally, there will be discussion of the computational challenges of algorithm development, automation, and statistical analysis, particularly as it applies to the data consumer and an introduction to the Python programming language. PEDS 7010, PEDS 7020, or permission of the instructor is required.

PEDS 7140 Practical Epidemiology **+6**

In this online course, students will use data from the CHILd cohort to develop a manuscript from idea to submission. Students will analyse their own data. Pre-requisite PEDS 7010 or equivalent and permission of instructor is required.

PEDS 7180 Practical Qualitative and Mixed Methods **+3**

Students will learn and actively practice qualitative data collection and analysis, and compare qualitative and mixed methods research. Pre-requisites: Acceptance into the Pediatric Graduate Program; PEDS 7010 (or comparable), PEDS 7020 (or comparable); permission from the instructor.

PEDS 7190 Medical Education, Ethics, and Engagement **+3**

Students will gain theoretical and practical knowledge in medical education and ethics, as well as discuss practical ways to engage with policy makers and the popular press. Emphasis will include application of medical education methods. The course will be taught using team-based learning. Pre-requisites: PEDS 7030 and PEDS 7050; permission of instructor.

NET CREDIT HOUR CHANGE **+33**

Recommendations

Faculty Council of Graduate Studies recommends THAT the program proposals from the unit listed below be approved by Senate:

Dept. of Pediatrics & Child Health

Respectfully submitted,

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.

Dr. Kelley J. Main, Chair
Faculty Council of Graduate Studies

/ak

Report of the Senate Planning and Priorities Committee on Proposals for a Doctor of Philosophy and a Master of Science in Pediatrics and Child Health, Department of Pediatrics and Child Health

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. At its meeting on August 29, 2022, the SPPC considered proposals from the Department of Pediatrics and Child Health, Max Rady College of Medicine, to establish a Master of Science (M.Sc.) and a Doctor of Philosophy (Ph.D.) in Pediatrics and Child Health.
3. The proposal was endorsed by the Faculty Council of the Faculty of Graduate Studies at its meeting on May 17, 2022.

Observations

1. The purpose of the proposed M.Sc. and Ph.D. in Pediatrics and Child Health would be to offer students opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training that emphasizes the translational impact of their findings for children who receive pediatric care. The program would expose students to the multidisciplinary research environment of the Department and the discipline, which is broadly classified into four pillars: clinical research, basic sciences, population health, and practice and policy.
2. Graduates of the M.Sc. and Ph.D. in Pediatrics and Child Health might pursue further training in the areas of nursing or medicine, as graduate students or post-doctoral fellows, or find employment in academia, within provincial or regional health authorities, the public health sector, or Indigenous health and community health organizations.
3. If the proposed programs were approved and implemented, the University of Manitoba would become one of only two Canadian institutions offering graduate-level programs in pediatrics. At present, only the University of Alberta offers graduate degrees in the discipline, with enrolments of 45 – 50 students annually.
4. Courses and Curriculum:
 - (a) Establishment of the programs would require the introduction of seventeen (17) new courses, including five 0 credit hour courses. The overall number of credit hours of courses offered by the Department would increase by 33 credit hours.
 - (b) The M.Sc. in Pediatrics and Child Health would be a two-year program, with requirements for (i) 12 credit hours of coursework, including three core courses (9 credit hours) and two “pillar courses” (3 credit hours) from outside a student’s home pillar; (ii) four 0 credit hour professional development courses; and (iii) a thesis, as detailed in the proposal. A student’s research project and the supervisor’s research platform would determine the student’s home pillar.
 - (c) The Ph.D. in Pediatrics and Child Health would be a four-year program, with requirements for (i) 15 credit hours of coursework, including one core course (3 credit hours), two “pillar courses” (3 credit hours) from outside a student’s home pillar, and 9 credit hours of elective courses; (ii) three 0 credit hour professional

development courses; and (iii) a thesis, as detailed in the proposal. A student's research project and the supervisor's research platform would determine the student's home pillar.

5. Enrolment:

- (a) Projected enrolment for the first intake into the M.Sc. program is three students. The maximum seat capacity would be fifteen students per year. The Department anticipates, however, stable enrolment of five students per year by Year 3.
- (b) The maximum seat capacity for the Ph.D. program would be fifteen students per year. The Department anticipates that one student would be admitted for the first intake and that annual enrolment would increase to a standard enrolment of five students per year by Year 3.

6. Resource requirements:

- (a) The total cost of delivering the M.Sc. program would be \$216,025, in Year 4. No new funding would be required to offer the program. Revenue to support the program would be derived from the following sources (as of Year 4):
 - program based tuition and continuing fees (\$45,519), which would generate the amount indicated based on enrolment of ten students, including five new and five continuing students;
 - existing resources in the Department (\$178,282).

Revenues identified above for the M.Sc. program would be allocated to the items indicated below (figures are for Year 4):

- salary and benefits (\$9,978) for a new 0.10 FTE academic position, for a graduate program director, who would be appointed from among existing faculty;
 - salary and benefits (\$178,282) for existing academic positions, including 3.00 FTE positions for Associate Professors, Assistant Professors, or Senior Instructors, with two of these positions being GFT appointments;
 - salary and benefits (\$15,966) for a new 0.25 FTE administrative support staff position; and
 - administrative overhead (\$11,799), including a \$7,547 tax on the tuition.
- (b) The total cost of delivering the Ph.D. program would be \$324,277, in Year 4. No new funding would be required to offer the program. Revenue to support the program would be derived from the following sources (as of Year 4):
 - program based tuition and continuing fees (\$32,279), which would generate the amount indicated based on enrolment of seven students, including four new and three continuing students;
 - existing resources in the Department (\$299,354).

Revenues identified above for the Ph.D. program would be allocated to the items indicated below (figures are for Year 4):

- salary and benefits (\$299,354) for existing academic positions, including 3.70 FTE positions for Associate Professors, Assistant Professors, or Senior Instructors, with two of these positions being GFT appointments;
- salary and benefits (\$15,966) for a new 0.25 FTE administrative support staff position; and
- administrative overhead (\$8,957), including a \$5,730 tax on the tuition.

- (c) The Children's Hospital Research Institute of Manitoba (CHRM) would provide in kind support, including infrastructure and equipment in the Clinical Simulation Lab, which would be used to offer PEDS 7020 Introduction to Research Methods, and space for offices and a trainee hub at the Bannatyne Campus.
7. The University of Manitoba Libraries indicated current collections can support the proposed programs.
8. Priority level:
On the basis of the SPPC's criteria for assigning priority to new programs / initiatives,¹ the Committee recommended that a high priority level be assigned to the proposals for a M.Sc. and a Ph.D. in Pediatrics and Child Health. The proposed programs would support the University's strategic priority for Driving Discovery through excellence in research, scholarly work and other creative activities, as well as its Strategic Research Plan, specifically, the Integrative Research in Health and Well-being research theme. The proposals are also consistent with the objectives of a major, medical-doctoral research university.

Recommendation:

The Senate Planning and Priorities Committee recommends:

THAT Senate recommend to the Board of Governors that it approve a proposal to establish a Master of Science in Pediatrics and Child Health and a Doctor of Philosophy in Pediatrics and Child Health, in the Department of Pediatrics and Child Health, 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 Derek Oliver, Chair
Senate Planning and Priorities Committee

¹ http://umanitoba.ca/admin/governance/media/SPPC_Assigning_Priorities_to_New_Programs-Initiatives.pdf

MEMORANDUM

Date: November 18 2020

To: Dr. Michael (Mike) Czubryt, Associate Dean, Faculty of Graduate Studies
Ms. Andrea Kailer, Programs Coordinator, Faculty of Graduate Studies

From: Dr. Brian Postl, Dean and Chair of the Max Rady College of Medicine



Re: Faculty of Graduate Studies Approval of MSc. and PhD. Program in Pediatrics and Child Health

The Rady Faculty of Health Sciences is requesting initiation of the Faculty of Graduate Studies review and approval process for the following:

- 1) MSc. and PhD programs in Pediatrics and Child Health

The above motion was approved unanimously at the Max Rady College of Medicine meeting on November 17 2020.

Also attached to this email are two zip files that include the comprehensive graduate program proposals.

Please let me know if you require additional information or clarification.

Copy: Jeff Leclerc, University Secretary
Shannon Coyston, Associate University Secretary (Senate)
Patricia Birk, Department Head, Pediatrics and Child Health
Jennifer Protudjer, Assistant Professor, Pediatrics and Child Health



UNIVERSITY
OF MANITOBA

Rady Faculty of
Health Sciences

Max Rady College of Medicine
Office of the Dean
A101B-753 McDermot Avenue
Basic Medical Sciences Building
University of Manitoba
Winnipeg, Manitoba R3E 0W3
Telephone 204-789-3485

MEMORANDUM

Date: February 11, 2020

To: Patricia Birk, Department Head Pediatrics & Child Health

From: Brian Postl, Dean and Vice-Provost Rady Faculty of Health Sciences

Re: Pediatric Graduate Program

This letter confirms my support of the Pediatric Graduate Program. There will be no additional funds provided to the Department to support this initiative. Please note that approval of tuition amounts and graduate director stipends is through Faculty of Graduate Studies. They will provide feedback on these pieces of your proposal.

NEW PROGRAM OF STUDY

Under The Advanced Education Administration Act

Universities and colleges requesting approval for a **new** program of study from Education and Training must apply using this application form. This form reflects the requirements set out in the Programs (MR 134/2015) under The Advanced Education Administration Act.


UNIVERSITY
OF MANITOBA
UM INTERNAL REQUIREMENTS:

Following unit approval* please submit the complete proposal electronically (.pdf single file) to both the Office of the Provost & Vice-President (Academic) and, for:

Undergraduate Programs: Office of the University Secretary (for Senate submission deadlines visit <http://umanitoba.ca/admin/governance/meetings/index.html>). Please also submit a **hard copy** version to the Office of the Secretary to their office as well.

Graduate Programs: Faculty of Graduate Studies (for timelines visit http://umanitoba.ca/faculties/graduate_studies/admin/program_approval_timeline.html).

ALL Programs: as preparation for submission to MET, please submit a .docx file of the proposal, an .xlsx file of the Financial Support Form and a .pdf file of all other supporting documents (letters of support, external reviews, etc.). Please date stamp these files for ease of tracking should any changes result from the Senate approval process and submit directly to the Provost's Office.

Along with the information requested in the proposal template, please **append** details on the following:

MET /SPPC Financial Support Form [available through the Office of the Provost & Vice-President (Academic)]

This form requires the signature of the Financial Planning Office. Please contact Giselle Martel, Executive Director, Financial Planning and Budgeting, for direction on completion of the form. Approval of the financial support form does not signify approval of any funding requests, either internally or from the province. Confirmation of resource availability and allocation of any new funds will be determined by the Provost at time of implementation.

Admission and/or transfer criteria for the proposed program.

Course details for required coursework, including title, course number, credit hours and calendar description. Highlight any proposed new courses and attach:

Undergraduate Programs: for SCCCC Program and Course Change forms, as applicable, visit <http://umanitoba.ca/admin/governance/forms/index.html>

Graduate Programs: for course change forms visit http://umanitoba.ca/faculties/graduate_studies/admin/course_changes.html

Any **new academic regulations** for the program that are not currently addressed in existing faculty/college/school requirements.

Letters of support from internal units that may be impacted by the proposed new program and any external letters of support as outlined below.

Library statement of support.

Where applicable, a **transition plan** for current students entering the new program.

SECTION A – PROPOSAL DETAILS

Institution: **UNIVERSITY OF MANITOBA**

Applicable faculties/department with responsibility for the program:

- Department of Pediatrics and Child Health, Max Rady College of Medicine, Rady Faculty of Health Sciences

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

- N/A

Program name:

- Pediatrics and Child Health

Credential awarded:

- Master of Science, Pediatrics and Child Health

Funding request: None

Office Use Only

One-time funding: _____

On-going funding: _____

Proposed start date:

- September 2023

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

We will comply with all public health orders relating to the COVID-19 pandemic, including fully virtual delivery of the program until permitted to hold classes in person.

UM INTERNAL REQUIREMENT: Name of Person(s) responsible for the Program internally (please include contact information):

Jennifer L P Protudjer
501G-715 McDermot Avenue
Winnipeg, MB
R3E 3P4
Canada

+1 204 480 1380 (confidential voicemail)

Jennifer.Protudjer@umanitoba.ca

NOTE: Working remotely due to the COVID-19 pandemic.

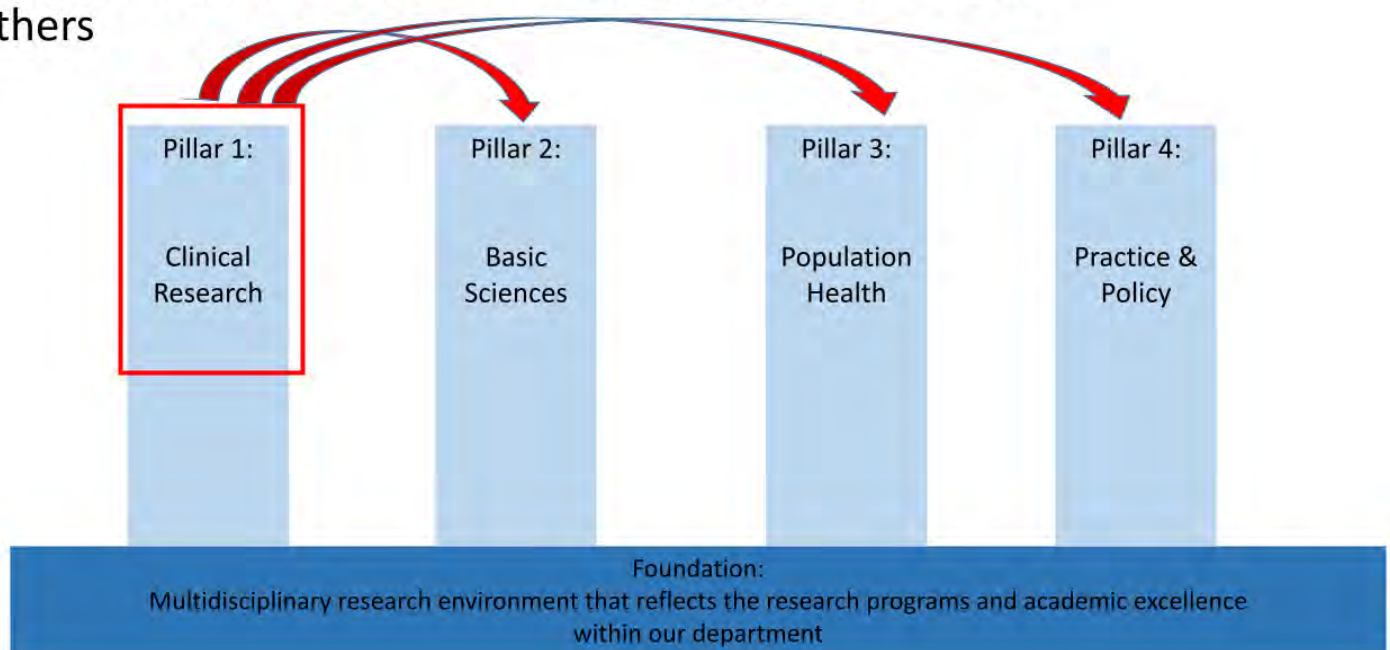
SECTION B – PROGRAM DESCRIPTION AND DELIVERY

B-1 Provide a general description of the program and its objectives: *(Include intended purpose, curriculum design, and highlight distinctive attributes)*

The goal of the University of Manitoba's Pediatric Graduate Program is to offer students opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training that emphasizes translational impact of their findings for the children for whom we care.

The MSc curriculum is focused on coursework during the first year (see section B-5) that involves some mixed learning platforms, statistical theory and application, clinical exposure for non-clinical students, and courses on the health needs and ethics of working with marginalized children. The second year is focused on original research, with the requirement to complete a thesis. Publication is not required for graduation, but supervisors are strongly encouraged to afford students the opportunity to be involved in the preparation of a manuscript.

Proposed program design: Four pillar program in which students will concentrate on one, but spend time in the others



This program is founded in the very nature of the Department of Pediatrics and Child Health at the University of Manitoba and its partner institutes, including the Children's Hospital Research Institute of Manitoba (CHRIM) and the George and Fay Yee Centre for Healthcare Innovation (CHI) (please refer to the letters of support provided by each of these partners). The research and academic excellence found in these organizations contribute to a multidisciplinary research environment into which our Pediatric Graduate Program will be fully integrated. Research in our Department and partner institutes can be broadly classified into four pillars: clinical research, basic sciences, population health, and practice & policy. Based on the student's thesis project and supervisor's research platform, they will spend the bulk of their time in one of the four pillars. In order to increase the transdisciplinary nature of the students training, to gain appreciation for research being performed in other pillars, and to promote knowledge translation, the student will also be required to spend two weeks in each of two of the other three pillars as part of two 1.5 credit hour courses in the

second year of study.

B-2 Length of Program: *(Define the length of the proposed program using measures appropriate to the schedule and delivery format. This will include total course credits and weeks/months, and, where relevant, hours and semesters of instruction)*

2 years full time equivalent (12 mandatory credit hours)

B-3 Intended outcomes of the program:

B-3.1 Describe how this program serves and advances the academic, cultural, social and economic needs and interests of students and the province:

- Academic: The Department of Pediatrics offers opportunities for multidisciplinary learning in an environment of academic excellence. Upon graduation, students will be able to understand, appreciate, and read literature in all research pillars (clinical, basic, and epidemiological), and relate these perspectives to their own research project. They will be able to design and test their own hypotheses by fostering multidisciplinary collaborations within Manitoba as well as nationally and internationally.
- Cultural: The Pediatric Graduate Program will promote child health simultaneous with the pursuit of academic excellence. Students will have opportunities to build compassion and awareness of cultural differences in the province. There will be a strong focus on Indigenous health and cultural sensitivity.
- Socioeconomic: Regardless of the pillar in which a student's project primarily resides, students in this program will be encouraged to pay particular attention to the needs of marginalized populations and the impact of poverty and geographical isolation on health outcomes. They will be educated in the geographic disparities that exist even within Winnipeg, and throughout the whole of Manitoba. As a result of this perspective, graduates will be better equipped to advocate for health equity in their work as clinicians and researchers.

B-3.2 Describe the existing and anticipated post-secondary learning needs of students in Manitoba that this program addresses and responds to:

Students in Manitoba are demographically diverse. Many are returning or mature students who, after working for a period of time in a clinical field, recognize the benefit of continuing their education based on the perspective they have gained during their time in the field. The Pediatric Graduate Program will pay special attention to returning and mature students, understanding their need/desire to continue working to avoid career interruption and/or to support their families. In addition, the program will attract students from elsewhere in Canada and around the world. Students will be attracted not only by the opportunities and academic excellence offered by the program itself but also by the lower cost of living Manitobans enjoy; the [Canadian Real Estate Association](#) indicates housing prices in Manitoba are currently almost 46% lower than the national average. Many graduates will choose to stay in the province, which will contribute to job creation and economic growth.

B-4 Mode of Delivery

B-4.1 Provide the total program length through one of the following measures:

12 Total credit hours

B-4.2 What proportion of the total program length (as indicated above) can be completed through the two following modes of delivery? *(Note that one or both selections can be offered up to the total program length.)*

There will be no limit on the number of credit hours that could be completed online. Students will be able to complete as many online course offerings (including required and elective courses) as are available. Currently, at least 3 credit hours of the required courses are available with an online option. We anticipate that more online offerings will be made available for program and elective requirements.

B-5 Provide an overview of the suggested progression of courses on a year-by-year basis for the program from start to maturity. *(Course level detail is not necessary, however, please include credit hours/contract hours, proportion of upper level courses, clinical placements or practicums, or subject area requirements where applicable)*

Year 1

- First 3 weeks: PEDS 7010 (Introduction to Biostatistics in Child Health Research, 3 credit hours) is an intensive course of three weeks, beginning immediately after Labour Day, with morning lectures and afternoon labs
- Week 4: Mandatory 0 credit hour seminars and tutorials (GRAD 7500, Academic Integrity; GRAD 7300, Research Integrity; PEDS 7030, Equity, Diversity and Inclusion for Professionals; PEDS 7080: Indigenous Child Health)
- Months 2-4: Course work (PEDS 7020, Introduction to Research Methods, 3 credit hours). For non-clinically oriented students, 0 credit hour PEDS 7040, Introduction to a Clinical Environment. For clinically-oriented students, 0 credit hour PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics.
- Months 5-8: Course work (PEDS 7050, Ethics and Equity in Child Health Research, 3 credit hours)
- Months 10-12: Research proposal, ethics submission

Year 2

- Months 13-20: Research Project plus two of the following: PEDS 7130, PEDS 7150, PEDS 7160 or PEDS 7170 (Multidisciplinary Immersion in Clinical Research, in Basic Sciences, in Population Health or in Practice & Policy, respectively, based on the three pillars other than the student's home pillar. Each course is 1.5 credit hours, for a total of 3 credit hours, completed in two 2-week segments as placements with other labs or research groups)
- Months 21-24: Thesis writing and defence

UM INTERNAL REQUIREMENT: please complete the chart below to provide an overview of suggested progression through the program (indicate pre-requisites and related credit hours). Outline options for specializations within this program [minor(s) and/or concentration(s)].

NOTE: Course that are listed for both the MSc and PhD programs must be successfully completed at both levels.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
PEDS 7010: Introduction to Biostatistics in Child Health Research (3 ch) GRAD 7500: Academic Integrity Tutorial (0 ch)	Research Project (8 months) And Two of the following, based on each student's home pillar PEDS 7130: Multidisciplinary	Not applicable	Not applicable

<p>GRAD 7300: Research Integrity Tutorial (0 ch)</p> <p>PEDS 7030: Equity, Diversity and Inclusion for Professionals (0 ch)</p> <p>PEDS 7040: Introduction to a Clinical Environment (0 ch)</p> <p>*non-clinically oriented students only</p> <p>PEDS 7060: Considerations in the Delivery of Virtual Care in Pediatrics (0 ch)</p> <p>*clinically-oriented students only</p> <p>PEDS 7020: Introduction to Research Methods (3 ch)</p> <p>PEDS 7080: Indigenous Child Health</p>	<p>Immersion in Clinical Research (1.5 ch)</p> <p>PEDS 7150: Multidisciplinary Immersion in Basic Sciences (1.5 ch)</p> <p>PEDS 7160: Multidisciplinary Immersion in Population Health (1.5 ch)</p> <p>PEDS 7170: Multidisciplinary Immersion in Practice and Policy (1.5 ch)</p>		
<p>PEDS 7050: Ethics and Equity in Child Health Research (3 ch)</p>	<p>Thesis Writing (4 months)</p> <p>Thesis Defence</p>		
TOTAL CR. HRS: 9	TOTAL CR. HRS: 3	TOTAL CR. HRS: N/A	TOTAL CR. HRS: N/A

B-6 Will the program be available for part-time study?

Yes, part-time study will be supported and encouraged. We anticipate that many prospective students wishing to enroll in our program will be practicing clinicians who are dedicated to their roles and cannot interrupt their careers entirely while pursuing further education. The Pediatric Graduate Program will give special consideration to these individuals, offering the ability to continue working while enrolled in the program. Per the U of M Supplementary Regulation 1.4.1, all graduate students will be admitted full time and the student's status will then be determined by mutual agreement between student and advisor/co-advisors. They would submit a request to the Department Head, who then submits to the Faculty of Graduate Studies. Once a student is declared part time, they can choose to revert to full time once, but may not subsequently revert to part time again. A declaration of change in status must occur before the end of the registration revision period in the fall or winter terms, or within one month of the start of the summer term. Further

details are outlined in the program's Supplementary Regulations.

B-7 Indicate if this program will have a cooperative education, work placement, internship or practicum component and provide any relevant details:

- No

B-8 Intake Information

B-8.1 Projected enrolment for the first intake: 3

B-8.2 Maximum seat capacity (*Defined as first-year enrolment capacity*): 15

B-8.3 Anticipated date of maturity: Year 5

UM INTERNAL REQUIREMENT: please indicate the projected enrolment and graduates for the first 5 years of the program.

	Year 1	Year 2	Year 3	Year 4	Year 5
New Enrolments	3	4	5	5	5
Graduates	0	2	3	5	5

SECTION C – INFORMATION REGARDING PROGRAM DEVELOPMENT PHASE

C-1 Describe how this new program aligns with the strategic plans of your institution:

The University has identified “UNDERSTANDING AND COMMUNICATING INFORMATION” as a cross-cutting Research Theme, and “Integrated Research in Health and Well-Being” as a core theme. Within these areas, patient-oriented research that integrates clinical research and knowledge translation with policy and practice change has been identified as an emerging area of University research strength. The Pediatric Graduate Program described here will assist the University in realizing the general and specific objectives of its Strategic Research Plan in the following ways:

- *Recruit top students and provide outstanding research training opportunities.* The proposed Pediatric Graduate Program will provide a multidisciplinary research environment that maximizes the breadth and depth of the research programs and academic excellence that currently exists at the Department of Pediatrics and Child Health (see sections B-1 and C-5 for details on fields of study and opportunities afforded to students). We will also work with leadership within the Clinical Investigator Program (CIP; see letter of support) and the Canadian Child Health Clinician Scientist Program (CCHCSP; see letter of support) to identify and recruit top students.
- *Build research capacity through the recruitment and retention of excellent faculty.* The Pediatric Graduate Program is expected to attract students locally, nationally and internationally, and there is evidence from other similar programs of study (e.g., at the University of Alberta) that students seek employment locally after graduation. We thus expect this program to build research capacity at the University and affiliated institutions in the province.
- *Foster networking, partnership and collaborations between disciplines and across sectors.* The Pediatric Graduate Program will provide an environment that encourages collaboration between the basic sciences, applied and clinical sciences, and research institutes, including the Children's Hospital Research Institute of Manitoba (CHIRM), and the George and Fay Yee Centre for Healthcare Innovation (CHI).

- *Disseminate and translate knowledge.* The Pediatric Graduate Program will provide opportunities for students to learn about and engage in both patient-oriented research and knowledge translation. The integration of knowledge generation, synthesis and dissemination has become a central paradigm of child health research thanks to the efforts of faculty members at the University of Manitoba and beyond.

C-2 Outline the internal approval process (i.e. committees, governing bodies) for approving this new program of study within your institution and indicate any dates of decision. (*Governing Council, Board of Governors, Board of Regents, Senate, other*)

UM INTERNAL REQUIREMENTS: Please note date(s) of Faculty/College/School Approval. Approval dates through the governing bodies will be inserted by the Provost's Office prior to submission to government.

UM Undergraduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
Faculty/College/School	_____
SCCCC	_____
SPPC	_____
SCADM (<i>if applicable</i>)	_____
SCIE (<i>if applicable</i>)	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

UM Graduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
APC (<i>preliminary review</i>)	_____
External Review	_____
APC	_____
FGS Executive	_____
FGS Faculty Council	_____
SPPC	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

C-3 Responsibility to consult

C-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:

- Not applicable

C-3.2 What agencies, groups, or institutions have been consulted regarding the development of this program?

Note: this includes any consultation with internal UM units, academic or otherwise.

- Department of Pediatrics and Child Health, including Department Heads (2014-2019; 2019-Present) and Section Heads, University of Manitoba
- The Children's Hospital Research Institute of Manitoba (CHRIIM)
- George and Fay Yee Centre for Healthcare Innovation

- Clinical Investigator Program (CIP)
- Canadian Child Health Clinician Scientist Program (CCHCSP)
- Department of Internal Medicine, University of Manitoba
- Department of Community Health Sciences, University of Manitoba
- PhD Program in Applied Health Sciences
- Academic Programs Specialist, University of Manitoba
- Faculty of Graduate Studies, University of Manitoba
- The University of Alberta Department of Pediatrics Graduate Program
- The First Nations Health and Social Secretariat of Manitoba of the AMC · Research Centre
- Indigenous Knowledge Keepers

C-3.3 How have students and faculty been informed of the intent to establish this program?

Potential students, ranging from current undergraduates to practising physicians and provincial healthcare employees, were surveyed in April 2019. All responders favourably viewed the Graduate Training Program in Pediatrics, and saw it as an opportunity for true immersion in and integration of clinical, basic science and population health research. Responders also appreciated that, in contrast to some other graduate programs in the College of Medicine, the proposed program would be personalized and flexible.

Faculty members in the Department of Pediatrics and Child Health were invited to attend a town hall meeting on December 14, 2018, at CHRIM. Faculty in attendance were overwhelmingly in favour of the proposed graduate program. Faculty members expressed interest in having the ability to directly supervise graduate students without the need for cross-appointments to other faculties, to further develop cross-disciplinary collaborations within the Department. They indicated that creating a pediatrics graduate program would firmly position the University of Manitoba as an attractive centre for highly qualified students. They expressed a desire to recruit top-ranked students who, in addition to academic excellence, are passionate about pediatric research. Faculty agreed that students will have level-appropriate skills and knowledge to secure high-ranking positions across a variety of sectors upon completion of their training programs.

C-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.)*

Note: this includes any programs currently offered at UM.

The only program in Manitoba that could be seen as similar to the one proposed is the graduate program offered by the Department of Community Health Sciences at the U of M. It, too, focuses on research methods and statistical analysis in a multidisciplinary environment, with a strong epidemiological component. However, the Pediatric Graduate Program will be distinct in several key ways:

- an emphasis on child health
- a broader range of disciplines, including clinical research, basic biomedical science and epidemiology
- research focused, with fewer course requirements
- flexibility for part time studies for students
- an introduction to a clinical environment for non-clinically oriented students
- a course on virtual healthcare delivery for clinically-oriented students

C-4.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Manitoba.

- None.

C-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.)*

At present, the only Pediatric Graduate Training Program in Canada is offered at the University of Alberta (U of A), at both the MSc and PhD levels. The program began in 1990 and currently maintains a graduate student population of 45-50 students per year, supervised by 36 tenured or tenure-track faculty members. Graduate students receive training in clinical or basic sciences, in areas of research including cardiovascular, clinical trials, evidence-based medicine, gastroenterology, genetics, Indigenous health, nephrology, neonatology, neurology/neurosciences, obesity, oncology, pulmonology, and thrombosis.

For Canadian and international students looking for multidisciplinary training in child health research, the addition of a Pediatric Graduate Program at the University of Manitoba will grant students access to the research programs of 31 primary appointed faculty members who include MDs, allied health professionals and non-clinicians. Furthermore, interest may be generated among members of the Children's Hospital Research Institute of Manitoba who may have primary appointments in other departments. Research fields in which students may complete their training include allergy, asthma, biochemistry and medical genetics, biology of breathing, clinical trials, clinical pharmacology, developmental origins of health and disease, diabetes, early childhood oral health, emergency medicine, endocrinology, human anatomy and cell science, injury prevention, nutrition, physiology, physiotherapy, psychology, and rehabilitation, among others. From this list, it is evident that the programs in Alberta and Manitoba will have overlapping but distinct and clearly synergistic opportunities for students seeking graduate training in Pediatrics in Canada.

A Pediatric Graduate Program at the University of Manitoba will add to, and not detract from, the efforts of the University of Alberta. Members of the University of Alberta have supported the efforts of Dr. J. Protudjer in the development of the proposed program at the University of Manitoba, by offering advice and guidance in the process.

C-5.1 Describe any specific ladder, articulation and/or credit transfer options for students that are anticipated in this program in Canada.

- None

C-6 Describe the current and projected labour market demands in Manitoba for graduates of this Program:

(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.)

Based on records provided by the University of Alberta over the period 2011-2014, graduates of their Pediatric program have sought further education in Canada and abroad in nursing, in medical school, as residents, as PhD students and as postdoctoral fellows. Employment destinations for U of A graduates include administrative, research and faculty positions at Alberta universities (including a Tier I CRC) and in the Alberta Health System. Interestingly, while students tend to leave the province to pursue further education, graduates seeking employment have tended to stay within the province. Should a similar trend occur in Manitoba, graduates of the proposed program would have similar educational and employment opportunities, with potential to add high-quality personnel to organizations like the University of Manitoba, the provincial and regional health authorities, the provincial governments (including Healthy Child Manitoba and the Ministry for Health, Seniors and Active Living), Specialized Services for Children and Youth (SSCY), the Manitoba Centre for Health Policy (MCHP), and the Centre for Healthcare Innovation (CHI). Employment opportunities may also be

found in Indigenous health and community organizations such as the First Nations Health and Social Secretariat of Manitoba (Nanaandawewigamig), Klinik, mental health organizations, and University College of the North.

C-7 If copies of any internal or peer evaluations with respect to this new 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:

The letter of support provided by Dr. Patricia Birk (Department Head, Pediatrics & Child Health) affirms the support of all Section Heads for this program. Distinguished Professor Cheryl Rockman-Greenberg, an experienced academic clinician and former Department Head, has provided a very supportive letter calling the Pediatric Graduate Program the “next logical step” in the Department’s evolution. No individual or group we have consulted has raised any issues of concern.

SECTION D – REQUIRED RESOURCES AND FINANCIAL IMPLICATIONS

D-1 If one-time or pilot funding are being requested to support this new program of study, please identify the amount of funding being requested:

- No funding is requested at this time.

D-2 If ongoing funding being requested to support this new program of study, please identify the amount of funding being requested:

- No funding is requested at this time.

D-3 If new funding is not being requested, how will the program be funded?

As noted in the joint letter of support, dated 29 October 2020, from the Department of Pediatrics and Child Health, University of Manitoba; and the Children’s Hospital Research Institute of Manitoba:

To ensure the successful launch of this program, the department of Pediatrics and CHIRM will partner to fund a program administrative assistant at the OA5 level. CHIRM will provide 250 ft² of facilities space in the heart of the Bannatyne campus to support office space and a trainee hub in the middle of the learning environment.

(above text copied verbatim from the letter of support)

The teaching of courses within the program will be assigned to existing faculty members. Other program expenses will be covered initially by joint funding from these same entities and eventually by tuition.

D-4 List any external sources of funding that will be used to support the implementation or delivery of this new program of study: *(Provide such information as agreements for funding from industry or external grants and indicate the anticipated length of time for each agreement.)*

- Not applicable

D-5 What are the resource implications to the institution (budget, IT, library, laboratory, computer, space, practicum liability insurance, student services, etc) in delivering this new program of study?

The Children's Hospital Research Institute of Manitoba has committed to in kind support of physical space and infrastructure as well as joint support with the Department of Pediatrics for the administrative support position (OA5) mentioned below (section D-6). The Neil John McLean Library has expressed its support for this program (see accompanying UM Libraries Statement for Graduate Curriculum Change).

D-6 Please describe new and existing staffing resources needed to provide this new program of study. *Include reallocation of existing faculty, hiring of new faculty, administrative and support services and any other considerations.*

New staffing

- Office Assistant 5: full time 1.0 EFT supporting the entire Grad Program and other administrative duties
- Program Director: Stipend of \$7,500 annually

Existing faculty

- All courses will be delivered by existing faculty and staff. The Department of Pediatrics and Child Health includes both University of Manitoba Faculty Association (UMFA) members and GFT.

D-7 Provide a program implementation plan for the new program of study by academic year (start to maturity) that includes any elements to be phased in (e.g., new faculty hires, distribution of existing faculty and support staff) from launch to maturity:

Year 1

- New hires: OA5 (support staff) and Director (appointed from existing faculty, see section D-6)
- Current faculty (GFT and UMFA members) have agreed to cover teaching demands
- First students enrolled (up to 5), courses launched
- Pillar rotations to be arranged and implemented as faculty are available

Year 2

- Second round of enrolments (up to a total capacity of 5 students)
- Clinical faculty and UMFA to assume approximately comparable proportions of graduate students
- Graduate committees to be made up of a minimum of three (3) members (including the advisor/co-advisor), at least two (2) of whom must be members of the Faculty of Graduate Studies

Year 3

- Increase enrolment capacity to 8
- First graduates expected to complete thesis and graduate

D-8 Please describe the effect of this new program on existing capital infrastructure and equipment:

Students will need and be given access to state-of-the-art infrastructure and equipment to succeed in this program. The Clinical Simulation Lab is a unique facility that will be used to introduce non-clinically trained students to a clinical

working environment in a workshop (PEDS 7020). The Children's Hospital Research Institute of Manitoba, where the Pediatric Graduate Program will be based, is a state-of-the-art facility that supports basic biomedical, clinical and epidemiological research through several core facilities (see accompanying joint letter of support from Drs Birk and Klassen). The Pediatric Graduate Program will help to ensure these facilities are kept current and efficient in their operation.

D-9 If capital funding is being requested to support additional specialized program materials such as infrastructure or equipment required to provide this new program of study, please provide a detailed description of the use of this capital:

Infrastructure to be provided in kind from the Children's Hospital Research Institute of Manitoba. **No capital funding is requested from Manitoba Economic Development and Training (MEDT) at this time.**

SECTION E– TUITION

E-1 What are the proposed tuition fees?

Program Notes

The proposed tuition fees are **\$5,748.80 (fee quoted is per 2022-23 rates)** for Canadian students and **\$12,647.48 (fee quoted is per 2022-23 rates)** for international students, payable annually for the first year of the MSc program (full or part time). Subsequent years of enrolment (full time) would carry a continuing fee of **\$538.20 per term (3 terms per year; fee quoted is per 2022-23 rates)** until program completion.

E-2 Please provide a rationale for the tuition fee proposed. *(For example, are these tuition fees comparable to tuition for existing programs within the academic unit or to tuition for similar programs offered at other institutions?)*

The fee schedule proposed is based on the University's standard Full-Time master's program fees.

E-3 Please describe any additional fees that would apply to a student in this program?

- None

UM INTERNAL REQUIREMENTS: Please note any new course-fees proposed in support of this program. Please provide a rationale for any new fees. Are these fees comparable to fees for existing programs within the academic unit or for similar programs offered at other institutions?

- No new course-fees are anticipated

E-4 Please describe any specific supports to encourage affordability and accessibility to the program:

Part-time students will be able to work full time while pursuing their studies, but are ineligible for most awards and scholarships offered by the University.

SECTION F – SIGNATURES

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

SUBMITTED BY:

President:

Name:

Signature:

Date:

Vice-President/Academic:

Name:

Signature:

Date:

For use by joint programs only:

President:

Name: Not applicable

Signature:

Date:

Vice-President/Academic:

Name: Not applicable.

Signature:

Date:

SUBMIT COMPLETED FORM

PROVOST'S OFFICE ONLY 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)*:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Cover letter |
| <input type="checkbox"/> | Program of Study Financial Form |
| <input type="checkbox"/> | Any supporting documentation <i>(reviews, letters of support, etc.)</i> |

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

Admission Criteria – M.Sc.

In addition to admissions criteria outlined by the University of Manitoba's Faculty of Graduate Studies, the following criteria must be met to be considered eligible for the proposed MSc program:

- The **minimum GPA** for application to the MSc program in Pediatrics is **3.25**.
- A minimum GPA of 3.25 in the last 2 full years (60 credit hours) of study
- A letter from the student's prospective research supervisor, attesting to the advisor's commitment to the student must be included with the application (see section 4.3.1). The advisor must have a Master's degree, or equivalency, as assessed by the Faculty of Graduate Studies
- Indicated choice of home research pillar (Clinical and Applied Sciences, Population Health, Basic Sciences, or Policy & Practice; see Figure on Page 4)

The Pediatric Graduate Program reserves the right to interview all students prior to acceptance to, in part, assess their conversational English.

Three (3) Letters of Recommendation are required, including one from a present or former supervisor or academic mentor, all from individuals who have known the applicant for 2 or more years. Points that must be addressed in each letter include (a) a Statement of English language proficiency (if known; if not known, must be explicitly stated); and (b) a Statement of Scientific Capacity

- Professionals who do not work in private practice and who intend to continue working while in the Pediatric Graduate Program require a letter of support from the work supervisor. Professionals in private practice are exempt from this requirement.
- Pediatric residents who intend to continue working while in the Pediatric Graduate Program require both a letter of support from their program director and approval from the Department Head and Director of the Pediatric Graduate Program. With this approval, residents will be permitted to work up to 6 shifts or a total of 48 hours per month, whichever is less

Applicants will also be asked to respond to the following two questions on their application to give some context to their life experience and their unique qualifications as well as reasons for applying to the program:

1. Why do you think you're a strong candidate for this program? Please speak to some experiences in your own life that support your application to this application. (500 words)
2. What is a current issue in child health that you seek to address through your training and why? (300 words)

Master of Science in Pediatrics and Child Health: Bona Fide Academic Requirements

BFAR statement	Taught	Assessed
Student must successfully complete a research project, required by their program and determined by the assigned examining committee.		Examining/Adjudication Committee
Student must produce a recorded/published thesis commensurate with degree being sought.	Master's GRAD 7000	GRAD 7000
Student must successfully defend their thesis (where required), as determined by the assigned examining committee, in real-time.	Master's GRAD 7000	GRAD 7000
Student must demonstrate knowledge of the University of Manitoba's policy on academic integrity, plagiarism, and cheating.	GRAD 7500	GRAD 7500
Student must conduct research in a safe and ethical manner, referring to their respective ethics board and supervisor(s) to ensure respect is maintained for: human dignity and/or animal welfare; vulnerable persons; informed consent; justice and diversity; confidentiality and privacy; beneficence and non- maleficence in the work that they conduct.	GRAD 7300	GRAD 7300
Student must complete coursework as required by their program.	<p>A total of 12 credit hours is required from the following courses, for ALL students: PEDS 7010 PEDS 7020 PEDS 7050</p> <p>PEDS 7130 PEDS 7150 PEDS 7160 PEDS 7170</p> <p>The following non-credit course is required for</p>	<p>PEDS 7010 PEDS 7020 PEDS 7050</p> <p>PEDS 7130 PEDS 7150 PEDS 7160 PEDS 7170</p> <p>PEDS 7060</p>

BFAR statement	Taught	Assessed
	<p>students not having clinical training or background: PEDS 7040</p> <p>The following non-credit course is required for students with clinical training or a clinical background: PEDS 7060</p> <p>The following non-credit courses are also required, for ALL students: PEDS 7030 PEDS 7070 PEDS 7080</p>	<p>PEDS 7030 PEDS 7070 PEDS 7080</p>



**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.

Overview	
Institution:	University of Manitoba
Program Name:	Pediatric MSc Program
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca
Date:	7/6/2022

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
REVENUE INFORMATION										
Contribution from Institution		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tuition		\$ 18,180	\$ 18,180	\$ 23,701	\$ 5,521	\$ 37,636	\$ 13,935	\$ 42,519	\$ 4,884	\$ 42,519
Student Fees		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Unit (Existing Resources)		\$ 175,200	\$ 175,200	\$ 181,332	\$ 6,132	\$ 172,253	\$ (9,079)	\$ 178,282	\$ 6,029	\$ 178,282
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Revenue (A)	\$ -	\$ 193,380	\$ 193,380	\$ 205,033	\$ 11,653	\$ 209,889	\$ 4,856	\$ 220,801	\$ 10,913	\$ 220,801

MEDT Form

Institution:	University of Manitoba
Program Name:	Pediatric MSc Program
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca
Date:	7/6/2022

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
EXPENDITURE INFORMATON										
New Academic Salaries - Direct		\$ 9,000	\$ 9,000	\$ 9,315	\$ 315	\$ 9,641	\$ 326	\$ 9,978	\$ 337	\$ 9,978
Existing Academic Salaries - Direct		\$ 160,800	\$ 160,800	\$ 166,428	\$ 5,628	\$ 172,253	\$ 5,825	\$ 178,282	\$ 6,029	\$ 178,282
New Professional/Support Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ 15,426	\$ 15,426	\$ 15,966	\$ 540	\$ 15,966
Existing Professional/Support Salaries - Direct		\$ 14,400	\$ 14,400	\$ 14,904	\$ 504	\$ -	\$ (14,904)	\$ -	\$ -	\$ -
Operating Expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Student Support		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Indirect Salary Expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administrative Overhead		\$ 5,045	\$ 5,045	\$ 6,577	\$ 1,532	\$ 10,444	\$ 3,867	\$ 11,799	\$ 1,355	\$ 11,799
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Expenditures (B)	\$ -	\$ 189,245	\$ 189,245	\$ 197,224	\$ 7,979	\$ 207,764	\$ 10,540	\$ 216,025	\$ 8,261	\$ 216,025

MEDT Form

Institution:	University of Manitoba									
Program Name:	Pediatric MSc Program									
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca									
Date:	7/6/2022									
	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
<u>CAPITAL INFORMATON</u>										
Major Equipment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Renovations		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Furniture		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Capital (C)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue less Expenditures and Capital (A-(B+C))	\$ -	\$ 4,135	\$ 4,135	\$ 7,809	\$ 3,674	\$ 2,125	\$ (5,684)	\$ 4,776	\$ 2,651	\$ 4,776
Funding Request		\$ -		\$ -		\$ -		\$ -		

SENATE PLANNING AND PRIORITY COMMITTEE (SPPC)
New Program Approval - Financial Form

FACULTY / SCHOOL Max Rady College of Medicine

PROGRAM Pediatrics MSc Program

	21/22	22/23	23/24	24/25	25/26
	Year 1	Year 2	Year 3	Year 4	Year 5
1. STAFFING REQUIREMENTS (FTE)					
New Academic Positions (FTE) (Appendix A)	0.10	0.10	0.10	0.10	0.10
New Professional and Support Positions (FTE) (Appendix A)	-	-	0.25	0.25	0.25
New Indirect Staff (FTE) (Appendix A)	-	-	-	-	-
Subtotal Staffing Requirements (FTE)	0.10	0.10	0.35	0.35	0.35

2. PROGRAM COSTS

Direct Program Costs

New Academic Salaries (incl bpl) (Appendix A)	\$ 9,000	\$ 9,315	\$ 9,641	\$ 9,978	\$ 10,328
Existing Academic Salaries (incl bpl) (Appendix A)	160,800	166,428	172,253	178,282	184,522
New Professional/Support Salaries (incl bpl) (Appendix A)	-	-	15,426	15,966	16,525
Existing Professional/Support Salaries (incl bpl) (Appendix A)	14,400	14,904	-	-	-
Operating Expenses (Appendix B)	-	-	-	-	-
Student (Graduate/Undergraduate) Support (Appendix C)	-	-	-	-	-
Major Equipment (Appendix D)	-	-	-	-	-
Vehicles (Appendix D)	-	-	-	-	-
Renovations (Appendix D)	-	-	-	-	-
Furniture (Appendix D)	-	-	-	-	-
Other Capital (Appendix D)	-	-	-	-	-
Subtotal Direct Program Costs	\$ 184,200	\$ 190,647	\$ 197,320	\$ 204,226	\$ 211,374

Indirect Program Costs

New Indirect Salary Expenses (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Indirect Salary Expenses (incl bpl) (Appendix A)	-	-	-	-	-
Tax on Grant and Tuition Revenue	3,227	4,207	6,680	7,547	7,830
Administrative Overhead	1,818	2,370	3,764	4,252	4,411
Subtotal Indirect Program Costs	\$ 5,045	\$ 6,577	\$ 10,444	\$ 11,799	\$ 12,242

Total Program Costs (Direct & Indirect)	\$ 189,245	\$ 197,224	\$ 207,764	\$ 216,025	\$ 223,616
---	-------------------	-------------------	-------------------	-------------------	-------------------

3. ENROLMENT	Year 1	Year 2	Year 3	Year 4	Year 5
Expected Enrolment (headcount)	3	6	8	10	10
Expected Enrolment (credit hours)	-	-	-	-	-

4. PROGRAM REVENUE ALLOCATED TO FACULTY/SCHOOL					
Operating Grant Revenue (see note)					
Tuition Revenue (Appendix E)					
• Credit Hour Based					
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
• Program Based	18,180	23,701	37,636	42,519	44,114
• Program/Course Specific Fees	-	-	-	-	-
• Other Compulsory Student Fees	-	-	-	-	-
Other revenue	-	-	-	-	-
Total Program Revenue	\$ 18,180	\$ 23,701	\$ 37,636	\$ 42,519	\$ 44,114

5. EXISTING RESOURCES					
From Operations:					
Academic Salaries (Appendix A)	\$ 160,800	\$ 166,428	\$ 172,253	\$ 178,282	\$ 184,522
Professional and Support Salaries (Appendix A)	14,400	14,904	-	-	-
Indirect Salaries (Appendix A)	-	-	-	-	-
Current/prior years surplus (carryover)					
From Other Sources:					
Subtotal Existing Resources	\$ 175,200	\$ 181,332	\$ 172,253	\$ 178,282	\$ 184,522

SPPC Form

6. Program shortfall (surplus) (Program Costs -Program Revenue - Existing Resources)	\$ (4,135)	\$ (7,809)	\$ (2,125)	\$ (4,776)	\$ (5,020)
Internal Funds Requested through Strategic Allocation					
Funds Requested of the Provincial Government					
Balance (should be zero)	\$ (4,135)	\$ (7,809)	\$ (2,125)	\$ (4,776)	\$ (5,020)

A Kinnell

09/15/2022

Submitted by Faculty/School Budget Officer (signature)

Date

Healey om

9/15/22

Reviewed by Graduate Studies Dean or Designate (signature)

Date

(For graduate program submissions only)

Mark Wole

Sep 15, 2022

Reviewed by University Budget Officer (signature)

Date

App A - Salaries

Average Salary Increase 3.5%
Average Benefits and Pay Levy 20%

Appendix A - Salary Expenses

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

NEW	Year 1		Year 2		Year 3		Year 4		Year 5	
	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary
Academic										
Excluded Academic Admin	0.10	\$ 7,500	0.10	\$ 7,763	0.10	\$ 8,034	0.10	\$ 8,315	0.10	\$ 8,606
Professor	-	-	-	-	-	-	-	-	-	-
Assoc/Asst Professor or Senior Instructor	-	-	-	-	-	-	-	-	-	-
Lecturer/Instructor/Sessionals	-	-	-	-	-	-	-	-	-	-
Librarians	-	-	-	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-	-	-	-
Subtotal New Academic Salaries	0.10	7,500	0.10	7,763	0.10	8,034	0.10	8,315	0.10	8,606
Benefits and Pay Levy		1,500		1,553		1,607		1,663		1,721
Total New Academic Salaries (including BPL)	0.10	\$ 9,000	0.10	\$ 9,315	0.10	\$ 9,641	0.10	\$ 9,978	0.10	\$ 10,328
Professional and Support Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	-	-	-	0.25	12,855	0.25	13,305	0.25	13,771
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal New Professional and Support Staff	-	-	-	-	0.25	12,855	0.25	13,305	0.25	13,771
Benefits and Pay Levy		-		-		2,571		2,661		2,754
Total New Professional and Support Staff (incl. BPL)	-	\$ -	-	\$ -	0.25	\$ 15,426	0.25	\$ 15,966	0.25	\$ 16,525
Indirect Staff (Within your faculty/school)										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal New Indirect Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy		-		-		-		-		-
Total New Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total New Staff		\$ 9,000		\$ 9,315		\$ 25,067		\$ 25,944		\$ 26,852

App A - Salaries

Appendix A - Salary Expenses

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

EXISTING (Within your faculty/school)	Year 1		Year 2		Year 3		Year 4		Year 5	
	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary
Academic										
Excluded Academic Admin	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professor	-	-	-	-	-	-	-	-	-	-
Assoc/Asst Professor or Senior Instructor	3.00	134,000	3.00	138,690	3.00	143,544	3.00	148,568	3.00	153,768
Lecturer/Instructor/Sessionals	-	-	-	-	-	-	-	-	-	-
Librarians	-	-	-	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Academic Salaries	3.00	134,000	3.00	138,690	3.00	143,544	3.00	148,568	3.00	153,768
Benefits and Pay Levy		26,800		27,738		28,709		29,714		30,754
Total Existing Academic Salaries (including BPL)	3.00	\$ 160,800	3.00	\$ 166,428	3.00	\$ 172,253	3.00	\$ 178,282	3.00	\$ 184,522
Professional and Support Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	0.25	12,000	0.25	12,420	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Professional and Support Staff	0.25	12,000	0.25	12,420	-	-	-	-	-	-
Benefits and Pay Levy		2,400		2,484		-		-		-
Total Existing Professional and Support Staff (incl. BPL)	0.25	\$ 14,400	0.25	\$ 14,904	-	\$ -	-	\$ -	-	\$ -
Indirect Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	-	-	-	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Indirect Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy		-		-		-		-		-
Total Existing Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Existing Staff		\$ 175,200		\$ 181,332		\$ 172,253		\$ 178,282		\$ 184,522
GRAND TOTAL		\$ 184,200		\$ 190,647		\$ 197,320		\$ 204,226		\$ 211,374

App B - Operating Exp.

Appendix B - Operating Expenses

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

	<u>Direct Expenses</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
700BGT	Travel - Budget (includes visiting speakers, orientation, research day)	\$ -	\$ -	\$ -	\$ -	\$ -
701BGT	Hospitality - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
704BGT	Printing and Duplicating - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
706BGT	Consumable Materials/Supplies Budget (includes computers)	\$ -	\$ -	\$ -	\$ -	\$ -
708BGT	Telecommunications - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
710BGT	Other Expenses (Nonconsumable) Budget	\$ -	\$ -	\$ -	\$ -	\$ -
713BGT	Insurance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
716BGT	Externally Contracted Serv - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
718BGT	Professional Fees - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
740BGT	Repairs and Maintenance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Direct Operating		\$ -	\$ -	\$ -	\$ -	\$ -

Appendix C - Student Support**SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS**

<u>Graduate / Undergraduate Support Expense</u>		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
7700	Scholarships	\$ -	\$ -	\$ -	\$ -	\$ -
7710	Bursaries	\$ -	\$ -	\$ -	\$ -	\$ -
7720	Awards					
Subtotal Operating		\$ -	\$ -	\$ -	\$ -	\$ -

The Children's Hospital Research Institute of Manitoba strongly supports this research proposal. One of CHRIM's strategic goals is to support the training of HQP. We welcome partnering with this research program in graduate student applications to the funding call of Research Manitoba. Applications that are ranked highly are supported at \$17,850 annually from CHRIM.

Appendix D - Capital Costs

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

	Year 1			Year 2			Year 3			Year 4			Year 5		
Capital Item	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total
Major Equipment	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Vehicles	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Renovations	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Furniture	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Other (<i>list</i>)			-			-			-			-			-
...															
Subtotal Operating			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>

Appendix E - Tuition

Fee Increase

3.8%

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

1. EXPECTED ENROLMENT	Year 1	Year 2	Year 3	Year 4	Year 5
Headcount					
Undergraduate	-	-	-	-	-
Graduate	3	3	5	5	5
Graduate (continuing only)	-	3	3	5	5
Credit Hours					
Undergraduate	-	-	-	-	-
Graduate					

2. TUITION REVENUE GENERATED BY THE PROGRAM					
• Credit Hour Based - (enter credit hour rate in yr 1)	\$ -	\$ -	\$ -	\$ -	\$ -
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
• Program Based - (enter annual program fee in yr 1)	\$ 6,060	\$ 6,287	\$ 6,523	\$ 6,768	\$ 7,021
Undergraduate	-	-	-	-	-
Graduate	18,180	18,862	32,615	33,838	35,107
• Continuing Fee - (enter annual continuing fee in yr 2)		\$ 1,613	\$ 1,673	\$ 1,736	\$ 1,801
Graduate	-	4,839	5,020	8,681	9,007
Total Tuition Fees	\$ 18,180	\$ 23,701	\$ 37,636	\$ 42,519	\$ 44,114
• Program/Course Specific Fees					
Lab Fees - (enter amount in applicable years)					
Field Trip Fees - (enter amount in applicable years)					
(Fee description/rate)					
..... (add as required)...					
..... (add as required)...					
Total Program/Course Specific Fees	\$ -	\$ -	\$ -	\$ -	\$ -

TOTAL TUITION AND FEES GENERATED BY THE PROGRAM	\$ 18,180	\$ 23,701	\$ 37,636	\$ 42,519	\$ 44,114
--	------------------	------------------	------------------	------------------	------------------

3. TUITION REVENUE ALLOCATED TO THE FACULTY					
• Credit Hour Based - Undergraduate (enter amount)					
• Credit Hour Based - Graduate	-	-	-	-	-
• Program Based	18,180	18,862	32,615	33,838	35,107
• Continuing Fee (enter amount)		4,839	5,020	8,681	9,007
• Program/Course Specific Fees	-	-	-	-	-
• Other Compulsory Student Fees (enter amount)					
TOTAL TUITION REVENUE ALLOCATED TO THE FACULTY	\$ 18,180	\$ 23,701	\$ 37,636	\$ 42,519	\$ 44,114

NEW PROGRAM OF STUDY

Under The Advanced Education Administration Act

Universities and colleges requesting approval for a **new** program of study from Education and Training must apply using this application form. This form reflects the requirements set out in the Programs (MR 134/2015) under The Advanced Education Administration Act.



UNIVERSITY
OF MANITOBA

UM INTERNAL REQUIREMENTS:

Following unit approval* please submit the complete proposal electronically (.pdf single file) to both the Office of the Provost & Vice-President (Academic) and, for:

Undergraduate Programs: Office of the University Secretary (for Senate submission deadlines visit <http://umanitoba.ca/admin/governance/meetings/index.html>). Please also submit a **hard copy** version to the Office of the Secretary to their office as well.

Graduate Programs: Faculty of Graduate Studies (for timelines visit http://umanitoba.ca/faculties/graduate_studies/admin/program_approval_timeline.html).

ALL Programs: as preparation for submission to MET, please submit a .docx file of the proposal, an .xlsx file of the Financial Support Form and a .pdf file of all other supporting documents (letters of support, external reviews, etc.). Please date stamp these files for ease of tracking should any changes result from the Senate approval process and submit directly to the Provost's Office.

Along with the information requested in the proposal template, please **append** details on the following:

MET /SPPC Financial Support Form [available through the Office of the Provost & Vice-President (Academic)]

This form requires the signature of the Financial Planning Office. Please contact Giselle Martel, Executive Director, Financial Planning and Budgeting, for direction on completion of the form. Approval of the financial support form does not signify approval of any funding requests, either internally or from the province. Confirmation of resource availability and allocation of any new funds will be determined by the Provost at time of implementation.

Admission and/or transfer criteria for the proposed program.

Course details for required coursework, including title, course number, credit hours and calendar description.

Highlight any proposed new courses and attach:

Undergraduate Programs: for SCCCC Program and Course Change forms, as applicable, visit <http://umanitoba.ca/admin/governance/forms/index.html>

Graduate Programs: for course change forms visit http://umanitoba.ca/faculties/graduate_studies/admin/course_changes.html

Any **new academic regulations** for the program that are not currently addressed in existing faculty/college/school requirements.

Letters of support from internal units that may be impacted by the proposed new program and any external letters of support as outlined below.

Library statement of support.

Where applicable, a **transition plan** for current students entering the new program.

Please direct questions to Cassandra Davidson, Academic Programs Specialist, at Cassandra.Davidson@umanitoba.ca in the Office of the Provost and Vice-President (Academic).

*Note: the complete proposal, including all appendices, and associated program and course forms, should be submitted to departmental (as appropriate) and faculty/college/school approving bodies for review and approval, prior to submission to the Office of the University Secretary.

Revised December 10, 2017

SECTION A – PROPOSAL DETAILS

Institution: **UNIVERSITY OF MANITOBA**

Applicable faculties/department with responsibility for the program:

- Department of Pediatrics and Child Health, Max Rady College of Medicine, Rady Faculty of Health Sciences

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

- N/A

Program name:

- Pediatric Graduate Program

Credential awarded:

- Doctor of Philosophy, Pediatrics and Child Health

Office Use Only

Funding request: None

One-time funding: _____

On-going funding: _____

Proposed start date:

- September 2023

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

We will comply with all public health orders relating to the COVID-19 pandemic, including fully virtual delivery of the program until permitted to hold classes in person.

UM INTERNAL REQUIREMENT: Name of Person(s) responsible for the Program internally (please include contact information):

Jennifer L P Protudjer
501G-715 McDermot Avenue
Winnipeg, MB
R3E 3P4
Canada

+1 204 480 1380 (confidential voicemail)

Jennifer.Protudjer@umanitoba.ca

NOTE: Working remotely due to the COVID-19 pandemic.

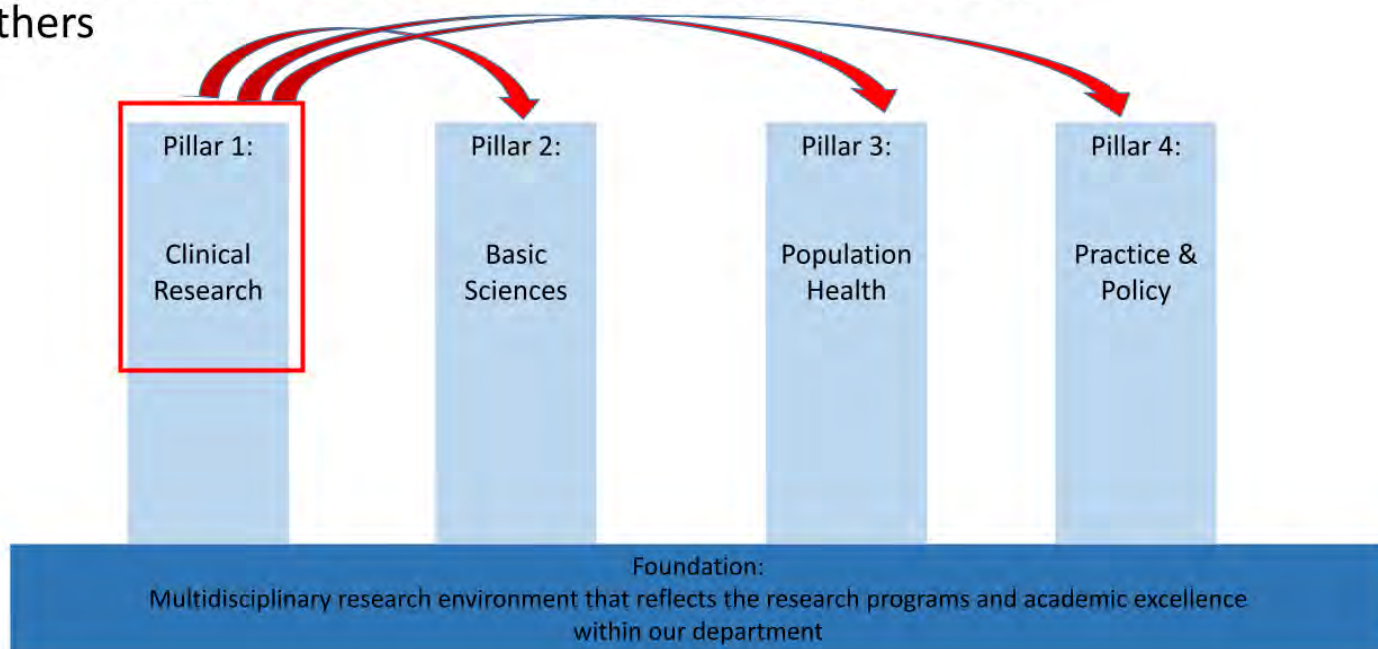
B-1 Provide a general description of the program and its objectives: *(Include intended purpose, curriculum design, and highlight distinctive attributes)*

The goal of the University of Manitoba's Pediatric Graduate Program is to offer student opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training that emphasizes translational impact of their findings for the children for whom we care.

The PhD curriculum design is focused on coursework during the first two years (see section B-5) that involves some clinical exposure for non-clinical students, mixed learning platforms, advanced statistical theory and application, and courses on the health needs and ethics of working with marginalized children. The third and fourth years are focused on original research, with the requirement to complete a thesis. Acceptance for publication of at least one first-author manuscript in a peer-reviewed scientific journal is required, and supervisors are encouraged to facilitate collaborative opportunities for students that would lead to co-authorship in other projects.

This program is founded in the very nature of the Department of Pediatrics and Child Health at the University of Manitoba and its partner institutes, including the Children's Hospital Research Institute of Manitoba (CHRIM) and the George and Fay Yee Centre for Healthcare Innovation (CHI) (please refer to the letters of support provided by each of these partners). The research and academic excellence found in these organizations contribute to a multidisciplinary research environment into which our Pediatric Graduate Program will be fully integrated. Research in our Department and partner institutes can be broadly classified into four pillars: clinical research, basic sciences, population health, and practice & policy. Based on the student's thesis project and supervisor's research platform, they will spend the bulk of their time in one of the four pillars. In order to increase the transdisciplinary nature of the students training, to gain appreciation for research being performed in other pillars, and to promote knowledge translation, the student will also be required to spend two weeks in each of two of the other three pillars as part of two 1.5 credit hour courses in the second year of study.

Proposed program design: Four pillar program in which students will concentrate on one, but spend time in the others



B-2 Length of Program: *(Define the length of the proposed program using measures appropriate to the schedule and delivery format. This will include total course credits and weeks/months, and, where relevant, hours and semesters of instruction)*
4 years full time equivalent (15 mandatory credit hours)

B-3 Intended outcomes of the program:

- B-3.1 Describe how this program serves and advances the academic, cultural, social and economic needs and interests of students and the province:
- Academic: The Department of Pediatrics offers opportunities for multidisciplinary learning in an environment of academic excellence. Upon graduation, students will be able to understand, appreciate, and read literature in all research pillars (clinical, basic, and epidemiological), and relate these perspectives to their own research project. They will be able to design and test their own hypotheses by fostering multidisciplinary collaborations within Manitoba as well as nationally and internationally.
 - Cultural: The Pediatric Graduate Program will promote child health simultaneous with the pursuit of academic excellence. Students will have opportunities to build compassion and awareness of cultural differences in the province. There will be a strong focus on Indigenous health and cultural sensitivity.
 - Socioeconomic: Regardless of the pillar in which a student's project primarily resides, students in this program will be encouraged to pay particular attention to the needs of marginalized populations and the impact of poverty and geographical isolation on health outcomes. They will be educated in the geographic disparities that exist even within Winnipeg, and throughout the whole of Manitoba. As a result of this perspective, graduates will be better equipped to advocate for health equity in their work as clinicians and researchers.
- B-3.2 Describe the existing and anticipated post-secondary learning needs of students in Manitoba that this program addresses and responds to:

Students in Manitoba are demographically diverse. Many are returning or mature students who, after working for a period of time in a clinical field, recognize the benefit of continuing their education based on the perspective they have gained during their time in the field. The Pediatric Graduate Program will pay special attention to returning and mature students, understanding their need/desire to continue working to avoid career interruption and/or to support their families. In addition, the program will attract students from elsewhere in Canada and around the world. Students will be attracted not only by the opportunities and academic excellence offered by the program itself but also by the lower cost of living Manitobans enjoy; the [Canadian Real Estate Association](#) indicates housing prices in Manitoba are currently almost 46% lower than the national average. Many graduates will choose to stay in the province, which will contribute to job creation and economic growth.

B-4 Mode of Delivery

B-4.1 Provide the total program length through one of the following measures:

15 Total credit hours

B-4.2 What proportion of the total program length (as indicated above) can be completed through the two following modes of delivery? *(Note that one or both selections can be offered up to the total program length.)*

There will be no limit on the number of credit hours that could be completed online. Students will be able to complete as many online course offerings (including required and elective courses) as are

available. Currently, at least 3 credit hours of the required courses are available with an online option. We anticipate that more online offerings will be made available for program and elective requirements.

B-5 Provide an overview of the suggested progression of courses on a year-by-year basis for the program from start to maturity. *(Course level detail is not necessary, however, please include credit hours/contract hours, proportion of upper level courses, clinical placements or practicums, or subject area requirements where applicable)*

Year 1

- Month 1: Mandatory 0 credit hour seminars and tutorials (GRAD 7500, Academic Integrity; GRAD 7300, Research Integrity; PEDS 7030, Equity, Diversity and Inclusion for Professionals; PEDS 7080, Indigenous Child Health)
- Month 2: Course work. For non-clinically oriented students, 0 credit hour PEDS 7040, Introduction to a Clinical Environment. For clinically-oriented students, 0 credit hour PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics.
- Terms 1 and 2 (Months 1-8): Coursework, 9 credit hours total (PEDS 7140 OR 7120; and 7050)
- - Where a student has already completed similar courses to the Pediatric Graduate Program core courses, the student may, with the recommendation of their Advisory Committee and with the approval of the Chair of the Pediatric Graduate program, or their delegate, be exempted from taking the equivalent core courses and allowed to fulfill the three (3) ch of core courses with three (3) ch of other courses taken at the 7000-8000 level from any college or department in the Rady Faculty of Health Sciences.
- Months 10-12: Research proposal, ethics submission

Year 2

- PEDS 7110, Directed Readings can be completed any time in the first two years of study
- Two of the following: PEDS 7130, PEDS 7150, PEDS 7160, or PEDS 7170 (Multidisciplinary Immersion in Clinical Research, in Basic Sciences, in Population Health, or in Practice & Policy) based on two pillars other than the student's home pillar. Each course is 1.5 credit hours, for a total of 3 credit hours, completed in two 2-week segments as placements with other labs or research groups)
- Thesis research begins

Year 3

- Thesis research continues, first-author manuscript preparation and submission for publication in Year 3 or 4
- Thesis proposal (may also be completed in Year 3, subsequent to the Candidacy Exam). The thesis proposal must be completed subsequent to the candidacy exam. The proposal must be independent of the candidacy exam, with <5% overlap in content. The thesis proposal must be presented first in writing to the advisory committee. The proposal must consist of a literature review, methods section (including statistical analysis plan), preliminary analyses, strengths and limitations, and future directions.
- The Candidacy Exam must be successfully completed a minimum of 1 year prior to the expected date of thesis defence. This examination, which must be independent from the thesis proposal, will include a written component, followed by an oral component, on subjects relevant to the general area of the candidate's research. First, the student must successfully complete the written exam, which will consist of a choice of 3 out of 4 questions assigned by the advisory committee. The student will have 3 weeks to complete this exam. If successful, the student will proceed to an oral exam. The exam must be scheduled within one month of successfully completing the written exam. The oral examination will consist of a discussion between the

candidate and advisory committee, during which the student must be able to more comprehensively speak to the questions in the written exam. The maximum time permitted for this oral exam will be 2.5 hours.

Year 4

- Research project work should be completed by the end of Term 1
- Thesis writing: time allotted is ~16 weeks. See Supplementary Regulations sections 5.11 and 5.11.1 for details.

UM INTERNAL REQUIREMENT: please complete the chart below to provide an overview of suggested progression through the program (indicate pre-requisites and related credit hours). Outline options for specializations within this program [minor(s) and/or concentration(s)].

NOTE: Course that are listed for both the MSc and PhD programs must be successfully completed at both levels.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GRAD 7500: Academic Integrity Tutorial (0 ch) GRAD 7300: Research Integrity Tutorial (0 ch) PEDS 7030: Equity, Diversity and Inclusion for Professionals (0 ch) PEDS 7040: Introduction to a Clinical Environment (0 ch) *non-clinically oriented students only PEDS 7060: Considerations in the Delivery of Virtual Care in Pediatrics (0 ch) *clinically-oriented students only PEDS 7050: Ethics and Equity in Child Health Research (3 ch) PEDS 7080: Indigenous Child Health (0 ch)	Two of the following, based on each student's home pillar PEDS 7130: Multidisciplinary Immersion in Clinical Research (1.5 ch) PEDS 7150: Multidisciplinary Immersion in Basic Sciences (1.5 ch) PEDS 7160: Multidisciplinary Immersion in Population Health (1.5 ch) PEDS 7170: Multidisciplinary Immersion in Practice and Policy (1.5 ch) *Note: The above courses can be completed any time in the first two years of the program	Research Project Candidacy Exam (written and oral)	Research Project work should be completed by end of Term 1

	Elective courses (minimum 9 ch) PEDS 7180: Practical Qualitative and Mixed Methods (3 ch) PEDS 7190: Medical Education, Ethics, and Engagement (3 ch) PEDS 7110: Directed Readings in Pediatric Literature (3 ch) PEDS 7140: Practical Epidemiology (6 ch) PEDS 7120: Foundation in Bioinformatics (3 ch) *Note: The above courses can be completed any time in the first two years of the program		Thesis Writing (16 weeks) Thesis Defence
TOTAL CR. HRS: 9	TOTAL CR. HRS: 6 (of which a portion may be completed at any point in Year 1 or Year 2)	TOTAL CR. HRS: 0	TOTAL CR. HRS: 0

B-6 Will the program be available for part-time study?

Yes, part-time study will be supported and encouraged. We anticipate that many prospective students wishing to enroll in our program will be practicing clinicians who are dedicated to their roles and cannot interrupt their careers entirely while pursuing further education. The Pediatric Graduate Program will give special consideration to these individuals, offering the ability to continue working while enrolled in the program. Per the U of M Supplementary Regulation 1.4.1, all graduate students will be admitted full time and the student's status will then be determined by mutual agreement between student and advisor. They would submit a request to the Department Head, who then submits to the Faculty of Graduate Studies. Once a student is declared part time, they can choose to revert to full time once, but may not subsequently revert to part time again. A declaration of change in status must occur before the end of the registration revision period in the fall or winter terms, or within one month of the start of the summer term. Further details are outlined in the program's Supplementary Regulations.

B-7 Indicate if this program will have a cooperative education, work placement, internship or practicum component and provide any relevant details:

- No

B-8 Intake Information

B-8.1 Projected enrolment for the first intake: 3

B-8.2 Maximum seat capacity (*Defined as first-year enrolment capacity*): 15

B-8.3 Anticipated date of maturity: May 2026 (first PhD graduations)

UM INTERNAL REQUIREMENT: please indicate the projected enrolment and graduates for the first 5 years of the program.

	Year 1	Year 2	Year 3	Year 4	Year 5
New Enrolments	1	3	5	5	5
Graduates	0	0	0	2	3

SECTION C – INFORMATION REGARDING PROGRAM DEVELOPMENT PHASE

C-1 Describe how this new program aligns with the strategic plans of your institution:

The University has identified “UNDERSTANDING AND COMMUNICATING INFORMATION” as a cross-cutting Research Theme, and “Integrated Research in Health and Well-Being” as a core theme. Within these areas, patient-oriented research that integrates clinical research and knowledge translation with policy and practice change has been identified as an emerging area of University research strength. The Pediatric Graduate Program described here will assist the University in realizing the general and specific objectives of its Strategic Research Plan in the following ways:

- *Recruit top students and provide outstanding research training opportunities.* The proposed Pediatric Graduate Program will provide a multidisciplinary research environment that maximizes the breadth and depth of the research programs and academic excellence that currently exists at the Department of Pediatrics and Child Health (see sections B-1 and C-5 for details on fields of study and opportunities afforded to students). We will also work with leadership within the Clinical Investigator Program (CIP; see letter of support) and the Canadian Child Health Clinician Scientist Program (CCHCSP; see letter of support) to identify and recruit top students.
- *Build research capacity through the recruitment and retention of excellent faculty.* The Pediatric Graduate Program is expected to attract students locally, nationally and internationally, and there is evidence from other similar programs of study (e.g., at the University of Alberta) that students seek employment locally after graduation. We thus expect this program to build research capacity at the University and affiliated institutions in the province.
- *Foster networking, partnership and collaborations between disciplines and across sectors.* The Pediatric Graduate Program will provide an environment that encourages collaboration between the basic sciences, applied and clinical sciences, and research institutes, including the Children’s Hospital Research Institute of Manitoba (CHRIM), and the George and Fay Yee Centre for Healthcare Innovation (CHI).
- *Disseminate and translate knowledge.* The Pediatric Graduate Program will provide opportunities for students to learn about and engage in both patient-oriented research and knowledge translation. The integration of knowledge

generation, synthesis and dissemination has become a central paradigm of child health research thanks to the efforts of faculty members at the University of Manitoba and beyond.

C-2 Outline the internal approval process (i.e. committees, governing bodies) for approving this new program of study within your institution and indicate any dates of decision. (*Governing Council, Board of Governors, Board of Regents, Senate, other*)

UM INTERNAL REQUIREMENTS: Please note date(s) of Faculty/College/School Approval. Approval dates through the governing bodies will be inserted by the Provost's Office prior to submission to government.

UM Undergraduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
Faculty/College/School	_____
SCCCC	_____
SPPC	_____
SCADM (<i>if applicable</i>)	_____
SCIE (<i>if applicable</i>)	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

UM Graduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
APC (<i>preliminary review</i>)	_____
External Review	_____
APC	_____
FGS Executive	_____
FGS Faculty Council	_____
SPPC	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

C-3 Responsibility to consult

C-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:

- Not applicable

C-3.2 What agencies, groups, or institutions have been consulted regarding the development of this program?
Note: this includes any consultation with internal UM units, academic or otherwise.

- Department of Pediatrics and Child Health, including Department Heads (2014-2019; 2019-Present) and Section Heads, University of Manitoba
- The Children's Hospital Research Institute of Manitoba (CHROM)
- George and Fay Yee Centre for Healthcare Innovation
- Clinical Investigator Program (CIP)
- Canadian Child Health Clinician Scientist Program (CCHCSP)
- Department of Internal Medicine, University of Manitoba

- Department of Community Health Sciences, University of Manitoba
- PhD Program in Applied Health Sciences
- Academic Programs Specialist, University of Manitoba
- Faculty of Graduate Studies, University of Manitoba
- The University of Alberta Department of Pediatrics Graduate Program
- The First Nations Health and Social Secretariat of Manitoba of the AMC · Research Centre
- Indigenous Knowledge Keepers

C-3.3 How have students and faculty been informed of the intent to establish this program?

Potential students, ranging from current undergraduates to practicing physicians and provincial healthcare employees, were surveyed in April 2019. All responders favourably viewed the Graduate Training Program in Pediatrics, and saw it as an opportunity for true immersion in and integration of clinical, basic science and population health research. Responders also appreciated that, in contrast to some other graduate programs in the College of Medicine, the proposed program would be personalized and flexible.

Faculty members in the Department of Pediatrics and Child Health were invited to attend a town hall meeting on December 14, 2018, at CHRIM. Faculty in attendance were overwhelmingly in favour of the proposed graduate program. Faculty members expressed interest in having the ability to directly supervise graduate students without the need for cross-appointments to other faculties, to further develop cross-disciplinary collaborations within the Department. They indicated that creating a pediatrics graduate program would firmly position the University of Manitoba as an attractive centre for highly qualified students. They expressed a desire to recruit top-ranked students who, in addition to academic excellence, are passionate about pediatric research. Faculty agreed that students will have level-appropriate skills and knowledge to secure high-ranking positions across a variety of sectors upon completion of their training programs.

C-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.)*

Note: this includes any programs currently offered at UM.

The only program in Manitoba that could be seen as similar to the one proposed is the graduate program offered by the Department of Community Health Sciences at the U of M. It, too, focuses on research methods and statistical analysis in a multidisciplinary environment, with a strong epidemiological component. However, the Pediatric Graduate Program will be distinct in several key ways:

- an emphasis on child health
- a broader range of disciplines, including clinical research, basic biomedical science and epidemiology
- research focused, with fewer course requirements
- flexibility for part time studies for students
- an introduction to a clinical environment for non-clinically oriented students
- a course on virtual healthcare delivery for clinically-oriented students

C-4.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Manitoba.

- None.

C-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.)*

At present, the only Pediatric Graduate Training Program in Canada is offered at the University of Alberta (U of A), at both the MSc and PhD levels. The program began in 1990 and currently maintains a graduate student population of 45-50 students per year, supervised by 36 tenured or tenure-track faculty members. Graduate students receive training in clinical or basic sciences, in areas of research including cardiovascular, clinical trials, evidence-based medicine, gastroenterology, genetics, Indigenous health, nephrology, neonatology, neurology/neurosciences, obesity, oncology, pulmonology, and thrombosis.

For Canadian and international students looking for multidisciplinary training in child health research, the addition of a Pediatric Graduate Program at the University of Manitoba will grant students access to the research programs of 31 primary appointed faculty members who include MDs, allied health professionals and non-clinicians. Furthermore, interest may be generated among members of the Children's Hospital Research Institute of Manitoba who may have primary appointments in other departments. Research fields in which students may complete their training include allergy, asthma, biochemistry and medical genetics, biology of breathing, clinical trials, clinical pharmacology, developmental origins of health and disease, diabetes, early childhood oral health, emergency medicine, endocrinology, human anatomy and cell science, injury prevention, nutrition, physiology, physiotherapy, psychology, and rehabilitation, among others. From this list, it is evident that the programs in Alberta and Manitoba will have overlapping but distinct and clearly synergistic opportunities for students seeking graduate training in Pediatrics in Canada.

A Pediatric Graduate Program at the University of Manitoba will add to, and not detract from, the efforts of the University of Alberta. Members of the University of Alberta have supported the efforts of Dr. J. Protudjer in the development of the proposed program at the University of Manitoba, by offering advice and guidance in the process.

C-5.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Canada.

- None

C-6 Describe the current and projected labour market demands in Manitoba for graduates of this Program:

(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.)

Based on records provided by the University of Alberta over the period 2011-2014, graduates of their Pediatric program have sought further education in Canada and abroad in nursing, in medical school, as residents, as PhD students and as postdoctoral fellows. Employment destinations for U of A graduates include administrative, research and faculty positions at Alberta universities (including a Tier I CRC) and in the Alberta Health System. Interestingly, while students tend to leave the province to pursue further education, graduates seeking employment have tended to stay within the province. Should a similar trend occur in Manitoba, graduates of the proposed program would have similar educational and employment opportunities, with potential to add high-quality personnel to organizations like the University of Manitoba, the provincial and regional health authorities, the provincial governments (including Healthy Child Manitoba and the Ministry for Health, Seniors and Active Living), Specialized Services for Children and Youth (SSCY), the Manitoba Centre for Health Policy (MCHP), and the Centre for Healthcare Innovation (CHI). Employment opportunities may also be

found in Indigenous health and community organizations such as the First Nations Health and Social Secretariat of Manitoba (Nanaandawewigamig), Klinik, mental health organizations, and University College of the North.

C-7 If copies of any internal or peer evaluations with respect to this new 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:

The letter of support provided by Dr. Patricia Birk (Department Head, Pediatrics & Child Health) affirms the support of all Section Heads for this program. Distinguished Professor Dr. Cheryl Rockman-Greenberg, an experienced academic clinician and former Department Head, has provided a very supportive letter calling the Pediatric Graduate Program the “next logical step” in the Department’s evolution. No individual or group we have consulted has raised any issues of concern.

SECTION D – REQUIRED RESOURCES AND FINANCIAL IMPLICATIONS

D-1 If one-time or pilot funding are being requested to support this new program of study, please identify the amount of funding being requested:

- No funding is requested at this time.

D-2 If ongoing funding being requested to support this new program of study, please identify the amount of funding being requested:

- No funding is requested at this time.

D-3 If new funding is not being requested, how will the program be funded?

Administrative support will be provided by an 0.25 FTE Office Assistant 5 (OA5). This position will be jointly funded between the Children’s Hospital Research Institute of Manitoba and the Department of Pediatrics during the early years of the program.

The teaching of courses within the program will be assigned to existing faculty members. Other program expenses will be covered initially by joint funding from these same entities and eventually by tuition.

D-4 List any external sources of funding that will be used to support the implementation or delivery of this new program of study: *(Provide such information as agreements for funding from industry or external grants and indicate the anticipated length of time for each agreement.)*

- Not applicable

D-5 What are the resource implications to the institution (budget, IT, library, laboratory, computer, space, practicum liability insurance, student services, etc) in delivering this new program of study?

The Children’s Hospital Research Institute of Manitoba has committed to in kind support of physical space and infrastructure as well as joint support with the Department of Pediatrics for the administrative support position (OA5)

mentioned below (section D-6). The Neil John McLean Library has expressed its support for this program (see accompanying UM Libraries Statement for Graduate Curriculum Change).

D-6 Please describe new and existing staffing resources needed to provide this new program of study. *Include reallocation of existing faculty, hiring of new faculty, administrative and support services and any other considerations.*

New staffing

- Office Assistant 5: full time 1.0 EFT supporting the entire Grad Program and other administrative duties
- Program Director: Will be overseen by the Graduate Program Director

Existing faculty

- All courses will be delivered by existing faculty and staff. The Department of Pediatrics and Child Health includes both University of Manitoba Faculty Association (UMFA) members and GFT.

D-7 Provide a program implementation plan for the new program of study by academic year (start to maturity) that includes any elements to be phased in (e.g., new faculty hires, distribution of existing faculty and support staff) from launch to maturity:

Year 1

- New hires: OA5 (support staff) and Director (appointed from existing faculty, see section D-6)
- Current faculty (especially University of Manitoba Faculty Association (UMFA) members) have agreed to cover teaching demands
- First students enrolled (up to 2), courses launched
- Pillar rotations to be arranged and implemented as faculty are available

Year 2

- Second round of enrolments (total capacity up to 2 students)
- Clinical faculty and UMFA to assume approximately comparable proportions of graduate students
- Graduate committee to be assembled, made up of a minimum of three (3) members including the candidate's advisor

Year 3

- Enrolment capacity maintained at 2 new students per year for the first 5 years

Year 4

- Enrolment capacity maintained at 2 new students per year for the first 5 years
- First graduates expected to complete thesis and graduate

D-8 Please describe the effect of this new program on existing capital infrastructure and equipment:

Students will need and be given access to state-of-the-art infrastructure and equipment to succeed in this program. The Clinical Simulation Lab is a unique facility that will be used to introduce non-clinically trained students to a clinical working environment in a workshop (PEDS 7020). The Children's Hospital Research Institute of Manitoba (CHRIM), where the Pediatric Graduate Program will be based, is a state-of-the-art facility that supports basic biomedical, clinical and epidemiological research through several core facilities (see accompanying joint letter of support from Drs Birk and Klassen). The Pediatric Graduate Program will help to ensure these facilities are kept current and efficient in their operation.

D-9 If capital funding is being requested to support additional specialized program materials such as infrastructure or equipment required to provide this new program of study, please provide a detailed description of the use of this capital:

Infrastructure to be provided in kind from the Children's Hospital Research Institute of Manitoba. **No capital funding is requested from Manitoba Economic Development and Training (MEDT) at this time.**

SECTION E– TUITION

E-1 What are the proposed tuition fees?

Program Notes

The proposed tuition fees are **\$5,748.80 (fee quoted is per 2022-23 rates)** for Canadian students, payable annually for the first two years of the PhD program (full time). Subsequent years of enrolment (full time) would carry a continuing fee of **\$538.20 per term (3 terms per year; fee quoted is per 2022-23 rates)** until program completion.

E-2 Please provide a rationale for the tuition fee proposed. *(For example, are these tuition fees comparable to tuition for existing programs within the academic unit or to tuition for similar programs offered at other institutions?)*

The fee schedule proposed is based on the University's standard Full-Time PhD program fees

E-3 Please describe any additional fees that would apply to a student in this program?

- None

UM INTERNAL REQUIREMENTS: Please note any new course-fees proposed in support of this program. Please provide a rationale for any new fees. Are these fees comparable to fees for existing programs within the academic unit or for similar programs offered at other institutions?

- No new course-fees are anticipated

E-4 Please describe any specific supports to encourage affordability and accessibility to the program:

Part-time students will be able to work full time while pursuing their studies, but are ineligible for most awards and scholarships offered by the University.

SECTION F – SIGNATURES

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

SUBMITTED BY:

President:

Name:

Signature:

Date:

Vice-President/Academic:

Name:

Signature:

Date:

For use by joint programs only:

President:

Name: Not applicable

Signature:

Date:

Vice-President/Academic:

Name: Not applicable.

Signature:

Date:

SUBMIT COMPLETED FORM

PROVOST'S OFFICE ONLY 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)*:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Cover letter |
| <input type="checkbox"/> | Program of Study Financial Form |
| <input type="checkbox"/> | Any supporting documentation <i>(reviews, letters of support, etc.)</i> |

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

Admission Criteria – Ph.D.

In addition to admissions criteria outlined by the University of Manitoba's Faculty of Graduate Studies, the following criteria must be met to be considered eligible for the proposed program:

- The **minimum GPA** for application to the PhD program in Pediatrics is **3.25**.
- A thesis-based Master's degree that is broadly related to health and/or pediatrics. Students who have a non-research Master's degree that is broadly related to health and/or pediatrics will be required to complete two additional 3 credit hour courses, PEDS 7010 Introduction to Biostatistics in Child Health Research; and, PEDS 7020 Introduction to Research Methods, in the first two terms of their program
- A minimum GPA of 3.25 in the last 2 full years (60 credit hours) of study. This includes those applying for direct admission and those entering from a Pre-Master's program
- A letter from the student's prospective research supervisor
- Indicated choice of home research pillar (Clinical and Applied Sciences, Population Health, Basic Sciences, or Practice & Policy; see Figure on Page 4 of 15)

The Pediatric Graduate Program reserves the right to interview all students prior to acceptance to, in part, assess their conversational English.

Three (3) Letters of Recommendation are required, including one from a present or former supervisor or academic mentor, all from individuals who have known the applicant for 2 or more years. Points that must be addressed in each letter include (a) a Statement of English language proficiency (if known; if not known, must be explicitly stated); and (b) a Statement of Scientific Capacity

- Professionals who do not work in private practice and who intend to continue working while in the Pediatric Graduate Program require a letter of support for the work supervisor. Professionals in private practice are exempt from this requirement.
- Pediatric residents who intend to continue working while in the Pediatric Graduate Program require both a letter of support from their program director and approval from the Department Head and Director of the Pediatric Graduate Program. With this approval, residents will be permitted to work up to 6 shifts or a total of 48 hours per month, whichever is less

Note:

The originally submitted PhD program application requirements included a thesis-based Master's degree. However, in holding an additional stakeholder (virtual) meeting on 30 June 2021, including a large representation from potential students in the program, there was concern raised that a course based Master's degree in a related field (e.g. a Master of Public Health; Master of Business Administration in Healthcare, Master of Global Health Policy) would not meet the admissions requirements for the proposed PhD program. Yet, acceptance of students with this background into the PhD program would further enhance the multidisciplinary of the program. To strengthen the research foundation for potential PhD students entering from a course-based Master's degree, these individuals will be required to complete two additional 3 credit hour courses, PEDS 7010 Pediatric Biostatistics; and, PEDS 7020 Introduction to Research Methods, in the first two terms of their PhD program.

The MSc in Pediatrics and Child Health remains a thesis-based program as the Department of Pediatrics and Child Health, University of Manitoba, along with the Children's Hospital Research Institute of Manitoba, are research-intensive organisations. Faculty are involved in local, national and international research, thereby providing ample and diverse opportunities for students to receive excellent mentorship and training by leading researchers in pediatrics.

Doctor of Philosophy in Pediatrics and Child Health: Bona Fide Academic Requirements

BFAR statement	Taught	Assessed
Student must successfully complete a research project, required by their program and determined by the assigned examining committee.		Examining/Adjudication Committee
Student must produce a recorded/published thesis commensurate with degree being sought.	Doctoral GRAD 8000	GRAD 8000
Student must successfully defend their thesis (where required), as determined by the assigned examining committee, in real-time.	Doctoral GRAD 8000	GRAD 8000
Student in doctoral program must complete a candidacy exam (or equivalent) as required by their program and determined by the assigned examining committee.	GRAD 8010	GRAD 8010
Student must demonstrate knowledge of the University of Manitoba's policy on academic integrity, plagiarism, and cheating.	GRAD 7500	GRAD 7500
Student must conduct research in a safe and ethical manner, referring to their respective ethics board and supervisor(s) to ensure respect is maintained for: human dignity and/or animal welfare; vulnerable persons; informed consent; justice and diversity; confidentiality and privacy; beneficence and non- maleficence in the work that they conduct.	GRAD 7300	GRAD 7300
Student must complete coursework as required by their program.	A total of 15 credit hours is required from the following courses, for ALL students: PEDS 7050 PEDS 7110 PEDS 7130 PEDS 7150 PEDS 7160	PEDS 7050 PEDS 7110 PEDS 7130 PEDS 7150 PEDS 7160 PEDS 7120 PEDS 7140 PEDS 7040 PEDS 7060

	<p>PEDS 7170 PEDS 7180 PEDS 7190 PEDS 7120 OR PEDS 7140</p> <p>The following non-credit course is required for students not having clinical training or background: PEDS 7040</p> <p>The following non-credit course is required for students with clinical training or a clinical background: PEDS 7060</p> <p>The following non-credit courses are also required, for ALL students: PEDS 7030 PEDS 7080</p>	<p>PEDS 7030 PEDS 7170 PEDS 7180 PEDS 7190 PEDS 7080</p>
--	--	--



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.

Overview	
Institution:	University of Manitoba
Program Name:	Pediatrics PhD Program
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca
Date:	7/6/2022

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
REVENUE INFORMATON										
Contribution from Institution		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tuition		\$ 6,060	\$ 6,060	\$ 18,862	\$ 12,802	\$ 27,766	\$ 8,904	\$ 32,279	\$ 4,514	\$ 32,279
Student Fees		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Unit (Existing Resources)		\$ 128,400	\$ 128,400	\$ 294,354	\$ 165,954	\$ 289,231	\$ (5,123)	\$ 299,354	\$ 10,123	\$ 299,354
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Revenue (A)	\$ -	\$ 134,460	\$ 134,460	\$ 313,216	\$ 178,756	\$ 316,996	\$ 3,781	\$ 331,633	\$ 14,637	\$ 331,633

MEDT Form

Institution:	University of Manitoba
Program Name:	Pediatrics PhD Program
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca
Date:	7/6/2022

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
EXPENDITURE INFORMATON										
New Academic Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Academic Salaries - Direct		\$ 114,000	\$ 114,000	\$ 279,450	\$ 165,450	\$ 289,231	\$ 9,781	\$ 299,354	\$ 10,123	\$ 299,354
New Professional/Support Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ 15,426	\$ 15,426	\$ 15,966	\$ 540	\$ 15,966
Existing Professional/Support Salaries - Direct		\$ 14,400	\$ 14,400	\$ 14,904	\$ 504	\$ -	\$ (14,904)	\$ -	\$ -	\$ -
Operating Expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Student Support		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Indirect Salary Expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administrative Overhead		\$ 1,682	\$ 1,682	\$ 5,234	\$ 3,552	\$ 7,705	\$ 2,471	\$ 8,957	\$ 1,253	\$ 8,957
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Expenditures (B)	\$ -	\$ 130,082	\$ 130,082	\$ 299,588	\$ 169,506	\$ 312,362	\$ 12,774	\$ 324,277	\$ 11,916	\$ 324,277

MEDT Form

Institution:	University of Manitoba									
Program Name:	Pediatrics PhD Program									
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca									
Date:	7/6/2022									
	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
<u>CAPITAL INFORMATON</u>										
Major Equipment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Renovations		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Furniture		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Capital (C)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue less Expenditures and Capital (A-(B+C))	\$ -	\$ 4,378	\$ 4,378	\$ 13,628	\$ 9,249	\$ 4,635	\$ (8,993)	\$ 7,356	\$ 2,721	\$ 7,356
Funding Request		\$ -		\$ -		\$ -		\$ -		

SENATE PLANNING AND PRIORITY COMMITTEE (SPPC)
New Program Approval - Financial Form

FACULTY / SCHOOL Max Rady College of Medicine

PROGRAM Pediatrics PhD Program

1. STAFFING REQUIREMENTS (FTE)	Year 1	Year 2	Year 3	Year 4	Year 5
New Academic Positions (FTE) (Appendix A)	-	-	-	-	-
New Professional and Support Positions (FTE) (Appendix A)	-	-	0.25	0.25	0.25
New Indirect Staff (FTE) (Appendix A)	-	-	-	-	-
Subtotal Staffing Requirements (FTE)	-	-	0.25	0.25	0.25

2. PROGRAM COSTS

Direct Program Costs

New Academic Salaries (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Academic Salaries (incl bpl) (Appendix A)	114,000	279,450	289,231	299,354	309,831
New Professional/Support Salaries (incl bpl) (Appendix A)	-	-	15,426	15,966	16,525
Existing Professional/Support Salaries (incl bpl) (Appendix A)	14,400	14,904	-	-	-
Operating Expenses (Appendix B)	-	-	-	-	-
Student (Graduate/Undergraduate) Support (Appendix C)	-	-	-	-	-
Major Equipment (Appendix D)	-	-	-	-	-
Vehicles (Appendix D)	-	-	-	-	-
Renovations (Appendix D)	-	-	-	-	-
Furniture (Appendix D)	-	-	-	-	-
Other Capital (Appendix D)	-	-	-	-	-
Subtotal Direct Program Costs	\$ 128,400	\$ 294,354	\$ 304,657	\$ 315,320	\$ 326,356

Indirect Program Costs

New Indirect Salary Expenses (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Indirect Salary Expenses (incl bpl) (Appendix A)	-	-	-	-	-
Tax on Grant and Tuition Revenue	1,076	3,348	4,928	5,730	6,264
Administrative Overhead	606	1,886	2,777	3,228	3,529
Subtotal Indirect Program Costs	\$ 1,682	\$ 5,234	\$ 7,705	\$ 8,957	\$ 9,793

Total Program Costs (Direct & Indirect)	\$ 130,082	\$ 299,588	\$ 312,362	\$ 324,277	\$ 336,149
---	-------------------	-------------------	-------------------	-------------------	-------------------

3. ENROLMENT	Year 1	Year 2	Year 3	Year 4	Year 5
Expected Enrolment (headcount)	1	3	5	7	8
Expected Enrolment (credit hours)	-	-	-	-	-

4. PROGRAM REVENUE ALLOCATED TO FACULTY/SCHOOL					
Operating Grant Revenue (see note)					
Tuition Revenue (Appendix E)					
• Credit Hour Based					
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
• Program Based	6,060	18,862	27,766	32,279	35,291
• Program/Course Specific Fees	-	-	-	-	-
• Other Compulsory Student Fees	-	-	-	-	-
Other revenue	-	-	-	-	-
Total Program Revenue	\$ 6,060	\$ 18,862	\$ 27,766	\$ 32,279	\$ 35,291

5. EXISTING RESOURCES					
From Operations:					
Academic Salaries (Appendix A)	\$ 114,000	\$ 279,450	\$ 289,231	\$ 299,354	\$ 309,831
Professional and Support Salaries (Appendix A)	14,400	14,904	-	-	-
Indirect Salaries (Appendix A)	-	-	-	-	-
Current/prior years surplus (carryover)					
From Other Sources:					
Subtotal Existing Resources	\$ 128,400	\$ 294,354	\$ 289,231	\$ 299,354	\$ 309,831

SPPC Form

6. Program shortfall (surplus) (Program Costs -Program Revenue - Existing Resources)	\$ (4,378)	\$ (13,628)	\$ (4,635)	\$ (7,356)	\$ (8,973)
Internal Funds Requested through Strategic Allocation					
Funds Requested of the Provincial Government					
Balance (should be zero)	\$ (4,378)	\$ (13,628)	\$ (4,635)	\$ (7,356)	\$ (8,973)

A Kinnell

09/15/2022

Submitted by Faculty/School Budget Officer (signature)

Date

Kelsey om

9/15/22

Reviewed by Graduate Studies Dean or Designate (signature)

Date

(For graduate program submissions only)

Mark Wole

Sep 15, 2022

Reviewed by University Budget Officer (signature)

Date

Average Salary Increase 3.5%
Average Benefits and Pay Levy 20%

Appendix A - Salary Expenses

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

NEW	Year 1		Year 2		Year 3		Year 4		Year 5	
	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary
Academic										
Excluded Academic Admin	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professor	-	-	-	-	-	-	-	-	-	-
Assoc/Asst Professor or Senior Instructor	-	-	-	-	-	-	-	-	-	-
Lecturer/Instructor/Sessionals	-	-	-	-	-	-	-	-	-	-
Librarians	-	-	-	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-	-	-	-
Subtotal New Academic Salaries	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy		-		-		-		-		-
Total New Academic Salaries (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professional and Support Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	-	-	-	0.25	12,855	0.25	13,305	0.25	13,771
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal New Professional and Support Staff	-	-	-	-	0.25	12,855	0.25	13,305	0.25	13,771
Benefits and Pay Levy		-		-		2,571		2,661		2,754
Total New Professional and Support Staff (incl. BPL)	-	\$ -	-	\$ -	0.25	\$ 15,426	0.25	\$ 15,966	0.25	\$ 16,525
Indirect Staff (Within your faculty/school)										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal New Indirect Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy		-		-		-		-		-
Total New Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total New Staff		\$ -		\$ -		\$ 15,426		\$ 15,966		\$ 16,525

App A - Salaries

Appendix A - Salary Expenses

SENATE PLANNING AND PRIORITY COMMITTEE NEW PROGRAM APPROVAL PROCESS

EXISTING (Within your faculty/school)	Year 1		Year 2		Year 3		Year 4		Year 5	
	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary
Academic										
Excluded Academic Admin	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professor	-	-	-	-	-	-	-	-	-	-
Assoc/Asst Professor or Senior Instructor	2.70	95,000	3.70	232,875	3.70	241,026	3.70	249,462	3.70	258,193
Lecturer/Instructor/Sessionals	-	-	-	-	-	-	-	-	-	-
Librarians	-	-	-	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Academic Salaries	2.70	95,000	3.70	232,875	3.70	241,026	3.70	249,462	3.70	258,193
Benefits and Pay Levy		19,000		46,575		48,205		49,892		51,639
Total Existing Academic Salaries (including BPL)	2.70	\$ 114,000	3.70	\$ 279,450	3.70	\$ 289,231	3.70	\$ 299,354	3.70	\$ 309,831
Professional and Support Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	0.25	12,000	0.25	12,420	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Professional and Support Staff	0.25	12,000	0.25	12,420	-	-	-	-	-	-
Benefits and Pay Levy		2,400		2,484		-		-		-
Total Existing Professional and Support Staff (incl. BPL)	0.25	\$ 14,400	0.25	\$ 14,904	-	\$ -	-	\$ -	-	\$ -
Indirect Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	-	-	-	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Indirect Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy		-		-		-		-		-
Total Existing Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Existing Staff		\$ 128,400		\$ 294,354		\$ 289,231		\$ 299,354		\$ 309,831
GRAND TOTAL		\$ 128,400		\$ 294,354		\$ 304,657		\$ 315,320		\$ 326,356

App B - Operating Exp.

Appendix B - Operating Expenses

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

	<u>Direct Expenses</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
700BGT	Travel - Budget (includes visiting speakers, orientation, research day)	\$ -	\$ -	\$ -	\$ -	\$ -
701BGT	Hospitality - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
704BGT	Printing and Duplicating - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
706BGT	Consumable Materials/Supplies Budget (includes computers)	\$ -	\$ -	\$ -	\$ -	\$ -
708BGT	Telecommunications - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
710BGT	Other Expenses (Nonconsumable) Budget	\$ -	\$ -	\$ -	\$ -	\$ -
713BGT	Insurance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
716BGT	Externally Contracted Serv - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
718BGT	Professional Fees - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
740BGT	Repairs and Maintenance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Direct Operating		\$ -	\$ -	\$ -	\$ -	\$ -

Appendix C - Student Support

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

<u>Graduate / Undergraduate Support Expense</u>		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
7700	Scholarships	\$ -	\$ -	\$ -	\$ -	\$ -
7710	Bursaries	\$ -	\$ -	\$ -	\$ -	\$ -
7720	Awards					
Subtotal Operating		\$ -	\$ -	\$ -	\$ -	\$ -

PhD students are strongly encouraged to apply for CIHR doctoral funding

Appendix D - Capital Costs

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

	Year 1			Year 2			Year 3			Year 4			Year 5		
Capital Item	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total
Major Equipment	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Vehicles	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Renovations	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Furniture	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Other (<i>list</i>)			-			-			-			-			-
...															
Subtotal Operating			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>

Appendix E - Tuition

Fee Increase

3.8%

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

	22/23	23/24	24/25	25/26	26/27
	Year 1	Year 2	Year 3	Year 4	Year 5
1. EXPECTED ENROLMENT					
Headcount					
Undergraduate	-	-	-	-	-
Graduate	1	3	4	4	4
Graduate (continuing only)	-	-	1	3	4
Credit Hours					
Undergraduate	-	-	-	-	-
Graduate					

2. TUITION REVENUE GENERATED BY THE PROGRAM					
• Credit Hour Based - (enter credit hour rate in yr 1)	\$ -	\$ -	\$ -	\$ -	\$ -
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
• Program Based - (enter annual program fee in yr 1)	\$ 6,060	\$ 6,287	\$ 6,523	\$ 6,768	\$ 7,021
Undergraduate	-	-	-	-	-
Graduate	6,060	18,862	26,092	27,071	28,086
• Continuing Fee - (enter annual continuing fee in yr 2)		\$ 1,613	\$ 1,673	\$ 1,736	\$ 1,801
Graduate	-	-	1,673	5,209	7,205
Total Tuition Fees	\$ 6,060	\$ 18,862	\$ 27,766	\$ 32,279	\$ 35,291
• Program/Course Specific Fees					
Lab Fees - (enter amount in applicable years)					
Field Trip Fees - (enter amount in applicable years)					
(Fee description/rate)					
..... (add as required)...					
..... (add as required)...					
Total Program/Course Specific Fees	\$ -	\$ -	\$ -	\$ -	\$ -

TOTAL TUITION AND FEES GENERATED BY THE PROGRAM	\$ 6,060	\$ 18,862	\$ 27,766	\$ 32,279	\$ 35,291
--	-----------------	------------------	------------------	------------------	------------------

3. TUITION REVENUE ALLOCATED TO THE FACULTY					
• Credit Hour Based - Undergraduate (enter amount)					
• Credit Hour Based - Graduate	-	-	-	-	-
• Program Based	6,060	18,862	26,092	27,071	28,086
• Continuing Fee (enter amount)		-	1,673	5,209	7,205
• Program/Course Specific Fees	-	-	-	-	-
• Other Compulsory Student Fees (enter amount)					
TOTAL TUITION REVENUE ALLOCATED TO THE FACULTY	\$ 6,060	\$ 18,862	\$ 27,766	\$ 32,279	\$ 35,291



University of Manitoba Libraries

Statement for New Program

Faculty College of Medicine
Department Pediatrics and Child Health
Graduate Program (PhD)

The Libraries' collection can support this new program, as it was described in the documents provided.

It is not expected that this proposed change will affect the Libraries' ability to continue to provide services such as research and teaching support, reference assistance, document delivery, and the technical infrastructure which allows the discovery and delivery of the Libraries' resources and services.

The information resources for this program are heavily journals based. An analysis of journals ranked by Journal Citation Reports shows that the Libraries subscribes to 94 percent of the top 2 quartiles of journals.

Though monographs are less heavily used in this area, an analysis was undertaken to determine that the collection had adequate support. In order to accomplish this, the reference lists of 3 doctorate dissertations from the University of Alberta's graduate program in pediatrics were analyzed and all references to monographs that meet our collection policies were investigated to determine whether or not they are in our collections. This analysis found 91 percent of the referenced books in our collections.

The Libraries' collection in this area is strong. Additionally, the University of Manitoba Libraries participates in external agreements with many other libraries which allow us to provide access to collections through interlibrary loan when our collections do not contain materials.

Janice Winkler
Health Sciences Librarian

Sherri Vokey
Head, Neil John Maclean Health Sciences
Library

Kristen Kruse
Coordinator, Collections Management

Lisa Hanson O'Hara
Vice Provost (Libraries) & University Librarian

December 12, 2019

Date



University of Manitoba Libraries

Statement for New Program

Faculty College of Medicine
Department Pediatrics and Child Health
Graduate Program (MSc)

The Libraries' collection can support this new program, as it was described in the documents provided.

It is not expected that this proposed change will affect the Libraries' ability to continue to provide services such as research and teaching support, reference assistance, document delivery, and the technical infrastructure which allows the discovery and delivery of the Libraries' resources and services.

The information resources for this program are heavily journals based. An analysis of journals ranked by Journal Citation Reports shows that the Libraries subscribes to 94 percent of the top 2 quartiles of journals.

Though monographs are less heavily used in this area, an analysis was undertaken to determine that the collection had adequate support. In order to accomplish this, the reference lists of 5 masters level theses from the University of Alberta's graduate program in pediatrics were analyzed and all references to monographs that meet our collection policies were investigated to determine whether or not they are in our collections. This analysis found 77 percent of the referenced books in our collections. A number of the materials not held were older materials for which we held more current analogues.

The Libraries' collection in this area is strong. Additionally, the University of Manitoba Libraries participates in external agreements with many other libraries which allow us to provide access to collections through interlibrary loan when our collections do not contain materials.

Janice Winkler
Health Sciences Librarian

Sherri Vokey
Head, Neil John Maclean Health Sciences
Library

Kristen Kruse
Coordinator, Collections Management

Lisa Hanson O'Hara
Vice Provost (Libraries) & University Librarian

December 12, 2019

Date

Supplementary Regulations Faculty of Graduate Studies (FGS)

Name of Unit/Program: Pediatrics & Child Health (M.Sc. & Ph.D.)

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. The integrity of the process is at stake. The major goal of this guide is to prevent potential problems that may affect the completion of a student's program. It is the responsibility of students and the department/unit offering a graduate program to read and follow the policies contained herein.</p> <p>All regulations as laid out in the Faculty of Graduate Studies Academic Guide are subject to revision by the appropriate bodies of the Faculty of Graduate Studies. This compendium is presented as the most recent set of regulations as a guideline for students and staff. Individual departments/units may have additional regulations that supplement these general regulations. All such supplementary procedures and regulations must be approved as specified by the By-Laws of the Faculty of Graduate Studies, be published and available to students, and kept on file in the Faculty of Graduate Studies Office.</p> <p>For those programs that are administered through a Faculty (as opposed to a Department) the term "Department" should be substituted by "Unit" within this document (i.e. Department Head becomes Unit Head.)</p> <p>PREFACE</p> <p>The Faculty of Graduate Studies is a pan-University faculty charged with the oversight of the administration of all graduate programs at the University. Therefore these regulations apply to all graduate students in all programs in all academic units. Individual units may require specific requirements above and beyond those in the following document, and students should consult unit supplementary regulations for these specific regulations. All unit supplementary regulations require approval of the Faculty of Graduate Studies.</p> <p>Definitions</p> <p>The "Dean, Faculty of Graduate Studies" shall be taken to mean the Dean, Faculty of Graduate Studies or designate.</p> <p>"Unit" shall be taken to mean the academic unit where the graduate student is pursuing his/her studies. Generally, this is the department. For Faculty-based programs, the Dean is the <i>de facto</i> Head of the unit. The term "unit" shall also include Schools of Faculties within the University. The Dean of the Faculty of Graduate Studies is the <i>de facto</i> Head of interdisciplinary programs administered by the Faculty of Graduate Studies. The Head of any unit may designate any of his/her responsibilities in this policy to another member of the unit, such as the Graduate Chair.</p>	
<p>1.1 Application and Admission Procedures</p> <p>The application (and all required documentation) is to be submitted directly to the Faculty of Graduate Studies via the online application system. Applicants should contact the department/unit to which they are applying for the procedures and requirements which are specific to the program of application. Contact information for each department/unit can be found on the Graduate programs of study website.</p> <p>1.1.1 Process:</p> <p>1.1.1 (a) A completed official application for admission form must be submitted, together with the application fee and supporting documentation, to the Faculty of</p>	<p>Pediatric Graduate Program Coordinator</p> <p>John Buhler Research Centre 501G-715 McDermot Ave, Winnipeg MB R3E 3P4, Canada Email: pgpadmin@umanitoba.ca</p>

FGS Academic Guide Regulation 2021/22		Supplementary Regulation																
<p>Graduate Studies, via the online application system. Note: International students must pay special attention to the appropriate requirements with respect to transcripts (see application form for details).</p> <p>1.1.1 (b) Applications are subsequently reviewed by the unit offering the program which will decide whether the applicant meets the unit's criteria including, but not limited to, availability of advisors, space, and facilities.</p> <p>1.1.1 (c) Notification of recommended/rejected applications is sent by the Head of the unit to the Faculty of Graduate Studies. Applications recommended for admission are checked to determine if they meet the Faculty of Graduate Studies' eligibility requirements. The Faculty of Graduate Studies then notifies applicants of their acceptance or rejection.</p>																		
<p>1.1.2 Deadlines for Recommended Applications (from Departments/Units to the Faculty of Graduate Studies)</p> <p>The following are the deadlines for receipt by the Faculty of Graduate Studies of recommendations from departments/units.</p> <table><tr><th>Term</th><th>Start Date</th><th>Canadian/US</th><th>International</th></tr><tr><td>Fall</td><td>September</td><td>July 1</td><td>April 1</td></tr><tr><td>Winter</td><td>January</td><td>November 1</td><td>August 1</td></tr><tr><td>Summer</td><td>May</td><td>March 1</td><td>December 1</td></tr></table> <p>IMPORTANT: <u>These are not application deadlines.</u> Applicants are required to submit the application and documentation to the Faculty of Graduate Studies to meet the application deadline in place for a particular department/unit. Deadlines vary depending on the program to which the applicant is applying and whether the applicant is domestic or international. Deadlines can be found by clicking the appropriate application program page on the <u>Graduate programs of study website</u>.</p>		Term	Start Date	Canadian/US	International	Fall	September	July 1	April 1	Winter	January	November 1	August 1	Summer	May	March 1	December 1	<p>For upcoming application deadlines, please consult the Graduate Program Page: [link to specific program page from http://umanitoba.ca/faculties/graduate_studies/admissions/programs/index.html]</p>
Term	Start Date	Canadian/US	International															
Fall	September	July 1	April 1															
Winter	January	November 1	August 1															
Summer	May	March 1	December 1															
<p>1.1.3 Application Fee</p> <p>A \$100.00 (CDN) non-refundable fee must accompany an application for admission. The Physician Assistant Studies and Orthodontics programs charge an additional fee of \$25 and \$50, respectively.</p>																		
<p>1.1.4 Transcripts</p> <p>Unofficial copies of transcripts and final degree certificates are acceptable for initial assessment and provisional admission purposes. Upon admission to the Faculty of Graduate Studies, applicants must arrange for official transcripts from all post-secondary institutions attended to be sent to the Faculty of Graduate Studies, within one (1) month of the date on the admission letter. Applicants will be placed on hold, which prevents registration until all admission requirements have been submitted. All transcripts must arrive in sealed, university-stamped envelopes sent directly from the issuing institution(s) and be accompanied by official and literal English translations (Please refer to Transcripts: International below). For international degrees or where the transcripts does not or will not clearly state that a degree has been conferred, a copy of the official degree certificate is also required.</p>																		
<p>1.1.5 Transcripts: International</p> <p>Where academic records from a country other than Canada are produced in a language other than English, the applicant must arrange for the submission of official literal English translations of all records. To be official, original language documents and English translations must arrive together in envelopes which have been sealed and endorsed by the issuing institution. For international degrees, a copy of the official degree certificate is also required.</p>																		
<p>1.1.6 Transcripts: University of Manitoba</p>																		

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
University of Manitoba students are not required to submit University of Manitoba transcripts.	
<p>1.1.7 Proficiency in English</p> <p>A successfully completed English Language Proficiency Test from the approved list is required of all applicants unless they have received a secondary school diploma and/or university degree from Canada or one of the countries listed on the English Language Proficiency Test Exemption List (see 1.1.8). The Faculty of Graduate Studies requires a passing, acceptable English Language Test score in order to offer admission. Please note: In all cases, test scores older than two (2) years (from the time of completing the test) are invalid.</p> <p>Thresholds required for successful completion are indicated in parentheses.</p> <ul style="list-style-type: none"> • Test of English as a Foreign Language (TOEFL) Internet based -iBT® (86; minimum score of 20 in each of reading, writing, listening and speaking categories). The “best score” will not be considered for admission. Only individual test scores will be used to meet the minimum requirements. • Canadian Test of English for Scholars and Teachers (CanTEST®) (band 4.5 in listening and reading and band 4.0 in writing and oral interview) • International English Language Testing System (IELTS™) (6.5 in the Academic Module) • Academic English Program for University and College Entrance (AEPUCE) (65%) • PTE Academic (61% overall) <p>Note:</p> <p>In addition, foreign language students may be asked by the department/unit to complete the CanTEST prior to or following registration in the Faculty of Graduate Studies and, if need be, the department/unit may recommend remedial measures in language skills based on the results of the CanTEST. Some units may require a specific test or test scores greater than those indicated above. Students should check department/unit supplementary regulations for details.</p>	<p>Acceptable test results must be dated <u>within 1 year of date of application</u> to the Pediatric Graduate Program.</p> <p>The Pediatric Graduate Program reserves the right to interview all students prior to acceptance to, in part, assess their conversational English.</p>
<p>1.1.8 English Language Proficiency Test Exemption List</p> <p>Applicants holding secondary school diplomas and/or recognized university degrees from countries on the Faculty of Graduate Studies English Language exemption list are not required to submit an English Language Proficiency score. For more information please see our website.</p>	
<p>1.1.9 Letters of Recommendation</p> <p>Letters of Recommendation are to be completed via the online application. Recommendation letters submitted via post or email are not accepted. Applicants are required to add their 'Recommendation Provider(s)' contact information so that each recommender is sent an automated email notification.</p> <p>Generally, two (2) Letters of Recommendation must be submitted to the Faculty of Graduate Studies. For the number of recommendation letters necessary, applicants should review their specific Graduate programs of study website.</p>	<p><u>M.Sc.:</u></p> <p>Three (3) Letters of Recommendation are required, including one from a present or former supervisor or academic mentor, all from individuals who have known the applicant for 2 or more years.</p> <p><u>Ph.D.:</u></p> <p>Three (3) Letters of Recommendation are required, including one from the student's Master's supervisor or academic mentor, and all from individuals who have known the applicant for 2 or more years.</p> <p><u>Both M.Sc. & Ph.D.:</u></p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<p>These letters must include a statement of scientific capacity.</p> <p>Professionals who do not work in private practice and who intend to continue working while in the Pediatric Graduate Program require a letter of support for the work supervisor. Professionals in private practice are exempt from this requirement.</p> <p>Pediatric residents who intend to continue working while in the Pediatric Graduate Program require both a letter of support from their program director and approval from the Department Head and Director of the Pediatric Graduate Program. With this approval, residents will be permitted to work up to 6 shifts or a total of 48 hours per month, whichever is less.</p>
<p>1.1.10 Admission Tests</p> <p>Some departments/units require admissions tests, such as the Graduate Record Examination (GRE®) or the Graduate Management Aptitude Test (GMAT™). These requirements are listed in the supplementary regulations of the particular department/unit, and if required, the scores must be submitted at the time of application.</p>	
<p>1.1.11 Entrance Requirements</p> <p>The minimum standard for acceptance into any category in the Faculty of Graduate Studies is a 3.0 Grade Point Average (GPA) or equivalent in the last two (2) previous years of full time university study (60 credit hours).</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.</p>	<p>The minimum GPA for application to the Pediatric Graduate Program is 3.25.</p> <p>Applicants will normally possess a research-based Master's degree in a discipline or profession consistent with pediatrics and health. Applicants who do not possess a research-based Master's degree, but who have some research experience will be assessed on a case-by-case basis, as will those with professional Master's degrees.</p> <p>Students admitted to the PhD program in the Pediatric Graduate Program without a research-based Master's degree will be required to complete two additional 3 credit hour courses, PEDS 7010 Pediatric Biostatistics; and, PEDS 7020 Introduction to Research Methods, in the first two terms of their program.</p> <p>Entry into the program will also require the applicant to answer the following questions on their application:</p> <ol style="list-style-type: none"> 1. Why do you think you're a strong candidate for this program? Please speak to some experiences in your own life that support your application to this application. (500 words) 2. What is a current issue in child health that you seek to address through your training and why? (300 words)
<p>1.1.12 Eligibility of University of Manitoba Staff Members</p> <p>A staff member at The University of Manitoba at the rank of Assistant Professor or above is not eligible to apply for admission to a graduate program in the department/unit in which the appointment is held.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>1.2 Registration Procedures</p> <p>1.2.1 Registration</p> <p>Pre-Master's students are not normally allowed to register in 7000-level courses or above, with the exception of <u>GRAD 7500</u>, unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate. See <u>General Regulations - Pre-Master's</u> for additional information.</p> <p>Undergraduate students may be permitted to register in 7000-level courses or above on recommendation of the department/unit offering the graduate course, subject to the conditions listed below.</p> <ul style="list-style-type: none"> • Undergraduate students must obtain permission from the department/unit head and course instructor before registering for a graduate course. • Only undergraduate students completing an undergraduate degree at the University of Manitoba are eligible to enroll in a graduate course. • Undergraduate students are not eligible for admission to any graduate course that is cross-listed with an undergraduate course, or that is scheduled to be taught at the same time and location as an undergraduate class. • Undergraduate students will only be eligible to receive graduate-level credit for a course designated as 7000-level or above if at least 75% of the students registered in the course are graduate students. • Undergraduate students who complete a graduate course are not guaranteed admission to a graduate program. <p>On admission to a graduate program at the University of Manitoba, application may be made to the Faculty of Graduate Studies to apply any previously completed graduate courses toward meeting program requirements, subject to the restrictions listed below.</p> <ul style="list-style-type: none"> • No more than 50% of the coursework required in a graduate program may be imported. • Only courses in which a C+ grade or higher, or the minimum grade required by the program to which the course would be applied, are eligible to be considered towards meeting the requirements of any graduate program. • Any graduate course completed by an undergraduate student may subsequently be applied to a graduate program only if it has not been used toward completion of any other degree program. • Any graduate course completed by an undergraduate student for which a passing grade has been obtained (i.e., C+ or higher) may not be repeated should the student later gain admission to a graduate program. • Courses completed more than seven (7) years prior to the date of awarding a degree may not normally be used for credit towards the degree (please refer to <u>Lapse or Expiration of Credit of Courses</u>). <p>All graduate students must initially register in the term indicated in their letter of acceptance as specified in the Academic Schedule of the Graduate Calendar. Any student not registering by the registration deadline for the term specified in their letter of offer will be required to re-apply for admission; <u>admission is not guaranteed if a student re-applies to the Faculty of Graduate Studies</u>. In exceptional circumstances and with prior approval from the department/unit, a student may defer registration for up to one (1) term following acceptance into the Faculty of Graduate Studies. In the case of international students, admission may be deferred, with prior approval from the department/unit, for up to one (1) year following acceptance.</p>	<p>Only courses in which a grade of B or higher is achieved (or the minimum grade required by the program to which the course would be applied) are eligible to be considered to be used toward meeting the requirements of any graduate program.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>All programs must be approved by the Head of the major department/unit or designate. Approval to take courses from departments/units outside the major department/unit must be obtained from the outside department/unit.</p> <p>The approval or denial of admission and registration to two (2) concurrent programs rests with the Dean of the Faculty of Graduate Studies in consultation with the department/unit concerned. The request for approval or denial must be submitted to the Faculty of Graduate Studies prior to the student's admission/registration on the "Concurrent Curriculum Permission" form.</p> <p>Where a student does register in two (2) programs, it is important to note that dual registration may affect funding, and that completing a graduate program as a part-time student will affect eligibility for The University of Manitoba Graduate Fellowship (UMGF) and may limit other funding possibilities.</p>	
<p>1.2.2 Re-Registration</p> <p>All students must re-register in all Fall, Winter and Summer terms of their program until a degree is obtained. Failure to re-register will result in the student being discontinued from their graduate program. A student who has been discontinued and would like to be considered for continuation in a program must apply for re-admission, which is not guaranteed. The re-registration requirement does not apply to occasional students, visiting students, Pre-Master's students or students on an Exceptional or Parental Leave of Absence (please refer to "Leave of Absence").</p> <p>The notation 'Discontinued Graduate Program' will be placed on the academic record of any graduate student who has failed to maintain continuous registration.</p>	
<p>1.2.3 Registration Revisions</p> <p>For designated periods subsequent to registration, approved revisions may be made. It is required that students adhere to dates and deadlines as published in the Academic Schedule of the Graduate Academic Calendar.</p> <p>Note: Graduate students are not permitted to withdraw from courses without written permission from their department/unit Head on recommendation from their advisor/co-advisor (and/or advisory committee). The notation "Required to Withdraw" may be placed on the academic record of any graduate student who has withdrawn from courses without such approval.</p>	
<p>1.2.4 Advisor Student Guidelines (ASG)</p> <p>All students in thesis/practicum programs, in consultation with their advisor/co-advisor, are required to complete the ASG as soon as possible after registration but no later than at the time of submission of the first Progress Report. If a student does not have an advisor/co-advisor at this time, the interim advisor will be required to complete the ASG. The ASG is to be completed again if there is a change in advisor/co-advisor. The ASG form is available through JUMP only.</p>	
<p>1.2.5 Western Deans' Agreement</p> <p>This agreement was established in 1974 as an expression of co-operation and mutual support among universities offering graduate programs in western Canada. Its primary purpose is the reciprocal enrichment of graduate programs throughout western Canada. This agreement is not intended to preclude other agreements between participating institutions. A list of the participating Universities can be found on the Western Canadian Deans of Graduate Studies website. University of Manitoba graduate students interested in participating can learn more about how to apply on the Registrar's Office website.</p> <p>1.2.5.1 The Western Deans' Agreement normally provides an automatic tuition fee waiver for visiting students. Graduate students paying normal required tuition fees to their home institution will not pay tuition fees to the host institution.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>1.2.5.2 Only degree level courses from recognized post-secondary institutions will be considered; courses that are part of certificate or diploma programs will not be approved.</p> <p>1.2.5.3 Program fees are always to be paid to the home institution, regardless of coursework taken at another institution. Students may be required to pay student, activity, application, or other ancillary fees to the host institution, according to general policies in effect at the host institution. Wherever possible, these fees will also be waived.</p> <p>1.2.5.4 Students will qualify for the fee waiver if they:</p> <p>a) Present the <u>"Authorization Form: Western Deans' Agreement"</u> signed by the University of Manitoba graduate student's department/unit Head or advisor/co-advisor to the Faculty of Graduate Studies at least eight (8) weeks prior to the start of the term of the course(s) at the host institution. The Dean of the Faculty of Graduate Studies (or designate) will review and sign the form and submit it to the participating Western Deans' institution at least six (6) weeks prior to the start of the term, specifying the course(s) to be taken for credit toward a graduate degree program at the student's home institution;</p> <p>b) Are in good standing in a graduate program at the home institution;</p> <p>c) Do not owe tuition and/or fees at the home institution.</p> <p>1.2.5.5 Students must meet all requirements as prescribed by the host university's regulations, deadlines, class capacities, and course prerequisites.</p> <p>1.2.5.6 Registration is possible in courses at both the graduate and undergraduate levels, and in credit courses offered through distance education or other means. To be eligible, courses must be an integral part of the applicant's graduate degree program. Fee waiver is not permitted for audit or non-credit courses.</p> <p>1.2.5.7 Students must have the Authorization Form approved by the relevant department/unit Head and the Faculty of Graduate Studies at the host institution at least one (1) month prior to the commencement of the course(s) requested. The fee waiver is not available retroactively.</p> <p>1.2.5.8 Students are subject to regulations of the home institution governing credit for the courses to be undertaken. As a condition of registration at the host institution, students will arrange for official transcripts from the host institution to be sent to the home institution confirming successful completion of courses selected.</p> <p>1.2.5.9 Students must send confirmation of registration and notice of any change to the Registrar's Office of the home institution at the time of registration or course change is completed.</p> <p>1.2.5.10 Students may not claim fee waivers under the terms of this Agreement for a period of more than three (3) months in total.</p> <p>1.2.5.11 Each institution has its own regulations regarding the maximum number of transfer credits permitted in a given degree program. A list of the participating Universities can be found on the <u>Western Canadian Deans of Graduate Studies website</u>.</p>	
<p>1.3 Course Classifications</p> <p>1.3.1 General Classifications</p> <p>Students who register through Aurora Student Information System (Aurora Student) must also have prior approval of the department/unit Head or designate. Students registering through Aurora Student should add only those courses that are a Major (Standard "S") course in their program. Courses with Auxiliary "X", Audit "A", or Occasional "O" status (see below) must be added by the department/unit.</p> <p>"X" Auxiliary course: Course is not a major requirement of the program but is required/recommended by the student's advisor/co-advisor.* Extra courses that are not part of the Master's or Ph.D. program but which are specified and</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>required/recommended by the student's advisor/co-advisor, may be classified as "X" (Auxiliary) and the grade will not be included in the degree GPA which appears on the transcript. However, "X" course grades may be used in the calculation of the GPA for continuation in the program and a minimum grade requirement may be required for "X" coursework by the department/unit. (Please consult the individual department/unit's <u>supplementary regulations</u>.) Additionally, "X" courses are used in the calculation of the GPA for the purposes of Admission and Awards. (The University of Manitoba Graduate Fellowship [UMGF] and International Graduate Student Scholarship [IGSS] use "X" courses in the calculation of the GPA.) The student's advisor/co-advisor and department/unit Head must determine if there is a valid need for the registration in courses under the X classification. A maximum of twelve (12) credit hours under the "X" course classification is permitted while registered in a given program.</p> <p>"A" Audit course: Course is not taken for credit. No grade is recorded. Additional fees will be assessed.</p> <p>"O" Occasional course: Course is not a requirement of the program. Additional fees will be assessed.</p> <p>Note:</p> <ul style="list-style-type: none"> Students are not permitted to audit a course and take the same course for credit at a later date. Changes in course classifications are regarded as course/program changes and may not be made without approval (refer to <u>Registration Revision</u>) or after the deadline dates for course changes as indicated in the Academic Schedule of the <i>Calendar</i>. 	
<p>1.3.2 Continuing Courses (CO)</p> <p>For those graduate level courses (6000, 7000, and 8000) which are being taken by students enrolled in the Faculty of Graduate Studies and which continue beyond the normal academic term, the instructor shall recommend that a mark classification of CO be used until such time as a final grade can be established. If the course is not completed by August 31, the student must re-register for the course(s).</p> <p>In the absence of an assigned mark of CO, the student may receive a mark of F in that term.</p> <p>Note:</p> <p>A CO will normally not be permitted longer than twelve (12) months. In exceptional circumstances, where a CO grade is requested for a second twelve (12) months, at the time the CO grade is submitted, the instructor and department/unit Head must also submit the "<u>Recommendation for Continuing Status of a Course</u>" form stating the reason for the CO and the deadline by which the course must be completed.</p>	
<p>1.3.3 Incomplete Courses</p> <p>Students who are unable to complete the term work prescribed in a course may apply to the instructor prior to the end of term for consideration of a grade classification of "Incomplete". It is understood that the student is to write the final examination if one is scheduled for the course. A "<u>Time Extension for Completion of Term Work</u>" form must be completed.</p> <p>Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary grade using a zero value for incomplete work.</p> <p>Normally, the following maximum extensions are allowed:</p> <ul style="list-style-type: none"> August 1st for courses terminated in April December 1st for courses terminated in August 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> • April 1st for courses terminated in December <p>If a final grade is not reported within one (1) month of the extension deadline, the Incomplete (I) classification will be dropped and the grade will remain as awarded. Normally, the student will no longer have an opportunity to improve the grade. In no case will the satisfaction of the incomplete requirements result in a lower grade being awarded.</p>	
<p>1.3.4 Cross-Listed Courses</p> <p>Cross-listed courses are defined as courses taught at the same time and in the same location.</p> <p>The regulations below place limits on the extent to which cross-listed courses may be used to meet graduate program requirements.</p> <ol style="list-style-type: none"> 1. In order to receive credit for any 7000-level course that is cross-listed with a 3000-, 4000-, or 5000-level undergraduate course, the 7000-level course must have a distinct syllabus, and the course content and evaluation methods must be at the graduate-level. 2. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a 1000- or 2000-level undergraduate course unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate. 3. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a previously completed course. 	
<p>1.4 Student Status/Categories of Students</p> <p>1.4.1 Full-Time and Part-Time Students</p> <p>Graduate students are admitted as full-time students. Graduate student status is not determined by the number of credit hours taken per term. Therefore, students who spend much of the time in a laboratory or library engaged in research or writing a thesis/practicum, or who spend part of the academic year engaged in research elsewhere, are regarded as full-time students.</p> <p>Student status should be determined by the student and advisor/co-advisor, and changes must be requested on the <u>"Part-Time Status" form</u>. The form must be approved by the department/unit Head and submitted to the Faculty of Graduate Studies.</p> <p>Declaration of full/part time status must be made prior to the end of the registration revision period in the Fall and/or Winter terms and within one (1) month of the start of the Summer term.</p> <p>For every full year (12 months) that a Master's student is declared as part time, they will receive an additional four (4) months in time to complete their program. For every two (2) full years (24 months) a Master's student is declared as part time, they will receive an additional year (12 months) in time to complete their program. Master's students who declare part time status for less than one year (12 months) are not permitted any additional time to complete their program. Retroactive status changes will not be made.</p> <p>For every two (2) full years (24 months) that a Ph.D. student is declared as part time, they will receive an additional four (4) months in time to complete their program. Ph.D. students who declare part time status for less than two (2) full years (24 months) are not permitted any additional time to complete their program. Retroactive status changes will not be made.</p>	
<p>1.4.2 Pre-Master's Or Qualifying Students</p> <p>In specific cases where the academic background of the student is judged to be insufficient for the given program in a department/unit, the department/unit may</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>recommend that the student be admitted to a Pre-Master's program of study. The Pre-Master's program is intended to bring the student's standing to approximately the level of an Honours graduate in the major department/unit, and to provide any necessary prerequisites for courses.</p>	
<p>1.4.3 Occasional Students</p> <p>A student wishing to take graduate courses with no intention of applying them toward an advanced degree at The University of Manitoba is classified as an occasional student. Occasional students must meet the same degree and grade point average entrance requirements as regular graduate students and must write final examinations in the courses taken (unless audited), but will not receive credit toward a degree. In special circumstances, an occasional student may apply for permission to proceed to a degree program and also apply for transfer, for credit, of courses previously taken in the "occasional" category.</p> <p>Occasional student status is not advised for international students due to study permit limitations. If you are an international student interested in becoming an occasional student, please contact the Graduate Studies admissions office and University of Manitoba International Centre.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Transfer of courses from the "occasional" category to a degree program is not automatic: request for advance credit must be made within the first year of a degree program on the "Advance Credit – Transfer of Credit" form. 2. Fees paid by a student while registered as an occasional student are not transferable, at a later date, to a degree program. 3. Registration in the occasional student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication. 4. At least 60% of coursework per academic year must be taken at the graduate level while registered as an occasional student. 	
<p>1.4.4 Joint Masters (With the University of Winnipeg)</p> <p>The University of Manitoba and the University of Winnipeg offer four (4) joint Master's programs: History, Religion, Public Administration, and Peace and Conflict Studies. The University of Manitoba, Faculty of Graduate Studies is responsible for the administration of the joint programs, and students must complete the regular University of Manitoba application and registration forms. Students taking Pre-Master's qualifying work for these programs register at the university where the courses are being taken.</p>	
<p>1.4.5 Visiting Students</p> <p>Visiting students are students who are registered at another institution who are taking one (1) or more courses at The University of Manitoba on a Letter of Permission from their home university. Visiting students must submit an online application, along with a \$100.00 (CDN) non-refundable application fee, in addition to copies of transcripts from all institutions attended and a successfully completed English Language Proficiency Test from the approved list, if applicable. Applications must be submitted to the Faculty of Graduate Studies a minimum of one (1) month prior to the start of the intended term of study.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Fees paid by a student while registered as a visiting student are not transferable, at a later date, to a degree program. 2. Registration in the visiting student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication. 3. At least 60% of coursework per academic year must be taken at the graduate level while registered as a visiting student. 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>4. Registration at two different universities on a <u>Letter of Permission</u> (Including Western Dean's and CUGTA) must have permission from the Dean of Graduate Studies. Students must provide a letter from their home department stating that they are in good academic standing and that they are permitted to take courses at multiple institutions.</p>	
<p>1.5. Student Accessibility See <u>Accessibility Policy and Procedure</u>.</p>	
<p>SECTION 2: Academic Performance - General</p> <p>2.1 General Note</p> <p>Students are responsible for ensuring that they meet all degree and program requirements. The advisor (and if appropriate co-advisor), advisory committee, and department/unit must ensure that each student follows Faculty of Graduate Studies and department/unit guidelines and meets all program requirements. The Faculty of Graduate Studies performs a final check of Faculty of Graduate Studies minimum requirements for each student just prior to graduation. Students are cautioned, therefore, to periodically check all regulations with respect to their degree requirements. Failure to meet all the requirements will render a student ineligible to graduate.</p> <p>Departments/Units may make recommendations with respect to the regulations concerning minimum academic performance; however, enforcement of academic regulations rests with the Faculty of Graduate Studies. The following procedures apply to recommendations made by departments/units:</p> <p>The department/unit is responsible for informing the Faculty of Graduate Studies when a student's performance is unsatisfactory in research or coursework and the department/unit must outline any recommended remedial action(s).</p> <p>The department/unit must notify the student of the deficiency and of its recommendation.</p> <p>If the student fails to satisfy any remedial action recommended, the student may be required to withdraw from the Faculty of Graduate Studies.</p> <p>Note:</p> <p>When a graduate student is required to withdraw from a program of study, the notation on the academic record will be: "Required to withdraw".</p> <p>A student who has been required to withdraw from a graduate program may be permitted to apply for admission to another graduate program only if the application for admission is approved by the Dean of the Faculty of Graduate Studies.</p> <p>Voluntary withdrawal from a program is only permitted if the student is in good academic standing.</p> <p>Recommendations of departments/units will supersede student requests for voluntary withdrawal.</p>	
<p>2.2 Bona Fide Academic Requirements (BFAR)</p> <p>The following Bona Fide Academic Requirements (BFAR) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills. Students must also meet additional requirements that may be specified for their program.</p> <p>Students must meet requirements as outlined in both BFARs and Supplementary Regulation documents as approved by Senate.</p> <p>Unless otherwise indicated, students may elect to complete any/all of the following requirements with or without appropriate and authorized assistive technology/aids. Students must consult Student Accessibility Services (SAS) regarding authorization for these procedures.</p>	

BFAR Statement	Taught	Assessed
Student must successfully complete a co-operative experience or practicum, if required by their program.	Master's GRAD 7030	GRAD 7030
Student must successfully complete a comprehensive exam, project, studio exhibition, or equivalent, as required by their program and determined by the assigned examining committee.	GRAD 7010 GRAD 7050 GRAD 7090 GRAD 7200	GRAD 7010 GRAD 7050 GRAD 7090 GRAD 7200 Examining/Adjudication Committee
Student must produce a recorded/published thesis commensurate with degree being sought.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000
Student must successfully defend their thesis (where required), as determined by the assigned examining committee, in real-time.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000
Student in doctoral program must complete a candidacy exam (or equivalent) as required by their program and determined by the assigned examining committee.	GRAD 8010	GRAD 8010
Student must demonstrate knowledge of the University of Manitoba's policy on academic integrity, plagiarism, and cheating.	GRAD 7500	GRAD 7500
Student must conduct research in a safe and ethical manner, referring to their respective ethics board and supervisor(s) to ensure respect is maintained for: human dignity and/or animal welfare; vulnerable persons; informed consent; justice and diversity; confidentiality and privacy; beneficence and non-maleficence in the work that they conduct.	GRAD 7300	GRAD 7300
Student must complete coursework as required by their program.		
Individual unit BFARs available on the Graduate Studies website .		
2.3 Academic Performance <p>Student progress shall be reported at least annually, (but not to exceed once every four (4) months), to the Faculty of Graduate Studies on the "Progress Report" form.</p> <p>Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will normally be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>		

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>2.4 Performance in Coursework</p> <p>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.</p> <p>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 six (6) 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 six (6) credit hours of coursework are normally required to withdraw, unless otherwise stated in the department/unit's supplementary regulations.</p> <p>Students are normally expected to complete remedial action by the end of the subsequent term.</p> <p>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 <u>Master's Degree General Regulations</u> and <u>Doctor of Philosophy General Regulations</u>).</p> <p>Note:</p> <p>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.</p> <p>Supplemental exams are not permitted to students in the Master's or Ph.D. program, unless otherwise stated in the department/unit's supplementary regulations.</p> <p>A summary of all actions taken administratively are to be reported, in summary form, to the Faculty of Graduate Studies Executive Committee.</p>	
<p>2.5 Mandatory Academic Integrity Course</p> <p>All students, including those in a Pre-Master's program, are required to register for and complete <u>GRAD 7500 Academic Integrity Tutorial</u> (0 credit hours) within their first term of initial registration. Université de Saint-Boniface graduate students may choose to complete <u>GRAD 7500</u> or the French-language equivalent, <u>GRAD 7501</u>.</p> <p>Failure to complete this course will result in suspension of registration privileges and a grade of "F/NP" being assigned to the course which may lead to being "Required to withdraw" from the graduate program.</p> <p>Notes:</p> <p>Students who successfully complete <u>GRAD 7500</u> at the Master's level are not normally required to repeat the course at the Ph.D. level so long as no more than one (1) term separates one graduate degree program from another graduate degree program.</p> <p>Students on an exceptional/parental/regular leave of absence must register in <u>GRAD 7500</u> upon return from leave if it has not already been completed.</p> <p>Visiting and Occasional students are not expected to complete <u>GRAD 7500</u>. For further information see <u>GRAD 7500 FAQ</u>.</p>	
<p>2.6 Mandatory Research Integrity Online Course</p> <p>All students, including those in a Pre-Master's program, are required to register for and complete <u>GRAD 7300</u> prior to applying to any ethics boards which are</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>appropriate to the student's research or within the student's first year, whichever comes first.</p> <p>Failure to complete this course will result in suspension of registration privileges and a grade of "F/NP" being assigned to the course which may lead to being "Required to withdraw" from the graduate program.</p> <p>Notes:</p> <p>Students who successfully complete <u>GRAD 7300</u> Online Course at the Master's level are not normally required to repeat the course at the Ph.D. level so long as no more than one (1) term separates one graduate degree program from another graduate degree program.</p> <p>Students on an exceptional/parental/regular leave of absence must register in <u>GRAD 7300</u> upon return from leave if it has not already been completed.</p> <p>Visiting and Occasional students are not expected to complete <u>GRAD 7300</u>. For further information see <u>GRAD 7300 FAQ</u>.</p>	
<p>2.7 Graduate Focus on Aging Concentration</p> <p>The Graduate Focus on Aging Concentration is available to any interested student who is enrolled in the Faculty of Graduate Studies and whose graduate work is concentrated in aging. To be eligible, a "<u>Student intention to receive the Graduate Focus on Aging Concentration</u>" form must be submitted to the Faculty of Graduate Studies. Masters or Doctoral students must complete the requirements of the program to which they have been admitted and the requirements of the Graduate Focus on Aging Concentration.</p> <p>The Graduate Focus on Aging Concentration requirements include:</p> <ol style="list-style-type: none"> 1. Six (6) credit hours of graduate (7000-level or higher) courses that focus on aging and are approved by the student's Advisory Committee; 2. A thesis/practicum on an aging-related topic; 3. Having at least one Advisory committee member who is officially affiliated with the Centre on Aging as a <u>Research Affiliate</u>; and 4. Participating in the annual Spring Research Symposium of the Centre on Aging at least once as a poster presenter. <p>Graduate students may be able to attain their 6 credit hours of courses within the existing course requirements of their graduate program. Students must attain a minimum grade of C+ (or higher, if stipulated in the department/unit supplementary regulations), for the required 6 credit hours of aging courses.</p> <p>Graduate students who are not in a thesis/practicum-based program will be considered on a case-by-case basis.</p> <p>Student progress in the Graduate Focus on Aging Concentration would normally be discussed with the student's Advisory committee, and progress documented on the "<u>Student Intention to Receive the Graduate Focus on Aging Concentration</u>" form which must accompany the Progress Report form submitted to the Faculty of Graduate Studies. The final <u>Graduate Focus on Aging Concentration Completion</u> form must be submitted no later than at least one week prior to the FGS deadline for graduands to submit theses/practica and other reports.</p>	
<p>SECTION 3: General Regulations: Pre-Master's</p> <p>3.1 Admission and Program Requirements</p> <p>Graduates of bachelor degree programs with a minimum grade point average (GPA) of 3.0 in the last two (2) full years of university study will be considered for admission to a Pre-Master's program. These are the minimum requirements of the Faculty of Graduate Studies. Departments/Units may specify higher or additional criteria. <u>Admission to a Pre-Master's program does not guarantee future admission to a Master's program.</u> The</p>	<p>Pre-Master's admits will not be considered.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>purpose of the Pre-Master's program of study is to bring a student's background up to the equivalent of a required four (4)-year undergraduate degree and/or fulfill deficiencies in knowledge of a particular discipline. Departments/Units should assign to students, as part of their Pre-Master's program of study, an appropriate number of applicable upper level (3000 or 4000) undergraduate courses. These courses may not be transferred into a Master's program at a later date. Pre-Master's students are not normally allowed to register in 7000-level courses or above, with the exception of GRAD 7300 and GRAD 7500, unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate. If permission is granted, students may take a maximum of 3 credit hours at the 7000 level or above and these credit hours must be taken as Occasional ("O"). A Pre-Master's student may only transfer a maximum of 3 credit hours into a prospective Master's program of study.</p>	
<p>3.2 Academic Performance</p> <p>3.2.1. The department/unit Head is responsible for assigning the courses and monitoring the progress of each student.</p> <p>3.2.2. A minimum degree grade point average of 3.0 with no grade below C+ must be maintained to continue in a Pre-Master's program. Students who fail to maintain this standing will be required to withdraw unless remedial action recommended by the department/unit (as described below) is approved by the Dean of the Faculty of Graduate Studies.</p> <p>3.2.3. Students deficient in six (6) hours of credit or less may be permitted to write a supplemental examination (when offered in the department/unit's supplementary regulations) in courses in which a grade of C or less was obtained.</p> <p>3.2.4. Students deficient in six (6) hours of credit or less with a grade of C, D, or F in a course or courses may be permitted, if the overall average is C or better, to write one (1) supplemental examination in each course (when permitted by the department/unit's supplementary regulations), to repeat the courses, or to take equivalent substitute courses.</p> <p>A student may be permitted to remove deficiencies in grades by writing a supplemental examination or repeating courses only one (1) time for each course to a maximum of nine (9) credit hours of coursework.</p> <p>If a course is repeated or a supplemental examination is written, the highest grade obtained in that course will be used in the determination of the degree GPA.</p> <p>The degree GPA is cumulative in a Pre-Master's program if more than one (1) year is required to complete the course requirements.</p> <p>A summary of all action taken administratively is to be reported to the Faculty of Graduate Studies Executive Committee.</p>	
<p>SECTION 4: General Regulations: Master's</p> <p>4.1 General</p> <p>Although general regulations apply to all students, individual departments/units may have additional regulations that supplement these general regulations. All such supplementary regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (please refer to the following link), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplementary regulations for specific details regarding admission, program requirements, progression, and completion. Individual departments/units may offer Master's programs by one or more of the following:</p> <ul style="list-style-type: none"> • Thesis/practicum-based; • Course-based; • Comprehensive Exam; 	<p>The Pediatric Graduate Program is <u>thesis-based</u> at the Master's level.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> • Project; • Accredited Professional; • Major research paper. 	
<p>4.2 Admission</p> <p>Students who are eligible to be considered for direct admission to a program of study leading to the Master's degree include:</p> <ul style="list-style-type: none"> • Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from: <ul style="list-style-type: none"> ○ Canadian institutions empowered by law to grant degrees; or ○ Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies. • Graduates from first-cycle Bologna compliant degrees. • Students who have completed a Pre-Master's program from: <ul style="list-style-type: none"> ○ The University of Manitoba (see <u>General Regulations - Pre-Master's</u>); or ○ Canadian institutions empowered by law to grant degrees; or ○ Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies. <p>All students applying for a Master's degree 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.</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.</p>	<p>Additional criteria at the Master's level include:</p> <ul style="list-style-type: none"> • a minimum GPA of 3.25 in the last 2 full years (60 credit hours) of study • a letter from the student's prospective research supervisor (see section 4.4.1) • A short write up responding to pre-determined questions. 500 words in length for the first question and 300 words in length for the second. • demonstrated English language proficiency (see section 1.1.7) • indicated choice of home research pillar (Clinical and Applied Sciences, Population Health, Basic Sciences, or Practice and Policy)
<p>4.3 Program Requirements</p> <p>In general, students must complete one of the programs of study described below for the Master's degree. However, the program of study is determined by the department/unit and may follow the department/unit's supplementary regulations. Any single course cannot be used for credit toward more than one program.</p>	
<p>4.3.1 Thesis/Practicum Route</p> <p>A minimum of twelve (12) credit hours of coursework, unless otherwise stated in the department/unit's supplementary regulations, plus a thesis or practicum is required. The minimum must include at least six (6) credit hours at the 7000-level or above, with the balance of the coursework at the 3000-level or above. A maximum of twenty-four (24) credit hours of coursework is allowed unless the department/unit's supplementary regulations indicate otherwise. The student must complete the thesis/practicum at The University of Manitoba.</p>	<p>The M.Sc. consists of a total of 12 credit hours.</p> <p>The following courses (for a total of 9 credit hours) is required for ALL students:</p> <p>PEDS 7010: Pediatric Biostatistics (3 credit hours) PEDS 7020: Introduction to Research Methods (3 credit hours) PEDS 7030: Equity, Diversity and Inclusion for Professionals (0 credit hours) PEDS 7050 Ethics and Equity in Child Health Research (3 credit hours) PEDS 7070: Reflexive Practice in Patient Engagement (0 ch) PEDS 7080: Indigenous Child Health (0 ch) GRAD 7500: Academic Integrity Tutorial (0 ch) GRAD 7300: Research Integrity Tutorial (0 ch)</p> <p>Students must select two of the following courses (representing the two pillars) which are not their home pillar:</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<p>PEDS 7130: Multidisciplinary Immersion in Clinical Research (1.5 ch) PEDS 7150: Multidisciplinary Immersion in Basic Sciences (1.5 ch) PEDS 7160: Multidisciplinary Immersion in Population Health (1.5 ch) PEDS 7170: Multidisciplinary Immersion in Practice & Policy (1.5 ch)</p> <p>The following course is required for non-clinical students:</p> <p>PEDS 7040: Introduction to a Clinical Environment (0 ch)</p> <p>The following course is required for clinical students:</p> <p>PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics (0 ch)</p>
<p>4.3.2 Course-based or Comprehensive Examination Route</p> <p>A minimum of twenty-four (24) credit hours of coursework and comprehensive examination(s) is required. The minimum must include at least eighteen (18) credit hours at the 7000-level or above with the balance of the coursework at the 3000-level or above. A maximum of forty-eight (48) credit hours of coursework is allowed unless a department/unit's supplementary regulations indicate otherwise. A comprehensive examination is required for some course-based programs.</p>	Not applicable
<p>4.3.3 Accredited Professional Route</p> <p>The credit hours and course requirements shall reflect the requirements of the department/unit's external accrediting body. Students should check department/unit supplementary regulations regarding this requirement.</p>	Not applicable
<p>4.3.4 Language Requirements</p> <p>Some department/units specify a language requirement for the Master's degree. Students should check department/unit supplementary regulations regarding this requirement.</p>	Refer to section 1.1.7
<p>4.3.5 Advanced Credit</p> <p>Advance credit for courses completed prior to admission to a Master's program will be considered on a case-by-case basis. The student's department/unit must make a request to the Faculty of Graduate Studies by completing the "Recommendation for Advance Credit-Transfer of Courses" form.</p> <ul style="list-style-type: none"> • Application for advance credit must be made within the first year of the program (see Lapse or Expiration of Credit of Courses). • No more than 50% of the required coursework for the program can be achieved using advance credit. • A course may not be used for credit toward more than one (1) degree, diploma, or certificate. • The student must register at The University of Manitoba for at least two (2) terms within a single academic year and must also complete the thesis/practicum/project/comprehensive exam at The University of Manitoba. 	<p>Prior to application for advanced credit to the Faculty of Graduate Studies, the applicant must have approval from the Department Head and/or Director, Pediatric Graduate Program, and from the potential research supervisor.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> • Courses taken while in the Pre-Masters program may not be used for credit in a Master's program. <p>Regardless of the extent of advanced credit granted, all students are required to pay all applicable program fees.</p>	
<p>4.3.6 Transfer Credit</p> <p>Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:</p> <ul style="list-style-type: none"> • 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; • cannot be used for credit towards another degree; • may not exceed 50% of the minimum credit hours of coursework required of the student's graduate program at The University of Manitoba. <p>Permission is granted in the form of a <u>Letter of Permission</u> which may be obtained by making an application to the Registrar's Office; an original transcript and course equivalency must be provided.</p>	<p>Prior to application for transferred credit to the Faculty of Graduate Studies, the applicant must have approval from the Department Head and/or Director, Pediatric Graduate Program, and from the potential research supervisor.</p>
<p>4.3.7 Time in Program</p> <p>The minimum time for students in the Master's program is equivalent to two (2) terms. Completion of most programs requires more than this and students should check department/unit supplementary regulations regarding specific requirements.</p> <p>The maximum time allowed for the completion of the Master's degree is four (4) years for students declared as full-time and six (6) years for students declared as part-time (see <u>Student Status/Categories of Students</u> for information on calculating maximum time for students). Individual department/units and/or programs may have specified minimum and maximum time limits, and students should periodically check department/unit supplementary regulations regarding these specific requirements.</p> <p>Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted to the Dean of the Faculty of Graduate Studies using the "<u>Time Extension Request</u>" form at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit.</p> <p>A student who has not completed the degree requirements within the time limit or within the time limit of the extension will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>	
<p>4.4 Student's Advisor and Co-Advisor</p> <p>4.4.1 Student's Advisor</p> <p>Each student should have an advisor upon entry into the program, and must have one assigned no later than one (1) term following initial registration. The advisor must:</p> <ul style="list-style-type: none"> • hold an appointment in the student's department/unit; • be a member of the Faculty of Graduate Studies¹; • hold at least a Master's degree or equivalent²; • be active in their field; • have expertise in a discipline related to the student's program. <p>¹ http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html</p>	<p>A student must have an advisor identified at the time of application. A letter attesting to the advisor's commitment to the student must be included with the application (see section 4.2).</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>² Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.</p> <p>It is the responsibility of the department/unit Head to determine whether faculty members meet these criteria, and also to report to the Dean of the Faculty of Graduate Studies on equivalency as necessary. Any exceptions or special circumstances must be recommended by the department/unit Head and approved by the Dean of the Faculty of Graduate Studies who considers each case on an individual basis.</p> <p>In department/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the department/unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen. Students must have an advisor through to the end of their program in programs requiring an advisor.</p>	
<p>4.4.2 Student's Co-advisor</p> <p>In special circumstances, upon approval of the Head of the department/unit, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:</p> <ul style="list-style-type: none"> • be a member of the Faculty of Graduate Studies¹; • hold a Master's or equivalent²; • be active in research; • have expertise in a discipline related to the student's program; <p>¹ http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html</p> <p>² Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential co-advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.</p> <p>The co-advisor may be identified either at the beginning of, or mid-way through, a student's program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement. If a co-advisor is added midway through the student's program, a new Advisor Student Guidelines must be completed.</p> <p>When an advisor and co-advisor are assigned, together they shall fulfill the role of the advisor (that is, neither shall fulfill any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor; the advisor/co-advisor have a single vote. Both the advisor and co-advisor's signatures are required on all documents where the advisor's signature is required.</p>	<p>Students may opt to have a co-advisor. A letter attesting to the co-advisor's commitment to the student and willingness to work with the advisor must be included with the application (see section 4.2).</p> <p>The co-advisor must have a Master's degree, or equivalency, as demonstrated by an established basic, bioinformatics and/or clinical research program.</p>
<p>4.4.3 Student's Advisor/Co-advisor</p> <p>A student who also holds an appointment at The University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit.</p> <p>The advisor, co-advisor (if applicable) and student must discuss, and complete, the Faculty of Graduate Studies Advisor Student Guidelines prior to the commencement</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, then the interim advisor will be required to complete the Advisor Student Guidelines. The advisor/co-advisor and the student are required to approve the agreement. If the parties cannot agree on any component(s) of the Advisor Student Guidelines, the matter should be referred to the department/unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. The Advisor Student Guidelines is to be completed again if there is a change in advisor/co-advisor or when a co-advisor is added mid-way through the student's program.</p> <p>Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the department/unit Graduate Chair, the Head of the department/unit, then to the Dean of the Faculty of Graduate Studies (or designate). It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor if this is appropriate and necessary. All students should consult department/unit supplementary regulations for specific details regarding advisor/co-advisor requirements.</p>	
<p>4.5 Advisory Committee</p> <p>4.5.1 Conflict of Interest</p> <p>There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba <u>Conflict of Interest Policy and Conflict of Interest Procedures</u> as well as the <u>Conflict of Interest Between Evaluators and Students due to Close Personal Relationships</u> should also be consulted.</p> <p>In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees should be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies). All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate). If the conflict is deemed sufficiently significant and cannot be mitigated, a new committee may need to be struck.</p>	
<p>4.5.2 Thesis/Practicum Route</p> <p>Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their research program.</p> <p>The advisory committee must consist of a minimum of three (3) voting members (the advisor/co-advisor have a single vote), at least two (2) of whom must be members of the <u>Faculty of Graduate Studies</u>.</p> <p>All examiners must be deemed qualified by the department/unit Head and be willing to serve.</p> <p>Individuals who are not a member of the Faculty of Graduate Studies, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee, and must be nominated by the unit Head or Graduate Chair and approved by the Dean of the Faculty of Graduate Studies or designate.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies.</p> <p>Under no circumstances are graduate students, Post-Doctoral fellows, and Research Assistants or Associates to serve on graduate student examining committees, regardless if they hold a rank of Adjunct Professor.</p> <p>The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies. The advisor/co-advisor is the Chair of the advisory committee.</p> <p>It is expected that advisory committee members will have a Master's degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies or designate. Knowledge experts are exempted from this requirement.</p> <p>Additional specifications, if any, regarding the advisory committee are found in the department/unit supplementary regulations and students should consult these regulations for specific requirements.</p>	
<p>4.5.3 Course-based, Major Research Paper, or Comprehensive Examination Route</p> <p>Normally, advisory committees are not required in these routes; however, any appropriate specifications regarding an advisory committee can be found in the department/unit's supplementary regulations and students should consult these regulations for specific requirements.</p>	Not applicable
<p>4.5.4 Accredited professional programs</p> <p>Normally, advisory committees are not required in these routes; however, any appropriate specifications regarding an advisory committee can be found in the department/unit's supplementary regulations and students should consult these regulations for specific requirements.</p>	Not applicable
<p>4.6 Courses and Performance</p> <p>4.6.1 Course or Program Changes</p> <p>Students are not permitted to change their program of study, including withdrawal from individual courses, without the approval of their advisor/co-advisor (and/or advisory committee) and department/unit Head. Withdrawal from courses or changes of course category without such approval may result in the student being required to withdraw from the Faculty of Graduate Studies.</p>	Students are not permitted to change their program of study, including withdrawal from individual courses, without the approval of their advisor/co-advisor and; either the department/unit Head or Director, Pediatric Graduate Program.
<p>4.6.2 Lapse or Expiration of Credit of Courses</p> <p>Courses completed more than seven (7) years prior to the date of awarding of a degree may not normally be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content.</p> <p>Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed expired and cannot be used for credit toward that degree.</p> <p>In the event that coursework is no longer considered current or has expired, students must take additional coursework (as recommended by the department/unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.</p>	
<p>4.6.3 Academic Performance</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Student progress shall be reported at least annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the “<u>Progress Report</u>” form.</p> <p>Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the “Progress Report” form. Students who receive two (2) consecutive “in need of improvement” or one (1) “unsatisfactory” rating will normally be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be “Required to withdraw”.</p>	
<p>4.6.4 Performance in Coursework</p> <p>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 the department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.</p> <p>Students are normally expected to complete remedial action by the end of the subsequent term.</p>	<p>A minimum degree grade point average (DGPA) of 3.5 with no grade below B must be maintained to continue in the Pediatric Graduate Program.</p> <p>With permission of the Department Head and Director Pediatric Graduate Program, students deficient in six (6) credit hours or less with a grade of C+ or lower in a course or courses may be permitted, if the overall DGPA is 3.5 or better, to write one (1) supplemental examination in each course, to repeat the courses, or to take equivalent substitute courses. Note: substitute courses are not permitted for core required courses to the program.</p>
<p>4.6.5 Performance not related to Coursework</p> <p>In some departments/units, students are required to demonstrate satisfactory academic performance in areas not related to performance in courses, such as attendance at or participation in course lectures, seminars and in laboratories and progress in research, thesis or practicum. The specific nature of satisfactory academic performance is outlined in individual department/unit supplementary regulations and students should consult these supplementary regulations for specific requirements. Unsatisfactory performance must be reported to the Faculty of Graduate Studies on the “<u>Progress Report</u>” form. Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the department/unit Head to the Dean of the Faculty of Graduate Studies.</p>	<p>Students must attend a minimum of 4 CHRIM Research Rounds per academic term. These rounds are held Thursdays at noon, in 500 JBRC. Students must sign in to attest to their attendance.</p> <p>Students must present at CHRIM Research Rounds a minimum of once at the MSc level, and twice at the PhD level.</p> <p>All students must complete training for PHIA – Personal Health Information Act, and Tri-Council Policy Statement on Sex and Gender Training. Certificates attesting to successful completion must be forwarded via email to the Director, Pediatric Graduate Program within 1 month of acceptance, and no later than 1 week from the start of the program. The student’s advisor and co-advisor must be cc’d on this email.</p> <p>All students complete a Criminal Background Check and Child Abuse Registry Check. An original certificate must be forwarded via email to the Director, Pediatric Graduate Program within 1 month of acceptance, and no later than 1 week from the start of the program. The student’s advisor and co-advisor must be cc’d on this email. All students must also read and sign the CHRIM Code of Conduct for Working with Children within 1 month of acceptance, and no later than 1 week from the start of the program. This signed document must be sent to CHRIM administration, Pediatric Graduate Program administration, and the advisor and co-advisor.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>4.7 Academic Requirements for Graduation</p> <p>All students must:</p> <ul style="list-style-type: none"> • maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+; • complete <u>GRAD 7500</u> • complete <u>GRAD 7300</u> • meet the minimum and not exceed the maximum course requirements; and • meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses). <p>Individual department/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements.</p>	<p>All students must maintain a minimum degree grade point average of 3.5 with no grade below B</p>
<p>4.7.1 Thesis/Practicum Route</p> <p>4.7.1.1 Thesis vs. Practicum</p> <p>Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum. The thesis or practicum will normally be written in English unless the student is studying in a program at the Université de Saint-Boniface, or departmental/unit supplementary regulations allow a different language to be used.</p> <p>A practicum differs from the thesis in its emphasis on the application of theory, it is however similar in scope, span, and rigour. The practicum takes the form of an exercise in the practical application of knowledge and skill. It usually involves the careful definition of a problem, the application of appropriate knowledge and skills to the problem, and a report of the results in a manner suitable for evaluation by an examining committee. Individual department/units have specific requirements for graduation and students should consult department/unit supplementary regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the practicum.</p> <p>The thesis is developed under the mentorship of the advisor/co-advisor. Individual department/units may have specific guidelines regarding the thesis proposal and its acceptance by the student's advisory committee and department/unit Head; students should consult department/unit supplementary regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the thesis research.</p>	<p>The thesis proposal is normally completed within the first 14 months of the program. This two-stage proposal must occur sequentially, with the written thesis successfully completed prior to proceeding to the oral presentation.</p> <p>Unanimous approval by all members of the advisory committee is required to proceed from the written proposal to the oral proposal. If the first attempt of the written and/or oral proposals are not unanimously approved, the student will be granted a second attempt no earlier than one month after the unsuccessful attempt. If either second attempt is unsuccessful, the student will be asked to withdraw from the program.</p> <p>The written thesis proposal must be written by the student, with guidance by the supervisor.</p> <p>Formatting requirements:</p> <ul style="list-style-type: none"> • Word document, not PDF • 6000-7500 words of main text, excluding references and appendices • 1.5 spacing • Arial, 11 point font • Tables and figures may include smaller Arial font, but must be legible without increasing size of page. • Vancouver style references • Canadian spelling • Submitted to the Director, Pediatric Graduate Program, who will distribute the thesis proposal to the advisory committee <p>Preliminary materials include:</p> <ul style="list-style-type: none"> • title page • table of contents • acknowledgements (optional) • attestation that the work was produced by the student, with guidance from the advisor <p>Required sections must include</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<ul style="list-style-type: none"> • review of the literature (recommended 3-5 pages) • main aim and specific objectives • methods, including research design, study population, data sources, relevant definitions, outcomes, data management, statistical analyses, ethical approval • ethical considerations • feasibility issues • strengths and limitations • knowledge translation plan <p>Back pages:</p> <ul style="list-style-type: none"> • references • student and advisor contact information • appendices, including consent forms and REB approval certificates* • budget • supplementary tables (optional) <p>*If REB approval is not in place at the time of the thesis proposal, the student must submit a complete application to the appropriate Research Ethics Board by the next submission deadline, unless the next deadline is less than 2 weeks from the date of approval. In the latter case, the student may submit for the first subsequent deadline.</p> <p>Oral thesis proposal presentation:</p> <ul style="list-style-type: none"> • Closed session (open only to student, advisory committee). Others may be invited with the written permission of the Director, Pediatric Graduate Program • 20 minute presentation by the student • 60 minute question and answer period between the student and advisory committee <p>The written thesis must be written by the student.</p> <p>This document is expected to be approximately 10,000-12,000 words, and follow the formatting guidelines described for the thesis proposal. In addition to the required sections for the thesis proposal, the student must include results and interpretation of findings. A grouped manuscript, which includes the student's original publications pertaining to the thesis, is preferred. However, written permission must be obtained from the publisher(s) to do so. A copy of this written permission must be included as a back page of the thesis. Moreover, the student must write a stand alone summary of the results and interpretation of the results, that can be understood independent of the published papers.</p> <p>Additional back pages for the thesis must also include any instruments or tools (e.g. questionnaires, interview guides) used as part of the thesis work.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>4.7.1.2 Examining Committee</p> <p>The advisor/co-advisor will recommend an examining committee to the department/unit Head for approval, which shall then be reported to the Faculty of Graduate Studies on the “Master’s Thesis/Practicum Title and Appointment of <u>Examiners</u>” form. This form must be approved by the Dean of the Faculty of Graduate Studies at least two (2) weeks prior to the distribution of the thesis.</p> <p>Under normal circumstances, the examining committee will be the same as the advisory committee unless otherwise stipulated in the department/unit’s supplementary regulations. The examining committee must consist of a minimum of three (3) members (including the advisor/co-advisor), at least two (2) of whom must be members of the Faculty of Graduate Studies. All examiners must be deemed qualified by the department/unit Head and be willing to serve. It is expected that, under normal circumstances, examination committee members will have a Master’s degree or equivalent. The composition of, and any changes to, the examining committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies. Individual department/units establish specific requirements for examination and students should consult department/unit supplementary regulations for specific requirements.</p> <p>Under no circumstances are graduate students, Post-Doctoral fellows, and Research Assistants or Associates to serve on graduate student examining committees, regardless if they hold a rank of Adjunct Professor.</p> <p>The Head of the department/unit arranges for the distribution of the thesis/practicum to the examiners. It is the duty of all examiners to read the thesis/practicum and report on its merits according to the following categories:</p> <ul style="list-style-type: none"> • Acceptable, without modification or with minor revision(s); or • Acceptable, subject to modification and/or revision(s); or • Not acceptable. <p>If two or more examiners do not approve the thesis, then the student is deemed to have failed the distribution.</p> <p>Note that in the case of an advisor and co-advisor, both together have a single vote on the examining committee.</p>	<p>The MSc Examining Committee will normally comprise the Advisory Committee, specifically the student’s supervisor, one faculty member from another pillar within the Pediatric Graduate Program, and one methodological expert.</p>
<p>4.7.1.3 Oral Examination</p> <p>For department/units requiring students to pass an oral examination on the subject of the thesis/practicum and matters relating thereto, the format of the oral examination is described in the supplementary regulations of the department/unit. Students should consult these supplementary regulations for specific requirements. A student has the right to an examination of the thesis/practicum if they believe it is ready for examination. It is the department/unit’s responsibility to advise the student of any risk involved should they decide to proceed against the department/unit’s recommendation.</p> <p>The examining process should be completed within one (1) month of distribution of the thesis/practicum to the examining committee.</p> <p>Normally, all members of the examining committee should be present in-person at the examination. Under exceptional circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) member may participate electronically. Only under very exceptional circumstances can the student or the Advisor/Co-advisor participate electronically. No recording devices will be permitted. The oral examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus, Université de Saint-Boniface, or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours. The oral examination shall be open to all members of The University of Manitoba community</p>	<p>At least one month prior to the proposed date the following information must be received by the Director, Pediatric Graduate Program:</p> <ul style="list-style-type: none"> • Thesis examining committee reports (both internal and external) • Student’s examination program information (submitted in a Word document): <ul style="list-style-type: none"> ○ Biographical data if desired (i.e. birthplace) ○ List of degrees obtained--institution and date ○ List of the candidate’s awards, publications, and joint publications ○ An abstract of the thesis (not more than 350 words) <p>Outline of procedures for the Oral Examination</p>

except in exceptional cases. The oral examination may be closed, for example, when the results of the thesis/practicum research must be kept confidential for a period of time. In such cases, the examining committee and department/unit Head shall recommend such action to the Dean of the Faculty of Graduate Studies who shall then decide whether to grant that the final examination be closed to all but the examining committee and the Dean of the Faculty of Graduate Studies (or delegate).

The oral examination will normally be held in English unless the student is studying in a program at the Université de Saint-Boniface, or departmental/unit supplementary regulations allow a different language to be used.

Following completion of the examination of the thesis/practicum, examiners will consider the oral examination and the written thesis/practicum.

The examiners will also determine the nature of and procedures for approval of any revisions that will be required prior to submission of the thesis/practicum to the Faculty of Graduate Studies. The advisor/co-advisor is normally responsible for ensuring that revisions are completed according to the instructions from the examining committee.

The judgment of the examiners shall be reported to the Faculty of Graduate Studies in the qualitative terms "approved" or "not approved" on the "[Thesis/Practicum Final Report](#)" form. Each examiner must indicate their opinion by their signature. If two (2) or more examiners do not approve the thesis/practicum, the student is deemed to have failed the examination.

(taken from:

https://umanitoba.ca/faculties/graduate_studies/thesis/phdoegi.html)

The Chair outlines the procedures for the conduct of the examination for the candidate, examining committee, and audience as follows:

- The candidate will be asked to give a 25 to 30 minute presentation of the thesis to include the major objectives, content, results, and conclusions. The Chair also notes that the Candidate's ability to present the thesis clearly and concisely in a 25 to 30 minute period is an essential part of the examination process.
- At the conclusion of the candidate's presentation, the examiners will be invited to pose questions. The Chair reminds the examiners that they will each be initially allowed approximately 20 minutes to pose their questions and that, because this is an examination on which candidates may, and do, pass or fail, their comments and discussions on the subject matter of the thesis, apart from those essential to the questions, should be made only at the post-examination meeting of the examiners.
- The Chair notes that ample time will be given to ensure that the examiners are able to complete their questions and that they may raise additional matters after hearing the initial round of questions. The Chair also notes that, if the external examiner is not present, the Chair (or advisor, as decided) will pose the questions from the external examiner to the candidate.
- If time permits, and after the questioning by members of the Examining Committee is completed, the Guest member (if applicable and in attendance) may be given an opportunity to ask questions, followed by other members of the FGS and members of the audience.

Notes:

1. *The Chair is not permitted to pose any questions of his/her own to the candidate. The Chair must remain neutral at all times.*
2. *At the conclusion of the candidate's presentation and before the questioning period, the Chair should allow sufficient time for those members of the audience who wish to leave the session to do so.*
3. *One and one-half hours should normally be sufficient for the conduct of the oral examination by the committee, but in no case should the questioning exceed two hours.*

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<p>Following completion of the presentation and questioning period, the Chair conducts the remainder of the Oral Examination as follows:</p> <ul style="list-style-type: none"> the audience (and Guest member, if applicable) is thanked for their attendance and support of the candidate and, along with the candidate, is asked to leave so that a confidential meeting of the Examining Committee may be held. each examiner is asked, in sequence, to comment on the candidate's performance with respect to the answers to the questions and on whether the candidate should pass or fail the oral examination*. the candidate is invited back into the room and informed of the results of the examination, the nature of revisions, and the method of approval of the revisions. the candidate is reminded of the procedures for submission of the thesis to MSpace, and of the meaning and use of the copyright and partial release of copyright forms.
<p>4.7.1.4 Failure</p> <p>In the case of a failure of the thesis/practicum at the Master's level, the candidate may, on support of their home department/unit, be allowed to defend the thesis a second time. In this case, a detailed written report will be prepared by the Chair of the examination committee and submitted to the Faculty of Graduate Studies, who will make the report available to the student, the student's advisor/co-advisor and the Department/Unit Head. The Department/Unit Head shall convene a meeting of the members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second defence.</p> <p>A student will be required to withdraw when the thesis/practicum has been rejected twice at the stage where:</p> <ul style="list-style-type: none"> The examining committee reports on the merits of the written thesis/practicum; The oral examination; or A combination of both stages. 	
<p>4.7.2 Course-based, Major Research Paper, or Comprehensive Examination Route</p> <p>Students must demonstrate their mastery of their field. The specific procedures for evaluation of this mastery are stated in individual department/unit supplementary regulations.</p> <p>In those department/units where comprehensive examinations are required, students should consult the department/unit's supplementary regulations for specific requirements.</p> <p>The results of the comprehensive examinations shall be submitted to the Faculty of Graduate Studies on the "Report on Comprehensive Examination" form in the terms "pass" or "fail." No student may sit comprehensive examinations more than twice. Any student who receives a "fail" on the comprehensive examination twice will be required to withdraw from the Faculty of Graduate Studies.</p>	Not applicable.
4.8 Style and Format	See supplemental material in Appendix 1.

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>The thesis/practicum must be written according to a standard style acknowledged by a particular field of study (please refer to Thesis/Practicum Types).</p>	
<p>4.9 Details for Submission of the Final Copy</p> <p>Following the approval of the thesis/practicum by the examining committee and the completion of any revisions required by that committee, the thesis/practicum, must be submitted to the Faculty of Graduate Studies as follows:</p> <ul style="list-style-type: none"> • One digital version submitted as an e-thesis/practicum at the MSpace website; • Copyright Licence Declaration/Infringement Form (completed on MSpace); • Thesis/Practicum final report. 	
<p>4.10 Publication and Circulation of Thesis/Practicum</p> <p>Every graduate student registering in a thesis/practicum Master's program at The University of Manitoba shall be advised that, as a condition of being awarded the degree, they will be required to grant a license of partial copyright to the University and to the Library and Archives Canada for any thesis or practicum submitted as part of their degree program.</p> <p>Note: This licence makes the thesis/practicum available for further research only. Publication for commercial purposes remains the sole right of the author.</p> <p>The Copyright Licence Declaration/Infringement Form must be completed on MSpace. This and other related regulations may give rise to important questions of law, and students may need additional legal advice on the copyright laws of Canada and/or other countries. Students who wish to obtain legal advice concerning their subsequent rights are advised to do so prior to signing the agreements. Signing of the licence agreements is normally done after the contents of the thesis/practicum have been delineated and the importance of copyright and/or patents fully understood and appreciated.</p> <p>Publication in the above manner does not preclude further publication of the thesis or practicum report or any part of it in a journal or in a book. In such cases, an acknowledgement that the work was originally part of a thesis/practicum at The University of Manitoba should be included.</p> <p>Notes:</p> <p>Patents –Refer to "Policy of Withholding Theses Pending Patent Applications" in this Guide.</p> <p>Restriction of Thesis/Practicum for Publication – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.</p> <p>Library and Archives Canada – Library and Archives Canada obtains a copy of the thesis via the University's MSpace repository.</p>	<p>The student must also provide an electronic copy and one bound hard copy to the Director, Pediatric Graduate Program.</p>
<p>4.11 Final Requirements and Deadlines for Graduation</p> <p>The final requirements of the degree, in the form of the final report on the thesis/practicum (and the corrected copy of the thesis/practicum and Copyright Licence Declaration uploaded into MSpace); comprehensive examination; M. Eng. project; or Design thesis, must be submitted to the Faculty of Graduate Studies by the appropriate deadline. For those programs that do not have a GRAD course associated with their culminating exercise, the department/unit must forward a list of potential graduate names to the Faculty of Graduate Studies by the deadline. The deadline for each of the graduation dates is published on the Faculty of Graduate Studies website.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>SECTION 5: Doctor of Philosophy General Regulations</p> <p>The degree of Doctor of Philosophy (Ph.D.) is granted only upon evidence of general proficiency and of distinctive attainment in a special field. In particular, the candidate must demonstrate an ability for independent investigation, original research or creative scholarship. This is expected to be presented in a thesis with a degree of literary skill and by an oral examination wherein the candidate exhibits mastery of their field. The Ph.D. is a research degree and is not conferred by The University of Manitoba solely as a result of coursework study.</p> <p>Although general regulations apply to all students, individual department/units may have additional regulations that supplement these general regulations. All such supplementary regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (please refer to the website), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplementary regulations for specific details regarding admission, program requirements, progression, and completion.</p>	
<p>5.1 Admission</p> <p>5.1.1 General criteria</p> <p>Normally, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 or equivalent in the last two (2) years of full time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program.</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and department/units may have higher standards and additional criteria. However, the criteria for admissions into the Ph.D. program are more stringent than for Master's programs; therefore, the completion of a Master's program does not guarantee admission into the Ph.D. program. Some department/units require completion of a thesis-based Master's program prior to admission to a Ph.D. program.</p>	<p>Additional criteria for the Pediatric Graduate Program include:</p> <ul style="list-style-type: none"> • a Master's degree that is broadly related to health and/or pediatrics • a minimum GPA of 3.5 in the last 2 full years (60 credit hours) of study. • a letter from the student's prospective research supervisor (see section 5.2.1) • demonstrated English language proficiency (see section 1.1.7) • indicated choice of home research pillar (Clinical and Applied Sciences, Population Health, Basic Sciences, or Practice and Policy) <p>Applicants will normally possess a research-based Master's degree in a discipline or profession consistent with pediatrics and health. Applicants who do not possess a research-based Master's degree, but who have some research experience will be assessed on a case-by-case basis, as will those with professional Master's degrees.</p> <p>Students admitted to the PhD program in the Pediatric Graduate Program without a research-based Master's degree will be required to complete two additional 3 credit hour courses, PEDS 7010 Pediatric Biostatistics; and, PEDS 7020 Introduction to Research Methods, in the first two terms of their program.</p>
<p>5.1.2 Direct Admission from the Bachelor's Honours or Equivalent</p> <p>With special recommendation of the department/unit concerned, applicants with an honours Bachelor's degree or equivalent may be considered for entry to Ph.D. study. These students must be outstanding in their academic background (GPA well above 3.0 in the last two full years of undergraduate study).</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and department/units may have higher standards and additional criteria. Once admitted, these students must complete at least 24 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise, and will be assessed Ph.D. fees for three (3) years. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18</p>	<p>Direct admission from a Bachelor's Honours or equivalent will not be considered.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.</p>	
<p>5.1.3 Transfer from the Master's to the Ph.D. Program</p> <p>Students who have not completed a Master's program may transfer to the Ph.D. program within the same department/unit upon the recommendation by the Head of the department/unit to the Faculty of Graduate Studies. The recommendation should be made within four (4) terms (including Summer term) from the start of the Master's program. Fees paid, coursework completed and time spent in the Master's program will normally be credited towards the Ph.D. program. Students must complete at least 24 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.</p> <p>The request to transfer from a Master's to the Ph.D. program must be submitted to the Faculty of Graduate Studies at least one (1) month prior to the term for which the student intends to start the Ph.D. program. The applicant must indicate a request for transfer on the online admissions application.</p> <p>The student will be admitted to a 3-year Ph.D. program and will pay a total of three years of program fees, including program fees paid in the Master's at the time of transfer. Students are cautioned that such transfers may impact on the duration of The University of Manitoba Graduate Fellowship.</p> <p>Students who have previously completed a recognized Master's degree and are initially admitted and registered in a Master's program may transfer to the Ph.D. program within the same department/unit on the recommendation of the student's advisor/co-advisor and Head of the department/unit. Where a student holds a Master's degree that would be sufficient for admission to the Ph.D. program, students must complete at least 12 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise. The student will be admitted to a 2-year Ph.D. program and will pay a total of two years of program fees, including program fees paid in the Master's at the time of transfer.</p>	<p>Transfer is subject to approval of the Head of Department, and the Director, Pediatric Graduate Program</p>
<p>5.1.4 Provisional Admission to the Ph.D.</p> <p>Students nearing the completion of the Master's degree may be accepted provisionally to the Ph.D. program for a 12 month period (commencing with the first registration in the Ph.D. program). Further registration in the Ph.D. program is contingent upon completion of all requirements of the Master's degree within the 12 months. Students must maintain continuous registration in their Master's program until its completion. Students will require assistance from the department/unit and the Faculty of Graduate Studies to complete dual registration on the "<u>Concurrent Curriculum Permission</u>" form in the Master's and Ph.D. program simultaneously.</p>	
<p>5.2 Student's Advisor, Co-advisor and Advisory Committee</p> <p>5.2.1 Student's Advisor</p> <p>Every Ph.D. student must have an advisor throughout their program, appointed by the Head of the department/unit. The advisor is responsible for supervising the student's graduate program. The advisor is the student's first point of contact at the University of Manitoba, and therefore should be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program, and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program, and stays informed of the student's scholarly activities and progress. The student's advisor</p>	<p>A student must have a research advisor (supervisor) identified at the time of application. A letter attesting to the advisor's commitment to the student must be included with the application (see section 5.1.1). If the student will have a co-advisor (see section 5.2.2), the advisor's letter must also acknowledge this and express a willingness to work with the co-advisor.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>also acts as a channel of communication to the student's advisory committee, the department/unit and the Faculty of Graduate Studies.</p> <p>The advisor must:</p> <ul style="list-style-type: none"> • hold an appointment in the student's department/unit. • be a member of the Faculty of Graduate Studies¹; • hold a Ph.D. or equivalent²; • be active in research; and • have expertise in a discipline related to the student's program. <p>¹ http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html</p> <p>² Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.</p> <p>Usually the student and the advisor choose to work together by mutual agreement. In department/units where the choice of thesis topic advisor is postponed for some time after entry into the program, the Head of the department/unit or the selection committee shall appoint a faculty member to advise the student as to the rules and regulations and on program and course requirements. This interim period must not exceed eighteen (18) months after entry into the program before a permanent advisor is chosen.</p>	
<p>5.2.2 Student's Co-advisor</p> <p>In special circumstances, upon approval of the Head of the department/unit, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:</p> <ul style="list-style-type: none"> • be a member of the Faculty of Graduate Studies¹; • hold a Ph.D. or equivalent²; • be active in research; and • have expertise in a discipline related to the student's program. <p>¹ http://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html</p> <p>² Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential co-advisor's demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.</p> <p>The co-advisor may be identified either at the beginning of, or midway through a student's program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement. If a co-advisor is added midway through the student's program, a new Advisor Student Guidelines must be completed. When an advisor and co-advisor are assigned, together they shall fulfill the role of the advisor (that is, neither shall fulfill any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor; the advisor/co-advisor have a single vote. Both the advisor and co-</p>	<p>Students may opt to have a co-advisor. A letter attesting to the co-advisor's commitment to the student and willingness to work with the advisor must be included with the application (see section 5.1.1).</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>advisor's signatures are required on all documents where the advisor's signature is required.</p>	
<p>5.2.3 Student's Advisor/Co-advisor</p> <p>A student who also holds an appointment at the University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit.</p> <p>The advisor, co-advisor (if applicable) and student must discuss, and complete, the Faculty of Graduate Studies Advisor Student Guidelines prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, the interim advisor will be required to complete the Advisor Student Guidelines. If the parties cannot agree on any component(s) of the Advisor Student Guidelines, the matter should be referred to the department/unit Graduate Chair, the Head of the department/unit, or the Dean of the Faculty of Graduate Studies. The Advisor Student Guidelines is to be completed again if there is a change in advisor/co-advisor or when a co-advisor is added midway through the student's program.</p> <p>Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the department/unit Graduate Chair, the Head of the department/unit, then to the Dean of the Faculty of Graduate Studies. It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor/co-advisor if this is appropriate and necessary.</p> <p>All students should consult department/unit supplementary regulations for specific details regarding advisor/co-advisor requirements.</p>	
<p>5.2.4 Advisory Committee</p> <p>The Head of the department/unit is responsible for the establishment of an advisory committee for each Ph.D. student. Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their program.</p> <p>The advisory committee must consist of a minimum of three (3) voting members (the advisor/co-advisor have a single vote), all of whom must be <u>members of the Faculty of Graduate Studies</u>.</p> <p>In addition, individuals who are not a member of the Faculty of Graduate Studies, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee, and must be nominated by the unit Head or Graduate Chair and approved by the Dean of the Faculty of Graduate Studies or designate. Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies.</p> <p>It is expected that advisory committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies or designate. Knowledge experts are exempted from this requirement.</p> <p>Under no circumstances should graduate students, Post-Doctoral Fellows, and Research Assistants or Associates serve on graduate student advisory committees, regardless if they hold a rank of Adjunct Professor.</p> <p>A student who also holds an appointment at the University of Manitoba at the rank of Assistant Professor or above cannot have an advisor or co-advisor with an appointment in the same department/unit.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies on the <u>"Program of Study and Appointment of Advisory Committee"</u> form.</p> <p>The advisor/co-advisor is the Chair of the advisory committee.</p> <p>Advisory committee meetings must be held at least annually, and are not intended to take the place of meetings between the student and advisor/co-advisor which should occur with much greater frequency than the advisory committee meetings.</p>	
<p>5.2.5 Conflict of Interest</p> <p>There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba <u>Conflict of Interest Policy</u> and <u>Conflict of Interest Procedures</u> as well as the <u>Conflict of Interest Between Evaluators and Students due to Close Personal Relationships</u> should also be consulted.</p> <p>In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees should be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies). All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate). If the conflict is deemed sufficiently significant and cannot be mitigated, a new committee may need to be struck.</p>	
<p>5.3 Program of Study</p> <p>As soon as possible, but no later than 24 months after a student has commenced their program, the student's program of study should be registered with the Faculty of Graduate Studies on the <u>"Program of Study and Appointment of Advisory Committee"</u> form and should include:</p> <ul style="list-style-type: none"> • information about the minimum or expected time for completion of the degree; • coursework to be taken along with course classification ("S", "X", "A" or "O"); • any foreign language requirement; • the research area in which the thesis will be written. <p>The approval of the student's advisor/co-advisor and the Head of the department/unit are sufficient for registration. The program of study, including withdrawal from individual courses and any subsequent changes, must be approved by the student's advisor/co-advisor, the advisory committee, and the Head of the department/unit. Withdrawal from courses or changes of course category without such approval may result in the student being required to withdraw from the Faculty of Graduate Studies.</p>	
<p>5.4 Program Requirements</p> <p>All students must complete one of the following programs of study for the Ph.D. degree, unless otherwise specified in the approved department/unit supplementary regulations:</p> <ul style="list-style-type: none"> • Where admission to the Ph.D. is directly from a Master's degree, a minimum of 12 credit hours at the 7000- level or higher plus a thesis is required. Any further coursework beyond the minimum 12 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.¹ 	<p>A minimum of 15 credit hours plus a thesis is required.</p> <p>Required 3 credit hour course for all students: PEDS 7050 Ethics and Equity in Child Health Research</p> <p>The following non-credit courses are also required: GRAD 7500: Academic Integrity Tutorial GRAD 7300: Research Integrity Tutorial</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at the 7000-level or higher with the balance of the coursework at the 3000-level or higher. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.¹ <p>¹ Unless professional accreditation requirements and/or the department/unit's supplementary regulations indicate otherwise.</p>	<p>PEDS 7030: Equity, Diversity and Inclusion for Professionals PEDS 7080: Indigenous Child Health</p> <p>Where a student has already completed similar courses to the Pediatric Graduate Program core courses, the student may, with the recommendation of their Advisory Committee and with the approval of the Chair of the Pediatric Graduate program, or their delegate, be exempted from taking the equivalent core courses and allowed to fulfill the three (3) ch of core courses with three (3) ch of other courses taken at the 7000-8000 level from any college or department in the Rady Faculty of Health Sciences.</p> <p>The following non-credit course is required for students not having clinical training or background: PEDS 7040: Introduction to a Clinical Environment</p> <p>The following non-credit course is required for clinically-oriented students: PEDS 7060: Considerations in the Delivery of Virtual Care in Pediatrics</p> <p>Students must select two of the following four courses, representing the three pillars which are not their home pillar: PEDS 7130: Multidisciplinary Immersion in Clinical Research (1.5 ch) PEDS 7150: Multidisciplinary Immersion in Basic Sciences (1.5 ch) PEDS 7160: Multidisciplinary Immersion in Population Health (1.5 ch) PEDS 7170: Multidisciplinary Immersion in Practice and Policy (1.5ch)</p> <p>The following courses are offered as electives, usually to be taken during the second year of study: PEDS 7110: Directed Readings in Pediatric Literature (3 credit hours) PEDS 7140: Practical Epidemiology (6 credit hours) PEDS 7120: Foundations in Bioinformatics (3 credit hours): PEDS 7180: Practical Qualitative and Mixed Methods (3 credit hours) PEDS 7190: Medical Education, Ethics and Engagement (3 credit hours)</p>
<p>5.4.1 Language Requirements</p> <p>Some department/units specify a language requirement for the Ph.D. degree. Students are advised to check department/unit supplementary regulations regarding this requirement.</p>	
<p>5.4.2 Advance Credit</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Advance credit for courses completed prior to admission to a Ph.D. program will be considered on a case-by-case basis. The student's department/unit makes the request to the Faculty of Graduate Studies by completing the "<u>Advance Credit-Transfer of Courses</u>" form.</p> <ul style="list-style-type: none"> • Application for advance credit must be made within the first year of the program (please refer to <u>Lapse or Expiration of Credit of Courses</u>) • No more than 50% of the required coursework for the program can be achieved using advance credit. • A course may not be used for credit toward more than one degree, diploma or certificate. • The student must register at the University of Manitoba for at least two consecutive terms and must also complete the thesis and candidacy examination at The University of Manitoba. Regardless of the extent of advanced credit received, all students are required to pay applicable program fees. 	<p>Prior to application for advanced credit to the Faculty of Graduate Studies, the applicant must have approval from the Department Head <u>or</u> Director, Pediatric Graduate Program <u>and</u> from the potential research supervisor.</p>
<p>5.4.3 Transfer Credit</p> <p>Courses within a program of study may be taken elsewhere and transferred for credit at the University of Manitoba. All such courses:</p> <ul style="list-style-type: none"> • 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; • cannot be used for credit towards another degree; • may not exceed 50% of the minimum credit hours of coursework required of the student's graduate program at The University of Manitoba. <p>Permission is granted in the form of a <u>Letter of Permission</u> which may be obtained by making an application to the Registrar's Office; an original transcript, and course equivalency must be provided.</p>	<p>Prior to application for transferred credit to the Faculty of Graduate Studies, the applicant must have approval from the Department Head <u>or</u> Director, Pediatric Graduate Program; <u>and</u> from the potential research supervisor.</p>
<p>5.4.4 Lapse or Expiration of Credit of Courses</p> <p>Courses completed more than seven (7) years prior to the date of awarding of a degree may not normally be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content.</p> <p>Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed expired and cannot be used for credit toward that degree.</p> <p>In the event that coursework is no longer considered current or has expired, students must take additional course-work (as recommended by the department/unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.</p>	
<p>5.5 Time Limits</p> <p>5.5.1 Minimum Time Limit</p> <p>The minimum time requirement for the program of study for a Ph.D. degree will normally be two (2) years of study beyond the level of the Master's degree, or three (3) years beyond the level of a Bachelor's degree.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>5.5.2 Maximum Time Limit</p> <p>A student's candidature shall lapse if they fail to complete the degree within six (6) years following initial registration in the Ph.D. program. For those students who transfer from the Master's to the Ph.D., years spent in the Master's program are counted as years in the Ph.D. program.</p> <p>Ph.D. students who are declared as part-time will receive an additional four (4) months in time to complete their program for every two (2) years (24 months) they are declared as part time (see <u>Student Status/Categories of Students</u>) to a maximum of seven (7) years. Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted using the "<u>Time Extension Request</u>" form to the Dean of the Faculty of Graduate Studies at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit.</p> <p>A student who has not completed the degree requirements within the time limit or within the time limit of any extension that has been granted (please refer to "<u>Extension of Time to Complete Program of Study</u>" and "<u>Leaves of Absence</u>") will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>	
<p>5.6 Academic Performance</p> <p>Student progress shall be reported at least annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the "<u>Progress Report</u>" form.</p> <p>Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will normally be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>	
<p>5.6.1 Performance in Coursework</p> <p>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.</p>	<p>A minimum degree grade point average (DGPA) of 3.5 with no grade below B must be maintained to continue in the Pediatric Graduate Program, to be monitored on an annual basis. Monitoring will be done by the Pediatric Graduate Program Administrative Team.</p> <p>With permission of the Department Head and Director Pediatric Graduate Program, students deficient in six (6) credit hours or less with a grade of C+ or lower in a course or courses may be permitted, if the overall DGPA is 3.5 is better, to write one (1) supplemental examination in each course, to repeat the courses, or to take equivalent substitute courses. Note: substitute courses are not permitted for core required courses to the program.</p>
<p>5.6.2 Performance Not Related to Coursework</p> <p>Students may be required to withdraw from their Ph.D. program for reasons of unsatisfactory performance other than those related to failing grades. These include, but are not restricted to, unsatisfactory attendance and lack of progress in research and/or thesis preparation. Unsatisfactory performance must be reported to the Faculty of Graduate Studies on the "<u>Progress Report</u>" form. Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the department/unit Head to the Dean of the Faculty of Graduate Studies.</p>	<p>Students must attend a minimum of 4 CHRIM Research Rounds per academic term. These rounds are held Thursdays at noon, in 500 JBRC. Students must sign in to attest to their attendance.</p> <p>Students must present at CHRIM Research Rounds a minimum of two (2) times.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Students are normally expected to complete remedial action by the end of the subsequent term.</p>	<p>All students must complete training for PHIA – Personal Health Information Act, and Tri-Council Policy Statement on Sex and Gender Training. Certificates attesting to successful completion must be forwarded via email to the Director, Pediatric Graduate Program within 1 month of acceptance, and no later than 1 week from the start of the program. The student's advisor and co-advisor must be cc'd on this email.</p> <p>All students complete a Criminal Background Check and Child Abuse Registry Check. An original of these certificates must be forwarded via email to the Director, Pediatric Graduate Program within 1 month of acceptance, and no later than 1 week from the start of the program. The student's advisor and co-advisor must be cc'd on this email.</p>
<p>5.7 Academic Requirement for Graduation</p> <p>All students must:</p> <ul style="list-style-type: none"> • maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+; • complete GRAD 7500 • complete GRAD 7300 • meet the minimum and not exceed the maximum course requirements; and • meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses). <p>Individual department/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements. A cumulative degree grade point average of 3.0 or greater is required in those courses that constitute the program of study for graduation in the Faculty of Graduate Studies.</p>	
<p>5.8 Candidacy Examination</p> <p>The candidacy examination is an absolute requirement of the Faculty of Graduate Studies and, as such, cannot be waived under any circumstances. However, the format and content of the candidacy exam varies from unit to unit. The purpose of the candidacy exam in doctoral programs is to determine the student's competence in the discipline with respect to understanding and absorbing a broad spectrum of material, and then researching, identifying, analyzing, synthesizing, and communicating ideas about that material in depth.</p> <p>At the time specified by the advisory committee, normally within the first year after the completion of the Ph.D. program coursework, but in no case later than one year prior to expected graduation, the student must successfully complete the formal candidacy examination.</p> <p>The examination is conducted according to a procedure established by the department/unit which is approved and documented in departmental/unit supplementary regulations. The department/unit supplementary regulations state the format and composition of the examination committee for the candidacy examination. The candidacy examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus, or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours.</p>	<ul style="list-style-type: none"> • Students are expected to take a formal candidacy exam, normally within 6 months of completing coursework or before the end of the 2nd year after admission to the program of full-time study, or equivalent but no later than one year prior to expected graduation date. Students must have completed all course work prior to the candidacy examination. • This examination, which must be independent of the thesis proposal, involves a sequential, two-step process, including a written component followed by an oral component, on subjects relevant to the general area of the candidate's research. <p>Written component</p> <ul style="list-style-type: none"> ○ The student must successfully complete the written exam, which will consist of the responses to a choice of 3 out of 4 questions assigned by the advisory committee. ○ Questions are compiled by the Advisor. If there are more than four committee members, the committee decides on the 4 questions that will

This examination, which must be independent from the thesis proposal, may be oral, written, or both and may cover subjects relevant to the general area of the student's research. The structure of the exam must be made known to the student well in advance of the exam. In the case where there is a required oral component, the student must be physically present.

A "pass" decision of the examiners must be unanimous. Students must be provided with feedback on their performance and access to the reasons for the pass/fail.

The Dean of the Faculty of Graduate Studies must be informed whether the candidate has "passed" or "failed" the candidacy examination on the "[Report on Ph.D. Candidacy Examination](#)" form.

Any student who fails the candidacy examination twice will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".

On successful completion of this examination, the student will be considered a candidate for the Ph.D. degree.

comprise the examination (advisor/co-advisor act as one voice); the Advisor then sends the questions to the student and the Director, Pediatric Graduate Program.

- The committee will specify their expectations and requirements concerning the number of words/pages, format, spacing, style, etc. for each written answer (normally 4000-5000 words per question, excluding references; Vancouver formatting). The student will have 30 calendar days to prepare the written answers.
- The intent of the written candidacy examination is for students to demonstrate the analysis and synthesis of the literature in their substantive field and the ability to integrate and synthesize ideas that reflect current knowledge. Duplicate submission of all or part of previous coursework papers is considered plagiarism and is not permitted.
- The written answers must be submitted to the advisory committee, with a copy to the Director of the Pediatric Graduate Program, in Word format. The committee has 3 weeks to evaluate the quality of the written answers. The assessment focuses on the student's integrative thinking ability at the general and abstract level and preparedness to undertake thesis research. Each member of the Advisory Committee assesses each written answer independently prior to comparison of the evaluations. Each written answer is assigned a pass/fail grade by the Advisory Committee. All written answers must be unanimously approved prior to the oral defence. Once approved, the student will receive feedback regarding the decision from the Advisor/Advisory Committee. If any committee member assigns a 'fail' to any of the written answers, that committee member will contact the Advisor. A tentative meeting date of the committee and student will be scheduled to discuss the failure, normally within 1 month from distribution of the student's written answer to the committee. A student who fails a written answer will be allowed a second attempt not less than 1 month and not more than 3 months following the first attempt. If the written answer fails a second time, this would constitute the second failure of the candidacy exam and the student would be required to withdraw from the program.

Oral component

- The purpose of the oral defence is to allow the student the opportunity to discuss and comprehensively speak to the questions in the written exam. The maximum time permitted for this oral exam will be 2.5 hours.
- Immediately following the oral defence, the Advisory Committee will meet in camera to

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<p>determine the outcome of the oral examination. The student will be informed immediately following the decision. A 'pass' decision of the examiners must be unanimous. Students must pass both the written and oral examinations to be considered a candidate for the PhD degree.</p> <ul style="list-style-type: none"> ○ A student who fails the oral examination will be allowed a second attempt not less than 3 months and not more than 6 months following the first attempt. The student is permitted a second attempt at the oral exam only if there has been no failure in the written component of the exam. The Dean, Faculty of Graduate Studies will be informed regarding the outcome of the oral defence by way of the "Report of the PhD Candidacy Examination" form. A student may fail each portion (written and oral) of the candidacy examinations only once. A student who fails any one portion of the candidacy examinations more than once will be required to withdraw from the Faculty of Graduate Studies. ○ The candidacy exam is distinct from the thesis proposal.
<p>5.9 Thesis Proposal</p> <p>Some departments/units have specific procedures in place for approval of thesis proposals and students are advised to refer to the specific department/unit supplementary regulations. If departments/units require thesis proposal approval, this exercise must be independent from the candidacy examination. Regardless, the proposed thesis research must be approved by the advisory committee and, if necessary, by the Human Research Ethics Board or Animal Care Committee before the work has begun on the thesis research or project.</p>	<p>The written thesis proposal must be written by the student, with guidance by the supervisor.</p> <p>Formatting requirements:</p> <ul style="list-style-type: none"> ● Word document, not PDF ● No more than 10,000 words 1.5 spacing, excluding references, tables/figures and other supplementary materials. ● Arial, 11 point font ● Tables and figures may include smaller Arial font, but must be legible without increasing size of page. ● Vancouver style references ● Canadian spelling ● Submitted to the Director, Pediatric Graduate Program, who will distribute the thesis proposal to the advisory committee <p>Preliminary materials include:</p> <ul style="list-style-type: none"> ● title page ● table of contents ● acknowledgements (optional) ● attestation that the work was produced by the student, with guidance from the advisor <p>Required sections must include</p> <ul style="list-style-type: none"> ● Literature review/background (recommended 5-7 pages) ● Main aim and specific objectives ● methods, including research design, study population, data sources, relevant definitions, outcomes, data management, statistical analyses, ethical approval ● Feasibility issues ● Preliminary analyses ● Strengths and limitations

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<ul style="list-style-type: none"> • Knowledge translation plan • Future directions • <p>Back pages:</p> <ul style="list-style-type: none"> • references • student and advisor contact information • appendices, including consent forms and REB approval certificates* • budget • supplementary tables (optional) <p>*If REB approval is not in place at the time of the thesis proposal, the student must submit a complete application to the appropriate Research Ethics Board by the next submission deadline, unless the next deadline is less than 2 weeks from the date of approval. In the latter case, the student may submit for the first subsequent deadline.</p> <p>If the written proposal is successful, the student will proceed to an oral proposal, at which he/she must be physically or virtually present. The oral proposal exam must be scheduled within one month of successfully completing the written proposal.</p> <p>The oral proposal will consist of a presentation of the research, followed by a discussion between the candidate and advisory committee, during which the student must be able to more comprehensively speak to the questions in the written proposal.</p> <p>Oral thesis proposal presentation:</p> <ul style="list-style-type: none"> • Closed session (open only to student, advisory committee). Others may be invited with the written permission of the Director, Pediatric Graduate Program • 20-25 minute presentation by the student • 60 minute question and answer period between the student and advisory committee • The maximum time permitted for this oral exam will be 1.5 hours. <p>The written thesis proposal must be completed subsequent to the candidacy exam, and no less than 8 months prior to the defense. The proposal must be independent of the candidacy exam, with minimal overlap in content. The thesis proposal must be presented first in writing to the advisory committee. The proposal must consist of:</p> <ul style="list-style-type: none"> • Literature review/background • Methods section, including statistical analysis plan • Preliminary analyses • Strengths and limitations • Future directions

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<p>The proposal may not be more than 15 pages double spaced, excluding references, tables/figures and other supplementary materials.</p> <p>If the written proposal is successful, the student will proceed to an oral proposal, at which he/she must be physically present. The oral proposal exam must be scheduled within one month of successfully completing the written proposal.</p> <p>The oral proposal will consist of a presentation of the research, followed by a discussion between the candidate and advisory committee, during which the student must be able to more comprehensively speak to the questions in the written proposal. The maximum time permitted for this oral exam will be 1.5 hours.</p> <p>Once the thesis proposal is approved, the student must submit a complete REB application to the appropriate Research Ethics Board by the next submission deadline, unless the next deadline is less than 2 weeks from the date of approval. In the latter case, the student may submit for the first subsequent deadline.</p>
<p>5.10 Thesis</p> <p>An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The thesis must be written in English unless otherwise approved by the department/unit and Faculty of Graduate Studies.</p> <p>The thesis must be written according to a standard style acknowledged within the candidate's particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors).</p> <p>The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the guidelines found on the website.</p>	<p>In accordance with the regulations of the Faculty of Graduate Studies, the student is required to demonstrate competence in planning and conducting a research project, and in disseminating the results. If a grouped thesis format is chosen, it would normally consist of 3 publishable manuscripts, at least one of which has been submitted for publication and all of which are first authored by the student. The specification "publishable" refers to the distinct contribution to knowledge in the research area.</p> <p>Notably, whereas shared first authorship may be appropriate for peer-reviewed publication, only one student may include any given manuscript in a grouped thesis. It is strictly forbidden to include any version of a manuscript or publication in a grouped thesis that has previously appeared in another student's thesis.</p> <p>Additional formatting guidelines in Appendix 1</p> <p>The written thesis must be written by the student.</p> <p>This document is expected to be approximately 15,000 - 20,000 words, and follow the formatting guidelines described for the thesis proposal. In addition to the required sections for the thesis proposal, the student must include results and interpretation of findings. A grouped manuscript, which includes the student's original publications pertaining to the thesis, is preferred. However, written permission must be obtained from the publisher(s) to do so. A copy of this written</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
	<p>permission must be included as a back page of the thesis. Moreover, the student must write a stand alone summary of the results and interpretation of the results, that can be understood independent of the published papers.</p> <p>Additional back pages for the thesis must also include any instruments or tools (e.g. questionnaires, interview guides) used as part of the thesis work.</p> <p>At least one month prior to the proposed date the following information must be received by the Faculty of Graduate Studies Director, Pediatric Graduate Program:</p> <ul style="list-style-type: none"> • Thesis examining committee reports (both internal and external) • Student's examination program information (submitted in a Word document): <ul style="list-style-type: none"> ○ Biographical data if desired (i.e. birthplace) ○ List of degrees obtained--institution and date ○ List of the candidate's awards, publications, and joint publications <p>An abstract of the thesis (not more than 350 words)</p>
<p>5.11 Thesis Examination Procedures</p> <p>The final examination for the Ph.D. degree proceeds in two (2) stages:</p> <ol style="list-style-type: none"> 1. Examination of the candidate's thesis by the examining committee; 2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto. 	
<p>5.11.1 Formation of the Examining Committee - University of Manitoba (Internal) Examiners</p> <p>The candidate's advisor/co-advisor is considered to be a single voting member of the examining committee. All voting members of the advisory committee are expected to serve on the examining committee; any exceptions must be approved in advance by the Dean of the Faculty of Graduate Studies. All examiners must be members of the <u>Faculty of Graduate Studies</u>. It is expected that examining committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies.</p>	<p>The PhD Internal Examiners will normally comprise the Examining Committee, specifically the student's supervisor, one faculty member from another pillar within the Pediatric Graduate Program, and one methodological expert.</p>
<p>5.11.2 Formation of the Examining Committee - External Examiner</p> <p>The candidate's advisor/co-advisor, in consultation with the advisory committee, will recommend the names of at least three (3) distinguished scholars from outside The University of Manitoba with particular experience in the field of the thesis research and significant Ph.D. student supervisory/examination experience to serve as the external examiner. The recommendations must be made to the Dean (or designate) of the Faculty of Graduate Studies for approval via the Ph.D. Thesis Submission Portal on <u>JUMP</u> and must include:</p> <ul style="list-style-type: none"> • A CV of each of the prospective external examiners; • A short statement explaining: <ul style="list-style-type: none"> ○ The rationale behind the recommendations; 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> ○ The prospective external examiners' qualifications (if not already explicit on the CV). This includes a current list of their scholarly publications and research activities and, importantly, their experience with Ph.D. student supervision/examination (e.g., Ph.D. students they have supervised to completion; Ph.D. students they are currently supervising; experience serving as external examiner for Ph.D. examining committees). <p>Advisors and/or departments/units must contact the prospective external examiners to obtain this information and determine if they are available to review the thesis.</p> <p>If any of the recommended examiners do not meet the criteria specified below, a detailed explanation should be included with the rationale for the recommendation.</p> <p>The external examiner must:</p> <ul style="list-style-type: none"> • hold a Ph.D. or equivalent (if outside of North America); • hold the rank of Associate Professor, Full Professor, Senior Scholar or Emeritus Professor (or the equivalent if outside North America) at a university, or have comparable expertise and standing if not a faculty member at a university; • have an established reputation in the area of the thesis research and be able to judge whether the thesis would be acceptable at an institution comparable to The University of Manitoba; and • have a demonstrated record of supervising a significant number of Ph.D. students to completion, and significant recent experience with the supervision/examination of Ph.D. students. <p>The external examiner must not:</p> <ul style="list-style-type: none"> • have held any faculty appointment within the candidate's home department/unit at the University of Manitoba within the last 10 years • have acted as an external examiner for a student of the same Ph.D. advisor and/or co-advisor within the previous two (2) years; • have been associated with the candidate at any time or in any significant way in the past five (5) years, present or reasonably foreseeable future (as advisor/co-advisor, colleague, teacher, co-author of published material, family member etc.); or • be associated with the candidate's advisor/co-advisor in any of the following ways: <ul style="list-style-type: none"> ○ former student within the last ten (10) years; ○ research advisor/co-advisor within the last ten (10) years; ○ research collaborator within the last five (5) years; ○ co-author of published material within the last five (5) years. <p>The Dean of the Faculty of Graduate Studies or designate will choose the external examiner from the list provided by the candidate's advisor/co-advisor or department/unit and will make the formal invitation to the external examiner. The Dean (or designate) of the Faculty of Graduate Studies shall ensure the anonymity of the external examiner until their report has been submitted.</p>	
<p>5.11.3 Changes in the Examining Committee</p> <p>The Dean of the Faculty of Graduate Studies must approve changes in the membership of the examining committee. No changes shall be made in the examining committee after the thesis is submitted to the Faculty of Graduate Studies.</p>	
<p>5.11.4 Distribution of the Thesis for Examination</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Ph.D. candidates must submit their thesis for distribution electronically through JUMP. Please refer to the website for pertinent instructions. It is the responsibility of the Faculty of Graduate Studies to distribute the electronic version of the thesis to all examiners. The Faculty of Graduate Studies shall attempt to ensure that the thesis is distributed to examiners as soon as possible after the submission of all required documentation. The Faculty of Graduate Studies website should be consulted regarding recommended dates by which theses must be submitted.</p> <p>Once the thesis has been submitted to the Faculty of Graduate Studies, neither the candidate nor the advisor/co-advisor shall have any communication with the examining committee regarding the thesis. However, should the need arise, the examiners may contact the Dean of the Faculty of Graduate Studies to discuss any issues related to the thesis.</p>	
<p>5.11.5 Responsibilities of the Examiners</p> <p>In general, the examiners are responsible for:</p> <ul style="list-style-type: none"> • ensuring that the thesis and the candidate meet recognized scholarly standards for a Ph.D.; • appraising the underlying assumptions, methodology, findings, and scholarly significance of the findings of the thesis; • ensuring that the thesis is organized, presents data and uses accepted conventions for addressing the scholarly literature in an acceptable manner; • evaluating that the candidate has the ability to present their findings orally and demonstrate their scholarship by responding to questions and defending the thesis. <p>Notes:</p> <ol style="list-style-type: none"> 1. Any potential breach of academic integrity must be reported to the Dean of the Faculty of Graduate Studies. 2. Any potential breach of The University of Manitoba's Responsible Conduct of Research Policy must be reported to the Office of the Vice President (Research and International). 3. Submission of previously published, peer-reviewed material in the thesis does not preclude its critical examination, either as a written document being reviewed by examiners or at the thesis defence. 	
<p>5.11.6 Process</p> <p>Examination of the Written Thesis</p> <p>Support of the candidate's advisor/co-advisors, advisory committee, and department/unit is required before the thesis is eligible for examination. Such support must be provided to the Faculty of Graduate Studies through submission by the department/unit Head of a completed "Approval to Proceed to Examination" form. By completing the "Approval to Proceed to Examination" form:</p> <ul style="list-style-type: none"> • each member of the advisory committee verifies that they have read the complete version of the thesis and have provided the candidate with a detailed review and comments including any necessary revisions; • the student verifies that they have received feedback from all members of the advisory committee and have taken the feedback into account in preparing the thesis and are ready and willing to have their thesis examined; and • the department/unit verifies that the student's thesis has been reviewed by all members of the advisory committee and that the department/unit fully supports the thesis proceeding for examination. 	

The thesis will be eligible for examination if no more than one (1) member of the advisory committee is not in support, the department/unit is in support, and an external examiner has been secured by the Faculty of Graduate Studies.

The Dean of the Faculty of Graduate Studies will request the examiners to give, within four (4) weeks of the distribution of the thesis, a detailed written report of the thesis.

The examiners will be asked to place the thesis into one of the following categories:

1. The thesis represents a distinct contribution to the candidate's field of research and is acceptable as it stands. Minor revisions to content, structure, or writing style may be required. The thesis may proceed to oral examination.
2. The thesis has merit and makes a contribution to the candidate's field; however, there are research-related concerns that have the potential to be addressed in the oral defence. The structure and writing style are acceptable or require only minor revisions. The thesis may proceed to oral examination.
3. The thesis has some merit, but is not acceptable in its current state and requires major revisions to one or more of its core components, such as research content, structure or writing style. The thesis should not proceed to oral examination.
4. The thesis is unacceptable with respect to its core components, such as research content, structure, and writing style. The thesis should not proceed to oral examination.

The candidate's advisor (and, if appropriate, co-advisor) may also wish to submit a report.

If either the external examiner or two (2) or more internal examiners indicate a failure (i.e. places the thesis in categories 3 or 4), then the candidate fails the examination. Otherwise, the candidate may proceed to the oral examination. The awarding of a passing grade by an internal or external examiner does not preclude them from assigning a failing grade at a subsequent stage in the examination process.

In the event of a first failure, the candidate may, on support of their home department/unit, be allowed to have the thesis evaluated a second time, by the same examining committee. In this case, the department/unit Head shall convene a meeting of the internal examiners of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. In normal circumstances, this will involve additional scholarly work that the department/unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.

Support of the candidate's advisor/co-advisors, examining committee, and department/unit is required before the thesis is eligible for re-examination. Such support must be provided to the Faculty of Graduate Studies through submission by the department/unit Head of a new completed "Approval to Proceed to Examination" form, accompanied by a detailed summary of the changes made to improve the thesis. The thesis will be eligible for second distribution only once this is received by Faculty of Graduate Studies.

Two failures at any combination of written review and/or oral examination stage will normally result in the candidate being withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".

Reports

The Dean of the Faculty of Graduate Studies shall provide electronic copies of all reports to each of the advisor/co-advisor, examiners, and Head of the department/unit.

5.12 Oral Examination

5.12.1 Scheduling

Departments/Units cannot proceed with scheduling the oral examination prior to receiving the approved internal and external examiners report from the Faculty of

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Graduate Studies. The oral examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours. It is the responsibility of the department/unit to ensure that all room booking arrangements are made and appropriate facilities meet minimum standards expected for a Ph.D. defence. In addition, the candidate must submit, in electronic format biographical information and an abstract of the thesis to the Faculty of Graduate Studies at least two (2) weeks in advance of the date of the oral examination.</p>	
<p>5.12.2 Attendance</p> <p>The Dean of the Faculty of Graduate Studies or designate shall act as Chair of the examination committee.</p> <p>The attendance of the external examiner in person at the candidate's oral examination is encouraged. If the external examiner will not be present in person, then their participation electronically is expected. If the external examiner cannot participate electronically, they will be asked to provide questions in advance. These questions will be read to the candidate at the defence by the advisor.</p> <p>Normally, all internal members of the examining committee should be present in-person at the defence, unless exceptional circumstances prevent this. Under such circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, members may participate electronically. Consequently, no more than one (1) internal member and the external examiner may participate electronically.</p> <p>The candidate and advisor/co-advisor must be present in person for the examination.</p> <p>Normally, the oral examination shall be open to all members of The University of Manitoba community and the general public. In exceptional cases the final oral examination may be closed; for example, when the results of the thesis research must be kept confidential for a period of time. In such cases, the examination committee and Head of the department/unit shall request prior approval in writing from the Dean of the Faculty of Graduate Studies. If approved, the final oral examination shall be closed to all but the examining committee and the Dean of the Faculty of Graduate Studies or designate.</p> <p>Regardless of open or closed status, no recording devices will be permitted.</p>	
<p>5.12.3 Format of the Examination</p> <p>The first part of the oral examination shall consist of an oral presentation by the candidate. This is followed by examination of the candidate by the examination committee. If time permits, the Chair, at their discretion, may allow questions from the invited member (if applicable) of the examining committee and then members of the audience.</p>	
<p>5.12.4 Procedures for the Conduct of the Examination</p> <p>The Chair should discuss the examination procedures with the examiners prior to the beginning of the formal examination.</p> <p>The Chair will introduce the candidate and request him/her to give a concise (20 to 25 minute) oral presentation of the thesis to include a summary of the problem addressed, the results obtained, and the conclusions drawn from the study.</p> <p>Following the presentation, the Chair will invite questions from each member of the examining committee, taking care to ensure that each examiner has approximately equal time for questions. The total time for questions by the examining committee must not exceed two (2) hours.</p> <p>The Chair may exercise their discretion in allowing questions from the audience following completion of the formal examination. Once assuming the role of Chair, they forego the right to comment on the merits of the thesis regardless of whether they are an expert in the field.</p>	

5.12.5 Decision of the Committee

Following completion of the formal examination, the candidate, invited member (if applicable) of the examining committee and audience must leave the examination room. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it. The performance of the candidate at the oral examination may reveal problems of comprehension or explanation, and the examining committee may require revisions be made to the written thesis to address these problems prior to granting final approval.

The judgement of the examiners shall be reported by the Chair to the Faculty of Graduate Studies in the qualitative terms "pass" or "fail" on the "Final Examination of the Ph.D. Thesis" form.

- **Pass:** the candidate has satisfactorily presented the thesis rationale, methodology, findings, and conclusions to the general satisfaction of the examining committee. Notwithstanding this, stylistic, grammatical, and content revisions to the thesis may be required. Normally, the advisor/co-advisor is charged with ensuring that any revisions are satisfactorily completed. Under some circumstances, the entire examining committee may wish to ensure any required revisions are completed satisfactorily. Regardless, those examiners in agreement must indicate, by their signatures, concurrence with the passing grade.
- **Fail:** the candidate has failed to adequately orally present the thesis rationale, methodology, findings, and/or conclusions, or to satisfactorily respond to questions posed related to the thesis. Failure may also arise because of defects in conception, methodology, or context. Those examiners in agreement must indicate, by their signature, concurrence with the failing grade.

If either the external examiner **or** two (2) or more internal examiners indicate a failure, then the candidate fails the examination. In this case, the Chair must submit a copy of the report(s), including written detailed reasons for the decision, to the candidate, all members of the examining committee, and the Dean of the Faculty of Graduate Studies.

In the case of a first failure of the oral defence, the candidate may, on support of their home department/unit, be allowed to defend the thesis a second time. In this case, the Department/Unit Head shall convene a meeting of the internal members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second oral defence. In normal circumstances this may involve additional scholarly work which the Department/Unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.

Support of the candidate's advisor/co-advisor, advisory committee, and department/unit is required before the thesis is eligible for re-examination. Eligibility for re-examination must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a new completed "Approval to Proceed to Examination" form, accompanied by a detailed summary of the changes made to improve the thesis, if any. The thesis will be eligible for second distribution to internal and external examiners only once this is received by Faculty of Graduate Studies.

Note: In some circumstances, the candidate may revise the written thesis. The revised thesis will be provided to the committee prior to the next oral defence. The revised written thesis shall not be re-examined; however, revisions can be recommended at the oral examination.

Candidates whose thesis is failed twice at the written review and/or oral examination stage will normally be withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>5.13 Graduation</p> <p>The candidate will be recommended for the Ph.D. degree upon receipt by the Faculty of Graduate Studies of favourable reports by the thesis examining committee and "Final Examination of the Ph.D. Thesis" form, a corrected copy of the electronic version of the thesis and Copyright Licence Declaration uploaded into MSpace, and providing all other degree requirements have been satisfied.</p> <p>Patents –Refer to "Policy of Withholding Theses Pending Patent Applications".</p> <p>Restriction of Theses for Publication – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after the submission of the digital version of a thesis to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.</p> <p>Library and Archives Canada – Library and Archives Canada obtains a copy of the thesis via the University's MSpace repository.</p>	<p>The student must also provide an electronic copy to the Director, Pediatric Graduate Program pgpadmin@umanitoba.ca</p>
<p>5.14 Student Withdrawal</p> <p>A student will be required to withdraw when the Ph.D. thesis has been rejected twice at the stage where:</p> <ol style="list-style-type: none"> 1. The internal examining committee reports on the merits of the written thesis; 2. The external examiner reports on the merits of the written thesis; 3. The oral examination; or 4. A combination of any of these stages. 	
<p>SECTION 6: Policy of Withholding Thesis Pending Patent Applications Content or Manuscript Submission</p> <p>In 1970, The University of Manitoba Board of Governors and Senate approved a policy on accepting research grants from outside agencies. This policy defined the right of agencies to defer release of information and thus ensure freedom of publications for research findings of University personnel. Occasionally, the University may also wish to restrict the release of a thesis pending patent application. For additional details, see The University of Manitoba Governing website.</p> <p>This situation may arise in the two (2) circumstances defined below, both of which are governed by the same set of regulations:</p> <ol style="list-style-type: none"> 1. Where a research project is known to contain patentable items as defined in the research contract, then it is the responsibility of the advisor/co-advisor to give written information of the restrictions on publication to the student prior to the start of the thesis research. If the student agrees to carry out the research, then the regulation given below will apply. 2. Where a patentable item is found during the course of research, then the advisor/co-advisor and the student may make application for patent rights through the University Patent Committee, and the following regulation will apply concerning the release of the thesis. <p>Regulations Concerning Release of a Thesis during Application and Negotiation for Patents</p> <p>The Dean of the Faculty of Graduate Studies will receive the approved thesis. On written joint request of the advisor/co-advisor and the student, the Dean will retain the thesis for a period up to one (1) year.</p> <p>Regulations Concerning Release of Thesis Pending Manuscript Submission</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>The Dean of the Faculty of Graduate Studies will receive the approved thesis. On written joint request of the advisor and the student, the Dean will retain the thesis for a period up to one (1) year.</p> <p>In exceptional cases, not covered by the regulation concerning patents, where adequate causes can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate studies restrict access for a period up to one (1) year after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.</p>	
<p>SECTION 7: Extension of Time to Complete Program of Study Content</p> <p>All requests for extensions will normally be dealt with administratively and reported, in summary form, to the Executive Committee of Graduate Studies for information. The student must complete the "Time Extension Request" form and submit it to their major department/unit for recommendation to the Faculty of Graduate Studies at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit. Requests for an extension are reviewed by the Faculty of Graduate Studies on a case-by-case basis.</p> <p>Requests for extension must be accompanied by a realistic detailed timeline that has been agreed to by the student and advisor/co-advisor and endorsed by the department/unit Head. The extension time requested must closely reflect the time required to complete the program.</p> <p>The normal time granted for extensions is four (4) to eight (8) months. More than one (1) extension period may be granted, however the total for all approved extensions will not normally exceed one (1) year.</p>	
<p>Section 8: Leaves of Absence</p> <p>For International Graduate Students:</p> <p>To determine how applying for a Leave of Absence may affect your immigration status with Immigration, Refugees and Citizenship Canada, please consult with an International Student Advisor at the <u>International Centre</u> prior to completing your "<u>Leave of Absence</u>" application with your department/unit.</p> <p>8.1 Regular Leave</p> <p>A regular leave is intended to allow students to meet responsibilities/plans related to family, travel or employment and circumstances not covered by the parental or exceptional leaves. At the student's request, the Head of the department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted a leave of absence for a period of time not to exceed one (1) year. While on a regular leave of absence, a student must not be actively engaged in their program of study or thesis/practicum research work. A student on a regular leave of absence is required to maintain continuous registration. A student on a regular leave of absence will not be assessed program fees, if any are owing, during the period of the leave; however, the appropriate continuing fee will be assessed.¹ Any program fees deferred as a result of a regular leave will be assessed when the student returns from leave. A regular leave of absence status does not extend time limits to complete program of study as outlined in Faculty of Graduate Studies regulations.</p> <p>Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.</p> <p>¹ Program Fees: The continuing fee in effect at the time of the granting of the leave will be levied. However, if the student returns from leave in January, the normal tuition fee will be levied less the continuing fee already paid.</p>	<p>At the student's request, <u>the Director of the Pediatric Graduate Program</u> or Head of the department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted a leave of absence for a period of time not to exceed one (1) year.</p>
<p>8.2 Exceptional Leave</p> <p>In exceptional circumstances for medical or compassionate reasons (e.g. the need to care for an ailing family member), at the request of the student, the Head of the</p>	<p>At the request of the student, <u>the Director of the Pediatric Graduate Program</u> or Head of the</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted an exceptional leave of absence for a period of time not to exceed one (1) year. Supplemental documentation must support the requested dates of the leave. Exceptional leaves must correspond with the start and end of (an) academic term(s). While on an exceptional leave of absence, a student is not permitted to be engaged in their program of study or thesis/practicum work, and would not be required to maintain continuous registration or pay tuition fees. In addition, the leave period would not be included in the time period allowed for the completion of the degree. This leave does not cover circumstances related to travel, employment or financial concerns.</p> <p>Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.</p>	<p>department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted an exceptional leave of absence for a period of time not to exceed one (1) year.</p>
<p>8.2.1 Fees</p> <p>Program Fees: Students are not expected to pay fees for the term in which they have been granted an exceptional leave. Upon return from the exceptional leave, students will be assessed fees as determined by the Registrar's Office.</p>	
<p>8.3 Parental Leave</p> <p>A graduate student who is expecting a child or who has primary responsibility for the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. The request for a parental leave should be made through the department/unit, to the Faculty of Graduate Studies for a period of time normally not to exceed one (1) year. Supplemental documentation must be submitted to support the requested dates of the leave. Parental leaves must correspond with the start and end of (an) academic term(s). While on leave of absence for parental reasons, a student must not be actively engaged in their program of study or thesis/practicum work. The leave period is not included in the time period allowed for completion of the degree.</p> <p>Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.</p>	
<p>8.3.1 Fees</p> <p>Program Fees: Students are not expected to pay fees for the term(s) in which they have been granted a parental leave. Upon return from the parental leave students will be assessed fees as determined by the Registrar's Office.</p> <p>All applications for Leaves of Absence must be submitted on the "<u>Leave of Absence</u>" form.</p>	
<p>8.4 Awards and Leave of Absence</p> <p>Students granted an exceptional or a parental leave will retain the full value of a University of Manitoba Graduate Fellowship or other award whose terms and conditions are established by the Faculty of Graduate Studies. Such an award will be suspended at the onset of the leave and reinstated at the termination of the leave period (4 to 12 months) provided that the student returns to full time study at that time.</p> <p>Note: Other awards will be paid according to the conditions established by the donor or granting agency.</p>	
<p>8.5 Graduate Student Vacation Entitlement</p> <p>Students are entitled to 21 calendar days of vacation over a twelve (12) month period.</p> <ul style="list-style-type: none"> For the purposes of calculating vacation entitlement, the academic year means the period from September 1 to August 31. Vacation entitlement will be prorated for the portion of the year in which a student is registered. 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> Any vacation time taken during an official closure of the University is not included as part of the 21 calendar day vacation entitlement. In addition, attendance at academic conferences shall not be considered vacation time. Student vacation requests should have minimal impact on the student's research, coursework, and other obligations to the University. Any requests provided ahead of time and within these guidelines will not be unreasonably denied. Should a conflict arise between a student's vacation request and a supervisor's expectations, the Department/Unit Head (or designate) shall make a final determination. 	
<p>SECTION 9: Appeals – Procedures and Guidelines</p> <p>9.1 General</p> <p>Students who disagree with a decision have access to appeal routes as laid out by various Faculty of Graduate Studies and University of Manitoba appeal procedures. Student appeals may be limited by the scope of the inquiry available at each level and category of appeal, as well as by the time restrictions for submission of appeals.</p> <p>A further limitation is that the Faculty of Graduate Studies rules and regulations, established to uphold the academic rigour of the University of Manitoba, are generally not subject to appeal unless an appeal route is otherwise stipulated. In situations where no appeal route is available, a student may make a written request to the Dean of the Faculty of Graduate Studies.</p> <p>Students are referred to the appeals section of the <u>University of Manitoba Governing Documents</u> for further details.</p> <p>For students registered in Joint Master's Programs (University of Manitoba and University of Winnipeg), there is a different process for handling academic and disciplinary appeals cases than normally used for University of Manitoba students in regular programs (not Joint Programs). This process is outlined in the Joint Master's Program Governing Document.</p>	
<p>9.2 Definitions</p> <ul style="list-style-type: none"> “Appellant” – the graduate student appealing a decision affecting the student’s own admission to, academic standing in, awards from or disciplinary action by a department/unit or the Faculty of Graduate Studies; “Appeal Panel” – a panel convened from the members of the Faculty of Graduate Studies Appeals Committee by the Executive Committee of the Faculty of Graduate Studies empowered to deal with appeals stemming from decisions of departments/units or the Faculty of Graduate Studies, or individuals designated to make such decisions; “Unit” – the department/unit council, or appeal body, whose decision is being appealed. This is understood to include decisions taken by individuals or committees acting in the name of the department/unit and also to the supplementary regulations pertinent to a department/unit’s operation which have been approved by the Faculty of Graduate Studies; “Respondent” – a representative of the Faculty of Graduate Studies designated by the Dean of the Faculty of Graduate Studies to represent the Faculty of Graduate Studies. In this document, “Respondent” may also refer to a “Co-respondent” invited by the Respondent to represent the department/unit unless otherwise noted. 	
<p>9.3 Types of Appeal</p> <p>Several areas of appeal are available to appellants:</p> <ul style="list-style-type: none"> admission; 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> • academic; • discipline; • administration (e.g. fee appeals). <p>In all cases, appeals should be addressed to the Dean of the Faculty of Graduate Studies. Appeals of decisions made by the Dean will be referred to an Appeal Panel. A decision of the Faculty of Graduate Studies Appeal Panel is appealable only to the Senate Committee on Appeals or the University Discipline Committee, as appropriate. In all cases, an appellant shall have the option of being registered in, and undertaking the responsibilities of, their program, until such time as they have exhausted the university appeal process or the appellant decides not to appeal further, whichever comes first.</p> <p>A flow chart of the University of Manitoba Appeals Processes is available at this link.</p>	
<p>9.4 Admission Appeals</p> <p>Please refer to University of Manitoba Governing Documents: Students: Policy: Admission Appeals Procedures and Guidelines.</p>	
<p>9.5 Academic Appeals</p> <p>Academic Appeals are appeals concerning academic decisions made by the department/unit and/or the Faculty of Graduate Studies.</p> <p>9.5.1 Appeal Considerations</p> <p>The Faculty of Graduate Studies will consider appeals:</p> <ul style="list-style-type: none"> • stemming from a decision of a department/unit on academic matters (e.g. first failure of a candidacy examination) only after they have been dealt with by the appropriate department/unit-level appeal process (if any), as is outlined in the department/unit supplementary regulations; • stemming from a decision of the Faculty of Graduate Studies (e.g. Required to Withdraw) which may follow the recommended action of a department/unit. • stemming from a negative decision from the Registrar's Office on a final grade or term work grade appeal. <p>In all cases, appeals should be addressed to the Dean of the Faculty of Graduate Studies.</p> <p>A decision of the Appeal Panel is appealable only to the Senate Committee on Appeals.</p>	
<p>9.5.2 Composition of an Appeal Panel</p> <p>Faculty members or students are disqualified from participating on an Appeal Panel if they:</p> <ul style="list-style-type: none"> • hold any academic appointment in the department/unit in which the appellant is registered; • are/were a student in the department/unit in which the appellant is registered; • were, as an individual, or as a member of a committee or board, responsible for making the decision being appealed. <p>Note: All members of an Appeal Panel shall participate in all of the deliberations essential for the determination of the matter in dispute. If, in the course of hearing an appeal, a member is not present at the commencement of the hearing or a member cannot continue, the Panel may elect to proceed in the absence of that member. If more than one (1) member is not present at the commencement or cannot continue, the Appeal Panel must adjourn the proceedings.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>9.5.3 Grounds for an Academic Appeal</p> <p>It shall be the responsibility of the appellant to indicate clearly and specifically the grounds warranting consideration of the appeal.</p> <p>The Appeal Panel shall only consider an appeal if there is evidence that:</p> <ul style="list-style-type: none"> • the department/unit or the Faculty of Graduate Studies failed to follow the rules of natural justice; • the department/unit or the Faculty of Graduate Studies failed to follow procedures; • a department/unit or Faculty of Graduate Studies regulation has been unfairly or improperly applied, or has become inapplicable through lapse of time; • there are documented mitigating circumstances (e.g. medical, compassionate); • there is apparent conflict between a Senate Regulation, a Faculty of Graduate Studies policy and/or a department/unit regulation. 	
<p>9.5.4 Academic Appeal Deadlines</p> <p>9.5.4.1 Appeal of a Faculty of Graduate Studies Decision:</p> <p>An appeal of action taken by any department/unit, committee, administrator or faculty member within the Faculty of Graduate Studies must be submitted in writing by the appellant to the Dean of the Faculty of Graduate Studies within fifteen (15) working days of the date that the appellant was informed in writing of the action to be appealed.</p>	
<p>9.5.4.2 Appeals to Senate:</p> <p>As per the University of Manitoba Governing Documents: <u>Students: Policy: Appeals Procedures</u>, appeals to the Senate Committee on Appeals shall be filed with the University Secretary within twenty (20) working days after the mailing of the notice of decision from which the appeal is made.</p>	
<p>9.5.5 Faculty of Graduate Studies Academic Appeals Process</p> <p>9.5.5.1 Submission of Appeal Package</p> <p>The Appellant must submit an appeal package consisting of an appeal form, a letter outlining their appeal, and any relevant supporting documentation to the Faculty of Graduate Studies within the above timeframe. Incomplete appeals may not be considered.</p> <p>Upon receipt of a formal appeal, the Dean of the Faculty of Graduate Studies may, at their discretion, consider the appeal or forward it to an Appeal Panel. If the Dean considers the appeal, the student shall be informed of the outcome in writing. Decision letters are issued via email to the appellant's University of Manitoba email address. Hard copies of the letter will be made available upon request.</p> <p>9.5.5.2 Faculty of Graduate Studies Appeals Committee</p> <p>The appellant may appeal the Dean's decision to the Faculty of Graduate Studies Appeals Committee within fifteen (15) working days of the date of the letter of decision.</p> <p>An Appeal Panel will be struck, and a teleconference meeting set by the Faculty of Graduate Studies to determine whether the appellant has grounds to proceed to a Hearing. If the Appeal Panel determines that the appellant has not substantiated their grounds for appeal, the matter will not proceed to a hearing. The Panel will notify the appellant and the Dean of Graduate Studies of their decision in writing. If the Appeal Panel determines that the appellant has substantiated their grounds for appeal, the</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>appellant and the Dean of Graduate Studies will be notified and a hearing will be scheduled.</p> <p>If it is determined that the appeal will proceed to a hearing, the Appeal Panel may request additional information, or of its own volition, call additional witnesses.</p>	
<p>9.5.5.3 Hearing Procedures</p> <p>The Faculty of Graduate Studies shall inform the appropriate department/unit head (or designate) of the nature of the appeal and request that they accompany the Faculty of Graduate Studies respondent as a co-respondent at the hearing. The co-respondent will be requested to provide a letter responding to the appeal no later than fifteen (15) business days before the date of the hearing. The respondent will be requested to provide a letter addressed to the Chair of the Appeal Panel no later than ten (10) working days prior to the hearing.</p> <p>The appellant shall be advised by the Dean of the Faculty of Graduate Studies of the right to appear in person or to be represented by a student advocate, a fellow student or other full-time member of the University community not receiving payment for appearing, or working for legal aid. If the appellant wishes, one (1) member of their immediate family, and a lawyer, may be present, but only as observers (i.e. they cannot participate in the proceedings). The Faculty of Graduate Studies must be notified of any persons accompanying the appellant at least ten (10) working days prior to the hearing.</p> <p>The appellant, respondent, and appeal panel shall have the right to call witnesses to appear before the panel. Witnesses are to be made available for questioning only and will not be privy to the appeal documents or the hearing proceedings in which they are not involved. The appellant must indicate their witness request in their appeal letter. The respondent shall indicate their desire to invite a witness to the Chair of the Appeal Panel no later than five (5) business days after receiving notice that the appeal will proceed to a hearing. It is the responsibility of the party calling witnesses to ensure that the witnesses are informed of the date and time of the hearing.</p> <p>All documentation that the Appeal Panel will consider shall be made available through the Faculty of Graduate Studies to both the appellant and the respondent at least one (1) week in advance of the hearing with notification of the specific time and location of the hearing. No additional materials should be presented at the time of the hearing. In the case where a request is made to submit additional materials, the Chair may postpone the hearing and allow no more than ten (10) working days for the other party to respond to the new materials.</p> <p>Hearings shall be held in closed session unless at least one (1) party requests an open hearing and all parties involved in the proceedings agree to the request. During the hearing, the appellant or the respondent may request a change in the open or closed nature of the hearing, at which time the Appeal Panel shall determine its procedures.</p> <p>The Appeal Panel shall convene prior to the arrival of the appellant (and/or representative) and the respondent to discuss the order of proceedings and questions raised by the appeal documents.</p> <p>The order of proceedings is as follows:</p> <ul style="list-style-type: none"> • The appellant and/or representative will be invited to make an opening statement, followed by rounds of questioning by the Panel and then the respondent; • The respondent will be invited to make an opening statement, followed by rounds of questioning by the Panel and then the appellant and/or representative; • The Panel will have the opportunity to ask further questions of all parties; 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ul style="list-style-type: none"> • If applicable, witnesses will be called upon to enter the room individually. The Panel, appellant and/or representative and respondent will have the opportunity to ask questions; • The appellant and/or representative and respondent will make closing statements. No new information is permitted to be presented at this time; • The Panel will deliberate in camera (i.e. closed session). <p>All parts of the meeting required by the Appeal Panel to deliberate or determine the disposition of the appeal shall be held in camera. Such deliberations shall take into account all documentation provided by the appellant and respondent, as well as all testimonies heard during the hearing.</p>	
<p>9.5.5.4 Disposition</p> <p>The Chair of the Appeal Panel shall inform the Dean of the Faculty of Graduate Studies in writing of the disposition of the appeal, the reasons for the decision, and any actions that may result. The Dean of the Faculty of Graduate Studies shall, in turn, inform the appellant, their representative, and the department/unit in writing of the disposition of the appeal, the reasons for the decision and any actions that may result. The appellant shall be informed of their right of appeal to the Senate Committee on Appeals, including relevant time limits. The Dean of the Faculty of Graduate Studies may inform the department/unit of any recommendations brought forward by the Appeal Panel.</p>	
<p>9.6 Discipline Appeals</p> <p>The specific jurisdiction of each of the Disciplinary Authorities is outlined in:</p> <ul style="list-style-type: none"> • Table 1: Jurisdiction of Disciplinary Authorities for Student Academic Misconduct • Table 2: Jurisdiction of Disciplinary Authorities for Student Non-Academic Misconduct • Table 3: <u>Disciplinary Actions and Disciplinary Authorities</u> <p>If the appeal is from a decision of the Dean of the Faculty of Graduate Studies the appeal statement shall be delivered to the Dean of the Faculty of Graduate Studies on behalf of the Local Discipline Committee (also commonly referred to as the "L.D.C.")</p> <p>If the appeal is from a decision of the L.D.C., the official statement shall be delivered to the Secretary of the University Discipline Committee (U.D.C.) with a copy to the Dean of the Faculty of Graduate Studies.</p>	
<p>9.6.1 Discipline Appeal Deadlines</p> <p>If a student wishes to appeal a decision, the notice of appeal must be delivered in writing to the appropriate person(s) within ten (10) working days of the student being notified of the decision the student intends to appeal.</p>	
<p>9.6.2 Appeal of Disciplinary Action</p> <p>When the appeal is against a disciplinary decision made by the Faculty of Graduate Studies, the appeal routes and procedures as outlined in the following shall prevail: <u>Student Discipline Appeal Procedure</u>.</p> <p>The student shall clearly indicate in the notice of appeal whether they are appealing the decision on:</p> <ol style="list-style-type: none"> 1. the finding of facts; 2. the disposition determined by the disciplinary authority; or 3. both (1) and (2). 	
<p>9.7 Fee Appeals</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Please refer to the Registrar's Office webpage on fee appeals. To initiate the Fee Appeal process, the student must complete a Fee Appeal form, available at the former link. For information about Fee Appeals, please visit the Registrar's Office online or in person at 400 University Centre.</p>	
<p>9.8 Term Work Appeals</p> <p>Students are encouraged to discuss matters relating to grading of term work with their instructor in the first instance. Further appeals of grades on academic term work shall be directed, by the appellant, to the department/unit responsible for the course within ten (10) working days after the grades for term work have been communicated to students. Following receipt of the appropriate appeal form and evidence of payment of the refundable appeal fee, the department/unit shall consider the appeal and provide a decision within fifteen (15) working days. Please refer to the Registrar's Office website for additional information.</p>	
<p>9.9 Final Grade Appeals</p> <p>Please refer to the Registrar's Office webpage on grade appeals. To initiate the Grade Appeal process, the student must complete a Grade Appeal form, available at the former link. For information about Grade Appeals, please visit the Registrar's Office online or in person at 400 University Centre.</p>	
<p>9.10 Assistance with Appeals</p> <p>The Office of Student Advocacy & Case Management, 520 University Centre, provides information and assistance to students regarding all appeal processes. It is strongly recommended that students contact the Office of Student Advocacy & Case Management to assist them with any appeal they are considering.</p>	
<p>APPENDIX 1: Thesis/Practicum Types</p> <p>A student/candidate may present a thesis/practicum in one of two acceptable formats:</p> <ul style="list-style-type: none"> • Regular style • Manuscript/grouped manuscript style <p>The type of thesis/practicum must be approved by the advisory committee and comply with all regulations of the Faculty of Graduate Studies and any supplementary regulations of the department/unit.</p> <p>1.0 Regular Style</p> <p><u>1.1 Prefatory Pages</u></p> <p>1.1.1 Title Page</p> <p>The title page should contain the following information:</p> <ul style="list-style-type: none"> • the title of the thesis/practicum • the name of the University • the degree for which the thesis/practicum is submitted • the name of the department/unit • the full name of the author • the copyright notation © <p>The title must be a meaningful description of the content of the research. The author's name should be in full, identical to the name under which they are registered and be consistent on all other documents. A sample title page can be found on this link.</p>	<p>A manuscript/grouped manuscript style is preferred in the Pediatric Graduate Program.</p>
<p>1.1.2 Abstract</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>The abstract is expected to provide a concise, accurate account of the thesis/practicum. Abstract maximum length is 350 words. An abstract should contain a statement of the problem, methods, results, and conclusions.</p>	
<p>1.1.3 Acknowledgements</p> <p>The content of this single page is left to the discretion of the author. For example, the page may make reference to the student/candidate's advisor/co-advisor and advisory committee, to other individuals who have provided invaluable assistance to the development of the thesis/practicum, and to sources of financial assistance or other support.</p>	
<p>1.1.4 Dedication</p> <p>A single page pertaining to a dedication is allowed.</p>	
<p>1.1.5 Table of Contents</p> <p>This must list and provide page references to all elements of the thesis/practicum. The numbering and formatting must be identical to the way the material appears in the text. Page numbers should be right justified. A sample table of contents can be found at this link.</p>	
<p>1.1.6 List of Tables</p> <p>This should immediately follow the Table of Contents and be of the same format. The list must include the number, name and page number of each table.</p>	
<p>1.1.7 List of Figures</p> <p>This should immediately follow the List of Tables and be of the same format as the Table of Contents. The list must include the number, name and page number of each figure.</p>	
<p>1.1.8 List of Copyrighted Material</p> <p>On occasion students/candidates include images, figures, photos and other materials from copyrighted sources. Written permission from the copyright holder is required. This should follow the List of Figures and follow the same format as the Table of Contents. For further information on copyright please refer to the following link.</p>	
<p>1.2 Format</p> <p>1.2.1 Styles</p> <p>The thesis/practicum should be written in a standard style manual that has been recommended by the department/unit. Manuals recommended by the Faculty of Graduate Studies include but are not limited to:</p> <ul style="list-style-type: none"> • American Psychological Association, Publication Manual of the American Psychological Association • Kate L. Turabian, A Manual for Writers of Term Papers, Theses and Dissertations • The Modern Language Association of America, MLA Handbook for Writers of Research Papers • University of Chicago Press, The Chicago Manual of Style <p>Students should always use the latest edition available. If there is a conflict between the instructions in this guide and the style manual chosen, the former should be followed.</p>	
<p>1.2.2 Spelling</p> <p>Canadian, British or American spelling is acceptable, but one style must be used consistently throughout the document.</p>	<p>Canadian spelling must be used; where more than one spelling of a word is correct, consistency is required.</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>1.2.3 Format</p> <p>One-and-a-half (1.5) space all text material; footnotes and long quotations may be single spaced. The entire thesis/practicum must be in the same text font, style, and size. Font size should be no less than 12pt Times Roman. Full justification of the text is not required.</p>	<p>Text must be left justified; full justification is not acceptable.</p>
<p>1.2.4 Margins</p> <p>It is imperative that the specified margins be observed throughout the thesis/practicum. Leave at least a one inch (1.0") margin from the top, bottom, left, and right hand edges of the paper. These margins apply to all material, including appendices, diagrams, maps, photographs, charts, tables, etc.</p>	
<p>1.2.5 Page Numbers</p> <p>Each page in the thesis/practicum must be numbered consecutively. Illustrative pages and appendices must also be numbered. Roman numerals should be used for the prefatory pages. The remaining pages of the thesis/practicum, beginning with the introduction (Chapter One) should be numbered consecutively in Arabic numerals.</p>	
<p><u>1.3 Footnotes, References and Appendices</u></p> <p>Instructions in the style manual recommended by the department/unit should be followed. Regardless of which style manual is used, format selected must be consistent throughout the document.</p>	<p>Footnotes, references and appendices must be in Vancouver style.</p>
<p><u>1.4 Figures, Illustrations, Photographs and Design Drawings</u></p> <p>1.4.1 Illustrative Material</p> <p>All illustrative material must be consistent throughout the thesis/practicum. All figures, illustrations, photographs and drawings must be numbered consecutively in Arabic numerals and accompanied with a title. The material should appear as soon as possible after as it is mentioned in the text. All original materials should be of high quality, with sharp and clear images.</p> <p>1.4.2 Layout of Tables and Figures</p> <p>Each table and figure must have a number and title. The number and title should appear at the top or bottom of the table or figure as per style. The title of the table or figure should be as short as possible and indicate the major focus of the material within the table or figure.</p>	
<p><u>1.5 Additional Materials</u></p> <p>1.5.1 Consent and Access to Information Forms</p> <p>Sample copies of consent forms that were used to obtain consent from participants to take part in the information gathering procedures for the thesis/practicum must be included in an Appendix. Any personal information including signatures must be omitted from the submitted form to meet <u>F.I.P.P.A. regulations</u>.</p> <p>In some cases, approval from an agency, institution or corporation may have been required before the information gathering procedures could proceed. The original approval form for access should be retained by the student with a copy provided to the Faculty of Graduate Studies upon completion of the thesis/practicum.</p>	
<p>1.5.2 Use of Copyrighted Material</p> <p>If the thesis/practicum includes copyrighted material (images or more than a reasonable extract (according to the Copyright Act) of another person's work), permission must be obtained from the copyright holder. A "Sample Permission Letter" is available on the <u>Copyright Office website</u>.</p> <p>In some cases, copyright holders prefer to use their own permission forms and/or will provide their permission electronically. Both of these are acceptable by the Faculty of Graduate Studies.</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>Note that obtaining permission may take a considerable amount of time and this must be taken into consideration when meeting a thesis/practicum submission deadline. A reference to written permission having been obtained must be included under the image or text. The reference should also include the date the permission was granted, and the name/title of the copyright holder(s). The original form(s) signed by the copyright holders should be retained by the student with a copy provided to the Faculty of Graduate Studies at the completion of the thesis/practicum.</p> <p>The thesis/practicum cannot be accepted by the Faculty of Graduate Studies if permission has not been obtained. It is important that the student and their advisor(s) ensure that the permission has been granted. In some cases, the copyright holder cannot be located or the cost is prohibitive to using the text or image. In these situations, the text or image may have to be omitted from the thesis/practicum.</p> <p>Subsequently, information on where the reader can locate the image or text should be included, such as the URL, title of book/journal, volume and issue number, page number, publisher, and date of publication. A description of the purpose or significance of the text or image should be provided.</p> <p>For further information on copyright please refer to the Copyright Office website.</p>	
<p>2.0 Manuscript/Grouped Manuscript Style</p> <p>A thesis/practicum may comprise a paper, or collection of papers, which are, or are about to be, published. The number of papers that comprise this style of thesis/practicum will be determined between the student and the advisory committee. The formatting of the thesis/practicum must be consistent throughout the thesis/practicum and the thesis/practicum cannot merely consist of several papers or articles bound within the one document.</p> <p>Publication, or acceptance for publication, of research results prior to the presentation of the thesis/practicum does not supersede the evaluation of the work by the examination committee (<i>i.e.</i> does not guarantee that the thesis/practicum will be found acceptable). Examiners may specify revisions regardless of the publication status.</p> <p>The thesis/practicum must follow the same prefatory information (1.1), spelling, formatting margin requirements, page numbering (1.2), footnotes and appendices (1.3), figures, illustrations photographs and drawings (1.4) and any additional material (1.5) as those outlined above.</p> <p>There must be an introductory chapter to the entire thesis/practicum that includes its own bibliography. The collection of papers or articles must contribute toward the overall theme that represents the thesis/practicum work and must be smoothly integrated into the flow of the thesis/practicum to produce a unified document. This may require changes or additions to, and re-writing of, any work that has been previously published.</p> <p>The thesis/practicum must contain connecting text between the different chapters providing logical links to allow the integration of the information. <u>These connecting sections are mandatory.</u> Not including these sections may compromise the ability of the examiners to evaluate the thesis/practicum and accordingly, there may be subsequent consequences.</p> <p>The thesis/practicum must contain a concluding chapter that includes a discussion on how the thesis/practicum, with its findings, provides a distinct contribution to knowledge in the research area.</p> <p>In the case of multi-authored papers, the nature and extent of the student/candidate's contribution, and those of the other authors, must be explicitly specified in a section entitled "Contributions of Authors" in the "Preface" of the thesis/practicum. The advisor/co-advisor, by signing the thesis/practicum submission form, attests to the accuracy of these statements and will be asked to reaffirm these statements at the oral defence in the case of a doctoral thesis.</p>	

Department of Pediatrics & Child Health, Children's Hospital,
CE208 – 840 Sherbrook Street, Winnipeg, MB. R3A 1S1
Phone# 204-787-8020 Fax# 204-787-4807

October 29, 2020

Dr. Janice Ristock, FRSC
Provost and Vice-President (Academic)
208 Administration Building
University of Manitoba, Winnipeg, MB
R3T 2N2

RE: Pediatric Graduate PhD Program application

Dear Dr. Ristock,

It is with great excitement that we write this letter strongly expressing our support for the development of a Pediatric Graduate PhD Program. This program is designed to offer student opportunities for collaborative and multidisciplinary, cutting edge rigorous scientific training.

The Department of Pediatrics, Max Rady College of Medicine, Rady Faculty of Health Sciences and the Children's Hospital Research Institute of Manitoba (CHRIM) have a well establish collaboration. Together, we strive to be a leading voice and recognized advocate for the development of knowledge and research excellence that will lead to improvements in child health. The proposed Pediatric Graduate PhD Program will provide an environment that encourages collaboration between the basic and clinical sciences providing a unique training ground for trainees.

The collaborative program before you has been developed with input from diverse stakeholders, both internal and external to CHRIM and the University of Manitoba. Distinctive attributes of this program, including training across pillars, in equity, diversity and inclusion, and rigorous methods, are founded in the very nature of the partnerships which are committed to the development a Pediatric Graduate Program in Manitoba.

The Pediatric Graduate PhD Program will address a largely unmet need, across Canada, in graduate level training in pediatrics. At present, only the University of Alberta offers a similar training program. With the planned first student intake in September 2022, this four-year program (based on full time enrollment; noting the possibility to study part time) includes 18 credit hours, and the completion of a research project. We have written commitments from both clinical faculty and UMFA for teaching responsibilities. As designed, the proposed PhD Program is based on an anticipated full re-opening, based on directions from public health. However, we note that the Pediatric Graduate Program will fully comply with all directions from the University of Manitoba, and Provincial public health orders.

To ensure the successful launch of this program, the department of Pediatrics and CHIRM will partner to fund a program administrative assistant at the OA5 level. CHRIM will provide 250 ft2 of facilities space in the heart of the Bannatyne campus to support office space and a trainee hub in the middle of the learning environment.



Collectively, we are pleased to provide our commitment to the establishment and success of the University of Manitoba's Pediatric Graduate PhD Program.

Sincerely,



Patricia E. Birk, MD, FRCP(C)
Professor and Head, Department of Pediatrics
and Child Health
Max Rady College of Medicine, University of
Manitoba
Provincial Specialty Lead, Pediatrics and Child
Health, Shared Health Manitoba
Medical Director, Transplant Manitoba-Pediatric
Kidney Program, Shared Health Manitoba
Fellow, Executive Leadership in Academic
Medicine (ELAM)



Terry Klassen, MD, MSc, FRCPC
Professor, Dept. of Pediatrics & Child Health,
University of Manitoba
CEO & Scientific Director, Children's Hospital
Research Institute of Manitoba
Academic Director, George and Fay Yee Centre for
Healthcare Innovation



To: Jennifer Protudjer, PhD
Assistant Professor, Department of Pediatrics and Child Health, University of Manitoba
Epidemiologist, George & Fay Yee Centre for Healthcare Innovation
Scientist, The Children's Hospital Research Institute of Manitoba

From: Atul Sharma, MD, MSc, FRCPC
Atul Sharma MD, MSc(Statistics), FRCPC
Assistant Professor and Biostatistician,
Department of Pediatrics and Child Health

Dear Dr. Protudjer:

I am excited to learn of your proposed graduate program in Pediatric medicine, which is an important addition to the training opportunities available to students interested in careers in pediatric medical research.

Though I may be biased, I do believe that a proper statistical grounding is an essential component in the education of both clinical and basic science trainees in our department. As you know, we have already developed a dedicated curriculum for this purpose, currently aimed at clinical trainees in pediatrics: Our *Academic Skills and Knowledge* (ASK) curriculum consists of 4 weeks of full-time teaching, mostly small group sessions in study design, biostatistics, epidemiology, and critical appraisal. The biostatistics portion of the course represents about 1/3 of the total, which I teach in conjunction with the course coordinator, Dr. Celia Rodd.

To ensure relevance to clinical trainees, we try to provide an introduction to biostatistics in a pediatric context by emphasizing pediatric examples and datasets throughout e.g. determinants of low birth weight, infant mortality, and breast-feeding duration. To ensure mastery of practical skills, our teaching is evenly split between didactic lectures and hands-on laboratory work, the latter using the R Statistical Computing Environment.



For the past 3 years, we have been teaching around a customized course text written by the two of us, which is available on-line at www.statsguy.ca (there are links in the top left of the page to both the Pediatric Biostatistics Primer and the laboratory code/datasets). I think you will find it well suited to the needs of your non-clinical trainees in pediatric medicine, and we would be delighted to expand its relevance.

As we have discussed, I am happy to assist you as you move forward with your new program.

Sincerely,

A handwritten signature in black ink that reads "A Sharma".

Atul Sharma MD, MSc (Statistics), FRCPC

Nov 12, 2019



Jennifer LP Protudjer, PhD
Assistant Professor, Department of Pediatrics and Child Health, University of Manitoba
Epidemiologist, George & Fay Yee Centre for Healthcare Innovation
Scientist, The Children's Hospital Research Institute of Manitoba
4th floor, 753 McDermot Ave
Winnipeg Manitoba R3E 0T6, Canada

6 December 2019

Dear Dr. Protudjer,

On behalf of the George and Fay Yee Centre for Healthcare Innovation (CHI), I am pleased to provide a letter of support for your proposal to establish a Pediatric Graduate Program at the University of Manitoba.

As the Manitoba Strategy for Patient-Oriented Research SUPPORT Unit, the goal of this program — to offer opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training in Pediatrics — is well aligned with CHI's organizational mandate. In particular, this proposal aligns with our commitment to capacity development to strengthen Manitoba's ability to attract, train and mentor professionals and researchers, and to create sustainable career paths in patient-oriented research with the aim of improving systems and practices.

The program proposal is timely and the need compelling. As only the second of its kind in Canada, the program will feature coursework on the ethical and health issues in pediatric care, with consideration to marginalized children. This is especially relevant and important to Manitoba, where the gap between Indigenous health and all others Manitobans continues to grow. Incorporating an equity, diversity and inclusion focus advances the University's Truth and Reconciliation Commission Calls to Action efforts to identify and close these gaps in health outcomes.

The proposed program design is innovative and addresses student needs for flexibility by allowing part-time study. The three pillar design will provide students with a solid foundation in a multidisciplinary research environment while offering focused studies in either clinical research, basic sciences or population health.

CHI enjoys a strong relationship with you through your role as Epidemiologist in the Clinical Trials Platform at CHI. Your work supporting the implementation of clinical trials and epidemiological studies is valued by researchers and constitutes an important pillar of the Clinical Trials platform. Your accomplishments as an independent investigator has led to significant learnings related to the future directions of food allergies and weight and lifestyle behaviours and asthma in Manitoba children. All of these achievements demonstrate a strong track record and the ability to achieve results meaningful to Manitobans. On behalf of the Centre, I wish you the very best with advancing this important initiative.

Sincerely,



Frank Krupka
Executive Director
George and Fay Yee Centre for Healthcare Innovation
University of Manitoba/Winnipeg Regional Health Authority
753 McDermot Avenue
Winnipeg, MB, Canada R3E 0T6
T: 204.594.5390 | F: 204.594.5394

chimb.ca

October 22, 2020

Dear Dr. Protudjer,

On behalf of the Children's Hospital Research Institute of Manitoba's (CHRIM) Mentorship Program, I am pleased to offer a letter of support for the University of Manitoba Pediatric Graduate Program application. The CHRIM Mentorship Program initially began as a local chapter of the Canadian Child Health Clinician Scientist Program (CCHCSP). CCHCSP was founded in 2002, with the mission "*to train the next generation of child health clinician scientists within an interdisciplinary model*". Over the years, the value of mentorship has been increasingly recognized, such that the mentorship program was expanded to not only include CCHCSP trainees, but all CHRIM early career members who express an interest in participating in a mentorship relationship. The program currently functions to match new investigators with mentors and holds bimonthly education sessions/workshops that are designed to provide information, skills, and tools to support early career success.

It is a natural fit for the CHRIM Mentorship Program to work with the Pediatric Graduate Program, to help foster the success of trainees within the Pediatric Graduate Program. Graduate trainees would be eligible for CHRIM membership, and as such, could apply to participate fully in the CHRIM Mentorship Program. As chair of the CHRIM Mentorship Program, I will work closely with Dr. Protudjer to ensure that trainees are aware of, and able to participate in the mentorship program. We would also welcome a graduate trainee member on the CHRIM Mentorship Program committee, to help inform the session/workshop topics, to provide input on the mentorship process and evaluation, and to further raise awareness about the opportunity for graduate trainee participation.

I am excited for the opportunity to extend the CHRIM mentorship program to include pediatric graduate trainees. We wish the program every success.

Sincerely,



Kristy Wittmeier PT MSc PhD
Chair, CHRIM Mentorship Program
Dr. John M Bowman Chair in Pediatrics and Child Health
Clinician Researcher, CHRIM
Associate Professor, Department of Pediatrics and Child Health
Rady Faculty of Health Sciences, University of Manitoba

Dec. 13, 2019

To Whom it may Concern,

Re: Letter of support for the Pediatric Graduate Program

It is my delight to provide a letter of support for the Pediatric Graduate Program. Since 2010, I have worked at the University of Manitoba, currently as the Director of Equity, Diversity and Inclusion (EDI) at the Rady Faculty of Health Sciences (RFHS). I am responsible for ensuring and supporting a culture of respect, equity, diversity and inclusion at RFHS. This is by means by researching and advising on diversity and inclusion issues and creation of programs, training and values around this. I support and guide search and admission committees to help create a brand that appeals to diverse applicants and address biases. Further, I am operationalizing a plan that supports the implementation of the EDI strategy and ensure it aligns with the Faculty's vision, mission, values and goals.

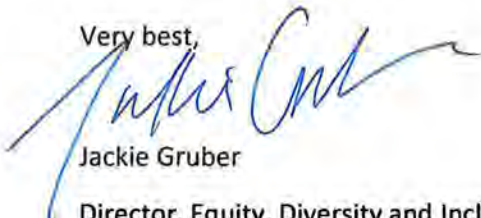
I educate faculty, staff and students in the following areas: principles of EDI, implicit bias, human rights discrimination, human rights-based harassment, sexual harassment, reasonable accommodation, sexual violence, conflict resolution, communication and the Accessibly for Manitobans Act (AMA). Additionally, I develop and provide educational opportunities and materials which encourage good decisions to be made around equity and human rights issues. I aid in identifying patterns that guide educational and other proactive initiatives directed at systemic responsiveness. I sit as an advisor to the Vice-Provost of RFHS on all matters related to EDI.

I am committed to supporting the program by means of delivering the following lectures:

1. EDI for Professionals
2. EDI in Pediatric Health Outcomes

As an EDI and human rights leader, this is an exciting opportunity to be a part of the curriculum to bring awareness to our learners regarding the impact of EDI and how bias can ultimately effect patient care.

Very best,



Jackie Gruber

Director, Equity, Diversity and Inclusion

Rady Faculty of Health Sciences

November 23, 2019

RE: Pediatric Graduate Program

To whom it may concern,

The Clinical Learning and Simulation Program (CLSP) is a shared Rady Faculty of Health Sciences and Winnipeg Regional Health Authority resource that provides simulation-based education space, equipment, supplies and expertise to a vast array of learner groups. The CLSP manages the bookings for the Clinical Learning and Simulation Facility (000 Brodie) and the Skills Lab (211 Basic Medical Sciences Building). The CLSP also provides equipment loans for offsite use. The mandate of the CLSP is to provide simulation support for any programs within the Rady Faculty of Health Sciences. As such the CLSP is happy to support any simulation related activities necessary for the proposed Pediatric Graduate Program.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,



Lawrence Gillman MD MMedEd FRCSC FACS
Trauma and Acute Care Surgeon, Intensivist
Associate Professor, Department of Surgery
Director, Clinical Learning and Simulation Program



**University
of Manitoba**

Office of the Registrar and
Enrolment Services

400 University Centre
Winnipeg, Manitoba
Canada R3T 2N2
T: 204-474-8820
F: 204-474-7554

TO: Jennifer Protudjer, Assistant Professor

FROM: Jeff Adams, University Registrar & Executive Director, Enrolment Services

DATE: September 8, 2022

SUBJECT: Letter of support for irregular schedule

I am in support of the Pediatric Graduate Program's proposal. I can confirm that the Office of the Registrar and Enrolment Services will be able to accommodate the proposed irregular schedule. Please note that the classroom assignments for the Bannatyne campus is not done by this office so the scheduler in the department would be responsible for the classroom assignment aspect.

If additional information is required, I would be happy to provide it.

12 January 2022

Dear Faculty of Graduate Studies, University of Manitoba:

Pursuant to the external review of the proposed Pediatric Graduate Program, held virtually on 17-19 August 2021, we respectfully submit point-by-point responses to reviewer comments received on 26 August 2021 via email. Herein, we have bolded each reviewer comment, followed immediately thereafter by our response, in normal font.

At the request of the Faculty of Graduate Studies, we have tracked all changes to the versions seen by the reviewers. The exception to this is PEDS 7120, originally titled Advanced Bioinformatics (6 credit hours), now revised to Foundations in Bioinformatics (3 credit hours). Owing to the extensive changes in this course, tracking changes resulted in a document that was illegible. As part of the current submission, we have included both the revised syllabus, and that which was seen by the reviewers (see Att. 27 and 28, denoted syllabus and original syllabus, respectively).

Other notable changes to the program include:

- a. Addition of a fourth pillar: Practice and Policy
 - i. This addition has added some flexibility to the program, such that students may select two of three pillars outside their home pillar to pursue courses in multidisciplinary immersion
- b. Addition of the mandatory 0 credit hour courses for all students in the program:
 - i. PEDS 7070: Reflective Practice in Patient Engagement
 - ii. PEDS 7080: Indigenous Child Health
- c. Expansion of optional courses at the PhD level
 - i. PEDS 7180: Practical qualitative and mixed methods
 - ii. PEDS 7190: Medical education, ethics and engagement

The supporting documents for the above-listed changes, as well as additional documents requested by the reviewers are included in this resubmission. A complete table of contents follows this cover letter.

We offer our sincere thanks to the external reviewers, Dr Susan Samuel and Dr Greg Funk, for their thoughtful and constructive report, which included specific suggestions for improvement.

Sincerely,



Dr Jennifer LP Protudjer
 Intended Director, Pediatric Graduate Program
 Endowed Research Chair in Allergy, Asthma & the Environment
 Assistant Professor, Department of Pediatrics and Child Health, University of Manitoba
 Research Scientist, Children's Hospital Research Institute of Manitoba



Patricia E. Birk, MD, FRCPC

Professor and Head, Department of Pediatrics and Child Health

Max Rady College of Medicine, University of Manitoba

Provincial Specialty Lead, Pediatrics and Child Health, Shared Health Manitoba

Medical Director, Transplant Manitoba-Pediatric Kidney Program, Shared Health Manitoba

Fellow, Executive Leadership in Academic Medicine (ELAM)



Terry Klassen, MD, MSc, FRCPC

Professor, Dept. of Pediatrics & Child Health, University of Manitoba

Canada Research Chair in Clinical Trials

CEO & Scientific Director, Children's Hospital Research Institute of Manitoba

Academic Director, George and Fay Yee Centre for Healthcare Innovation

Response to External Reviewer Comments

Please note that the numbering system here aligns with that used in the reviewer comments received on 26 August 2021 via email.

Comment 1:

The only Pediatric Graduate Training Program currently operating in Canada is offered at the University of Alberta (UofA), at both the MSc and PhD levels. The program began in 1990 and currently maintains a graduate student population of 45-50 students per year, supervised by 36 tenured or tenure-track faculty members. Graduate students receive training in clinical or basic sciences, in areas of research including cardiovascular, clinical trials, evidence-based medicine, gastroenterology, genetics, Indigenous health, nephrology, neonatology, neurology/ neurosciences, obesity, oncology, pulmonology, and thrombosis. A graduate program similar to that under development at the UofM is being developed under the leadership of Dr. Allison Eddy at the University of British Columbia. Details are not yet publicly available, but we recommend developing strong communication ties with this group. The main differences between the programs offered at the UofA and the programs proposed at UofM are:

- a. The UofA programs have significantly reduced course requirements (9 credit hours (CH) for MSc and 6CH for PhD vs 12 and 15CH respectively at UofM) and greater expectations in terms of individual research output for the theses.**
- b. Both UofA and UofM programs are strongly integrated with local research institutes (WCHRI at UofA and CHRIM at UofM) that provide enormous value and support.**
- c. The UofM program has a much greater focus on trans-pillar, transdisciplinary training experiences and the development of translational researchers than the UofA. Overall, the ‘Manitoba Advantage’ for pediatrics and child health research that was mentioned in several of our interviews is apparent in that there is truly exceptional synergy, cooperation and communication across the full range of stakeholders involved in child health.**

Response 1:

The Faculty of Graduate Studies (FGS), University of Manitoba has established minimum course requirements for Masters and PhD programs. As of the 2021-22 academic year, these minimums are 12 credit hours, respectively, for thesis-based graduate degrees. (Please see FGS Supplementary Guidelines Section 4.3.1 and 5.4.) We acknowledge that the minimum number of credit hours in the PhD program in Pediatrics and Child Health is 3 greater than the minimum set by FGS. This is partially reflective of the emphasis on experiential learning, and thus coursework, in multidisciplinary immersion.

Comment 2:

The proposed MSc/PhD programs in Pediatrics and Child Health at the UofM have the expressed goal to recruit and train exceptional students in child health within the

multidisciplinary environment of the Department of Pediatrics and Child Health at the UofM and its partner institutes, including Children's Hospital Research Institute of Manitoba (CHRIM) and the George and Fay Yee Centre for Healthcare Innovation. The researchers within the Department of Pediatrics and CHRIM largely focus on clinical research, basic sciences and population health. There is a stated commitment from the faculty to immerse students across scientific pillars and provide cross disciplinary fluency. The curriculum is largely based on course work, a thesis project, and opportunities for professional development provided through the Department of Pediatrics and partner institutes and affiliates. Provided below are comments in each of these categories regarding the breadth and depth of the curriculum

Response 2:

The Department of Pediatrics and Child Health, and the Children's Hospital Research Institute of Manitoba wish to acknowledge the thoughtful and constructive report with specific suggestions to improve the proposed Pediatric Graduate Program. In this document, we have provided point-by-point responses to all external reviewer comments.

Comment 2.a:

PEDS 7010 – Pediatric Biostatistics (3CH) – is a 3-week, introductory course in biostatistics. Suggestions are to include statistical issues specifically relevant to child health research, such as small sample sizes, handling type 1 and type 2 errors, and how to overcome them in research designs. The 'Statistical models' lecture within the course will hopefully cover linear, logistic and Poisson regression. Inclusions of material about the handling of non-independent data may also be of use in the types of thesis work that will most likely be proposed by the students. Our main concern is that the course material and time allocated may not be enough to create sufficient expertise even at a MSc level for clinical research. Thus, the development of minicourses in statistics that are available to students after they complete their thesis is likely to be of value to the MSc graduates who continue in research. An independent, PhD-trained clinical or population health researcher will require more in-depth biostatistics training than what is provided in this course. Some trainees will gain this training when completing their thesis research, but certainly not all. A minor point is that we recommend a change to the course title. The course title "Pediatric Biostatistics" is not ideal because it implies that there is a separate "type" of biostatistics for pediatrics – there isn't. We suggest that a suitable alternate title such as Introductory Biostatistics (for the Child Health Researcher) is more accurate. Addition of a PhD Biostatistician to the course faculty would be highly advantageous.

Response 2.a :

In the revised submission, PEDS 7010 has been retitled from Pediatric Biostatistics, Introductory Biostatistics for the Child Health Researcher. To revise the curriculum, we consulted with Dr. Alex Aregbesola MD PhD. At Dr. Aregbesola's suggestion, the revised syllabus now includes a 'statistical models' lecture which will cover linear, logistic, and Poisson regression as does chapter 7 of the recommended textbook. The book also includes the handling of non-independent data. The curriculum has been re-worked to include a lecture to better introduce the students to the fundamentals of biostatistics. Areas included in the new lecture are: variables, data, measures of central tendency and dispersion, common

statistical challenges, and statistical frameworks. The course goals have also been revised to the following:

1. To introduce students to the fundamentals of biostatistics.
2. To introduce students to statistical frameworks
3. To introduce students to common biostatistical tests, through theory and on learning.
4. To facilitate the development of students' abilities to read, interpret, and critique scientific literature.
5. To provide a biostatistical foundation for students to write their research proposal, statistical analysis plan.

Comment 2.b:

PEDS 7020 – Introduction to Research Methods (3 CH) - covers a range of clinical methods and designs. Most of the designs and methods within clinical and health services research are mentioned. Suggestions will be to start with broad-based principles study design (bias and confounding, with attention to issues with sampling and confounding in studies involving children), moving onto observational studies, interventional studies, and then knowledge synthesis to mirror a natural progression in evidence. Patient engagement need not be just for clinical trials, but can be taught as a method in itself in health research. A bioinformatics lecture may not be necessary in this course.

Response 2.b:

We appreciate the reviewers' enthusiasm, and note that we are similarly enthusiastic. Of note, the original submission was prepared before Ms Carrie Costello joined CHRIM as the Patient Engagement Coordinator. At the suggestion of the reviewers, and in consultation with Ms Costello, we have added a lecture on patient engagement, to be delivered by Ms Costello, for the course PEDS 7020, Introduction to Research Methods.

By the of the session with Ms Costello, the learner will be able to

1. Operationalise patient engagement
2. Describe the importance of patient engagement
3. Articulate practical ways in which they engage patients in their research using current or new supports.

We have opted to retain the lecture on bioinformatics in this course.

Comment 2.c:

EDI for health professionals – The material as presented in the documents is insufficient detail for us to comment on its depth. We recommend consultation with local departments or leads for EDI, and CIHR and other Tri-Council agencies' direction and training resources for a complete discussion on EDI (e.g., implicit bias and allyship), and how to promote inclusive excellence in training, in the workplace and within research. It may also be helpful here to consult faculty members who are in the health equity field to discuss the critical importance of EDI in child health research.

Response 2.c:

Thank you for this comment. We have consulted with Ms Jackie Gruber, Director of Equity, Diversity, and Inclusion for the Rady Faculty of Health Sciences. Ms Gruber has agreed to deliver the 0 credit hour course, PEDS 7030, Equity, Diversity, and Inclusion for Healthcare Professionals with the following indicated learning objectives:

- Describe what EDI means and what it involves
- Discuss the expectations of a professional committed to EDI
- Expand on how we can address our own biases

In the original submission, we had included a mandatory 3 credit hour course, PEDS 7050, originally titled Ethical and Health Issues in Pediatric Care (With Consideration to Marginalised Children), and now retitled as Ethics and Equity in Child Health Research, at the request of the reviewers (see Comment 2.e). This course aims to cover a wide variety of topics presented by a variety of healthcare professionals related to special considerations for marginalised children with a focus on issues prevalent in Manitoba. More information can be found in the syllabus for PEDS 7050, Att. 16.

Finally, in the revised submission, we have included a new, 0 credit hour course, PEDS 7080: Indigenous Child Health. This course, which we developed in consultation with Dr Wanda Phillips-Beck, Director of Nursing Research, First Nations Health and Social Secretariat of Manitoba, and Knowledge Keepers from across Manitoba, will be required for all students at the Masters and PhD levels. This content for this course will be reviewed by Knowledge Keepers, and updated based on what they view as the most pressing concerns in Indigenous Child Health. Notably, the course will be delivered by Dr Phillips-Beck (or her designate) and an Indigenous Knowledge Keeper, both who will be appropriately compensated for their time and expertise, per discussions with, and the collective agreement for the Canadian Union of Public Employees [CUPE] Local 3909, of which sessional instructors are part. Of note, Knowledge Keepers have been compensated for their time to identify course content.

Comment 2.d:

PEDS 7040 – Introduction to clinical environment (1/2-day course, pass/fail) - is laudable. However, the value of a simulated experience is doubtful for a non-clinician. The type of experience may be more meaningful when combined with immersion in a clinical environment as part of the thesis project. Simulated environments for non-clinicians may not provide the same impact as real patients. The patient engagement experts and partners (that are available through CHRIM and CHI) will provide powerful clinical voices and the grounding in the patient experience that the non-clinically oriented students need. The role of these patient engagement experts should be strengthened throughout the proposal.

Response 2.d:

As first noted in Response 2.b, we appreciate the reviewers' enthusiasm, and note that we are similarly enthusiastic. Of note, the original submission was prepared before Ms Costello joined CHRIM as the Patient Engagement Coordinator.

Ms Costello has agreed to deliver an additional asynchronous lecture in the form of a podcast to supplement this half-day course. We will be offering both in-person and simulated

clinical experiences for the students. We will greatly encourage in-person experiences for all students, but must provide the option of a simulated experience. As not all students may be comfortable in a clinical environment or with patients, we believe that simulation is a necessary option. Any non-clinical students who do elect for the in-person clinical experience will be held to the same professional standards as clinical learners and staff are. See

https://umanitoba.ca/faculties/health_sciences/medicine/education/cpd/media/Dress_Code_Guidelines_2016.pdf

Comment 2.e:

PEDS 7050 – Ethical and health issues in pediatric care (with consideration to marginalised children) (3CH). We note that equity and patient engagement are also covered here. In fact, this course is more than ethics and rightly so, and therefore, it could very well be called Ethics and Equity in Child Health Research. This course is particularly well thought out and covers the important issues in child health.

Response 2.e:

As mentioned above in Response 2.c, PEDS 7050, which was originally titled Ethical and Health Issues in Pediatric Care (With Consideration to Marginalised Children), has now been retitled as Ethics and Equity in Child Health Research. We have also added a lecture on healthcare for trans youth to be delivered by Dr. Brandy Wicklow, Medical Lead at Gender Dysphoria Assessment and Action for Youth (GDAAY) Pediatric Transgender Health Services. The learning objectives for this new lecture are:

1. Define related terminology, as well as puberty blockers, HRT, and similar.
2. Articulate the need for practical considerations in affirmation and safe spaces.
3. Explain what is possible and desirable to binary trans people seeking full medical transition.

Comment 2.f:

PEDS 7060 – Virtual healthcare delivery. Although this is an important topic, we doubt that this needs to be covered as a 0 credit course. Insufficient details are provided in the document for us to determine the merits of the topics for discussion. There is an opportunity to formalize a lecture with particular attention to virtual care, as this aspect is so important to health service delivery in Manitoba (e.g., care for rural and remote Indigenous populations) and almost all other Provinces in Canada, even without a pandemic.

Response 2.f:

This course was developed as a result of the acute shift to virtual care at the start of the pandemic in March 2020. As the pandemic, and thus the virtual delivery of care continues it is unlikely that care will ever return exclusively to in-person delivery. As a part of the Academic Skill and Knowledge (ASK) rotation, of which Dr. Jennifer Protudjer is the co-director, first year medical residents completed an asynchronous lecture and online test on virtual health care delivery. This course was taught by Dr. Elissa Abrams, who has agreed to co-teach PEDS 7160, with Dr Brandy Wickow. All ASK residents (of which there were 12 in 2021) completed the lecture and test, however results from the test indicated variability in knowledge of, and confidence and familiarity with, virtual healthcare delivery. For example,

less than half of residents (5 out of 12; 41.7%) knew that COVID-19 case counts were inversely associated with in-person visits. Moreover, the same proportion of residents reported that case counts were not associated with a difference in virtual vs. in-person visits. Fortunately, all residents did recognise privacy-related concerns that are specific to virtual healthcare delivery. And, as residents also correctly noted, virtual care, as part of a hybrid method of healthcare delivery, will likely persist beyond the pandemic, owing to indirect - and direct - cost savings to patients, as well as a reduced carbon footprint, due to less travel. These results underscore the need to have a 0 credit hour course on virtual care in the Pediatric Graduate Program.

Comment 2.g:

Multidisciplinary immersions – these courses and their intent are excellent. Cross-disciplinary fluency in next generation child health researchers is critical to develop solutions that will improve the health and well-being of children, youth and families. The review committee was reassured by the care that will be taken by the administrative team to ensure high quality immersive experiences. Illustrative examples provided during discussions were convincing regarding the value of these experiences. Our suggestions are to add a policy immersion experience, and substitute real world experiential opportunities for trainees who desire to move to non-academic roles (e.g., shadowing, placements or internships in government, agencies, industry). Further opportunities exist to ensure cross-disciplinary attendance (of faculty and trainees) at CHRIM rounds can also help towards this goal.

Response 2.g:

Upon the recommendation of the reviewers a fourth pillar has been added entitled Practice and Policy. The goal of this pillar is to fully immerse students who would like to work in either medical education or healthcare policy and ethics. An additional 1.5 credit hour course has been added: PEDS 7170 Multidisciplinary Immersion in Practice and Policy to support this fourth pillar. Students will be able to select two of three multidisciplinary courses outside of their home pillar to immerse themselves in another area of medical research.

Comment 2.h:

PEDS 7120 – Advanced bioinformatics (6 CH), or PEDS 7140, is required for PhD students. This course seems somewhat out of place in the program. A more well-rounded approach with attention to basics of ‘omics’ research, bench research, skills to facilitate translational research (such as basics of biobanking, biomarker research) would perhaps be more useful for the general trainee. Precision medicine in child health research with practical examples of how child health is leading in this area may be illustrative for the students, and a suggested alternate focus of this course. Alternatively, as a 6CH course on bioinformatics may be useful to some trainees, inclusion of a 3rd optional course (6CH) that focuses on the additional course components mentioned above could address this issue.

Response 2.h:

Thank you for your constructive feedback on this course. As part of the revisions to this course, we consulted with two content experts recently recruited to CHRIM: Dr Nasser

Sadegkhani, Statistician, and Dr Richard LeDuc, Bioinformatician (see Att. 63 and 59, respectively).

Dr. Sadegkhani noted that from a statistician's point of view the syllabus matches the learning objectives of the course, but offered some suggestions to make it more precise and easier to understand. Subsequently, Dr LeDuc revised the entire curriculum to reflect a foundational approach to bioinformatics, rather than advanced methods.

This newly revised course has been reduced from 6 credit hours to 3 credit hours.

Also, as suggested by the reviewers, we have added two additional, optional PhD courses that may be more relevant to students in other pillars. These courses are: (i) PEDS 7180: Practical Qualitative and Mixed Methods; and, (ii) PEDS 7190: Medical Education, Ethics and Engagement.

Comment 2.i:

PEDS 7140 – Practical Epidemiology (6CH). This course appropriately dives into practical aspects of conducting a clinical research study as well as knowledge translation. It simulates what would happen in a thesis project, and will overlap with the thesis work. Therefore, the committee encourages the organisers to consider again the materials taught in PEDS 7020 when compared to this course, and provide a natural progression of materials, and provide more advanced topics for discussion in clinical or translational research methods. One needs to consider when this course will be taken in relation to the progression of the thesis project. Additional suggestions include to consider including other cohorts (both within and outside of Manitoba) for experiential study.

Response 2.i:

PEDS 7020, Introduction to Research Methods, is a required 3 credit hour course at the MSc level, as well as for those entering the PhD program from a course-based MSc degree. PEDS 7020 will be offered every Fall term, and is intended to be completed within the first year of the MSc degree (or PhD, for those with a course-based MSc). PEDS 7020 is an introductory course to a variety of research methods, ranging from patient engagement to clinical trials, qualitative and mixed methods, systematic reviews and bioinformatics. Within this course, there are two lectures on epidemiology for which the learning objectives include cohorts, participant selection and sensitivity analysis.

PEDS 7140, Practical Epidemiology, is an optional 6 credit hour course at the PhD level that will be open to PhD students every academic year, starting in September 2023. As a 6 credit hour course, PEDS 7140 runs from September to March. Permission of the instructor is required, and enrollment will be capped at three (3) PhD students per year. Whereas PEDS 7020 offers a high level overview of cohorts, PEDS 7140 creates an opportunity for students to make use of data from a large cohort, the CHILD Cohort. Students will learn about the cohort itself, how to set up a study database, how to analyse data within the cohort using statistical analysis software, and prepare research findings for scientific and lay audiences.

In summary, the two courses are substantially different from each other. One (PEDS 7020) offers two high level lectures on epidemiology as part of a broad, introductory course on research methods, whereas the other (PEDS 7140) provides students the opportunity to

work with real cohort data, and contribute to a study, from conception to knowledge translation.

Regarding the suggestion to include other cohorts for experimental study, we consulted with Dr. M Azad, the course instructor whose comments are summarised here, the original copy of the email is also attached for your consideration.

"Having instructors (myself and Elinor [Simons MD PhD]) with in-depth knowledge of and connection to the cohort is an exciting and unique opportunity for the students. This approach has been applied in two courses I took from Community Health Sciences where unique local data resources were used and the instructors were PIs on the projects: the MCHP Data Repository (used in the Epi(demiology) of Healthcare taught by (Drs) Les and Noraloo Roos) and the Manitoba Follow Up Study (used in Advanced Biostatistics taught by (Dr Robert) Bob Tate). Aside from having a unique connection through the instructor/PI, having all students use the same cohort (but asking different questions) provides a good opportunity for peer-to-peer learning."

It should also be noted that PEDS 7140 is a course developed by one researcher at the University of Manitoba and another at the University of Alberta and is intended to be introduced to both institutions simultaneously. As such the course content is fixed and cannot be changed at one institution without changing it at the other.

Comment 2.j:

The thesis projects will largely be in the area of expertise of the primary faculty within the Department of Pediatrics (clinical, basic science, population health). To advance the cross disciplinary goals of the program, we discussed the value of providing trainees with the opportunity to create aims within their thesis projects that cross disciplines. However, we understand and agree that it would be too difficult to make this a requirement of the program. We believe that exceptional students will make the natural leaps across disciplines when presented with the opportunity (e.g., a population health project could conceivably have a policy aim, and a clinical project could have a translational aim). We encourage the organisers to consider mechanisms to foster as much as possible the generation of such translational projects; doing so would greatly advance the cross disciplinary goals of the program. Further having a diversity of committee members pulled from different faculties within the UofM will greatly enhance the students' learning, experience and success.

Responses 2.j:

As per the Faculty of Graduate Studies, the thesis advisory committee is composed of three (3) voting members (the advisor/co-advisor have a single vote), at least two (2) of whom must be members of the Faculty of Graduate Studies. Individuals who are not a member of the Faculty of Graduate Studies, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee, and must be nominated by the unit Head or Graduate Chair and approved by the Dean of the Faculty of Graduate Studies or designate. Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies.

The Rady Faculty of Health Sciences encompasses the following health disciplines: Anesthesiology, Biochemistry and Medical Genetics, Clinical Health Psychology, Community Health Sciences, Emergency Medicine, Family Medicine, Gynaecology and Reproductive

Sciences, Human Anatomy and Cell Science, Immunology, Internal Medicine, Medical Microbiology and Infectious Diseases, Obstetrics, Ophthalmology, Otolaryngology, Pathology, Pediatrics and Child Health, Perioperative and Pain Medicine, Pharmacology and Therapeutics, Physician Assistant Studies, Physiology and Pathophysiology, Psychiatry, and Radiology and Surgery.

Given that the Rady Faculty of Health Sciences covers such a breadth of disciplines, to pre-emptively expand beyond the faculty may be unnecessarily prohibitive.

Comment 2.k:

The committee was reassured that there are many opportunities for professional development offered through all the partners represented in the application, and we encourage the program to leverage all of these and generate a comprehensive list of offerings that can be provided to trainees.

Response 2.k:

Thank you for this comment. We have provided a detailed response to this comment in a previous response to a similar comment. Please see Response 3 on Page 19 of this document.

Comment 2.l

Comment 2.l.i:

The multidisciplinary environment as presented (Department of Pediatrics, CHRIM, CHI, SSCY, related Indigenous health research organisations and faculty) is excellent to foster this training program. Many of the resources required for this program are already in place, 7 providing a great foundation for its proposed launch in September 2023. Interdisciplinary collaboration is excellent.

Response 2.l.i:

Thank you.

Comment 2.l.ii:

The factors that distinguish the proposed programs in Pediatrics and Child Health from other MSc/PhD programs offered within UofM should be more clearly delineated. This program should cover basic research methods plus all issues relevant to child health research.

Response 2.l.ii:

The other Graduate programs offered through the Max Rady College of Medicine come in a variety of disciplines but none focus on Pediatrics or Child Health. This program will set itself apart through classes such as: Ethics and Equity in Child Health Research, Introduction to Biostatistics in Child Health Research, and Consideration in the Delivery of Virtual Care in Pediatrics. Each course included in both the Masters and Graduate levels of this program have been specifically crafted for the programs with pediatrics and child health at the forefront of the mind.

Comment 2.l.iii:

We suggest adopting a lifecycle approach to child health research (i.e., the

importance of mothers, fathers, families, and communities in child and youth health and well-being, spanning pre-conception to adulthood). The importance of mothers (preconception, periconception, pregnancy, and child rearing), fathers, families, and school environments can be strengthened in the proposed curriculum.

Response 2.I.iii:

Thank you for this comment. This comment was also echoed during engagement with Indigenous Knowledge Keepers. As such, a lifecycle approach has been integrated into the course, PEDS 7080 Indigenous Child Health (originally described in Comment 2.c). Again, we note that content of this curriculum was developed by, and will be delivered by an Indigenous Child Health Researcher, and a Knowledge Keeper.

For more information about the development of this course, please refer to the course curriculum for PEDS 7080 (See Att. 22 of the revised submission).

Comment 2.I.iv:

It is important to consider all the intersection points that affect child health and well-being across sectors where graduates will be employed and impact child health, and to craft curriculum, experiences and opportunities to provide trainees with exposure to all these areas.

Response 2.I.iv:

Thank you for this comment. We agree that this is an important consideration. As such, in the revised application, we have made the following revisions:

- Added a fourth pillar: Practice and Policy
- Added an optional course, PEDS 7190 Medical Education, Ethics and Engagement; which includes emphasis on engaging with policy makers, analysts, and the popular press, which is taught using the principles of medical education

These revisions are detailed throughout the revised submission. We specifically draw attention to the course syllabus for PEDS 7190 Medical Education, Ethics and Engagement (See Att. 43 of the revised submission).

Comment 2.I.v:

Course work and time availability is tight. However, providing a dedicated course on Indigenous child health might be advantageous. It is a high priority topic for Manitoba and Canada, and research and health professionals need to develop expertise in this area in order to address the overwhelming health issues and inequities affecting Indigenous children in Canada. This is also an opportunity to provide training in the delivery of remote and virtual care for these Indigenous communities, and in the policies related to this type of care. We assume that a high proportion of graduates will end up working directly or indirectly in this area. Manitoba is particularly well positioned to do this, with the excellent faculty at the UofM that is complemented by the Network Environments for Indigenous Health Research at the University of Winnipeg. Further, providing Indigenous cultural safety training should be a priority within the program for registered students, irrespective of courses or thesis work.

Response 2.I.v:

Thank you for this important suggestion, with which we fully agree. Since the external review, Dr. Protudjer has had several meetings with Manitoba leaders in Indigenous Health. Several ideas were discussed as to the curriculum content of such a course. Moreover, we have carefully considered whether it would be more appropriate to require completion of an existing course, such as the Manitoba Indigenous Cultural Safety Training (MICST; see <https://wrha.mb.ca/indigenous-health/cultural-initiatives/micst/>), or develop a new, unique course. Ultimately, Indigenous leaders with whom we consulted advised the latter.

On their advice and with their active involvement, this culminated in the commitment to community engagement (held 6-7 December 2021) and commitment to leadership of a 0 credit hour course, from Dr. Wanda Phillips-Beck, an Anishinaabekwe from Hollow Water First Nations Territory, and Research Chair in Nursing, at First Nations Health and Social Secretariat of Manitoba (see <https://researchmanitoba.ca/q-a-with-wanda-phillips-beck-manitobas-first-indigenous-research-chair-in-nursing/>). Community partners identified the following topics as necessary for a course focused on Indigenous Child Health:

1. Indigenous knowledge and belief systems, particularly in regard to infants and children
2. Factors leading to losses of Indigenous culture and wellness practices
3. Land and nature-based education

We view this 0 credit hour course as the first step in developing a longer term vision to Indigenous Child Health education in Manitoba. As the development of such content requires trust and continued learning, we commit to revisiting and enhancing the course content on an annual basis.

Finally, we respectfully note that Dr. Protudjer (Director of the Pediatric Graduate Program) as well as Dr. Birk (Department Head, Pediatrics and Child Health) and Dr. Klassen (Scientific Director and CEO, Children's Hospital Research Institute of Manitoba), have completed MICST, as have 12/14 (85.7%) teaching faculty within the Pediatric Graduate Program and 45/97 (46.4%) CHRIM staff (more information on these numbers can be found in Att. 3, MICST Certified Staff). Notably, all staff and partners within the Winnipeg Regional Health Authority are encouraged to complete MICST, upon approval from their manager/director (see <https://wrha.mb.ca/indigenous-health/cultural-initiatives/micst/>).

In response to this comment a 0 Credit Hour course on Indigenous child health has been created in consultation with Dr. Wanda Phillips-Beck and a council of Knowledge Keepers. The course will be one session that is three hours in length. By the end of this course the goal is that students will:

1. Be able to describe the importance of land-based and nature education in health and healing practises for Indigenous people.
2. Have great insight into how colonisation and intergenerational trauma has disrupted Indigenous wellness practises and impacted child health.
3. Be able to articulate how racism, structural inequity, and the social determinants of health impact the health of Indigenous children.
4. Be able to articulate how health education about Indigenous people and cultures must be directly informed by Indigenous peoples and Indigenous knowledge.

This course is mandatory at both the Masters and PhD level. There is also PEDS 7060, Considerations in the Delivery of Virtual Care in Pediatrics which covers both practical and ethical considerations in delivering remote care in the context of remote communities as well

as other circumstances.

Comment 2.I.vi:

Policy, advocacy and community outreach are largely missing from the course work, and faculty. We suggest particular attention to this area by adding at least one lecture within the course work, bringing on faculty or potential committee members who work in this area and perhaps also developing experiential opportunities by leveraging partners such as the SSCY.

Response 2.I.vi:

In the revised submission, we have added a fourth pillar, titled Policy and Practice. This will allow students who want to work within medical education or healthcare policy to study their chosen field and get an understanding of two of the other pillars as well. As a part of this fourth pillar we are also including, like the other pillars, one course on Policy and Practice for students of the other pillars to take. Each student of the program will have to take two of three of the multidisciplinary classes in two of the pillars.

Comment 2.I.vii:

More flexibility in the course work is recommended to help students tailor it to their needs, as flexibility is always preferable to a more rigid approach to course work.

Response 2.I.vii:

In response to this comment two additional courses have been added to the PhD program: PEDS 7180 Practical Qualitative and Mixed Methods, and PEDS 7190 Medical Education, Ethics, and Engagement. These courses have been added as electives in order to increase flexibility within the PhD program. At this time with the credit hour requirements from the Faculty of Graduate Studies, the desire to make sure every student has a good knowledge of the fundamentals of medical research, and the various 0 credit hour courses required of students, there is not much more room to offer more flexibility at this time. As the program expands and we are able to offer more courses one goal will be to provide more room for flexibility and a tailored experience.

Comment 2.I.viii: Closer links with the Manitoba Centre for Health Policy for access to birth cohort/life course trajectory cohorts, and incorporation of child researchers such as Marni Brownell, and Leslie Roos (Psychology) with diverse methods expertise and child health focus would be a strength. Cost and other limitations mentioned by Dr. Protudjer are noted, however, the Manitoba Centre has the enviable position of holding some of the best administrative health data in Canada and it would be a wonderful resource for emerging researchers. Therefore, data science in child health and policy is a potential topic of focus for this graduate program.

Response 2.I.viii: We agree that the Manitoba Centre for Health Policy (MCHP) holds some of the best administrative health data in Canada. Although MCHP is a wonderful resource for some emerging researchers, the data is costly to access (typically in excess of \$10,000 per project). Moreover, the directors and researchers at MCHP are affiliated with another department within the College of Medicine, namely Community Health Sciences.

Some faculty within the Department of Pediatrics and Child Health do hold adjunct scientist or collaborator positions at MCHP. Through these individuals, students may be able to access MCHP data if a specific project has funding to support this access.

Please see: <https://umanitoba.ca/manitoba-centre-for-health-policy/faculty-and-staff#researchers> (Accessed 7 December 2021)

Dr Marni Brownell is a Senior Research Scientist at MCHP, and an Associate Professor in Community Health Sciences. As such, she is not eligible to be a primary supervisor within the Pediatric Graduate Program. However, she is an Investigator at CHRIM and is eligible to serve on student advisory committees.

Dr Leslie E Roos is an Assistant Professor in Psychology, with a cross-appointment to Pediatrics and Child Health, and is an Investigator at CHRIM. She is likewise eligible to serve on student advisory committees. However, as of the time of submitting the response to reviewers, Dr Roos is on maternity leave. Once she returns to work, we will invite her to discuss her involvement in the Pediatric Graduate Program.

Comment 2.I.ix:

It may not be in the best interest of the program to compete with more methods focused graduate programs, but instead focus on issues germane to child health. The challenge in this proposal is to create a unique brand to ensure the program is deemed as distinct (from existing programs) and highly valuable to those interested and invested in child health, compared to students looking for broader training in different pillars of research.

Response 2.I.ix:

Thank you for this comment. In the revised submission, we have included additional emphasis through the addition of a fourth pillar and new courses on child health, including ethics and Indigenous Child Health.

We have provided a detailed response to this comment in a previous response to a similar comment. Please see Response to Comment 6.2.i on Page 24 of this document.

Comment: 2.I.x. In contrast to the thorough description of course requirements, thesis research requirements are vague. We recommend that the research expectations for the MSc and PhD programs are clarified to help ensure consistency. This issue is discussed in more detail in Section 6.3).

Response 2.I.x: Thank you for requesting this clarification.

In the revised submission, we have provided further detail on the MSc thesis requirements, including both the written and oral thesis proposal, and the written and oral thesis defence. These requirements are detailed in Att. 4 Child Health MSc & PhD Supplemental Regulations.

MSc thesis proposal

- Written: Section 4.8.1.1
- Oral: Section 4.8.1.1

MSc thesis defence

- Written: Section 4.8.1.1 and Appendix 1
- Oral: Section 4.8.1.3

PhD thesis proposal

- Written: Section 5.9
- Oral: Section 5.9

PhD thesis defence

- Written: Section 5.10 and Appendix 1
- Oral: Sections 5.11 – 5.12

Additional formatting guidelines found in the Supplementary Guidelines, Appendix 1.

Comment 3:

Although an explicitly stated goal is to promote development of clinician researchers, it is highly likely that >80% of graduates will work in non-academic settings. Thus, greater emphasis on cross sectoral job preparation is recommended. Graduates will be able to work in health service delivery (hospital and community-based settings), industry (pharmaceutical, biotechnology, biomedical devices, nutrition), knowledge translation (knowledge brokers), policy at local, national and international levels (regulatory bodies, advocacy groups), education (schools, post-secondary), justice, and child protection (law, children and family services). Therefore, it would be advantageous to forge these partnerships as soon as possible (prior to program launch), and seek out experiential and immersion experiences that would increase the immediate employability of graduates. The value of child health leaders (trained in research and/or clinical area) across sectors servicing children and youth is tremendous, and this will likely be one of the most unique outputs and impact of the proposed program. Potential non-academic employment destinations for graduates will be Shared Health, Specialized Services for Children and Youth, partner organisations with Indigenous communities, and the Manitoba Centre for Health Policy. The challenge for graduates of the MSc/PhD programs is that they will have only introductory training in clinical research and thus, will need more methods expertise and experience to become independent researchers. As per the stated goals of this graduate program, the graduates should become experts in child health (as pertinent to research and knowledge translation, including policy), with sufficient methods expertise to move to either clinical, population or translational research. The committee's sense is that the large majority of graduates will come out with research skills sufficient to work cross-sectorally as leaders. It is an expressed goal of the organizers to develop clinician scientists through this program. This program is an excellent avenue for child health focused clinicians to pursue graduate training with the flexibility needed to complete both clinical and graduate training. However, further attention is needed to develop independent clinician scientists. In particular, clinicians will need more methods support and professional development training to establish a professional identity as independent scientists. Therefore, the committee recommends careful consideration to allow clinician scientists the flexibility to build more advanced methods expertise, and also to provide professional development opportunities (grant writing, communication, KT, professional identity formation, personal wellness) through programs like the Canadian Child Health Clinician Scientist Program, the UofM Clinical Investigator Programs, and MD/PhD programs.

Response 3: Both the Department of Pediatrics and Child Health, and the Children's Hospital Research Institute of Child Health offer numerous opportunities for professional development and methodological advancements. For example, both hold weekly research rounds on Thursdays, on topics ranging from patient engagement to findings from clinical trials. Current student resources are also available on the Department (<https://umanitoba.ca/medicine/departement-pediatrics-and-child-health>), and on the CHRIM (www.chrim.ca) website.

Students interested in a clinician-scientist career in pediatrics will also be encouraged to apply to the Canadian Child Health Clinician Scientist Program (CCHCSP), a national program that supports the equitable development and mentorship of clinical trainees in research. More information about the CCHCSP is available here: <https://cchcsp.ca/>

Within the Max Rady College of Medicine, the College in which the Department of Pediatrics is situated, medical residents may apply to the Clinician Investigator Program (CIP) during or immediately after their Royal College of Physician and Surgeon of Canada clinical residency program. Successful CIP candidates will receive protected research time and funding, at the appropriate PGY level, for a minimum of 24 months.

The CHRIM Trainee Career Development Group is a resource within CHRIM open to all students. Their goal is to help trainees transition from student life to life post-graduation by offering professional development resources. This group hosts different lectures several times a semester with professionals such as researchers, journal editors and other professionals in the healthcare industry. The group also offers assistance with résumé/CV writing, developing interview skills, and oral presentations as well as offering guidance to identify possible funding opportunities, among other resources.

Comment 4:

The UofM's Department of Pediatrics, CHRIM, and affiliated institutes have an exceptional cadre of faculty who are leaders in child health research. Notable examples are Dr. Klassen, Azad, Keijzer, McGavock, Dart, Wicklow, Wittmeier, Woodgate, Russell, Protudjer. Overall, there are 31 academic faculty with primary appointments in the Department of Pediatrics and Child Health who will be available to support students and serve as primary supervisors. Additional faculty throughout the university with an interest in child health, most of whom are members of CHRIM, provide a diverse pool of potential supervisory committee members, mentors and advisors. Research themes represented within CHRIM are summarised as follows: a. Biology of breathing (12 researchers) b. DREAM – Diabetes Research Envisioned and Accomplished in Manitoba (13 researchers) c. ENRRICH – Excellence in Neurodevelopmental and Rehabilitation Research in Child Health (18 researchers) d. Emergency medicine (8 researchers) Additional 'methods expert' faculty from the broader faculty base within the UofM should be available to meet student's unique needs. Different names that came up through the review include investigators at the Manitoba Centre for Health Policy. Suggestions were also made to link up with the other Colleges within the Rady Faculty of Health Sciences, and also to the mathematics and biostatistics department. Adequacy of support from PhD statisticians and MSc statisticians is not clear within the proposal, and should be expanded. The committee has requested additional documentation regarding potential faculty members who will be supervisors in the program, including

information about their current research program, areas of research interest, research teams (including a list of graduate and postdoctoral trainees in each principal investigator's team), publication records, external (and internal) sources of funding with information about the funding available through these grants to support trainee stipends and research expenses. The proposal states the following but this is too vague. "Pediatric Graduate Program at the University of Manitoba will grant students access to the research programs of 31 primary appointed faculty members who include MDs, allied health professionals and non-clinicians. Furthermore, interest may be generated among members of the Children's Hospital Research Institute of Manitoba who may have primary appointments in other departments. Research fields in which students may complete their training include allergy, asthma, biochemistry and medical genetics, biology of breathing, clinical trials, clinical pharmacology, developmental origins of health and disease, diabetes, early childhood oral health, emergency medicine, endocrinology, human anatomy and cell science, injury prevention, nutrition, physiology, physiotherapy, psychology, and rehabilitation, among others." We requested and received the 2020 Annual Report from CHRIM during the course of the review, which was very helpful. However, it would be very helpful to see a summary of this information included in the proposal along with CV's of potential supervisors to help reviewers gain a clear picture of the departmental research environment and supports that will be available to support the program as it launches and then evolves. A comment about future plans for recruitment within the Department would also be useful. The numbers of new graduate students proposed at the outset is not large, but it is still important to have this information to assess the supervisory and training environment.

Response 4:

The 2020 CHRIM annual report can be summarised with the following notable accomplishments:

- In total CHRIM researchers held nearly \$20 million in active research dollars in 2020.
- 15 new scientists joined the Institute as new members and 7 summer studentships were accepted bringing the total trainees across the three themes and all research areas to 101.
- Many CHRIM researchers were recognized for outstanding work through awards or mentions including Dr. Ayesha Saleem, Natalie Rodriguez, and Dr. Terry Klassen.
- Many researchers also received funding or patents for ongoing or new research projects including Drs. Bob Schroth, Chris Pascoe, Richard Keijzer, Hagar Labouta, Roberta Woodgate, and Shyamala Dakshinamurti.
- The Research Support Unit continued providing support to CHRIM researchers. This included extensive support to new research projects that arose involving COVID-19.
- The RSU also partnered with Women's Health to create a shared research coordinator position, developed a patient engagement service, and established the bioinformatics core laboratory.
- The Biology of Breathing research theme had 25 total investigators and trainees who published 144 new publications in 2020. Drs Richard Keijzer, and Andrew Halayko received awards as recognition of outstanding work, Dr. Meghan Azad is co-leading the International Perinatal Outcomes in the Pandemic study along with Dr. Merilee

Brockway, Dr. Neeloffer Mookherjee was awarded the CIHR Sex and Gender Science Chair, and Dr. Adrian West was featured in an article in The Manitoban.

- The Diabetes Research Envisioned and Accomplished in Manitoba (DREAM) theme had 23 investigators and trainees as well as 6 Indigenous community partners working towards its various projects. There were 56 total published papers in 2020 and DREAM received 13 new grants totalling \$900,000 in new funding. DREAM members worked closely with stakeholders to partner with Keewatinohk Inniniw Minoayawin (KIM) Inc. to support community-based wellness programming for Indigenous youth in Manitoba. DREAM contributed \$10,000 in 2020 which will be matched by KIM.
- ENRRICH (Excellence in Neurodevelopment and Rehabilitation Research in Child Health) was established, led by Drs. Kelly Russell and Kristy Wittmeier. There are 39 individuals involved with ENRRICH including investigators, trainees, industry professionals, and parent advisory members. In 2020 they secured \$1.65 million in new funding from 23 grants and put out 66 publications.
- Child Health Research Days (CHRD) 2020 Annual Conference was moved to an online only as a result of the public health guidelines for COVID-19. For CHRD 2002, there were 93 abstracts submitted, representing the most trainee posters ever submitted to CHRD.

The CV's of potential advisors have been collected and attached for your consideration as well; see Att. 51-65 of the revised submission.

Recruitment to the Pediatric Graduate Program is covered in more detail in response 6.2.ii on Page 24 of this document.

Comment 5:

Adequacy of facilities, space, resources Facilities and space seem more than adequate through faculty allocations and space provided in CHRIM. The research support unit in CHRIM is exceptional. There is space for clinical studies, a bioinformatics core laboratory, and patient engagement service within CHRIM. Statistical services are also available within CHRIM but additional details regarding statistical support would be useful. Our understanding from the letters submitted is that one MSc level statistician is available to support trainee projects, and that each trainee is provided with ~5 hours of consultation services at no charge through CHRIM. We have concerns about whether this level of support will be sufficient but we were also informed during the interviews that there is considerable statistics expertise that trainees can access through the Department of Statistics and additional resources. A brief description of these additional resources would be valuable.

Stipends for students. Students are not required to have scholarship or stipend support organised to start their programs. There are pros and cons to this approach to student funding. In the context of clinical professionals who are employed, requiring stipend support prior to starting the graduate program does not make sense. However, the source of stipend support is a serious concern for undergraduates entering the MSc program and MSc students entering or transitioning into the PhD. Grant resources available for student stipend support (and research

costs) are not clear. As mentioned in Section 4, a brief description of potential sources of stipend and scholarship support available to trainees would be useful. This account should include local foundation support, support available through CHRIM and an overview of the Tri-Council and external foundation support to principal investigators in the program that is available for trainee stipend. Academic Health Services Leadership Program which prepares individuals for leadership roles in the health system, led by CHI, may be a good avenue for trainees to gain experiential knowledge and professional development skills. Libraries should support evidence synthesis projects for graduate students. There are adequate online resources and library support for an excellent graduate program. Current support for the administration of graduate student programs was deemed excellent and additional administrative support has already been made available for the proposed programs. Linkages with Network Environments for Indigenous Health Research led by Dr. Jaime Cidro are recommended to enhance training opportunities and the development of culturally appropriate learning spaces is encouraged.

Response 5:

Thank you for recognizing the unique infrastructure available at CHRIM.

There is support available through the Centre for Healthcare Innovation for consultation on students' projects, students will receive 5 hours of free consultation for their project which covers assistance with knowledge translation, patient engagement, developing leadership and research skills, gathering evidence, and analysing data.

Funding for graduate students is made available through grants and stipends. The Office of Research Services at the University of Manitoba circulates weekly emails advertising all funding opportunities for students. The Faculty of Graduate Studies also maintains a list of funding opportunities that apply specifically to graduate students on their website. There is tri-council support through the CIHR which offers grants of \$35,000 per year for up to three years. Notably, if a researcher obtains CIHR funding for the project to which a graduate student is recruited, the University of Manitoba Graduate Enhancement of Tri-Council Stipends (GETS) also provides funding. As of 11 December 2021, this funding is as follows:

\$10,500 per year is allocated to each eligible Tri-Agency grant on a fiscal year (April 1 to March 31) basis for the duration of the grant.

(Funding detailed copied verbatim from <https://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2020-08/gets-program-guidelines-2020.pdf> . Accessed on 11 December 2021)

We have partnered with Indigenous Child Health leaders to inform the development of the course, PEDS 7080: Indigenous Child Health. At the suggestion of the reviewers and the leaders with whom we met, we also reached out to Dr Cidro. In an email dated 19 October 2021, Dr Cidro expressed enthusiasm for the course but had to decline involvement due to a lack of time.

Comment 6:

Strengths and Weaknesses of the Program Proposal

Comment 6.1:

Strengths

Comment 6.1.i:

The multidisciplinary environment (Department of Pediatrics, CHRIM, CHI, SSCY, related Indigenous health research organisations and faculty) is excellent to foster these graduate training programs. Many of the resources required for this program are already in place, providing a great foundation for their launch in September 2023. Interdisciplinary collaboration is excellent.

Comment 6.1.ii:

The proposed MSc and PhD programs will provide a group of highly-qualified, well-funded researchers with access to graduate students, and likewise, provide trainees access to the opportunities afforded by this translational program.

Comment 6.1.iii:

Flexibility and adaptability are built into the programs to accommodate the needs of clinical professionals, which will increase the number of trained clinician scientists working in the key area of Pediatrics and Child Health.

Comment 6.1.iv:

Graduate students accepted into these programs will be integrated into all the graduate student supports that are offered through CHRIM. These value-added services and programs, including career planning and professional development activities, are not well detailed in the proposal, but have been described in our discussions so we know they exist. This will offer the trainees a home and the opportunity to interact directly with fellow graduate students, which is essential for networking and development of a graduate student culture as the program grows. It also provides students with a voice as part of a larger group to affect program change, which can be very difficult to undertake and achieve if they were to be isolated in their own, small program.

Comment 6.1.v:

Inclusion of the CHRIM Grand rounds seminar program (once per week) in the curriculum is an additional strength. This will reinforce the cross disciplinary nature of the training delivered.

Comment 6.1.vi:

PEDS 7050 - Ethical and health issues in pediatric care, in particular, is extremely thorough in its scope and depth.

Comment 6.1.vii:

Strong administrative support will be provided, which will be essential for many aspects of program delivery, but especially to organise meaningful, personalised immersive training experiences for trainees.

Response 6.1:

We thank the reviewers for your careful evaluation of our submission and the constructive comments.

Comment 6.2:

Response 6.2.i: Curriculum revision (details specified above) to focus on the unique and specific needs of those working in pediatrics and child health research.

Thank you for this suggestion. We have considerably revised the following courses to address the unique and specific concerns of those working in pediatrics and child health.

- PEDS 7010 Introduction to Biostatistics in Child Health Research
- PEDS 7120 Foundations in Bioinformatics

We have also added two required (R) 0 credit hour courses, and three elective courses (EC) to address this suggestion.

- R – PEDS 7070 Reflective Practice in Pediatric Engagement
- R – PEDS 7080 Indigenous Child Health
- EC – PEDS 7190 Medical Education, Ethics and Engagement
- EC – PEDS 7170 Multidisciplinary Immersion in Practice and Policy
- EC – PEDS 7180 Practice and Qualitative Mixed Methods

Comment 6.2.ii

A recruitment strategy, that includes strategies to address the challenges of communication between the two campuses and to increase participation of marginalised populations in the program, should be developed.

Response 6.2.ii:

Once the program has been approved, we will collaborate with the communications team in the Department of Pediatrics and Child Health, and at CHRIM to develop a promotional video for the program once the program is approved. This video will be circulated to different stakeholders, identified through discussions with The Department of Pediatrics and Child Health, and CHRIM. We will also advertise this program widely through the UM/CHRIM and work with local and national media to announce the new program.

We will also hold a minimum of two information sessions in the late fall of every year, to discuss the program and take questions. The timing of these sessions is intended to allow for time in advance of funding applications. Pending public health guidelines, one session will be held in person, and the other virtually. Additional recruitment sessions will be considered as requested.

Comment 6.2.iii

The curriculum and philosophy of the program currently too focussed on the development of clinician scientists and researchers to work in the university setting. Focus needs to expand to fill the many other positions in government, community, schools, etc.

Response 6.2.iii:

Thank you for this comment. In the revised submission, we have included additional emphasis through the addition of a fourth pillar and new courses on child health, including ethics and Indigenous Child Health.

We have provided a detailed response to this comment in a previous response to a similar comment. Please see Response to Comment 6.2.i on Page 24 in this document.

Comment 6.2.iv

There is enormous support from the Dept of Pediatrics, CHRIM, CHI, SSCY, related Indigenous health research organisations and faculty), but the nature of this support and value added is not always explicit within the proposal. These strengths became clear through the course of our discussions, they can be added to the proposal. Some of these areas that require elaboration in the proposal are discussed below.

Response 6.2.iv:

Thank you for this comment. Throughout our responses to these comments we have addressed the supports and opportunities available through various Manitoba organisations. In particular, please see Response 3 on Page 20 of this document.

Comment 6.2.v:

Professional Development (PD): with <80% of PhDs finding employment in standard academic positions, PD has become a focus of many graduate programs across North America. Generic PD is often taken on by FGS, but there is great value in the development of program specific PD offerings that are designed to address the needs of individual programs. PD has not been discussed in the proposal, so it is not clear whether FGS offers generic training. More program specific opportunities are available through CHRIM and these could be highlighted. It will also be important to consider that the PD needs of clinical professionals entering the program to become clinician researchers and clinician scientists will differ significantly from undergraduate students entering the MSc or MSc students registering or transitioning into the PhD program. We recognized that programs like the Canadian Child Health Clinician Scientist Program will support you in this regard.

Response to Comment 6.2.v:

Thank you for this comment. We have provided a detailed response to this comment in a previous response to a similar comment. Please see Response 3 on Page 20 of this document.

Comment 6.2.vi:

Additional information about the principal investigators who will have access to trainees coming through this program is required. As already indicated, this information has been made available to us through the 2020 CHRIM Annual Report but the CV's, grant support, publication records and trainee records of investigators who will access the students in the program are standard inclusions in Quality Assurance reports for existing programs. Similar information would be helpful here. This would also help us understand the scope of investigators' expertise and therefore, the ability of the program to deliver meaningful cross-pillar immersion experiences and populate supervisory committees with the necessary expertise.

Response 6.2.vi:

In the revised submission, we have provided the following:

A summary of the 2020 CHRIM Annual Report, which details the total grant dollars held by, and the publication records for CHRIM researchers (See Att. 46 of this resubmission). The external reviewers were also provided with a copy of the full CHRIM 2020 Annual Report.

The full CVs for teaching faculty (See Att. 51 to 65 of this resubmission)

We also note that the website for the Department of Pediatrics and Child Health provides detailed profiles for its researchers. As the Pediatric Graduate Program moves through the approval process, we will create a page within this website to showcase the program.

Please see <https://umanitoba.ca/medicine/departments/pediatrics-and-child-health> (Accessed 7 December 2021)

Comment 6.3:

Comment 6.3.i:

Increased clarity is required regarding research expectations for both the MSc and PhD programs to ensure consistent standards throughout the program. The MSc program allocates 8 months, minus the two, 3-week immersive experiences, leaving 6.5 months for active research. Expectations of the MSc programs with which we are familiar are typically that the thesis should be sufficient for a minimum of one publication. This is unlikely within 6.5 months.

Response 6.3.i:

The timeline for the MSc program is described in Att. 5: MSc New Program Application Form, Section B-2, Pages 4-5, and copied here for your convenience

2 years full time equivalent

- The course work will normally be completed in Year 1 and will include:
 - 12 mandatory credit hours
 - 4 mandatory 0 credit hour courses (2 online tutorials and two workshops)
 - For non-clinically oriented students, a mandatory 0 credit hour clinical shadowing course
 - For clinically-oriented students, a mandatory 0 credit hour course on practical and ethical considerations in virtual healthcare delivery in pediatrics
- Research projects will be outlined and developed in the first year, concurrent with the completion of course work

- Thesis proposal should be completed within the first 12-14 months of the program
- Completion of research project expected to take ~8 months
- ~12 weeks are allotted for thesis writing and review
- For every full year (12 months) a student is declared as part-time (see section B-6), an additional 4 months is allowed for program completion. Retroactive status changes will not be made.

The timeline for the PhD program is described in Att. 24 PhD New Program Application Form, Section B-2, Pages 4-5, and copied here for your convenience

Year 1

- Month 1: Mandatory 0 credit hour seminars and tutorials (GRAD 7500, Academic Integrity; GRAD 7300, Research Integrity; PEDS 7030, Equity, Diversity and Inclusion; PEDS 7080, Indigenous Child Health)
- Month 2: Course work. For non-clinically oriented students, 0 credit hour PEDS 7040, Introduction to a Clinical Environment. For clinically-oriented students, 0 credit hour PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics.
- Terms 1 and 2 (Months 1-8): Coursework, 9 credit hours total (PEDS 7140 OR 7120; and 7050)
- Months 10-12: Research proposal, ethics submission

Year 2

- Two of the following: PEDS 7130, PEDS 7150 or PEDS 7160 (Multidisciplinary Immersion in Clinical Research, in Basic Sciences, or in Population Health, based on the two pillars other than the student's home pillar. Each course is 1.5 credit hours, for a total of 3 credit hours, completed in two 3-week segments as placements with other labs or research groups)
- Elective courses: PEDS 7180 (Practical Qualitative and Mixed Methods); PEDS 7190 (Medical Education, Ethics and Engagement); PEDS 7110 (Directed Readings in Pediatrics); PEDS 7120 (Foundations in Bioinformatics); and, or PEDS 7140 (Practical Epidemiology)
- Thesis research begins

Year 3

- Thesis research continues, first-author manuscript preparation and submission for publication in Year 3 or 4
- Thesis proposal (may also be completed in Year 3, subsequent to the Candidacy Exam). The thesis proposal must be completed subsequent to the candidacy exam. The proposal must be independent of the candidacy exam, with <5% overlap in content. The thesis proposal must be presented first in writing to the advisory committee. The proposal must consist of a literature review, methods section (including statistical analysis plan), preliminary analyses, strengths and limitations, and future directions.
- The Candidacy Exam must be successfully completed a minimum of 1 year prior to the expected date of thesis defence. This examination, which must be independent from the thesis proposal, will include a written component, followed by an oral component, on subjects relevant to the general area of the candidate's research.

First, the student must successfully complete the written exam, which will consist of a choice of 3 out of 4 questions assigned by the advisory committee. The student will have 3 weeks to complete this exam. If successful, the student will proceed to an oral exam. The exam must be scheduled within one month of successfully completing the written exam. The oral examination will consist of a discussion between the candidate and advisory committee, during which the student must be able to more comprehensively speak to the questions in the written exam. The maximum time permitted for this oral exam will be 2.5 hours.

Year 4

- Research project work should be completed by the end of Term 1
- Thesis writing: time allotted is ~16 weeks. See Supplementary Regulations sections 5.11 and 5.11.1 for details.

To address the comment re a minimum of publication during an MSc program, we consulted the Supplementary Guidelines for other thesis-based MSc programs in the Rady Faculty of Health Sciences, University of Manitoba.

MSc in Biochemistry and Medical Genetics

Per the Supplemental Guidelines, there is no requirement for a MSc student to produce a publication. The student may choose to write a grouped manuscript style thesis; however this is not required.

<http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-04/biochem-med-genetics-supp-regs.docx>

MSc in Community Health Sciences

Per the Supplemental Guidelines, there is no requirement for a MSc student to produce a publication. The student may choose to write a grouped manuscript style thesis; however this is not required.

http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-04/community-health_sciences-supp-regs.docx

Master's of Nursing

Per the Supplemental Guidelines, there is no requirement for a MN student to produce a publication. The student may choose to write a grouped manuscript style thesis; however this is not required.

<http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-05/nursing-supp-regs.docx>

Comment 6.2.ii

The PhD research requirements are defined as “one first-author manuscript in a peer-reviewed scientific journal is required, and supervisors are encouraged to facilitate collaborative opportunities for students that would lead to co-authorship in other projects.” The minimum of most PhD programs is at least sufficient data for 2 first author papers, often more. If only one first author paper is required because collaborations are encouraged, details are required to describe how students will parse out their contribution(s) to multidisciplinary projects so that they can demonstrate their capacity to do independent research (a cornerstone requirement of the PhD degree). In addition, some standard regarding the number of collaborative papers/projects should be included in the requirement. Finally, given that the thesis is typically a document describing independent research, a novel mechanism will have to be developed in collaboration with FGS that allows the candidate to include collaborative projects into the thesis so that it can be evaluated. As many of the collaborative projects are likely to involve multiple PhD students, this mechanism will need to enable several PhD students to include the same research project in their theses.

Response 6.2.ii:

With regard to consistent expectations for PhD students, the following Supplementary Guidelines have been added, informed by the Supplemental Guidelines for the PhD program in Applied Health Sciences (current as of 26 November 2021); emphasis added:

In accordance with the regulations of the Faculty of Graduate Studies, the student is required to demonstrate competence in planning and conducting a research project, and in disseminating the results. **If a grouped thesis format is chosen, it would normally consist of 3 publishable manuscripts, at least one of which has been submitted for publication and all of which are first authored by the student.** The specification “publishable” refers to the distinct contribution to knowledge in the research area. Notably, whereas shared first authorship may be appropriate for peer-reviewed publication, only one student may include any given manuscript in a grouped thesis. **It is strictly forbidden to include any version of a manuscript or publication in a grouped thesis that has previously appeared in another student’s thesis.**

Comment 6.3.iii:

Clarity is required regarding timing of the candidacy exam relative to the thesis research proposal for PhD candidates. The thesis proposal is required after the candidacy, which can occur as late as 3 years into the program (3/4 of the way through the program). Yet research is to start in year three, which is before the proposal will have been developed and defended. Stipulation of a separate timeline for these milestones for full-time and part-time students should alleviate some of these concerns (e.g. The three-year deadline for the candidacy exam has been included for part time students but this is not specified. Full-time students may therefore view this as their deadline).

Response 6.3.iii:

Thank you for raising your concern regarding the timing of candidacy exams. To properly address this question, we examined the Supplementary Guidelines of other PhD programs in the Rady Faculty of Health Sciences at the University of Manitoba.

The timing we outlined in the proposed PhD program in Pediatrics and Child Health are as follows:

Students are expected to take a formal candidacy exam, normally within 6 months of completing coursework or before the end of the 2nd year after admission to the program of full-time study, or equivalent but no later than one year prior to expected graduation date. Students must have completed all coursework work prior to the candidacy examination.

These align with the timing outlined by other PhD programs in the Rady Faculty of Health Sciences. Notably, the programs do not have separate timelines for full-time vs. part-time students (copied verbatim from the respective supplementary guidelines – links current as of 8 December 2021):

PhD in Applied Health Sciences

Students are expected to take a formal candidacy exam normally before the end of the 2nd year after admission to the program, but no later than one year prior to the expected graduation date.

<http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-04/applied-health-sciences-supp-regs.docx>

Note: In our response to Comment 6.3.iii, we did not refer to Applied Health Sciences. This is because Applied Health Sciences offers a PhD program only, not a MSc program.

Biochemistry and Medical Genetics

Scheduling: Students must take their candidacy examination within the first 12 months of completing their coursework.

Note: Depending on the program of study, the number of credit hours required for a PhD in Biochemistry and Medical Genetics ranges between 13-29.

<http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-04/biochem-med-genetics-supp-regs.docx>

Community Health Sciences

Examinations can be written at specified times (sittings) during the year, typically three times per year. Examination dates are determined by the Candidacy Exam Committee and are posted in the department. They are also communicated to PhD students who have not yet written the exam directly via email. The candidacy exam will normally be written within six

months following the completion of all course work. Students must indicate their intent to write the candidacy exam at least two months prior to a particular sitting.

Note: The minimum number of credit hours required for a PhD in Community Health Sciences is 18.

http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-04/community-health_sciences-suppl-regs.docx

Nursing

Students are expected to take a formal candidacy exam, normally within 6 months of completing coursework or before the end of the 2nd year after admission to the program of full-time study, or equivalent but no later than one year prior to expected graduation date. Students must have completed all coursework prior to the candidacy examination.

<http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-05/nursing-suppl-regs.docx>

Comment 6.3.iv:

Recommend moving the candidacy exam requirement as early as possible in the program. The candidacy exam should be a rigorous filter to identify those suited for independent research. As the candidacy moves later into the program, there is greater reluctance of examining committees to implement this filter (e.g., if a student has completed 3 years of a 4-year program, few committees will recommend failure).

Response 6.3.iv:

Thank you for this comment. After comparing the timing of the candidacy exam in the proposed PhD program to the timing of candidacy exams in existing PhD programs within the Rady Faculty of Health Sciences (detailed above in Comment 6.3.iii) , we have decided to retain the originally proposed timeline.

Comment 6.3.v:

Guidance could be provided regarding the composition of Supervisory Committees. Given the translational focus of this program, guidelines could recommend that committees comprise faculty with research expertise in the specific area (pillar), additional methods expertise (as required) and expertise in knowledge translation/community engagement. The program proposal could offer an abbreviated list of faculty members with the expertise to fulfil these needs on supervisory committees.

Response 6.3.v:

Thank you for this excellent suggestion. In the revised application, we have added language to describe committee composition (see Att. 4 Supplementary Guidelines MSc Section 4.8.1.2; PhD Section 5.11.1)

The MSc Examining Committee will normally comprise the Advisory Committee, specifically the student's supervisor, one faculty member from another pillar within the Pediatric Graduate Program, and one methodological expert.

The PhD Internal Examiners will normally comprise the Examining Committee, specifically the student's supervisor, one faculty member from another pillar within the Pediatric Graduate Program, and one methodological expert.

Comment 6.3.vi:

Additional clarity is required regarding the research expectations for Pediatric Residents who register in the MSc or PhD programs. The proposal indicates that residents will continue to work 6 shifts per month, which is 25% time. This further reduces that time allocated to the research component of the program, especially in the context of the MSc program. Usual allocation of clinical time during research training is 10%.

Response 6.3.vi:

Thank you for raising this concern. The decision to permit residents to work a maximum of 6 shifts per month was reached through discussions with senior administration of the Department of Pediatrics and Child Health, as well as in discussions with other clinical departments with graduate programs at the University of Manitoba. As such, we have decided to retain the cap of 6 shifts per month.

Comment 6.3.vii:

A GPA of 3.5 is currently the main admission requirement. We recommend an admissions process that considers a broader definition of excellence (i.e., not just the GPA). The admissions process should carefully evaluate equity for historically marginalised populations and provide applicants with alternate methods to demonstrate commitment to research and scholarship and child health. Clinical training and career interruptions should not be diminished, as they allow the trainees to gain more experiences over time. In addition, a major objective of the proposed programs is to attract clinical professionals. For these individuals available GPAs will often be "historical" and poor indicators of current commitment to the field of pediatrics and children's health.

Response 6.3.vii:

At the recommendation of the reviewers, we will decrease the GPA requirement from 3.5 to 3.25 to better allow for the many varied circumstances that individuals may be applying to

the program from. To supplement this GPA requirement we have formulated the following questions that all applicants will respond to in order to better understand their motivations and potential for excellence. We note that these questions were developed in collaboration with Ms Jackie Gruber, Director of Equity, Diversity and Inclusions, Rady Faculty of Health Sciences, University of Manitoba.

In no more than 3 pages (Arial 11pt font, 2cm margins), provide responses to the below questions in narrative form:

1. Why do you think you're a strong candidate for this program? Please speak to some experiences in your own life that support your application to this application. (500 words)
2. What is a current issue in child health that you seek to address through your training and why? (300 words)

**External Review Committee Report on the academic merits of the M.Sc. and Ph.D.
graduate program proposals by the Department of Pediatrics & Child Health, in the Max
Rady College of Medicine, Rady Faculty of Health Sciences**

Prepared by:

Dr. Gregory Funk, PhD

Professor, Department of Physiology
Associate Dean Research, Graduate Programs
Faculty of Medicine and Dentistry
University of Alberta
Email: gf@ualberta.ca

Dr. Susan Samuel, MD MSc

Professor, Departments of Pediatrics, Community Health Sciences
Pediatric Nephrologist, Alberta Children's Hospital
Director, Canadian Child Health Clinician Scientist Program
Cumming School of Medicine
University of Calgary

Respectfully submitted on: August 26, 2021

INTRODUCTION AND SUMMARY

We would like to open by thanking the University of Manitoba (UofM) Faculty of Graduate studies (FGS), specifically Dean Kelley Main and Associate Dean Steve Kirkland, for the invitation and opportunity to review these exciting, innovative and needed proposals to develop new Master of Science (MSc) and Doctor of Philosophy (PhD) Graduate programs in Pediatrics & Child Health, within the Department of Pediatrics & Child Health, Rady Faculty of Health Sciences.

These proposals were developed under the leadership of Dr. Jennifer Protudjer with the close collaboration of multiple stakeholders, including the leadership of the Department of Pediatrics, Children's Hospital Research Institute of Manitoba (CHRIM), George Fay Yee Center for Healthcare Innovation (CHI), and the Specialized Services for Children and Youth (SSCY), with the overall goal to offer graduate student training and opportunities for innovative, multidisciplinary, collaborative, and rigorous scientific training that emphasizes the translational impact of their findings for the children for whom they care.

Trainees who will access the program include clinicians from all disciplines (to facilitate the development of clinician scientists and clinician researchers), a diverse local undergraduate population and ultimately international students/professionals. The program was designed with an emphasis on flexibility to accommodate current professionals by offering a part-time option and also removing the necessity for having stipend support in place prior to acceptance, which can be

a burden for trainees to secure but also something that is not always necessary for clinical professionals applying to the program.

An additional objective (and benefit) of the program is that it will provide a network of world class researchers in Pediatrics and Child Health with the opportunity to include graduate student trainees in their research programs and similarly, provide interested students/professionals with access to the unique training opportunities available through this world class environment. In turn, the graduate program will increase overall capacity for scientific excellence in child health at the UofM.

Over the course of our review, we met outstanding researchers in the Department of Pediatrics and Child Health with impressive Tri-Council funding who are unable to involve graduate students in their programs due to lack of cross-appointments in departments with approved graduate programs. Without official affiliation (primary or cross-appointment) with a department that has an approved graduate program, faculty are not eligible to supervise graduate students. This is a significant lost opportunity.

Our final report focusses primarily on the points of evaluation that were outlined in our invitation. Before we get into these specifics, we would like to emphasize that during the course of our interviews and discussions over the three days of the review, we were increasingly excited and enthusiastic about the potential of these proposed programs and the environment at the UofM in which they will be delivered. The proposed programs are very unique, collaborative, cross disciplinary offerings with enormous support from the University and other stakeholders (via CHRIM, CHI, SSCY, related Indigenous health research organizations and faculty) that will prepare trainees with the ability to support pediatrics and child health through diverse employment opportunities. Moreover, it is clear that the program serves an obvious need in the Province and Canada, based on Shared Heath's care priorities.

There are many strengths of the proposed programs that we will highlight in our report. We also have a number of specific recommendations regarding curriculum and program design; our intent in providing these recommendations is to further enhance these exciting proposals. We then offer a series of recommendations for proposal revision that we do not necessarily consider weaknesses of the program but instead limitations of the proposal in that there is unnecessary modesty regarding the many unique strengths of the local environment. These strengths are obvious to the authors and internal reviewers of the UofM and the Province need to be more clearly articulated for those external who will be reviewing the proposal, and ultimately for potential recruits (local, national and international) reviewing graduate training opportunities in pediatrics and child health research.

POINTS OF EVALUATION

1. Comparisons with related program(s)

The only Pediatric Graduate Training Program currently operating in Canada is offered at the University of Alberta (UofA), at both the MSc and PhD levels. The program began in 1990 and currently maintains a graduate student population of 45-50 students per year, supervised by 36 tenured or tenure-tracked faculty members. Graduate students receive training in clinical or basic sciences, in areas of research including cardiovascular, clinical trials, evidence-based medicine, gastroenterology, genetics, Indigenous health, nephrology, neonatology, neurology/neurosciences, obesity, oncology, pulmonology, and thrombosis.

A graduate program similar to that under development at the UofM is being developed under the leadership of Dr. Allison Eddy at the University of British Columbia. Details are not yet publicly available, but we recommend developing strong communication ties with this group.

The main differences between the programs offered at the UofA and the programs proposed at UofM are:

- a. The UofA programs have significantly reduced course requirements (9 credit hours (CH) for MSc and 6CH for PhD vs 12 and 15CH respectively at UofM) and greater expectations in terms of individual research output for the theses.
- b. Both UofA and UofM programs are strongly integrated with local research institutes (WCHRI at UofA and CHRIM at UofM) that provide enormous value and support.
- c. The UofM program has a much greater focus on trans-pillar, transdisciplinary training experiences and the development of translational researchers than the UofA.

Overall, the ‘Manitoba Advantage’ for pediatrics and child health research that was mentioned in several of our interviews is apparent in that there is truly exceptional synergy, cooperation and communication across the full range of stakeholders involved in the child health.

2. Breadth and depth of the curriculum

The proposed MSc/PhD programs in Pediatrics and Child Health at the UofM have the expressed goal to recruit and train exceptional students in child health within the multidisciplinary environment of the Department of Pediatrics and Child Health at the UofM and its partner institutes, including Children’s Hospital Research Institute of Manitoba (CHRIM) and the George and Fay Yee Centre for Healthcare Innovation. The researchers within the Department of Pediatrics and CHRIM largely focus on clinical research, basic sciences and population health. There is a stated commitment from the faculty to immerse students across scientific pillars and provide cross disciplinary fluency.

The curriculum is largely based on course work, a thesis project, and opportunities for professional development provided through the Department of Pediatrics and partner institutes and affiliates.

Provided below are comments in each of these categories regarding the breadth and depth of the curriculum.

Courses:

The MSc requires 12 mandatory credit hours (9 in year 1 and 3 in year 2), 3 mandatory 0 credit courses (2 online tutorials and one workshop), for non-clinically oriented students a 0 credit, mandatory clinical shadowing course, and for clinically-oriented students, a mandatory 0 credit course on practical and ethical considerations in virtual healthcare delivery and pediatrics. Eight months are allocated for the research project and two, 3 week 30 hrs/wk) immersion experiences).

The PhD requires 15 mandatory credit hours (9 in year 1 and 6 in year 2). The PhD has the same 0 credit mandatory course requirements in year 1. The Candidacy exam must be completed in the first three years, with the thesis proposal to be fully developed and defended subsequent to Candidacy. 24 months are allocated for research).

Listed below are some items for consideration regarding course content.

- a. PEDS 7010 – Pediatric Biostatistics (3CH) – is a 3-week, introductory course in biostatistics. Suggestions are to include statistical issues specifically relevant to child health research, such as small sample sizes, handling type 1 and type 2 errors, and how to overcome them in research designs. The ‘Statistical models’ lecture within the course will hopefully cover linear, logistic and Poisson regression. Inclusions of material about the handling non-independent data may also be of use in the types of thesis work that will most likely proposed by the students. Our main concern is that the course material and time allocated may not be enough to create sufficient expertise even at a MSc level for clinical research. Thus, the development of mini-courses in statistics that are available to students after they complete their thesis is likely to be of value to the MSc graduates who continue in research. An independent, PhD-trained clinical or population health researcher will require more in-depth biostatistics training that what is provided in this course. Some trainees will gain this training when completing their thesis research, but certainly not all. A minor point is that we recommend a change to the course title. The course title “Pediatric Biostatistics” is not ideal because it implies that there is a separate “type” of biostatistics for pediatrics – there isn’t. We suggest that a suitable alternate title such as Introductory Biostatistics (for the Child Health Researcher) is more accurate. Addition of a PhD Biostatistician to the course faculty would be highly advantageous.
- b. PEDS 7020 – Introduction to Research Methods (3 CH) - covers a range of clinical methods and designs. Most of designs and methods within clinical and health services research are mentioned. Suggestions will be to start with broad-based principles study design (bias and confounding, with attention to issues with sampling and confounding in studies involving children), moving onto observational studies, interventional studies, and then knowledge synthesis to mirror a natural progression in evidence. Patient engagement need not be just for clinical trials, but can be taught as a method in itself in health research. A bioinformatics lecture may not be necessary in this course.

- c. EDI for health professionals – The material as presented in the documents is insufficient detail for us to comment on its depth. We recommend consultation with local departments or leads for EDI, and CIHR and other Tri-Council agencies’ direction and training resources for a complete discussion on EDI (e.g., implicit bias and allyship), and how to promote inclusive excellence in training, in the workplace and within research. It may also be helpful here to consult faculty members who are in the health equity field to discuss the critical importance of EDI in child health research.
- d. PEDS 7040 – Introduction to clinical environment (1/2-day course, pass/fail) - is laudable. However, the value of a simulated experience is doubtful for a non-clinician. The type of experience may be more meaningful when combined with immersion in a clinical environment as part of the thesis project. Simulated environments for non-clinicians may not provide the same impact as real patients. The patient engagement experts and partners (that are available through CHRIM and CHI) will provide powerful clinical voices and the grounding in the patient experience that the non-clinically oriented students need. The role of these patient engagement experts should be strengthened throughout the proposal.
- e. PEDS 7050 – Ethical and health issues in pediatric care (with consideration to marginalised children) (3CH). We note that equity and patient engagement are also covered here. In fact, this course is more than ethics and rightly so, and therefore, it could very well be called Ethics and Equity in Child Health Research. This course is particularly well thought out and covers the important issues in child health.
- f. PEDS 7060 – Virtual healthcare delivery. Although this is an important topic, we doubt that this needs to be covered as a 0 credit course. Insufficient details are provided in the document for us to determine the merits of the topics for discussion. There is an opportunity to formalize a lecture with particular attention to virtual care, as this aspect is so important to health service delivery in Manitoba (e.g., care for rural and remote Indigenous populations) and almost all other Provinces in Canada, even without a pandemic.
- g. Multidisciplinary immersions – these courses and their intent are excellent. Cross-disciplinary fluency in next generation child health researchers is critical to develop solutions that will improve the health and well-being of children, youth and families. The review committee was reassured by the care that will be taken by the administrative team to ensure high quality immersive experiences. Illustrative examples provided during discussions were convincing regarding the value of these experiences. Our suggestions are to add a policy immersion experience, and substitute real world experiential opportunities for trainees who desire to move to non-academic roles (e.g., shadowing, placements or internships in government, agencies, industry). Further opportunities exist to ensure cross-disciplinary attendance (of faculty and trainees) at CHRIM rounds can also help towards this goal.
- h. PEDS 7120 – Advanced bioinformatics (6 CH), or PEDS 7140, is required for PhD students. This course seems somewhat out of place in the program. A more well-rounded approach with

attention to basics of ‘omics’ research, bench research, skills to facilitate translational research (such as basics of biobanking, biomarker research) would perhaps be more useful for the general trainee. Precision medicine in child health research with practical examples of how child health is leading in this area may be illustrative for the students, and a suggested alternate focus of this course. Alternatively, as a 6CH course on bioinformatics may be useful to some trainees, inclusion of a 3rd optional course (6CH) that focuses on the additional course components mentioned above could address this issue.

- i. PEDS 7140 – Practical Epidemiology (6CH). This course appropriately dives into practical aspects of conducting a clinical research study as well as knowledge translation. It simulates what would happen in a thesis project, and will overlap with the thesis work. Therefore, the committee encourages the organizers to consider again the materials taught in PEDS 7020 when compared to this course, and provide a natural progression of materials, and provide more advanced topics for discussion in clinical or translational research methods. One needs to consider when this course will be taken in relation to the progression of the thesis project. Additional suggestions include to consider including other cohorts (both within and outside of Manitoba) for experiential study.

Thesis (research) requirements:

The thesis projects will largely be in the area of expertise of the primary faculty within the Department of Pediatrics (clinical, basic science, population health). To advance the cross-disciplinary goals of the program, we discussed the value of providing trainees with the opportunity to create aims within their thesis projects that cross disciplines. However, we understand and agree that it would be too difficult to make this a requirement of the program. We believe that exceptional students will make the natural leaps across disciplines when presented with the opportunity (e.g., a population health project could conceivably have a policy aim, and a clinical project could have a translational aim). We encourage the organizers to consider mechanisms to foster as much as possible the generation of such translational projects; doing so would greatly advance the cross disciplinary goals of the program. Further having a diversity of committee members pulled from different faculties within the UofM will greatly enhance the students’ learning, experience and success.

Opportunities for professional development and cross-disciplinary interactions

The committee was reassured that there are many opportunities for professional development offered through all the partners represented in the application, and we encourage the program to leverage all of these and generate a comprehensive list of offerings that can be provided to trainees.

Summary and overarching comments regarding the curriculum:

- i. The multidisciplinary environment as presented (Department of Pediatrics, CHRIM, CHI, SSCY, related Indigenous health research organizations and faculty) is excellent to foster this training program. Many of the resources required for this program are already in place,

providing a great foundation for its proposed launch in September 2023. Interdisciplinary collaboration is excellent.

- ii. The factors that distinguish the proposed programs in Pediatrics and Child Health from other MSc/PhD programs offered within UofM should be more clearly delineated. This program should cover basic research methods plus all issues relevant to child health research.
- iii. We suggest adopting a lifecycle approach to child health research (i.e., the importance of mothers, fathers, families, and communities in child and youth health and well-being, spanning pre-conception to adulthood). The importance of mothers (pre-conception, periconception, pregnancy, and child rearing), fathers, families, and school environments can be strengthened in the proposed curriculum.
- iv. It is important to consider all the intersection points that affect child health and well-being across sectors where graduates will be employed and impact child health, and to craft curriculum, experiences and opportunities to provide trainees with exposure to all these areas.
- v. Course work and time availability is tight. However, providing a dedicated course on Indigenous child health might be advantageous. It is a high priority topic for Manitoba and Canada, and research and health professionals need to develop expertise in this area in order to address the overwhelming health issues and inequities affecting Indigenous children in Canada. This is also an opportunity to provide training in the delivery of remote and virtual care for these Indigenous communities, and in the policies related to this type of care. We assume that a high proportion of graduates will end up working directly or indirectly in this area. Manitoba is particularly well positioned to do this, with the excellent faculty at the UofM that is complemented by the Network Environments for Indigenous Health Research at the University of Winnipeg. Further, providing Indigenous cultural safety training should be a priority within the program for registered students, irrespective of courses or thesis work.
- vi. Policy, advocacy and community outreach are largely missing from the course work, and faculty. We suggest particular attention to this area by adding at least one lecture within the course work, bringing on faculty or potential committee members who work in this area and perhaps also developing experiential opportunities by leveraging partners such as the SSCY.
- vii. More flexibility in the course work is recommended to help students tailor it to their needs, as flexibility is always preferable to a more rigid approach to course work.
- viii. Closer links with the Manitoba Centre for Health Policy for access to birth cohort/life course trajectory cohorts, and incorporation of child researchers such as Marni Brownell, and Leslie Roos (Psychology) with diverse methods expertise and child health focus would be a strength. Cost and other limitations mentioned by Dr. Protudjer are noted, however, the Manitoba Centre has the enviable position of holding some of the best administrative health data in Canada and it would be wonderful resource for emerging researchers. Therefore, data science in child health and policy is a potential topic of focus for this graduate program.
- ix. It may not be in the best interest of the program to compete with more methods focused graduate programs, but instead focus on issues germane to child health. The challenge in this proposal is to create a *unique brand* to ensure the program is deemed as distinct (from existing programs) and highly valuable to those interested and invested in child health, compared to students looking for broader training in different pillars of research.

- x. In contrast to the thorough description of course requirements, thesis research requirements are vague. We recommend that the research expectations for the MSc and PhD programs are clarified to help ensure consistency. This issue is discussed in more detail in Section 6.3).

3. Demand for graduates

Although an explicitly stated goal is to promote development of clinician researchers, it is highly likely that >80% of graduates will work in non-academic settings. Thus, greater emphasis on cross sectoral job preparation is recommended. Graduates will be able to work in health service delivery (hospital and community-based settings), industry (pharmaceutical, biotechnology, biomedical devices, nutrition), knowledge translation (knowledge brokers), policy at local, national and international levels (regulatory bodies, advocacy groups), education (schools, post-secondary), justice, and child protection (law, children and family services). Therefore, it would be advantageous to forge these partnerships as soon as possible (prior to program launch), and seek out experiential and immersion experiences that would increase the immediate employability of graduates. *The value of child health leaders (trained in research and/or clinical areaa) across sectors servicing children and youth is tremendous, and this will likely be one of the most unique outputs and impact of the proposed program.* Potential non-academic employment destinations for graduates will be Shared Health, Specialized Services for Children and Youth, partner organizations with Indigenous communities, and the Manitoba Centre for Health Policy.

The challenge for graduates of the MSc/PhD programs is that they will have only introductory training in clinical research and thus, will need more methods expertise and experience to become independent researchers. As per the stated goals of this graduate program, the graduates should become experts in child health (as pertinent to research and knowledge translation, including policy), with sufficient methods expertise to move to either clinical, population or translational research. The committee's sense is that the large majority of graduates will come out with research skills sufficient to work cross-sectorally as leaders.

It is an expressed goal of the organizers to develop clinician scientists through this program. This program is an excellent avenue for child health focused clinicians to pursue graduate training with the flexibility needed to complete both clinical and graduate training. However, further attention is needed to develop independent clinician scientists. In particular, clinicians will need more methods support and professional development training to establish a professional identity as independent scientists. Therefore, the committee recommends careful consideration to allow clinician scientists the flexibility to build more advanced methods expertise, and also to provide professional development opportunities (grant writing, communication, KT, professional identity formation, personal wellness) through programs like the Canadian Child Health Clinician Scientist Program, the UofM Clinical Investigator Programs, and MD/PhD programs.

4. Excellence of faculty and breadth of expertise

The UofM's Department of Pediatrics, CHRIM, and affiliated institutes have an exceptional cadre of faculty who are leaders in child health research. Notable examples are Dr. Klassen, Azad, Keijzer, McGavock, Dart, Wicklow, Wittmeier, Woodgate, Russell, Protudjer. Overall, there are 31 academic faculty with primary appointments in the Department of Pediatrics and Child Health who will be available to support students and serve as primary supervisors. Additional faculty throughout the university with an interest in child health, most of whom are members of CHRIM, provide a diverse pool of potential supervisory committee members, mentors and advisors. Research themes represented within CHRIM are summarized as follows:

- a. Biology of breathing (12 researchers)
- b. DREAM – Diabetes Research Envisioned and Accomplished in Manitoba (13 researchers)
- c. ENRRICH – Excellence in Neurodevelopmental and Rehabilitation Research in Child Health (18 researchers)
- d. Emergency medicine (8 researchers)

Additional 'methods expert' faculty from the broader faculty base within the UofM should be available to meet student's unique needs. Different names that came up through the review include investigators at the Manitoba Centre for Health Policy. Suggestions were also made to link up with the other Colleges within the Rady Faculty of Health Sciences, and also to the mathematics and biostatistics department. Adequacy of support from PhD statisticians and MSc statisticians is not clear within the proposal, and should be expanded.

The committee has requested additional documentation regarding potential faculty members who will be supervisors in the program, including information about their current research program, areas of research interest, research teams (including a list of graduate and postdoctoral trainees in each principal investigator's team), publication records, external (and internal) sources of funding with information about the funding available through these grants to support trainee stipends and research expenses.

The proposal states the following but this is too vague. *"Pediatric Graduate Program at the University of Manitoba will grant students access to the research programs of 31 primary appointed faculty members who include MDs, allied health professionals and non-clinicians. Furthermore, interest may be generated among members of the Children's Hospital Research Institute of Manitoba who may have primary appointments in other departments. Research fields in which students may complete their training include allergy, asthma, biochemistry and medical genetics, biology of breathing, clinical trials, clinical pharmacology, developmental origins of health and disease, diabetes, early childhood oral health, emergency medicine, endocrinology, human anatomy and cell science, injury prevention, nutrition, physiology, physiotherapy, psychology, and rehabilitation, among others."*

We requested and received the 2020 Annual Report from CHRIM during the course of the review, which was very helpful. However, it would be very helpful to see a summary of this information included in the proposal along with CV's of potential supervisors to help reviewers gain a clear picture of the departmental research environment and supports that will be available to support the

program as it launches and then evolves. A comment about future plans for recruitment within the Department would also be useful. The numbers of new graduate students proposed at the outset is not large, but it is still important to have this information to assess the supervisory and training environment.

5. Adequacy of facilities, space, resources

Facilities and space seem more than adequate through faculty allocations and space provided in CHRIM.

The research support unit in CHRIM is exceptional. There is space for clinical studies, a bioinformatics core laboratory, and patient engagement service within CHRIM. Statistical services are also available within CHRIM but additional details regarding statistical support would be useful. Our understanding from the letters submitted is that one MSc level statistician is available to support trainee projects, and that each trainee is provided with ~5 hours of consultation services at no charge through CHRIM. We have concerns about whether this level of support will be sufficient but we were also informed during the interviews that there is considerable statistics expertise that trainees can access through the Department of Statistics and additional resources. A brief description of these additional resources would be valuable.

Stipends for students. Students are not required to have scholarship or stipend support organized to start their programs. There are pros and cons to this approach to student funding. In the context of clinical professionals who are employed, requiring stipend support prior to starting the graduate program does not make sense. However, the source of stipend support is a serious concern for undergraduates entering the MSc program and MSc students entering or transitioning into the PhD. Grant resources available for student stipend support (and research costs) are not clear. As mentioned in Section 4, a brief description of potential sources of stipend and scholarship support available to trainees would be useful. This account should include local foundation support, support available through CHRIM and an overview of the Tri-Council and external foundation support to principal investigators in the program that is available for trainee stipend.

Academic Health Services Leadership Program which prepares individuals for leadership roles in the health system, led by CHI, may be a good avenue for trainees to gain experiential knowledge and professional development skills.

Libraries should support evidence synthesis projects for graduate students. There are adequate online resources and library support for an excellent graduate program.

Current support for the administration of graduate student programs was deemed excellent and additional administrative support has already been made available for the proposed programs.

Linkages with Network Environments for Indigenous Health Research led by Dr. Jaime Cidro are recommended to enhance training opportunities and the development of culturally appropriate learning spaces is encouraged.

6. Strengths and weaknesses of the program proposal

6.1 Strengths

- i. The multidisciplinary environment (Department of Pediatrics, CHRIM, CHI, SSCY, related Indigenous health research organizations and faculty) is excellent to foster these graduate training programs. Many of the resources required for this program are already in place, providing a great foundation for their launch in September 2023. Interdisciplinary collaboration is excellent.
- ii. The proposed MSc and PhD programs will provide a group of highly-qualified, well-funded researchers with access to graduate students, and likewise, provide trainees access to the opportunities afforded by this translational program.
- iii. Flexibility and adaptability are built into the programs to accommodate the needs of clinical professionals, which will increase the number of trained clinician scientists working in the key area of Pediatrics and Child Health.
- iv. Graduate students accepted into these programs will be integrated into all the graduate student supports that are offered through CHRIM. These value-added services and programs, including career planning and professional development activities, are not well detailed in the proposal, but have been described in our discussions so we know they exist. This will offer the trainees a home and the opportunity to interact directly with fellow graduate students, which is essential for networking and development of a graduate student culture as the program grows. It also provides students with a voice as part of a larger group to affect program change, which can be very difficult to undertake and achieve if they were to be isolated in their own, small program.
- v. Inclusion of the CHRIM Grand rounds seminar program (once per week) in the curriculum is an additional strength. This will reinforce the cross disciplinary nature of the training delivered.
- vi. PEDS 7050 - *Ethical and health issues in pediatric care*, in particular is extremely thorough in its scope and depth.
- vii. Strong administrative support will be provided, which will be essential for many aspects of program delivery, but especially to organize meaningful, personalized immersive training experiences for trainees.

6.2 Recommendations

- i. Curriculum revision (details specified above) to focus on the unique and specific needs of those working in pediatrics and child health research.
- ii. A recruitment strategy, that includes strategies to address the challenges of communication between the two campuses and to increase participation of marginalized populations in the program, should be developed.

iii. The curriculum and philosophy of program currently too focussed on the development of clinician scientists and researchers to work in the university setting. Focus needs to expand to fill the many other positions in government, community, schools, etc.

iv. There is enormous support from the Dept of Pediatrics, CHRIM, CHI, SSCY, related Indigenous health research organizations and faculty), but the nature of this support and value added is not always explicit within the proposal. These strengths became clear through the course of our discussions, they can be added to the proposal. Some of these areas that require elaboration in the proposal are discussed below.

v. Professional Development (PD): with <80% of PhDs finding employment in standard academic positions, PD has become a focus of many graduate programs across North America. Generic PD is often taken on by FGS, but there is great value in the development of program specific PD offering that are designed to address the needs of individual programs. PD has not been discussed in the proposal, so it is not clear whether FGS offers generic training. More program specific opportunities are available through CHRIM and these could be highlighted. It will also be important to consider that the PD needs of clinical professionals entering the program to become clinician researchers and clinician scientists will differ significantly from undergraduate students entering the MSc or MSc students registering or transitioning into the PhD program. We recognized that programs like the Canadian Child Health Clinician Scientist Program will support you in this regard.

vi. Additional information about the principal investigators who will have access to trainees coming through this program is required. As already indicated, this information has been made available to us through the 2020 CHRIM Annual Report but the CV's, grant support, publication records and trainee records of investigators who will access the students in the program are standard inclusions in Quality Assurance reports for existing programs. Similar information would be helpful here. This would also help us understand the scope of investigators' expertise and therefore, the ability of the program to deliver meaningful cross-pillar immersion experiences and populate supervisory committees with the necessary expertise.

6.3 Specific program recommendations regarding program timeline and milestones

i. Increased clarity is required regarding research expectations for both the MSc and PhD programs to ensure consistent standard throughout the program. The MSc program allocates 8 months, minus the two, 3-week immersive experiences, leaving 6.5 months for active research. Expectations of the MSc programs with which we are familiar are typically that the thesis should be sufficient for a minimum of one publication. This is unlikely within 6.5 months.

ii. The PhD research requirements are defined as *“one first-author manuscript in a peer-reviewed scientific journal is required, and supervisors are encouraged to facilitate collaborative opportunities for students that would lead to co-authorship in other projects.”* The minimum of most PhD programs is at least sufficient data for 2 first author papers, often more. If only one first author paper is required because collaborations are encouraged, details are required to describe

how students will parse out their contribution(s) to multidisciplinary projects so that they can demonstrate their capacity to do independent research (a cornerstone requirement of the PhD degree). In addition, some standard regarding the number of collaborative papers/projects should be included in the requirement. Finally, given that the thesis is typically a document describing independent research, a novel mechanism will have to be developed in collaboration with FGS that allows the candidate to include collaborative projects into the thesis so that it can be evaluated. As many of the collaborative projects are likely to involve multiple PhD students, this mechanism will need to enable several PhD students to include the same research project in their theses.

iii. Clarity is required regarding timing of the candidacy exam relative to the thesis research proposal for PhD candidates. The thesis proposal is required after the candidacy, which can occur as late as 3 years into the program (3/4 of the way through the program). Yet research is to start in year three, which is before the proposal will have been developed and defended. Stipulation of a separate timeline for these milestones for full-time and part-time students should alleviate some of these concerns (e.g., the three-year deadline for the candidacy exam has been included for part-time students but this is not specified. Full-time students may therefore view this as their deadline).

iv. Recommend moving the candidacy exam requirement as early as possible in the program. The candidacy exam should be a rigorous filter to identify those suited for independent research. As the candidacy moves later into the program, there is greater reluctance of examining committees to implement this filter (e.g., if a student has completed 3 years of a 4-year program, few committees will recommend failure).

v. Guidance could be provided regarding the composition of Supervisory Committees. Given the translational focus of this program, guidelines could recommend that committees comprise faculty with research expertise in the specific area (pillar), additional methods expertise (as required) and expertise in knowledge translation/community engagement. The program proposal could offer an abbreviated list of faculty members with the expertise to fulfill these needs on supervisory committees.

vi. Additional clarity is required regarding the research expectations for Pediatric Residents who register in the MSc or PhD programs. The proposal indicates that residents will continue to work 6 shifts per month, which is 25% time. This further reduces that time allocated to the research component of the program, especially in the context of the MSc program. Usual allocation of clinical time during research training is 10%.

vii. A GPA of 3.5 is currently the main admission requirement. We recommend an admissions process that considers a broader definition of excellence (i.e., not just the GPA). The admissions process should carefully evaluate equity for historically marginalized populations and provide applicants with alternate methods to demonstrate commitment to research and scholarship and child health. Clinical training and career interruptions should not be diminished, as they allow the trainees to gain more experiences over time. In addition, a major objective of the proposed programs is to attract clinical professionals. For these individuals available GPAs will often be “historical” and poor indicators of current commitment to the field of pediatrics and children’s health.

Report of the Faculty Council of Graduate Studies on Course, Program, Supplementary Regulation and Regulation Changes

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 Pathology.

Observations

1. The **Dept. of Pathology** proposes a Ph.D. in Pathology & Laboratory Medicine to be effective Fall 2023. The agenda contains the full program proposal documents, external reviewers' report and unit response.

The Ph.D. in Pathology and Laboratory Medicine refers to biomedical research that is relevant to disease. The program will focus on the research at the molecular, tissue, animal and clinical levels to understand the changes associated with diseases. Students will be provided with an opportunity to carry out supervised research in various areas including but not limited to breast cancer, stem cell biology, pathophysiology of neurodegeneration, pathogenesis of rare brain diseases, human neuropathology in population health, pulmonary and cardiovascular pathophysiology, molecular imaging, identification of novel biomarkers and treatment targets for various pathological conditions.

There are no course introductions associated with this program proposal.

The Ph.D. will consist of the following courses plus a thesis for a total of 12 credit hours:

- Required course (3 CH total):
 - IMED 7212 Introduction to Disease Mechanisms (3)
- Elective courses (9 CH total):
 - The student will discuss elective courses proposed either by the student themselves or by the advisor, and by mutual agreement, register and enroll in 9 credit hours of 7000 or 8000 level courses.

Recommendations

Faculty Council of Graduate Studies recommends THAT the program proposal from the unit listed below be approved by Senate:

Dept. of Pathology

Respectfully submitted,

Dr. Kelley J. Main, Chair
Faculty Council of Graduate Studies

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.

/ak

Report of the Senate Planning and Priorities Committee on a Proposal for a Doctor of Philosophy in Pathology and Laboratory Medicine, Department of Pathology

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. At its meetings on May 30 and August 29, and in an electronic poll carried out between August 30 and September 1, 2022, the SPPC considered a proposal from the Department of Pathology, Max Rady College of Medicine, to establish a Doctor of Philosophy (Ph.D.) in Pathology and Laboratory Medicine.
3. The proposal was endorsed by the Faculty Council of the Faculty of Graduate Studies at its meeting on May 17, 2022, and by the Department Council of the Department of Pathology at its meeting on June 1, 2022.

Observations:

1. The proposed Doctor of Philosophy (Ph.D.) in Pathology and Laboratory Medicine would be a four-year program that would require 12 credit hours of coursework, including IMED 7212 Introduction to Disease Mechanisms plus 9 credit hours of elective courses at the 7000- or 8000- level.

Additional requirements include attendance at the Annual Departmental Research Day and at least one Departmental presentation each year. Participation in the Department's weekly Grand Round Seminar Series would be optional but students would be encouraged to attend whenever possible.
2. The purpose of the interdisciplinary program, in the emerging field of laboratory medicine, would be to provide research training in biomedical research relevant to disease that would merge diagnostic clinical medicine and research, to better understand specific diseases and develop targeted therapeutic strategies. The objectives for the program would be to: (i) generate and critically evaluate scientific knowledge related to the causes, mechanisms and consequences of diseases affecting particular organ systems; (ii) design precision-based and targeted therapeutic approaches to treat specific stages of a disease; (iii) provide a platform to students, residents and scientists who wish to carry out research in the field of pathology; (iv) train the next generation of highly qualified students, researchers and scientists who will contribute to an enhanced understanding of disease diagnosis and mechanisms.
3. Graduates of the program would find careers in academia, in industry, including with pharmaceutical and biotechnology companies, with regulatory agencies and accrediting bodies, and in the public sector as consultants or policy advisors.
4. The proposed doctoral program would be unique in Manitoba and one of only a small number in Canada. It would fill a gap in graduate training in the Max Rady College of Medicine and the province by providing an educational opportunity that would bring together basic science research and diagnostic laboratory medicine, with access to existing diagnostic material and expertise in the Department.
5. Introduction of the program would not require the introduction of any new courses.

6. Projected enrolment for the first intake is one to two students. The maximum seat capacity would be two students.
7. The Department has sufficient resources to offer the program, including teaching and administrative staff, laboratory and office space, and instrumentation, including fluorescence and laser dissection microscopes, molecular biology tools, and cell culture facilities. Laboratory research costs will be supported by faculty members' research grants.
8. The total cost of delivering the program would be \$102,749, in Year 4. No new funding would be required to offer the program. Revenue to support the program would be derived from the following sources (as of Year 4):
 - program based tuition and continuing fees (\$15,272), which would generate the amount indicated based on enrolment of 3 students, one who is continuing;
 - existing resources in the Faculty (\$87,478).
9. Revenues identified in observation 8 would be allocated to the items indicated below (figures are for Year 4):
 - salary and benefits (\$79,495) for existing academic positions, including for 5.25 FTE positions at the rank of Associate Professor, Assistant Professor, or Senior Instructor, with five of these positions being GFT appointments;
 - salary and benefits (\$7,983) for a 0.1 FTE existing AESES support staff position; and
 - administrative overhead (\$4,238), which includes a \$2,711 tax on the tuition.
10. The University of Manitoba Libraries indicated current collections can support the proposed program.
11. On the basis of the SPPC's criteria for assigning priority to new programs / initiatives,¹ the Committee recommended that a high priority level be assigned to the proposal for a Ph.D. in Pathology and Laboratory Medicine. The proposal is consistent with the University's strategic priority for Driving Discovery through excellence in research, scholarly work and other creative activities.

Recommendation:

The Senate Planning and Priorities Committee recommends:

THAT Senate recommend to the Board of Governors that it approve a proposal to establish a Doctor of Philosophy in Pathology and Laboratory Medicine, in the Department of Pathology, 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 Derek Oliver, Chair
Senate Planning and Priorities Committee

¹ http://umanitoba.ca/admin/governance/media/SPPC_Assigning_Priorities_to_New_Programs-Initiatives.pdf



**University
of Manitoba**

Rady Faculty of Health Sciences

**Max Rady College of Medicine
Department of Pathology
University of Manitoba
401 Brodie Centre
727 McDermot Ave
Winnipeg, MB R3E 3P5
Ph: 204-789-3538
Fax: 204-789-3931**

July 7, 2021

To whom it may concern,

Please find enclosed here the new program "Ph.D. in Pathology and Laboratory Medicine" application proposed by the Department of Pathology, University of Manitoba for review and approval. Our detailed documentation is also attached.

Your help for establishing this program is greatly appreciated.

If you have any further questions, please do not hesitate to contact us.

Sincerely,

Gabor Fischer MD, PhD

Head, Department of Pathology, University of Manitoba, Rady Faculty of Health Sciences
Brodie Centre, 727 McDermot Avenue, Winnipeg, MB, R3E3P5

Phone: (204) 789-3538

Director of Anatomical Pathology, Shared Health Manitoba

St. Boniface Hospital, 409 Tache Avenue, Winnipeg, MB, R2H2A6

Phone: (204) 237-2851

E-mail: gfisher@sharedhealthmb.ca; Gabor.Fischer@umanitoba.ca

NEW PROGRAM OF STUDY

Under The Advanced Education Administration Act

Universities and colleges requesting approval for a **new** 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:
**University
of Manitoba**

1. Following unit approval* please submit the complete proposal electronically (.pdf single file) to both the Office of the Provost & Vice-President (Academic) and, for:
 - Undergraduate Programs:** Office of the University Secretary (for Senate submission deadlines visit <http://umanitoba.ca/admin/governance/meetings/index.html>. Please also submit a **hard copy** version to the Office of the Secretary to their office as well.
 - Graduate Programs:** Faculty of Graduate Studies (for timelines visit http://umanitoba.ca/faculties/graduate_studies/admin/program_approval_timeline.html.
 - ALL Programs:** as preparation for submission to MET, please submit a .docx file of the proposal, an .xlsx file of the Financial Support Form and a .pdf file of all other supporting documents (letters of support, external reviews, etc.). Please date stamp these files for ease of tracking should any changes result from the Senate approval process and submit directly to the Provost's Office.
2. Along with the information requested in the proposal template, please **append** details on the following:
 - a) **MEDT /SPPC Financial Support Form** [available through the Office of the Provost & Vice-President (Academic)]
This form requires the signature of the Financial Planning Office. Please contact Giselle Martel, Executive Director, Financial Planning and Budgeting, for direction on completion of the form. Approval of the financial support form does not signify approval of any funding requests, either internally or from the province. Confirmation of resource availability and allocation of any new funds will be determined by the Provost at time of implementation.
 - b) **Admission and/or transfer criteria** for the proposed program.
 - c) **Course details** for required coursework, including title, course number, credit hours and calendar description. Highlight any proposed new courses and attach:
 - Undergraduate Programs:* for SCCCC Program and Course Change forms, as applicable, visit <http://umanitoba.ca/admin/governance/forms/index.html>
 - Graduate Programs:* for course change forms visit http://umanitoba.ca/faculties/graduate_studies/admin/course_changes.html
 - d) Any **new academic regulations** for the program that are not currently addressed in existing faculty/college/school requirements.
 - e) **Letters of support** from internal units that may be impacted by the proposed new program and any external letters of support as outlined below.
 - f) **Library statement** of support.
 - g) Where applicable, a **transition plan** for current students entering the new program.
3. Please direct questions to Cassandra Davidson, Academic Programs Specialist, at Cassandra.Davidson@umanitoba.ca in the Office of the Provost and Vice-President (Academic).

*Note: the complete proposal, including all appendices, and associated program and course forms, should be submitted to departmental (as appropriate) and faculty/college/school approving bodies for review and approval, prior to submission to the Office of the University Secretary.

Revised December 2019.

SECTION A – PROPOSAL DETAILS

Institution: **UNIVERSITY OF MANITOBA**

Applicable faculties/department with responsibility for the program: Department of Pathology

If program is a joint program, list all participating institutions and the roles of each in delivering the proposed program:
Not applicable

Program name: Ph.D. in Pathology and Laboratory Medicine

Credential awarded: Ph.D.

Funding request: None

Office Use Only

One-time funding: _____

On-going funding: _____

Proposed start date: Fall 2023

List any critical issues that may impact the start date of the program: Not applicable

UM INTERNAL REQUIREMENT: Name of Person(s) responsible for the Program internally (please include contact information):

Dr. Gabor Fischer

Department of Pathology, Max Rady College of Medicine

401 Brodie Centre, 727 McDermot Ave

Winnipeg, MB R3E 3P5

Phone: 204-789-3212

B-1 Provide a general description of the program and its objectives: *(Include intended purpose, curriculum design, and highlight distinctive attributes)*

General description:

The PhD program in Pathology and Laboratory Medicine refers to biomedical research that is relevant to disease. The program will focus on the research at the molecular, tissue, animal and clinical levels to understand the changes associated with diseases. Students will be provided with an opportunity to carry out supervised research in various areas including but not limited to: breast cancer, stem cell biology, pathophysiology of neurodegeneration, pathogenesis of rare brain diseases, human neuropathology in population health, pulmonary and cardiovascular pathophysiology, molecular imaging, identification of novel biomarkers and treatment targets for various pathological conditions.

Objectives:

- To generate and critically evaluate scientific knowledge related to the causes, mechanisms and consequences of diseases affecting particular organ systems
- To design precision-based and targeted therapeutic approaches to treat specific stages of a disease
- To provide a platform to students, residents and scientists who wish to carryout research in the field of Pathology
- To train the next generation of highly qualified students, researchers and scientists who will in turn make contributions to enhance our understanding of disease diagnosis and mechanisms.

Curriculum Design:

Course requirements/Credit hours:

Expected duration time frame for Ph.D. in Pathology and Laboratory Medicine program: 4 years (12 credit hours)

Courses: Introduction to Disease Mechanisms (IMED 7212, Course credit hours: 3.0) offered by the Department of Pathology will be compulsory for the Ph.D. in Pathology and Laboratory Medicine program. An additional 9 Credit hours of 7000 – 8000 level courses are required to complete the required 12 credit hours. To complete the credit hours to fulfill the above-described requirement, the student will discuss courses proposed either by the student themselves or by the advisor and by mutual agreement, register and enroll in the courses. (list of elective courses is attached here with this document).

Compulsory Tutorials: Following two tutorials which are completed online are compulsory for graduate students

- (i) GRAD 7300 – Research Integrity
- (ii) GRAD 7500 – Academic Integrity Tutorial

Candidacy exam: As per supplementary regulations (Section 5.8) provided by Faculty of Graduate Studies, the candidacy examination is an absolute requirement of the Faculty of Graduate Studies and, as such, cannot be waived under any circumstances. However, the format and content of the candidacy exam varies from unit to unit. Details of the proposed candidacy exam for Ph.D. in Pathology and Laboratory Medicines is described in supplementary regulations for the Pathology department (copy enclosed here).

Thesis/Practicum:

A Ph.D. in Pathology and Laboratory Medicine requires the completion and submission of a thesis as per requirements outlined by the Faculty of Graduate Studies, University of Manitoba. The advisor of a student enrolled in the PhD program is responsible for assembling an advisory committee which will evaluate and approve the thesis. Students are also required to pass an oral exam of the thesis (the thesis defense) which will be conducted by the advisory committee.

B-2 Length of Program: *(Define the length of the proposed program using measures appropriate to the schedule and delivery format. This will include total course credits and weeks/months, and, where relevant, hours and semesters of instruction)*

Total Course Credit: 12

Expected total duration: 4 years

B-3 Intended outcomes of the program:

B-3.1 Describe how this program serves and advances the academic, cultural, social and economic needs and interests of students and the province:

The Ph.D. program in Pathology and Laboratory Medicine is a research oriented program which will provide an opportunity to students for in depth comprehensive research training. The Department of Pathology is in a unique position to fill a gap in the training of graduate students by providing training opportunities in a setting that allows direct access to patient samples of neoplastic and non-neoplastic diseases. At the present time, there is no other faculty or department which can offer such a distinguishing merger between diagnostic clinical medicine and research. The department of Pathology is well placed to launch such a program as we routinely handle and store a wide spectrum of patient samples including blood and neoplastic tissues. Moreover, we are well equipped with the necessary diagnostic and scientific tools and expertise to carry out high caliber and innovative research. The proposed PhD program would also further enhance opportunities for interdepartmental collaborations as well as contribute to investigations in the frame of personalized medicine.

Indeed similar programs exist nationally, but there is currently no such program that exists in Manitoba which offers such an interdisciplinary approach to the training of students that interconnects both clinical and laboratory research. Not only will this program provide an excellent novel opportunity for our own students here in Manitoba, but also it has the potential to attract national and international students to our institution to be a part of this unique training opportunity. Currently, students must pursue either clinical or basic research training at the University of Manitoba, or complete separate degree programs. This highlights a gap in the post-graduate training opportunities available at the University of Manitoba which this program aims to address.

The Pathology Department is ideally poised to offer a PhD program of this nature, linking clinical and laboratory research, as we have clinical scientists trained in a diverse range of subspecialties as well as scientists who carry out basic research. An additional benefit of this program is that it will also foster and promote strong collaboration between clinical pathologists and basic research scientists leading to novel and innovative translational discoveries in the field of medical research. Our collection of tissue samples will be made available for basic research scientists to integrate clinical findings with laboratory research discoveries. One interesting aspect of our vast tissue resource is that research scientists will be uniquely positioned to isolate actual primary cells that can be used for exciting and innovative studies at the cellular and molecular level. This presents a new opportunity for many investigators and students from various departments who may wish to gain access to patient tissue and cell samples to utilize in their own research locally, and thus, eliminating the need to outsource such requests to external institutions. Importantly, this program also provides the possibility to develop strong internal institutional collaborations between the Pathology Department and other departments (both Clinical and Basic Sciences) at the University of Manitoba. Hence, altogether, through our PhD program, we will breach this current gap that exists between clinical medicine and laboratory research. As well, not only will it provide an exceptional learning opportunity for trainees but it will also establish cutting-edge integrative clinical research that will propel the University of Manitoba to becoming a leading global institution for clinically related medical research.

B-3.2 Describe the existing and anticipated post-secondary learning needs of students in Manitoba that this program addresses and responds to:

Graduate students will be provided with an opportunity to carry out supervised research in various areas including but not limited to: breast cancer, stem cell biology, pathophysiology of neurodegeneration, pathogenesis of rare brain diseases, human neuropathology in population health, pulmonary and cardiovascular pathophysiology, molecular imaging, identification of novel biomarkers and treatment targets for various pathological conditions. The core goal of the program is to identify the potential therapeutic strategies to target the biological hits identified after the pathological interpretation of the disease. This program will bridge the clinical diagnosis and laboratory medicine approach together to better understand the disease and develop targeted mitigation strategies. Altogether, this program will provide training and preparedness for students in the emerging field of Laboratory Medicine.

B-4 Mode of Delivery

B-4.1 Provide the total program length through **one** of the following measures:

Total course credit hours: 12 credit hours plus Ph.D. thesis

Total length of the program: 12 credit hours plus Ph.D. thesis

Total contact hours

Total courses

B-4.2 What proportion of the total program length (as indicated above) can be completed through the two following modes of delivery? *(Note that one or both selections can be offered up to the total program length.)*

100% of the program (research work and course work) may be completed in person. The SARS-COVID19 pandemic has uncovered the crucial importance of virtual learning. If deemed necessary and approved by the University the entire course work component of the course work can be completed virtually.

B-5 Provide an overview of the suggested progression of courses on a year-by-year basis for the program from start to maturity. *(Course level detail is not necessary, however, please include credit hours/contract hours, proportion of upper level courses, clinical placements or practicums, or subject area requirements where applicable)*

Progression Chart

Year 1		Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMED 7212	Introduction to the Mechanisms of Disease	3
7000- or 8000-level	Additional Graduate Courses ¹	3
Thesis Proposal ²		

	Hours	6
Year 2		
GRAD 8000	Doctoral Thesis ³	0
7000- or 8000-level	Additional Graduate Courses ¹	6
	Hours	6
Year 3-4		
GRAD 8000	Doctoral Thesis ³	0
Candidacy Exam ⁴		
	Hours	0

¹ Additional 3 credit hours at the 7000 or 8000 level are mandatory. These additional courses vary from student to student and course selection will be made in consultation with the advisor/advisory committee.

² Two years following the commencement of their Ph.D. program and following consultation with their supervisor, the student should submit a detailed thesis proposal to their committee for advice and approval. The proposal should be 1-2 pages long, adhering to the following format: Introduction (Backglul); Hypothesis; Objectives; Proposed Methods/Potential Significance of Work.

³ Students continue to work on their thesis. Students are required to allow 4 weeks for members of their advisory committee to read their thesis prior to the oral exam.

⁴ Students will do their candidacy exam within 2 years of beginning their PhD Studies.

UM INTERNAL REQUIREMENT: please complete the chart below to provide an overview of suggested progression through the program (indicate pre-requisites and related credit hours). Outline options for specializations within this program [minor(s) and/or concentration(s)].

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GRAD 7300 (0 credit hrs) GRAD 7500 (0 credit hrs) IMED 7212 course (3 credit hrs) Additional Graduate courses 7000- or 8000-level (3 credit hrs) Thesis Proposal	Additional graduate courses 7000- or 8000-level (3 credit hrs) GRAD 8000 Students continue to work on their Thesis Student will submit their written proposal and undertake their candidacy exam	GRAD 8000 Students continue to work on their Thesis	GRAD 8000 Students continue to work on and finalize their Thesis Student will defend their Thesis

TOTAL CR. HRS: 6	TOTAL CR. HRS: 6	TOTAL CR. HRS: 0	0

B-6 Will the program be available for part-time study?

Yes, part-time graduate studies will be available. This option can be explored for practicing professionals who may have difficulties in committing to full time. Other requests for part-time studies can be discussed and may be granted on an individual basis.

B-7 Indicate if this program will have a cooperative education, work placement, internship or practicum component and provide any relevant details:

N/A

B-8 Intake Information

B-8.1 Projected enrolment for the first intake: 1-2 students

B-8.2 Maximum seat capacity (*Defined as first-year enrolment capacity*): 2

B-8.3 Anticipated date of maturity: 4 years until graduation

UM INTERNAL REQUIREMENT: please indicate the projected enrolment and graduates for the first 5 years of the program.

	Year 1	Year 2	Year 3	Year 4	Year 5
Enrolments	1	2	3	1-3	3
Graduates				1-2	

C-1 Describe how this new program aligns with the strategic plans of your institution:

This proposed program will strongly support several of the strategic directions currently being pursued by University of Manitoba. This initiative will be instrumental in driving scientific discoveries. The Department of Pathology has the available expertise of the clinical pathologists who can provide pathological interpretation of disease working hand-in-hand with the basic research scientists to identify the new targets and enhancing the potential to develop new therapeutic strategies. In line with University of Manitoba's vision "to engage in programs that foster interchange and creation of knowledge, ideas and forging collaborations", this program will bridge the clinical diagnosis and laboratory medicine approach together to better understand the disease and devise targeted mitigation strategies. Using privileged access to both normal and diseased tissue derived from individual patients, this program will provide an excellent source of experimental learning opportunities for the students.

C-2 Outline the internal approval process (i.e. committees, governing bodies) for approving this new program of study within your institution and indicate any dates of decision. *(Governing Council, Board of Governors, Board of Regents, Senate, other)*

The process follows the route required by the University and the provided guidelines. The Departmental Graduate Committee, Departmental Council, Graduate Studies Faculty Council, Faculty of Graduate Studies Programs & Guidelines Committee, Faculty of Graduate Studies Executive Committee, and the Senate Planning and Priorities Committee discussed and endorsed this new program application.

UM INTERNAL REQUIREMENTS: Please note date(s) of Faculty/College/School Approval. Approval dates through the governing bodies will be inserted by the Provost's Office prior to submission to government.

UM Undergraduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
Faculty/College/School	_____
SCCCC	_____
SPPC	_____
SCADM (if applicable)	_____
SCIE (if applicable)	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

UM Graduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
PGC (preliminary review)	_____
External Review	_____
PGC	_____
FGS Executive	_____
FGS Faculty Council	_____
SPPC	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

C-3 Responsibility to consult

C-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:

Ph.D. program in Pathology and Laboratory Medicines does not require any mandatory review by any external organization. The proposed program has received overwhelming support from multiple basic Science Departments. A file containing all the letters of support has been provided with this application.

C-3.2 What agencies, groups, or institutions have been consulted regarding the development of this program? *Note: this includes any consultation with internal UM units, academic or otherwise.*

In his capacity as Department Head (Pathology), Dr Fischer has completed a full circle of discussions with each Basic Science Department Head within the Max Rady College of Medicine about the objectives and scope of the program. This course of action was taken in order to ensure that the proposed PhD program in Pathology and Laboratory Medicine did not overlap with already existing Ph.D programs within the Faculty, but will in fact, bridge the gap that currently exists between basic science research and clinical research at this University. The strong support received from all the basic science departments (Physiology & Pathophysiology, Pharmacology & Therapeutics, Medical Microbiology & Infectious diseases, Biochemistry and Medical Genetics, Human Anatomy & Cell Science) was quite overwhelming, and the peer Departments recognized the benefits of potential collaborations with the Department of Pathology through the new program. Furthermore, they did not envision the new program as a conflict of interest with any of their existing programs, nor did they see it as a redundant overlap with any of their current teaching programs. In fact, on the contrary, the view was expressed that a Ph.D program in Pathology is long overdue at the University of Manitoba. Moreover, some of these individuals enthusiastically offered their assistance if required in the launching of this program by advice and/or input to the administrative oversight and design of the program, participation in delivering courses, and contributing to co-supervising and mentoring students. Based on these conversations we are confident to say that the new program would enhance the collaborations and would provide an opportunity to build additional networks and links between the departments.

In addition to the extensive consultation process to confirm the support within the Rady Faculty of Health Sciences, other Departments of the Faculty of Science have also been contacted. The initiative was discussed between the Department Heads of the Department of Microbiology, Department of Biological Sciences and Department of Chemistry, and they all expressed support and raised no concerns to Dr. Gabor Fischer (Department of Pathology).

Following the generation of such a wide interest from all other all Basics Science departments, faculty and students, Dr Fischer then presented the proposal to and completed preliminary discussions about the program with the Vice-Provost (Health Sciences) and Dean, Rady Faculty of Health Sciences, Vice Dean of Research, Rady Faculty of Health Sciences, as well as the Associate Dean of Research, Max Rady College of Medicine. They both expressed their full support for the program. Overall, based on the discussions completed to date, it has become quite clear that there is a need to establish a graduate program in the Department of Pathology that will add new dimensions to the Faculty of Graduate Studies at the University of Manitoba, fill a gap between the clinical and basic science world, and offer a platform to the students wishing to pursue a research degree in the field of Pathology and Translational Medicine.

C-3.3 How have students and faculty been informed of the intent to establish this program?

Prior to the submission of the SOI and the proposed PhD program in Pathology and Laboratory Medicine, Dr. Fischer, Department Head (Pathology) first initiated comprehensive discussions with faculty within the department, new or established researchers and clinical pathologists who are currently actively engaged in research. During the process of those conversations, various aspects related to the program such as the probable format, a need for establishing the program and the interest of the faculty members, were discussed. The new initiative was supported and the concept was introduced to at the Departmental Council meeting, where regular updates are also presented on the progress. These discussions were further extended to various student groups (currently pursuing or interested to pursue a research degree) and the students received briefings about the objectives/scope of the program. It was very encouraging to note that the students embraced the idea and were very excited and expressed great interest in the scope of the program.

C-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.)*

Note: this includes any programs currently offered at UM.

Ph.D in Pathology and Laboratory Medicine is not currently offered by University of Manitoba or by any other institute in Manitoba.

C-4.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Manitoba.

MSc students who have made excellent progress during their first year may be considered for transfer to the PhD program. Students within a MSc relevant degree program in a related biological Science or any related medical discipline could be eligible.

C-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.)*

PhD Programs in Pathology Departments are available in some other centers at other Universities in the country (University of Alberta, University of British Columbia, Dalhousie University, University of Toronto, and University of Western Ontario), however they are not available on the Prairies. What we can offer would fill a gap in our graduate education system in Manitoba by providing an educational opportunity at the junction of basic science and diagnostic laboratory medicine with access to diagnostic material, diagnostic expertise and a great research environment. The graduating individuals can work in research, industry, can contribute to tumor banking, policy making and collaborative research in multiple different ways.

C-5.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Canada.

None

C-6 Describe the current and projected labour market demands in Manitoba for graduates of this Program:

(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.)

There is a huge demand for the trained researchers in the field of Pathology and Laboratory Medicine both in academia and industry. The graduating individuals can work in research and build an academic career. They can also work in industry at pharmaceutical and biotech companies and can contribute to develop and test biomarkers, monitor drug efficacy and side effects and developing proficiency testing for other laboratories. Another option is working in tumor banking and participating in the design and execution of clinical trials. They can also work in regulatory agencies, accrediting bodies and can contribute to oversight of laboratories. In addition, working in policy making, consultant and advisory roles for government, and research administration for public and academic agencies (ethics and scientific) are also possibilities for employment.

C-7 If copies of any internal or peer evaluations with respect to this new program of study are being provided with this proposal, please indicated how any issues identified by these evaluations have been addressed and attach any relevant documents as available:

We have discussed the plan to initiate the program broadly within the Max Rady College of Medicine and Rady Faculty of Health Sciences with Basic Science Department Heads, students, key researchers in the department and leadership (Dean, Vice Dean and Associate Dean). Following this, Vice-Provost (Academic Planning and Programs) was also engaged to ensure proper communication with the highest Administrative leadership levels. The potential general issues that can be raised during the implementation of any new program are infrastructure, space, instrumentation and administrative support. The program can be safely accommodated at 401 Brodie Centre, in the rooms and offices of the Pathology Department. The existing infrastructure and instrumentation is sufficient to run the program, and the administrative support can be managed with the available capacity. We don't anticipate any more issues related to the start and implementation of the program. Furthermore, Associate Dean (Health Sciences), Faculty of Graduate Studies and Programs Coordinator from the Faculty of Graduate Studies have been consulted throughout the application preparation process and their input has thoroughly been incorporated in the application. The Faculty of Graduate studies at the University of Manitoba will coordinate the further review of this application.

SECTION D – REQUIRED RESOURCES AND FINANCIAL IMPLICATIONS

D-1 If one-time or pilot funding are being requested to support this new program of study, please identify the amount of funding being requested:

No such funding is being requested.

D-2 If ongoing funding being requested to support this new program of study, please identify the amount of funding being requested:

No such funding is being requested.

D-3 If new funding is not being requested, how will the program be funded?

The administrative resources have been reviewed. The Department has a Departmental Administrator (entirely devoted to the department), a Program Administrator (entirely devoted to the Department), a Business Manager (shared with

two other Departments) and a Finance and Administrative Assistant (shared with two other Departments). The job descriptions of the administrative support team members were reviewed by the Department Head and the Business manager, and modifications were made to accommodate the administrative support needs of the program. The PhD program will be supported by the Program Administrator.

The educational resources have also been reviewed. The Department has more than 60 faculty members including GFT and nil-salaried Pathologists, PhDs and UMFA members. We have 7 Professors and 10 Associate Professors, the majority of the remaining faculty members are Assistant Professors. The Pathologists provide clinical service, however based on their collective agreement they are expected to teach and have been contributing to postgraduate, graduate and undergraduate teaching. Since there is no need to build a new course, the available faculty members can handle the required teaching in the PhD program.

Since this is a laboratory research based program, it is important to address the departmental research funds. The Principal Investigators within the department have been successful in securing not only several national grant funding to conduct their research but have also received external competitive funding for research infrastructure as well. The available funds will serve the PhD Program very well.

D-4 List any external sources of funding that will be used to support the implementation or delivery of this new program of study: *(Provide such information as agreements for funding from industry or external grants and indicate the anticipated length of time for each agreement.)*

The researchers in the department have been very successful in securing funding (over \$2,000,000 in recent years)from national agencies that were highly competitive which will amply support their research endeavors as well as the salaries of their research trainees and technical support staff.

D-5 What are the resource implications to the institution (budget, IT, library, laboratory, computer, space, practicum liability insurance, student services, etc) in delivering this new program of study?

Because the number of students anticipated is low, we anticipate minimal little resources implications to the institution. The Department will support the associated costs by using the existing budget. Moreover, , the Neil John Mclean Health Sciences library was also consulted and provided the program with a library statement confirming that the library material is adequate to support the proposed program. Costs associated with the lab research will be supported by the principal investigator's research grant funding. The research laboratories in the department of Pathology are already equipped with major infrastructure equipment including fluorescence and laser dissection microscopes, as well as molecular biology tools (Western blot equipment, Thermal cycler, and spectrophotometer) and cell culture facilities. Thus, these already existing departmental resources, infrastructure and equipment will lend strong support for the successful launch of the Ph.D. Program.

D-6 Please describe new and existing staffing resources needed to provide this new program of study. *Include reallocation of existing faculty, hiring of new faculty, administrative and support services and any other considerations.*

As indicated in D-4, the Department of Pathology has more than sixty faculty members, including mostly GFT and non-GFT pathologist positions, and two UMFA members. The Department is prepared to absorb the teaching load. Generally, many Pathologists regularly participate in teaching the IMED 7212 course currently offered by the Department of Pathology. At least six faculty members primarily appointed in the Department of Pathology are eligible to supervise the doctoral students, whereas three cross-appointed faculty members are eligible to help as a co-supervisor. Moreover, the

Department of Pathology has one administrative staff who is responsible to facilitate the graduate courses, including those offered in the Ph.D. program, and this has been addressed in the job description. Hence, the required support for teaching, supervision and administrative tasks will be managed by the existing resources.

D-7 Provide a program implementation plan for the new program of study by academic year (start to maturity) that includes any elements to be phased in (e.g., new faculty hires, distribution of existing faculty and support staff) from launch to maturity:

Please see D-6. The need will be managed internally by the start date.

Year 1

Year 2

Year 3

Year 4

D-8 Please describe the effect of this new program on existing capital infrastructure and equipment:

Currently, the Department of Pathology has two fully functioning labs which are already well equipped with the necessary instruments and tools to undertake the funded research, including fluorescence and laser dissection microscopes, molecular biology tools (Western blot equipment, Thermal cycler, and spectrophotometer) and cell culture facilities. The maintenance of the infrastructure and the consumables are covered by existing resources. Altogether, this already existing infrastructure and equipment support will be very helpful for the successful launch of the Ph.D. Program. The PhD program will have no negative impact on the existing infrastructure, in fact it will contribute to the efficient utilization of the resources.

D-9 If capital funding is being requested to support additional specialized program materials such as infrastructure or equipment required to provide this new program of study, please provide a detailed description of the use of this capital:

. The program can utilize the existing capital infrastructure within the Department, no other investments are needed for this purpose. As it is described above, after reviewing our resources and infrastructure we are confident that a program will run successfully on the existing resources and infrastructure.

SECTION E– TUITION

E-1 What are the proposed tuition fees?

The tuition fees will be determined according to the guidelines of the University and Faculty of Graduate Studies, as outlined by this link.

Furthermore, the Registrar's office will also be consulted with respect to fees. Similar to other PhD programs, students will be assessed two years (or 4 terms) of program fees, plus a continuing fee in every term where program fees are not assessed until graduation. Annual increases to tuition and continuing fees are subject to the UM and provincial approval processes, as appropriate.

E-2 Please provide a rationale for the tuition fee proposed. *(For example, are these tuition fees comparable to tuition for existing programs within the academic unit or to tuition for similar programs offered at other institutions?)*

The fees are determined by the University, and the Department will follow these guidelines.

The fee schedule proposed is based on the University's standard Full-Time Ph.D. program fees and is similar to other Ph.D. programs at Rady Faculty of Health Sciences. Based on the information available to us the tuition fees are within the range of the tuition fees required by other universities for PhD Programs in Pathology and Laboratory Medicine.

E-3 Please describe any additional fees that would apply to a student in this program?

UM INTERNAL REQUIREMENTS: Please note any new course-fees proposed in support of this program. Please provide a rationale for any new fees. Are these fees comparable to fees for existing programs within the academic unit or for similar programs offered at other institutions?

No additional fees are required. Students will be assessed the same compulsory fees as students enrolled in other graduate programs at the other Ph.D. program at the Rady Faculty of Health Sciences, University of Manitoba.

E-4 Please describe any specific supports to encourage affordability and accessibility to the program:

These supports will be provided according to the University of Manitoba guidelines. Moreover, students will be encouraged to apply for Graduate studentships which are available through University (such as Graduate studentship, scholarship offered by Rady Faculty of Health Sciences), Province (such as the doctoral awards offered by Research Manitoba) and National funding sources (such as Canadian Institute of Health Research).

SECTION F – SIGNATURES

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

SUBMITTED BY:

President:

Name:

Signature:

Date:

Vice-President/Academic:

Name:

Signature:

Date:

For use by joint programs only:

President:

Name:

Signature:

Date:

Vice-President/Academic:

Name:

Signature:

Date:

SUBMIT COMPLETED FORM

PROVOST'S OFFICE ONLY 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



**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.

Overview	
Institution:	University of Manitoba
Program Name:	Pathology PhD Program
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca
Date:	7/14/2022

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
REVENUE INFORMATION										
Contribution from Institution		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tuition		\$ 6,060	\$ 6,060	\$ 12,575	\$ 6,515	\$ 14,720	\$ 2,145	\$ 15,272	\$ 552	\$ 15,272
Student Fees		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Unit (Existing Resources)		\$ 35,880	\$ 35,880	\$ 66,820	\$ 30,940	\$ 84,520	\$ 17,700	\$ 87,478	\$ 2,958	\$ 87,478
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Revenue (A)	\$ -	\$ 41,940	\$ 41,940	\$ 79,394	\$ 37,454	\$ 99,239	\$ 19,845	\$ 102,749	\$ 3,510	\$ 102,749

MEDT Form

Institution:	University of Manitoba
Program Name:	Pathology PhD Program
Contact Information:	Amanda Kinnell, Senior Finance Officer, Max Rady College of Medicine amanda.kinnell@umanitoba.ca
Date:	7/14/2022

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
EXPENDITURE INFORMATON										
New Academic Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Academic Salaries - Direct		\$ 28,680	\$ 28,680	\$ 59,368	\$ 30,688	\$ 76,807	\$ 17,439	\$ 79,495	\$ 2,688	\$ 79,495
New Professional/Support Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Professional/Support Salaries - Direct		\$ 7,200	\$ 7,200	\$ 7,452	\$ 252	\$ 7,713	\$ 261	\$ 7,983	\$ 270	\$ 7,983
Operating Expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Student Support		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Indirect Salary Expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administrative Overhead		\$ 1,682	\$ 1,682	\$ 3,489	\$ 1,808	\$ 4,085	\$ 595	\$ 4,238	\$ 153	\$ 4,238
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Expenditures (B)	\$ -	\$ 37,562	\$ 37,562	\$ 70,309	\$ 32,747	\$ 88,604	\$ 18,295	\$ 91,716	\$ 3,111	\$ 91,716

SENATE PLANNING AND PRIORITY COMMITTEE (SPPC)
New Program Approval - Financial Form

FACULTY / SCHOOL Max Rady College of Medicine
PROGRAM Pathology PhD Program

1. STAFFING REQUIREMENTS (FTE)	Year 1	Year 2	Year 3	Year 4	Year 5
New Academic Positions (FTE) (Appendix A)	-	-	-	-	-
New Professional and Support Positions (FTE) (Appendix A)	-	-	-	-	-
New Indirect Staff (FTE) (Appendix A)	-	-	-	-	-
Subtotal Staffing Requirements (FTE)	-	-	-	-	-

2. PROGRAM COSTS					
Direct Program Costs					
New Academic Salaries (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Academic Salaries (incl bpl) (Appendix A)	28,680	59,368	76,807	79,495	82,277
New Professional/Support Salaries (incl bpl) (Appendix A)	-	-	-	-	-
Existing Professional/Support Salaries (incl bpl) (Appendix A)	7,200	7,452	7,713	7,983	8,262
Operating Expenses (Appendix B)	-	-	-	-	-
Student (Graduate/Undergraduate) Support (Appendix C)	-	-	-	-	-
Major Equipment (Appendix D)	-	-	-	-	-
Vehicles (Appendix D)	-	-	-	-	-
Renovations (Appendix D)	-	-	-	-	-
Furniture (Appendix D)	-	-	-	-	-
Other Capital (Appendix D)	-	-	-	-	-
Subtotal Direct Program Costs	\$ 35,880	\$ 66,820	\$ 84,520	\$ 87,478	\$ 90,540

Indirect Program Costs

New Indirect Salary Expenses (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Indirect Salary Expenses (incl bpl) (Appendix A)	-	-	-	-	-
Tax on Grant and Tuition Revenue	1,076	2,232	2,613	2,711	2,812
Administrative Overhead	606	1,257	1,472	1,527	1,584
Subtotal Indirect Program Costs	\$ 1,682	\$ 3,489	\$ 4,085	\$ 4,238	\$ 4,397

Total Program Costs (Direct & Indirect)	\$ 37,562	\$ 70,309	\$ 88,604	\$ 91,716	\$ 94,936
---	------------------	------------------	------------------	------------------	------------------

3. ENROLMENT	Year 1	Year 2	Year 3	Year 4	Year 5
Expected Enrolment (headcount)	1	2	3	3	3
Expected Enrolment (credit hours)	-	-	-	-	-

4. PROGRAM REVENUE ALLOCATED TO FACULTY/SCHOOL

Operating Grant Revenue (see note)					
Tuition Revenue (Appendix E)					
• Credit Hour Based					
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
• Program Based	6,060	12,575	14,720	15,272	15,844
• Program/Course Specific Fees	-	-	-	-	-
• Other Compulsory Student Fees	-	-	-	-	-
Other revenue					
Total Program Revenue	\$ 6,060	\$ 12,575	\$ 14,720	\$ 15,272	\$ 15,844

5. EXISTING RESOURCES

From Operations:					
Academic Salaries (Appendix A)	\$ 28,680	\$ 59,368	\$ 76,807	\$ 79,495	\$ 82,277
Professional and Support Salaries (Appendix A)	7,200	7,452	7,713	7,983	8,262
Indirect Salaries (Appendix A)	-	-	-	-	-
Current/prior years surplus (carryover)					
From Other Sources:					
Subtotal Existing Resources	\$ 35,880	\$ 66,820	\$ 84,520	\$ 87,478	\$ 90,540

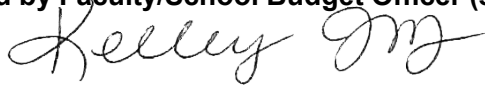
6. Program shortfall (surplus) (Program Costs -Program Revenue - Existing Resources)	\$ (4,378)	\$ (9,085)	\$ (10,635)	\$ (11,034)	\$ (11,447)
Internal Funds Requested through Strategic Allocation					
Funds Requested of the Provincial Government					
Balance (should be zero)	\$ (4,378)	\$ (9,085)	\$ (10,635)	\$ (11,034)	\$ (11,447)



08/03/22

Submitted by Faculty/School Budget Officer (signature)

Date

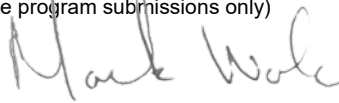


August 15, 2022

Reviewed by Graduate Studies Dean or Designate (signature)

Date

(For graduate program submissions only)



08/05/22

Reviewed by University Budget Officer (signature)

Date

Average Salary Increase 3.5%
Average Benefits and Pay Levy 20%

Appendix A - Salary Expenses

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

	Year 1		Year 2		Year 3		Year 4		Year 5	
	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary
NEW Academic										
Excluded Academic Admin	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professor	-	-	-	-	-	-	-	-	-	-
Assoc/Asst Professor or Senior Instructor	-	-	-	-	-	-	-	-	-	-
Lecturer/Instructor/Sessionals	-	-	-	-	-	-	-	-	-	-
Librarians	-	-	-	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-	-	-	-
Subtotal New Academic Salaries	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy	-	-	-	-	-	-	-	-	-	-
Total New Academic Salaries (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professional and Support Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	-	-	-	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal New Professional and Support Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy	-	-	-	-	-	-	-	-	-	-
Total New Professional and Support Staff (incl. BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Indirect Staff (Within your faculty/school)										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	\$ -	-	-	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal New Indirect Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy	-	-	-	-	-	-	-	-	-	-
Total New Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total New Staff		<u>\$ -</u>		<u>\$ -</u>		<u>\$ -</u>		<u>\$ -</u>		<u>\$ -</u>

Appendix A - Salary Expenses

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

EXISTING (Within your faculty/school)	Year 1		Year 2		Year 3		Year 4		Year 5	
Academic	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary
Excluded Academic Admin	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Professor	-	-	-	-	-	-	-	-	-	-
Assoc/Asst Professor or Senior Instructor	0.10	13,900	0.20	28,773	0.25	37,225	0.25	38,528	0.25	39,876
Lecturer/Instructor/Sessionals	2.00	10,000	4.00	20,700	5.00	26,781	5.00	27,718	5.00	28,688
Librarians	-	-	-	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Academic Salaries	2.10	23,900	4.20	49,473	5.25	64,006	5.25	66,246	5.25	68,564
Benefits and Pay Levy		4,780		9,895		12,801		13,249		13,713
Total Existing Academic Salaries (including BPL)	2.10	\$ 28,680	4.20	\$ 59,368	5.25	\$ 76,807	5.25	\$ 79,495	5.25	\$ 82,277
Professional and Support Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	0.10	6,000	0.10	6,210	0.10	6,427	0.10	6,652	0.10	6,885
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Professional and Support Staff	0.10	6,000	0.10	6,210	0.10	6,427	0.10	6,652	0.10	6,885
Benefits and Pay Levy		1,200		1,242		1,285		1,330		1,377
Total Existing Professional and Support Staff (incl. BPL)	0.10	\$ 7,200	0.10	\$ 7,452	0.10	\$ 7,713	0.10	\$ 7,983	0.10	\$ 8,262
Indirect Staff										
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
AESES	-	-	-	-	-	-	-	-	-	-
CUPE TA's	-	-	-	-	-	-	-	-	-	-
Subtotal Existing Indirect Staff	-	-	-	-	-	-	-	-	-	-
Benefits and Pay Levy		-		-		-		-		-
Total Existing Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Existing Staff		\$ 35,880		\$ 66,820		\$ 84,520		\$ 87,478		\$ 90,540
GRAND TOTAL		\$ 35,880		\$ 66,820		\$ 84,520		\$ 87,478		\$ 90,540

App B - Operating Exp.

Appendix B - Operating Expenses

SENATE PLANNING AND PRIORITY COMMITTEE NEW PROGRAM APPROVAL PROCESS

	<u>Direct Expenses</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
700BGT	Travel - Budget (includes visiting speakers, orientation, research day)	\$ -	\$ -	\$ -	\$ -	\$ -
701BGT	Hospitality - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
704BGT	Printing and Duplicating - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
706BGT	Consumable Materials/Supplies Budget (includes computers)	\$ -	\$ -	\$ -	\$ -	\$ -
708BGT	Telecommunications - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
710BGT	Other Expenses (Nonconsumable) Budget	\$ -	\$ -	\$ -	\$ -	\$ -
713BGT	Insurance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
716BGT	Externally Contracted Serv - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
718BGT	Professional Fees - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
740BGT	Repairs and Maintenance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Direct Operating		\$ -	\$ -	\$ -	\$ -	\$ -

Increase in operating expenses expected to be negligible, given the number of students in this program

Appendix C - Student Support

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

<u>Graduate / Undergraduate Support Expense</u>		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
7700	Scholarships	\$ -	\$ -	\$ -	\$ -	\$ -
7710	Bursaries	\$ -	\$ -	\$ -	\$ -	\$ -
7720	Awards					
Subtotal Operating		\$ -	\$ -	\$ -	\$ -	\$ -

Any costs of Student Stipends expected to be covered from Research Grant funding

Appendix D - Capital Costs

SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS

Capital Item	Year 1			Year 2			Year 3			Year 4			Year 5		
	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total
Major Equipment	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Vehicles	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Renovations	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Furniture	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Other (<i>list</i>)			-			-			-			-			-
...															
Subtotal Operating		<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>			<u>\$ -</u>	

Appendix E - Tuition

Fee Increase

3.8%

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

	22/23	23/24	24/25	25/26	26/27
	Year 1	Year 2	Year 3	Year 4	Year 5
1. EXPECTED ENROLMENT					
Headcount					
Undergraduate	-	-	-	-	-
Graduate	1	2	2	2	2
Graduate (continuing only)	-	-	1	1	1
Credit Hours					
Undergraduate	-	-	-	-	-
Graduate					

2. TUITION REVENUE GENERATED BY THE PROGRAM					
• Credit Hour Based - (enter credit hour rate in yr 1)	\$ -	\$ -	\$ -	\$ -	\$ -
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
• Program Based - (enter annual program fee in yr 1)	\$ 6,060	\$ 6,287	\$ 6,523	\$ 6,768	\$ 7,021
Undergraduate	-	-	-	-	-
Graduate	6,060	12,575	13,046	13,535	14,043
• Continuing Fee - (enter annual continuing fee in yr 2)		\$ 1,613	\$ 1,673	\$ 1,736	\$ 1,801
Graduate	-	-	1,673	1,736	1,801
Total Tuition Fees	\$ 6,060	\$ 12,575	\$ 14,720	\$ 15,272	\$ 15,844
• Program/Course Specific Fees					
Lab Fees - (enter amount in applicable years)					
Field Trip Fees - (enter amount in applicable years)					
(Fee description/rate)					
..... (add as required)...					
..... (add as required)...					
Total Program/Course Specific Fees	\$ -	\$ -	\$ -	\$ -	\$ -

TOTAL TUITION AND FEES GENERATED BY THE PROGRAM	\$ 6,060	\$ 12,575	\$ 14,720	\$ 15,272	\$ 15,844
--	-----------------	------------------	------------------	------------------	------------------

3. TUITION REVENUE ALLOCATED TO THE FACULTY					
• Credit Hour Based - Undergraduate (enter amount)					
• Credit Hour Based - Graduate	-	-	-	-	-
• Program Based	6,060	12,575	13,046	13,535	14,043
• Continuing Fee (enter amount)		-	1,673	1,736	1,801
• Program/Course Specific Fees	-	-	-	-	-
• Other Compulsory Student Fees (enter amount)					
TOTAL TUITION REVENUE ALLOCATED TO THE FACULTY	\$ 6,060	\$ 12,575	\$ 14,720	\$ 15,272	\$ 15,844

Supplementary Regulations Faculty of Graduate Studies (FGS)

**Name of Unit/Program: Pathology
(M.Sc., & M.Sc. Pathologists' Assistant, Ph.D.)**

FGS Academic Guide Regulation 2021/22

Supplementary Regulation

The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. The integrity of the process is at stake. The major goal of this guide is to prevent potential problems that may affect the completion of a student's program. It is the responsibility of students and the department/unit offering a graduate program to read and follow the policies contained herein.

All regulations as laid out in the Faculty of Graduate Studies Academic Guide are subject to revision by the appropriate bodies of the Faculty of Graduate Studies. This compendium is presented as the most recent set of regulations as a guideline for students and staff. Individual departments/units may have additional regulations that supplement these general regulations. All such supplementary procedures and regulations must be approved as specified by the By-Laws of the Faculty of Graduate Studies, be published and available to students, and kept on file in the Faculty of Graduate Studies Office.

For those programs that are administered through a Faculty (as opposed to a Department) the term "Department" should be substituted by "Unit" within this document (i.e. Department Head becomes Unit Head.)

PREFACE

The Faculty of Graduate Studies is a pan-University faculty charged with the oversight of the administration of all graduate programs at the University. Therefore these regulations apply to all graduate students in all programs in all academic units. Individual units may require specific requirements above and beyond those in the following document, and students should consult unit supplementary regulations for these specific regulations. All unit supplementary regulations require approval of the Faculty of Graduate Studies.

Definitions

The "Dean, Faculty of Graduate Studies" shall be taken to mean the Dean, Faculty of Graduate Studies or designate.

"Unit" shall be taken to mean the academic unit where the graduate student is pursuing his/her studies. Generally, this is the department. For Faculty-based programs, the Dean is the *de facto* Head of the unit. The term "unit" shall also include Schools of Faculties within the University. The Dean of the Faculty of Graduate Studies is the *de facto* Head of interdisciplinary programs administered by the Faculty of Graduate Studies. The Head of any unit may designate any of his/her responsibilities in this policy to another member of the unit, such as the Graduate Chair.

1.1 Application and Admission Procedures

The application (and all required documentation) is to be submitted directly to the Faculty of Graduate Studies via the online application system. **Applicants should contact the department/unit to which they are applying for the procedures and requirements which are specific to the program of application.** Contact information for each department/unit can be found on the [Graduate programs of study website](#).

1.1.1 Process:

Enquiries regarding admission can be made by email or in person at:

Department of Pathology
401 Brodie Centre
727 McDermot Avenue
Winnipeg, Manitoba, R3E 3P5

Phone: 204-789-3212
email: pathology@umanitoba.ca

1.1.1 (a) A completed official application for admission form must be submitted, together with the application fee and supporting documentation, to the Faculty of Graduate Studies, via the online application system. **Note:** International students must pay special attention to the appropriate requirements with respect to transcripts (see application form for details).

1.1.1 (b) Applications are subsequently reviewed by the unit offering the program which will decide whether the applicant meets the unit's criteria including, but not limited to, availability of advisors, space, and facilities.

1.1.1 (c) Notification of recommended/rejected applications is sent by the Head of the unit to the Faculty of Graduate Studies. Applications recommended for admission are checked to determine if they meet the Faculty of Graduate Studies' eligibility requirements. The Faculty of Graduate Studies then notifies applicants of their acceptance or rejection.

Application and admission procedures and forms are the same as FGS requirements except:

Two additional application documents are required:

- 1) A curriculum vitae or resume
- 2) A "statement of intent" indicating the applicant's background, interests, future goals, and the rationale for applying to the program (one page write-up)

For the Ph.D in Pathology and Laboratory Medicine and M.Sc. Research/Thesis-based Program: Applicants must seek the provisional acceptance of a thesis advisor before submitting their application to the Faculty of Graduate Studies (**see department website for list of potential advisors**). The onus is on the applicant to contact a potential advisor to discuss potential graduate student positions and thesis projects. Prospective applicants will only be approved for admission when the proposed advisor agrees to accept the applicant. If an applicant has no provisional advisor, the application will be rejected.

For the M.Sc. Pathologists' Assistant Program: Prior provisional acceptance by an advisor is **NOT** required.

1.1.2 Deadlines for Recommended Applications (from Departments/Units to the Faculty of Graduate Studies)

The following are the deadlines for receipt by the Faculty of Graduate Studies of recommendations from departments/units.

Term	Start Date	Canadian/US	International
Fall	September	July 1	April 1
Winter	January	November 1	August 1
Summer	May	March 1	December 1

IMPORTANT: These are not application deadlines. Applicants are **required** to submit the application and documentation to the Faculty of Graduate Studies to meet the application deadline in place for a particular department/unit. Deadlines vary depending on the program to which the applicant is applying and whether the applicant is domestic or international. Deadlines can be found by clicking the appropriate application program page on the [Graduate programs of study website](#).

For upcoming application deadlines, please consult the Graduate Program Page: http://umanitoba.ca/faculties/graduate_studies/admissions/programs/pathology.html

For the M.Sc. Pathologists' Assistant Program: The class size is normally limited to two students every second year so that more individual attention can be given to the students during their practicum. Thus, there is normally a single intake each September. The application process for Canadian/US students begins September 1. All supporting materials including letters of reference, official transcripts, and application fee must be submitted by deadline noted at the link above. Application review and interviews will occur in April/May. The Department will submit their recommendations to the Faculty of Graduate Studies, and the Faculty of Graduate Studies will notify the successful candidates of acceptance.

If admitted to the Pathologists' Assistant Program, an official criminal record check will be required prior to the start of the program.

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>In addition, foreign language students may be asked by the department/unit to complete the CanTEST prior to or following registration in the Faculty of Graduate Studies and, if need be, the department/unit may recommend remedial measures in language skills based on the results of the CanTEST. Some units may require a specific test or test scores greater than those indicated above. Students should check department/unit supplementary regulations for details.</p>	
<p>1.1.8 English Language Proficiency Test Exemption List</p> <p>Applicants holding secondary school diplomas and/or recognized university degrees from countries on the Faculty of Graduate Studies English Language exemption list are not required to submit an English Language Proficiency score. For more information please see our website.</p>	
<p>1.1.9 Letters of Recommendation</p> <p>Letters of Recommendation are to be completed via the online application. Recommendation letters submitted via post or email are not accepted. Applicants are required to add their 'Recommendation Provider(s)' contact information so that each recommender is sent an automated email notification.</p> <p>Generally, two (2) Letters of Recommendation must be submitted to the Faculty of Graduate Studies. For the number of recommendation letters necessary, applicants should review their specific Graduate programs of study website.</p>	<p>For the Ph.D in Pathology and Laboratory Medicine and M.Sc. Research/Thesis-based Program, <u>2</u> letters of recommendation must accompany the application.</p> <p>For the M.Sc. Pathologists' Assistant Program, <u>3</u> letters of recommendation must accompany the application.</p>
<p>1.1.10 Admission Tests</p> <p>Some departments/units require admissions tests, such as the Graduate Record Examination (GRE®) or the Graduate Management Aptitude Test (GMAT™). These requirements are listed in the supplementary regulations of the particular department/unit, and if required, the scores must be submitted at the time of application.</p>	<p>For the M.Sc. Pathologists' Assistant Program: After initial screening, selected applicants will be interviewed by the Pathologists' Assistant Program Committee. Normally, two students will be selected for admission into the program.</p>
<p>1.1.11 Entrance Requirements</p> <p>The minimum standard for acceptance into any category in the Faculty of Graduate Studies is a 3.0 Grade Point Average (GPA) or equivalent in the last two (2) previous years of full time university study (60 credit hours).</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.</p>	<p>The minimum standard for acceptance into the Department of Pathology is a 3.2 Grade Point Average (GPA) or equivalent in the last two previous years of full time university study (60 credit hours).</p>
<p>1.1.12 Eligibility of University of Manitoba Staff Members</p> <p>A staff member at The University of Manitoba at the rank of Assistant Professor or above is not eligible to apply for admission to a graduate program in the department/unit in which the appointment is held.</p>	
<p>1.2 Registration Procedures</p> <p>1.2.1 Registration</p> <p>Pre-Master's students are not normally allowed to register in 7000-level courses or above, with the exception of GRAD 7500, unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate. See General Regulations - Pre-Master's for additional information.</p> <p>Undergraduate students may be permitted to register in 7000-level courses or above on recommendation of the department/unit offering the graduate course, subject to the conditions listed below.</p> <ul style="list-style-type: none"> Undergraduate students must obtain permission from the department/unit head and course instructor before registering for a graduate course. Only undergraduate students completing an undergraduate degree at the University of Manitoba are eligible to enroll in a graduate course. 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>2. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a 1000- or 2000-level undergraduate course unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate.</p> <p>3. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a previously completed course.</p>	
<p>1.4 Student Status/Categories of Students</p> <p>1.4.1 Full-Time and Part-Time Students</p> <p>Graduate students are admitted as full-time students. Graduate student status is not determined by the number of credit hours taken per term. Therefore, students who spend much of the time in a laboratory or library engaged in research or writing a thesis/practicum, or who spend part of the academic year engaged in research elsewhere, are regarded as full-time students.</p> <p>Student status should be determined by the student and advisor/co-advisor, and changes must be requested on the “<u>Part-Time Status</u>” form. The form must be approved by the department/unit Head and submitted to the Faculty of Graduate Studies.</p> <p>Declaration of full/part time status must be made prior to the end of the registration revision period in the Fall and/or Winter terms and within one (1) month of the start of the Summer term.</p> <p>For every full year (12 months) that a Master’s student is declared as part time, they will receive an additional four (4) months in time to complete their program. For every two (2) full years (24 months) a Master’s student is declared as part time, they will receive an additional year (12 months) in time to complete their program. Master’s students who declare part time status for less than one year (12 months) are not permitted any additional time to complete their program. Retroactive status changes will not be made.</p> <p>For every two (2) full years (24 months) that a Ph.D. student is declared as part time, they will receive an additional four (4) months in time to complete their program. Ph.D. students who declare part time status for less than two (2) full years (24 months) are not permitted any additional time to complete their program. Retroactive status changes will not be made.</p>	<p>For the <u>Ph.D in Pathology and Laboratory Medicine and M.Sc. Research/Thesis-based Program</u>:</p> <p>Admission and maintenance of full-time status is <u>highly</u> recommended throughout this program. <u>However, part time status is also allowed.</u></p> <p>For the M.Sc. Pathologists’ Assistant Program:</p> <p>Full-time status is mandatory.</p>
<p>1.4.2 Pre-Master’s Or Qualifying Students</p> <p>In specific cases where the academic background of the student is judged to be insufficient for the given program in a department/unit, the department/unit may recommend that the student be admitted to a Pre-Master’s program of study. The Pre-Master’s program is intended to bring the student’s standing to approximately the level of an Honours graduate in the major department/unit, and to provide any necessary prerequisites for courses.</p>	
<p>1.4.3 Occasional Students</p> <p>A student wishing to take graduate courses with no intention of applying them toward an advanced degree at The University of Manitoba is classified as an occasional student. Occasional students must meet the same degree and grade point average entrance requirements as regular graduate students and must write final examinations in the courses taken (unless audited), but will not receive credit toward a degree. In special circumstances, an occasional student may apply for permission to proceed to a degree program and also apply for transfer, for credit, of courses previously taken in the "occasional" category.</p> <p>Occasional student status is not advised for international students due to study permit limitations. If you are an international student interested in becoming an occasional</p>	

commensurate with degree being sought.			
Student must successfully defend their thesis (where required), as determined by the assigned examining committee, in real-time.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000	
Student in doctoral program must complete a candidacy exam (or equivalent) as required by their program and determined by the assigned examining committee.	GRAD 8010	GRAD 8010	
Student must demonstrate knowledge of the University of Manitoba's policy on academic integrity, plagiarism, and cheating.	GRAD 7500	GRAD 7500	
Student must conduct research in a safe and ethical manner, referring to their respective ethics board and supervisor(s) to ensure respect is maintained for: human dignity and/or animal welfare; vulnerable persons; informed consent; justice and diversity; confidentiality and privacy; beneficence and non-maleficence in the work that they conduct.	GRAD 7300	GRAD 7300	
Student must complete coursework as required by their program.			
Individual unit BFARs available on the Graduate Studies website .			
2.3 Academic Performance Student progress shall be reported at least annually, (but not to exceed once every four (4) months), to the Faculty of Graduate Studies on the "Progress Report" form. Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will normally be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".			
2.4 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 six (6) 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.			<p>Students in either the Ph.D in Pathology and Laboratory Medicine, M.Sc. Research/Thesis-based Program or the M.Sc. Pathologists' Assistant Program are <u>required</u> to achieve a minimum grade of a B in Introduction to Disease Mechanisms (IMED 7212).</p> <p>For the M.Sc. Pathologists' Assistant Program: At the completion of their Pathology rotations/courses (see course list in section 4.4), students must attain a grade of "Pass" or a minimum grade of a B.</p> <p>Students who obtain an unsatisfactory grade in</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>must demonstrate an ability for independent investigation, original research or creative scholarship. This is expected to be presented in a thesis with a degree of literary skill and by an oral examination wherein the candidate exhibits mastery of their field. The Ph.D. is a research degree and is not conferred by The University of Manitoba solely as a result of coursework study.</p> <p>Although general regulations apply to all students, individual department/units may have additional regulations that supplement these general regulations. All such supplementary regulations must be approved (as specified by the By-Laws of the Faculty of Graduate Studies), be published and available to students (please refer to the website), and be kept on record in the Faculty of Graduate Studies. All students should consult department/unit supplementary regulations for specific details regarding admission, program requirements, progression, and completion.</p>	
<p>5.1 Admission</p> <p>5.1.1 General criteria</p> <p>Normally, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 or equivalent in the last two (2) years of full time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program.</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and department/units may have higher standards and additional criteria. However, the criteria for admissions into the Ph.D. program are more stringent than for Master's programs; therefore, the completion of a Master's program does not guarantee admission into the Ph.D. program. Some department/units require completion of a thesis-based Master's program prior to admission to a Ph.D. program.</p>	<p><u>Applicants must hold an MSc degree in a related Biological Science or any related medical field discipline.</u></p> <p><u>See Section 1.1.1</u></p>
<p>5.1.2 Direct Admission from the Bachelor's Honours or Equivalent</p> <p>With special recommendation of the department/unit concerned, applicants with an honours Bachelor's degree or equivalent may be considered for entry to Ph.D. study. These students must be outstanding in their academic background (GPA well above 3.0 in the last two full years of undergraduate study).</p> <p>Note: This is the minimum requirement of the Faculty of Graduate Studies and department/units may have higher standards and additional criteria. Once admitted, these students must complete at least 24 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise, and will be assessed Ph.D. fees for three (3) years. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.</p>	
<p>5.1.3 Transfer from the Master's to the Ph.D. Program</p> <p>Students who have not completed a Master's program may transfer to the Ph.D. program within the same department/unit upon the recommendation by the Head of the department/unit to the Faculty of Graduate Studies. The recommendation should be made within four (4) terms (including Summer term) from the start of the Master's program. Fees paid, coursework completed and time spent in the Master's program will normally be credited towards the Ph.D. program. Students must complete at least 24 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.</p> <p>The request to transfer from a Master's to the Ph.D. program must be submitted to the Faculty of Graduate Studies at least one (1) month prior to the term for which the student intends to start the Ph.D. program. The applicant must indicate a request for transfer on the online admissions application.</p>	<p><u>MSc students who have made excellent progress during their first year may be considered for transfer to the PhD program.</u></p> <p><u>Scheduling:</u> <u>The transfer process should be initiated 3 terms after the student's commencement in the MSc program, and must be completed within 4 terms.</u></p> <p><u>Attendees:</u> <u>The MSc to PhD transition Examination Committee will consist of the student's Advisory Committee and the Chair of the GSAC.</u></p> <p><u>REQUIREMENTS:</u> <u>Transfers will be considered only when:</u></p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>The student will be admitted to a 3-year Ph.D. program and will pay a total of three years of program fees, including program fees paid in the Master's at the time of transfer. Students are cautioned that such transfers may impact on the duration of The University of Manitoba Graduate Fellowship.</p> <p>Students who have previously completed a recognized Master's degree and are initially admitted and registered in a Master's program may transfer to the Ph.D. program within the same department/unit on the recommendation of the student's advisor/co-advisor and Head of the department/unit. Where a student holds a Master's degree that would be sufficient for admission to the Ph.D. program, students must complete at least 12 credit hours of coursework, unless the individual department/unit's approved supplementary regulations specify otherwise. The student will be admitted to a 2-year Ph.D. program and will pay a total of two years of program fees, including program fees paid in the Master's at the time of transfer.</p>	<ol style="list-style-type: none"> 1. The student has completed a minimum of 6 credit hours and has obtained a minimum Cumulative Grade Point Average of 3.5 (on a 4.5 scale) in MSc courses; 2. The student and advisor must provide a written request for transition to the Chair of the GSAC (or designate). The student must include the reasons for requesting the transition; 3. The student must provide a signed document from the Advisory Committee members supporting the transition into the PhD program; 4. The student must arrange a meeting with the Chair of the GSAC, or designate, to discuss the following matters: a. Requirements and expectations of the MSc to PhD transition process; b. Timeline for completing the transition process;(15 months after registering for the MSc program) c. Members of the examining committee who -will be identified and selected as per FGS guidelines. d. Setting of an examination date and time. 5. Their intent to request a transfer from the MSc program to the PhD program, on the Faculty of Graduate Studies online Application for Admission within 3 terms of commencement of their program.
<p>5.1.4 Provisional Admission to the Ph.D.</p> <p>Students nearing the completion of the Master's degree may be accepted provisionally to the Ph.D. program for a 12 month period (commencing with the first registration in the Ph.D. program). Further registration in the Ph.D. program is contingent upon completion of all requirements of the Master's degree within the 12 months. Students must maintain continuous registration in their Master's program until its completion. Students will require assistance from the department/unit and the Faculty of Graduate Studies to complete dual registration on the "Concurrent Curriculum Permission" form in the Master's and Ph.D. program simultaneously.</p>	
<p>5.2 Student's Advisor, Co-advisor and Advisory Committee</p> <p>5.2.1 Student's Advisor</p> <p>Every Ph.D. student must have an advisor throughout their program, appointed by the Head of the department/unit. The advisor is responsible for supervising the student's graduate program. The advisor is the student's first point of contact at the University of Manitoba, and therefore should be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program, and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program, and stays informed of the student's scholarly activities and progress. The student's advisor also acts as a channel of communication to the student's advisory committee, the department/unit and the Faculty of Graduate Studies.</p> <p>The advisor must:</p> <ul style="list-style-type: none"> • hold an appointment in the student's department/unit. • be a member of the Faculty of Graduate Studies¹; 	<p><u>For the Ph.D. in Pathology and Laboratory Medicine Program students must negotiate a position with a potential advisor prior to applying. Written confirmation that an advisor is accepting students and will provide mentorship and lab resources must be attached to the application (email correspondence would be acceptable).</u></p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>5.2.5 Conflict of Interest</p> <p>There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba Conflict of Interest Policy and Conflict of Interest Procedures as well as the Conflict of Interest Between Evaluators and Students due to Close Personal Relationships should also be consulted.</p> <p>In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees should be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies). All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate). If the conflict is deemed sufficiently significant and cannot be mitigated, a new committee may need to be struck.</p>	
<p>5.3 Program of Study</p> <p>As soon as possible, but no later than 24 months after a student has commenced their program, the student's program of study should be registered with the Faculty of Graduate Studies on the "Program of Study and Appointment of Advisory Committee" form and should include:</p> <ul style="list-style-type: none"> • information about the minimum or expected time for completion of the degree; • coursework to be taken along with course classification ("S", "X", "A" or "O"); • any foreign language requirement; • the research area in which the thesis will be written. <p>The approval of the student's advisor/co-advisor and the Head of the department/unit are sufficient for registration. The program of study, including withdrawal from individual courses and any subsequent changes, must be approved by the student's advisor/co-advisor, the advisory committee, and the Head of the department/unit. Withdrawal from courses or changes of course category without such approval may result in the student being required to withdraw from the Faculty of Graduate Studies.</p>	
<p>5.4 Program Requirements</p> <p>All students must complete one of the following programs of study for the Ph.D. degree, unless otherwise specified in the approved department/unit supplementary regulations:</p> <ul style="list-style-type: none"> • Where admission to the Ph.D. is directly from a Master's degree, a minimum of 12 credit hours at the 7000- level or higher plus a thesis is required. Any further coursework beyond the minimum 12 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.¹ • Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at the 7000-level or higher with the balance of the coursework at the 3000-level or higher. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.¹ 	<p>Introduction to Disease (IMED 7212) is a 3 credit hour mandatory course for all students who are enrolled in the Ph.D. Program in the Department of Pathology.</p> <p>All students in this program are required to take a minimum 12 credit hours of course work, as well as complete a supervised research project, and present it as an acceptable thesis. IMED 7212 and an additional 9 credit hours of courses at the 7000 or 8000 level must contribute to the total of 12 credit hours in the program. Course selected by the student should be made in consultation with the advisor.</p> <p>Weekly Grand Round Seminar Series is optional but students are encouraged to attend whenever possible. Students must attend the Annual Departmental Research Day and it is mandatory</p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
¹ Unless professional accreditation requirements and/or the department/unit's supplementary regulations indicate otherwise.	that each student give at least one Departmental presentation each year.
5.4.1 Language Requirements Some department/unit specify a language requirement for the Ph.D. degree. Students are advised to check department/unit supplementary regulations regarding this requirement.	None
5.4.2 Advance Credit Advance credit for courses completed prior to admission to a Ph.D. program will be considered on a case-by-case basis. The student's department/unit makes the request to the Faculty of Graduate Studies by completing the " Advance Credit-Transfer of Courses " form. <ul style="list-style-type: none"> • Application for advance credit must be made within the first year of the program (please refer to Lapse or Expiration of Credit of Courses) • No more than 50% of the required coursework for the program can be achieved using advance credit. • A course may not be used for credit toward more than one degree, diploma or certificate. • The student must register at the University of Manitoba for at least two consecutive terms and must also complete the thesis and candidacy examination at The University of Manitoba. Regardless of the extent of advanced credit received, all students are required to pay applicable program fees. 	
5.4.3 Transfer Credit Courses within a program of study may be taken elsewhere and transferred for credit at the University of Manitoba. All such courses: <ul style="list-style-type: none"> • 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; • cannot be used for credit towards another degree; • may not exceed 50% of the minimum credit hours of coursework required of the student's graduate program at The University of Manitoba. 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.	
5.4.4 Lapse or Expiration of Credit of Courses Courses completed more than seven (7) years prior to the date of awarding of a degree may not normally be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content. Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed expired and cannot be used for credit toward that degree. In the event that coursework is no longer considered current or has expired, students must take additional course-work (as recommended by the department/unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.</p>	
<p>5.5 Time Limits</p> <p>5.5.1 Minimum Time Limit</p> <p>The minimum time requirement for the program of study for a Ph.D. degree will normally be two (2) years of study beyond the level of the Master's degree, or three (3) years beyond the level of a Bachelor's degree.</p> <p>5.5.2 Maximum Time Limit</p> <p>A student's candidature shall lapse if they fail to complete the degree within six (6) years following initial registration in the Ph.D. program. For those students who transfer from the Master's to the Ph.D., years spent in the Master's program are counted as years in the Ph.D. program.</p> <p>Ph.D. students who are declared as part-time will receive an additional four (4) months in time to complete their program for every two (2) years (24 months) they are declared as part time (see <u>Student Status/Categories of Students</u>) to a maximum of seven (7) years. Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted using the "<u>Time Extension Request</u>" form to the Dean of the Faculty of Graduate Studies at least three (3), but no more than four (4), months prior to expiration of the respective maximum time limit.</p> <p>A student who has not completed the degree requirements within the time limit or within the time limit of any extension that has been granted (please refer to "<u>Extension of Time to Complete Program of Study</u>" and "<u>Leaves of Absence</u>") will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>	
<p>5.6 Academic Performance</p> <p>Student progress shall be reported at least annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the "<u>Progress Report</u>" form.</p> <p>Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the Graduate Chair and/or department/unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will normally be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>	<p><u>An FGS Progress Report for each student in the Ph.D. Program must be submitted to the Department by May 31. The FGS Progress Report must be received by FGS by June 1 of each year.</u></p> <p><u>The Department of Pathology requires that students undergo an internal informal departmental review in the Fall of each year. The purpose of this review is to provide the student with an opportunity to determine whether they are meeting the expectations of the program. The student's annual progress report must be submitted by the department to FGS prior to June 1st of each year.</u></p> <p><u>In the fall of each year, Departmental Reviews will be scheduled between November 1 – November 30th for students enrolled in the Program. Students who have submitted their thesis for distribution and examination prior to November 1 will not be required to be evaluated that year.</u></p>
<p>5.6.1 Performance in Coursework</p> <p>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</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>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.</p>	
<p>5.6.2 Performance Not Related to Coursework</p> <p>Students may be required to withdraw from their Ph.D. program for reasons of unsatisfactory performance other than those related to failing grades. These include, but are not restricted to, unsatisfactory attendance and lack of progress in research and/or thesis preparation. Unsatisfactory performance must be reported to the Faculty of Graduate Studies on the “Progress Report” form. Students who fail to maintain satisfactory performance may be required to withdraw on the recommendation of the department/unit Head to the Dean of the Faculty of Graduate Studies.</p> <p>Students are normally expected to complete remedial action by the end of the subsequent term.</p>	
<p>5.7 Academic Requirement for Graduation</p> <p>All students must:</p> <ul style="list-style-type: none"> • maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+; • complete GRAD 7500 • complete GRAD 7300 • meet the minimum and not exceed the maximum course requirements; and • meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses). <p>Individual department/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements. A cumulative degree grade point average of 3.0 or greater is required in those courses that constitute the program of study for graduation in the Faculty of Graduate Studies.</p>	
<p>5.8 Candidacy Examination</p> <p>The candidacy examination is an absolute requirement of the Faculty of Graduate Studies and, as such, cannot be waived under any circumstances. However, the format and content of the candidacy exam varies from unit to unit. The purpose of the candidacy exam in doctoral programs is to determine the student's competence in the discipline with respect to understanding and absorbing a broad spectrum of material, and then researching, identifying, analyzing, synthesizing, and communicating ideas about that material in depth.</p> <p>At the time specified by the advisory committee, normally within the first year after the completion of the Ph.D. program coursework, but in no case later than one year prior to expected graduation, the student must successfully complete the formal candidacy examination.</p> <p>The examination is conducted according to a procedure established by the department/unit which is approved and documented in departmental/unit supplementary regulations. The department/unit supplementary regulations state the format and composition of the examination committee for the candidacy examination. The candidacy examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus, or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours.</p> <p>This examination, which must be independent from the thesis proposal, may be oral, written, or both and may cover subjects relevant to the general area of the student's research. The structure of the exam must be made known to the student well in</p>	<p><u>The Ph.D. candidacy exam is normally initiated within 3 years of beginning Ph.D. studies. The written component of the exam is in the form of a grant proposal to a major funding agency. The subject of the proposal is to be chosen by the student from any area of Pathology and Laboratory Medicine. The acceptability of the specific topic should be confirmed by the advisory committee, prior to the investment of substantial effort on the part of the candidate. The grant proposal should be a minimum of 15 and a maximum of 20 pages (double spaced) in length. The candidate should critically review the current state of the literature with appropriate referencing of the literature in the topic area. The grant proposal should consist of rationale (building on the introductory material), hypothesis, specific research objectives, experimental methodology and interpretation/ significance of the study. The advisory committee normally serves as the examining committee; however additional examiners may be added if the committee or Graduate Chair deem it necessary. The candidate</u></p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>advance of the exam. In the case where there is a required oral component, the student must be physically present.</p> <p>A "pass" decision of the examiners must be unanimous. Students must be provided with feedback on their performance and access to the reasons for the pass/fail.</p> <p>The Dean of the Faculty of Graduate Studies must be informed whether the candidate has "passed" or "failed" the candidacy examination on the "<u>Report on Ph.D. Candidacy Examination</u>" form.</p> <p>Any student who fails the candidacy examination twice will be required to withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p> <p>On successful completion of this examination, the student will be considered a candidate for the Ph.D. degree.</p>	<p><u>presents their grant proposal to the examining committee in a closed oral examination. The Graduate Chair or designate acts as Chair of the committee, ensuring that the process is followed and that both the candidate and examiners keep to time. The candidate presents a 30 minute (maximum) overview of the rationale, goals, specific objectives, strategy and significance of their grant. The supervisor as well as each examiner questions the candidate for approximately 20 minutes each. The discussion regarding pass or fail will follow immediately after the exam period in the absence of the student. First, individual examiners will be asked to rate the student performance as pass or fail for the Ph.D. Candidacy Exam on the basis of the student's responses to individual examiner's selected area of questioning. Second, an open discussion among examiners will follow. Third, examiners will be asked to provide a pass or fail grade for the overall performance of the student. The student will be notified immediately as to their grade (Pass or Fail). The content of the grant proposal is the student's sole intellectual property.</u></p>
<p>5.9 Thesis Proposal</p> <p>Some departments/units have specific procedures in place for approval of thesis proposals and students are advised to refer to the specific department/unit supplementary regulations. If departments/units require thesis proposal approval, this exercise must be independent from the candidacy examination. Regardless, the proposed thesis research must be approved by the advisory committee and, if necessary, by the Human Research Ethics Board or Animal Care Committee before the work has begun on the thesis research or project.</p>	<p><u>Three months following the commencement of the program and following consultation with their supervisor, the student should submit a detailed thesis proposal to their committee for advice and approval. The proposal could be maximum 10 pages long (double spaced), adhering to the following format: Introduction (Background); Hypothesis; Objectives; Purpose Methods/Potential Significance of work and references. The 10 page limit does not include the figures in the proposal. The proposal should be submitted to the proposal committee for discussion, potential modifications and approval at the committee meeting.</u></p>
<p>5.10 Thesis</p> <p>An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The thesis must be written in English unless otherwise approved by the department/unit and Faculty of Graduate Studies.</p> <p>The thesis must be written according to a standard style acknowledged within the candidate's particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors).</p> <p>The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the guidelines found on the <u>website</u>.</p>	
<p>5.11 Thesis Examination Procedures</p> <p>The final examination for the Ph.D. degree proceeds in two (2) stages:</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<ol style="list-style-type: none"> 1. Examination of the candidate's thesis by the examining committee; 2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto. 	
<p>5.11.1 Formation of the Examining Committee - University of Manitoba (Internal) Examiners</p> <p>The candidate's advisor/co-advisor is considered to be a single voting member of the examining committee. All voting members of the advisory committee are expected to serve on the examining committee; any exceptions must be approved in advance by the Dean of the Faculty of Graduate Studies. All examiners must be members of the <u>Faculty of Graduate Studies</u>. It is expected that examining committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies.</p>	<p><u>The Examining Committee will normally consist of the voting members of the student's advisory committee.</u></p>
<p>5.11.2 Formation of the Examining Committee - External Examiner</p> <p>The candidate's advisor/co-advisor, in consultation with the advisory committee, will recommend the names of at least three (3) distinguished scholars from outside The University of Manitoba with particular experience in the field of the thesis research and significant Ph.D. student supervisory/examination experience to serve as the external examiner. The recommendations must be made to the Dean (or designate) of the Faculty of Graduate Studies for approval via the Ph.D. Thesis Submission Portal on <u>JUMP</u> and must include:</p> <ul style="list-style-type: none"> • A CV of each of the prospective external examiners; • A short statement explaining: <ul style="list-style-type: none"> ○ The rationale behind the recommendations; ○ The prospective external examiners' qualifications (if not already explicit on the CV). This includes a current list of their scholarly publications and research activities and, importantly, their experience with Ph.D. student supervision/examination (e.g., Ph.D. students they have supervised to completion; Ph.D. students they are currently supervising; experience serving as external examiner for Ph.D. examining committees). <p>Advisors and/or departments/units must contact the prospective external examiners to obtain this information and determine if they are available to review the thesis.</p> <p>If any of the recommended examiners do not meet the criteria specified below, a detailed explanation should be included with the rationale for the recommendation.</p> <p>The external examiner must:</p> <ul style="list-style-type: none"> • hold a Ph.D. or equivalent (if outside of North America); • hold the rank of Associate Professor, Full Professor, Senior Scholar or Emeritus Professor (or the equivalent if outside North America) at a university, or have comparable expertise and standing if not a faculty member at a university; • have an established reputation in the area of the thesis research and be able to judge whether the thesis would be acceptable at an institution comparable to The University of Manitoba; and • have a demonstrated record of supervising a significant number of Ph.D. students to completion, and significant recent experience with the supervision/examination of Ph.D. students. <p>The external examiner must not:</p> <ul style="list-style-type: none"> • have held any faculty appointment within the candidate's home department/unit at the University of Manitoba within the last 10 years 	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>passing grade by an internal or external examiner does not preclude them from assigning a failing grade at a subsequent stage in the examination process.</p> <p>In the event of a first failure, the candidate may, on support of their home department/unit, be allowed to have the thesis evaluated a second time, by the same examining committee. In this case, the department/unit Head shall convene a meeting of the internal examiners of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. In normal circumstances, this will involve additional scholarly work that the department/unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.</p> <p>Support of the candidate's advisor/co-advisors, examining committee, and department/unit is required before the thesis is eligible for re-examination. Such support must be provided to the Faculty of Graduate Studies through submission by the department/unit Head of a new completed "Approval to Proceed to Examination" form, accompanied by a detailed summary of the changes made to improve the thesis. The thesis will be eligible for second distribution only once this is received by Faculty of Graduate Studies.</p> <p>Two failures at any combination of written review and/or oral examination stage will normally result in the candidate being withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p> <p>Reports</p> <p>The Dean of the Faculty of Graduate Studies shall provide electronic copies of all reports to each of the advisor/co-advisor, examiners, and Head of the department/unit.</p>	
<p>5.12 Oral Examination</p> <p>5.12.1 Scheduling</p> <p>Departments/Units cannot proceed with scheduling the oral examination prior to receiving the approved internal and external examiners report from the Faculty of Graduate Studies. The oral examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus or the St. Boniface Hospital Albrechtsen Research Centre normally during regular business hours. It is the responsibility of the department/unit to ensure that all room booking arrangements are made and appropriate facilities meet minimum standards expected for a Ph.D. defence. In addition, the candidate must submit, in electronic format biographical information and an abstract of the thesis to the Faculty of Graduate Studies at least two (2) weeks in advance of the date of the oral examination.</p>	<p><u>The Ph.D. oral examination committee will consist of the members of the thesis examination committee and the Chair appointed by the FGS. The oral examination is open to all members of the University community and guests invited by the student.</u></p> <p><u>The first part of the examination will consist of an oral presentation by the candidate, which should include a 20-30 minute summary of the salient points of the research findings. This presentation will be followed by the examination of the candidate by the examination committee. This part of the examination should not normally exceed an additional 90 minutes. The Chair will be responsible for maintaining the relevance of questioning and ensuring that the time limits are not exceeded.</u></p>
<p>5.12.2 Attendance</p> <p>The Dean of the Faculty of Graduate Studies or designate shall act as Chair of the examination committee.</p> <p>The attendance of the external examiner in person at the candidate's oral examination is encouraged. If the external examiner will not be present in person, then their</p>	

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>participation electronically is expected. If the external examiner cannot participate electronically, they will be asked to provide questions in advance. These questions will be read to the candidate at the defence by the advisor.</p> <p>Normally, all internal members of the examining committee should be present in-person at the defence, unless exceptional circumstances prevent this. Under such circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, members may participate electronically. Consequently, no more than one (1) internal member and the external examiner may participate electronically.</p> <p>The candidate and advisor/co-advisor must be present in person for the examination.</p> <p>Normally, the oral examination shall be open to all members of The University of Manitoba community and the general public. In exceptional cases the final oral examination may be closed; for example, when the results of the thesis research must be kept confidential for a period of time. In such cases, the examination committee and Head of the department/unit shall request prior approval in writing from the Dean of the Faculty of Graduate Studies. If approved, the final oral examination shall be closed to all but the examining committee and the Dean of the Faculty of Graduate Studies or designate.</p> <p>Regardless of open or closed status, no recording devices will be permitted.</p>	
<p>5.12.3 Format of the Examination</p> <p>The first part of the oral examination shall consist of an oral presentation by the candidate. This is followed by examination of the candidate by the examination committee. If time permits, the Chair, at their discretion, may allow questions from the invited member (if applicable) of the examining committee and then members of the audience.</p>	
<p>5.12.4 Procedures for the Conduct of the Examination</p> <p>The Chair should discuss the examination procedures with the examiners prior to the beginning of the formal examination.</p> <p>The Chair will introduce the candidate and request him/her to give a concise (20 to 25 minute) oral presentation of the thesis to include a summary of the problem addressed, the results obtained, and the conclusions drawn from the study.</p> <p>Following the presentation, the Chair will invite questions from each member of the examining committee, taking care to ensure that each examiner has approximately equal time for questions. The total time for questions by the examining committee must not exceed two (2) hours.</p> <p>The Chair may exercise their discretion in allowing questions from the audience following completion of the formal examination. Once assuming the role of Chair, they forego the right to comment on the merits of the thesis regardless of whether they are an expert in the field.</p>	
<p>5.12.5 Decision of the Committee</p> <p>Following completion of the formal examination, the candidate, invited member (if applicable) of the examining committee and audience must leave the examination room. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it. The performance of the candidate at the oral examination may reveal problems of comprehension or explanation, and the examining committee may require revisions be made to the written thesis to address these problems prior to granting final approval.</p> <p>The judgement of the examiners shall be reported by the Chair to the Faculty of Graduate Studies in the qualitative terms "pass" or "fail" on the "Final Examination of the Ph.D. Thesis" form.</p> <ul style="list-style-type: none"> • Pass: the candidate has satisfactorily presented the thesis rationale, methodology, findings, and conclusions to the general satisfaction of the 	<p><u>In the event that the student fails the oral examination, a second examination will be scheduled within six months of the first examination.</u></p>

FGS Academic Guide Regulation 2021/22	Supplementary Regulation
<p>examining committee. Notwithstanding this, stylistic, grammatical, and content revisions to the thesis may be required. Normally, the advisor/co-advisor is charged with ensuring that any revisions are satisfactorily completed. Under some circumstances, the entire examining committee may wish to ensure any required revisions are completed satisfactorily. Regardless, those examiners in agreement must indicate, by their signatures, concurrence with the passing grade.</p> <ul style="list-style-type: none"> • Fail: the candidate has failed to adequately orally present the thesis rationale, methodology, findings, and/or conclusions, or to satisfactorily respond to questions posed related to the thesis. Failure may also arise because of defects in conception, methodology, or context. Those examiners in agreement must indicate, by their signature, concurrence with the failing grade. <p>If either the external examiner or two (2) or more internal examiners indicate a failure, then the candidate fails the examination. In this case, the Chair must submit of a copy of the report(s), including written detailed reasons for the decision, to the candidate, all members of the examining committee, and the Dean of the Faculty of Graduate Studies.</p> <p>In the case of a first failure of the oral defence, the candidate may, on support of their home department/unit, be allowed to defend the thesis a second time. In this case, the Department/Unit Head shall convene a meeting of the internal members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second oral defence. In normal circumstances this may involve additional scholarly work which the Department/Unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.</p> <p>Support of the candidate's advisor/co-advisor, advisory committee, and department/unit is required before the thesis is eligible for re-examination. Eligibility for re-examination must be provided to the Faculty of Graduate Studies through submission by the Department/Unit Head of a new completed "<u>Approval to Proceed to Examination</u>" form, accompanied by a detailed summary of the changes made to improve the thesis, if any. The thesis will be eligible for second distribution to internal and external examiners only once this is received by Faculty of Graduate Studies.</p> <p>Note: In some circumstances, the candidate may revise the written thesis. The revised thesis will be provided to the committee prior to the next oral defence. The revised written thesis shall not be re-examined; however, revisions can be recommended at the oral examination.</p> <p>Candidates whose thesis is failed twice at the written review and/or oral examination stage will normally be withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to withdraw".</p>	
<p>5.13 Graduation</p> <p>The candidate will be recommended for the Ph.D. degree upon receipt by the Faculty of Graduate Studies of favourable reports by the thesis examining committee and "Final Examination of the Ph.D. Thesis" form, a corrected copy of the electronic version of the thesis and Copyright Licence Declaration uploaded into MSpace, and providing all other degree requirements have been satisfied.</p> <p>Patents –Refer to "<u>Policy of Withholding Theses Pending Patent Applications</u>".</p> <p>Restriction of Theses for Publication – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to one (1) year after the submission of the digital version of a thesis to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted.</p>	<p><u>In addition to the copy of the thesis required by the Faculty of Graduate Studies, the Department of Pathology requires one bound copy of the final version of the thesis (to be submitted to the departmental office).</u></p>



**University
of Manitoba**

Rady Faculty of Health Sciences

Max Rady College of Medicine
Department of Pathology
University of Manitoba
401 Brodie Centre – 727 McDermot Ave
Winnipeg, MB R3E 3P5
Phone: 204-789-3212
Fax: 204-789-3931

To: Faculty of Health Sciences and Faculty of Graduate Studies Committees

From: Dr. Yvonne Myal, Department of Pathology, Graduate Committee Chair

Date: April 15, 2021

RE: Faculty of Graduate Studies – Bonafide Academic Requirements (BFAR)

The Department of Pathology, PhD Program Graduate Planning Committee met on April 14, 2021 and reviewed the current Faculty of Graduate Studies – Bonafide Academic Requirements (BFAR). The Committee was in agreement that the Department of Pathology would incorporate the Faculty of Graduate Studies BFAR requirements for our new PhD Program.

We would like to put forth this recommendation for approval.

Yvonne Myal

DEPARTMENT OF PATHOLOGY
Introduction to Disease Mechanisms (IMED 7212)

September 2021- December 2021

COURSE COORDINATOR:

Dr. Tanveer Sharif
Assistant Professor, Department of Pathology
Office: 401 Brodie Centre
Phone: 204 789-3460
Email: Tanveer.sharif@umanitoba.ca

Dr. Yvonne Myal (**Co-Coordinator**)
Professor, Department of Pathology
Office: R202 (Med Rehab Bldg)
Phone: 204-789-3874
Email: Yvonne.myal@umanitoba.ca

COURSE CREDIT HOURS: 3.0

COURSE OBJECTIVES:

The course introduces the student to the basic principles of disease processes using case models to illustrate mechanisms.

COURSE DESCRIPTION:

The course will follow a format consisting of lectures and tutorials, assigned reading, essays, and PowerPoint presentations.

TEXTBOOK:

Robbins and Cotran. Pathologic Basis of Disease. Kumar, Abbas and Aster. 8th Edition, 2015. Elsevier-Saunders publishers. (Digital Version in Library, studentconsult.com)

DATE AND TIME:

Mondays: 09:30am – 11:30am
Wednesdays: 09:30am – 11:30am

COURSE OUTLINE: All Classes will be held by Zoom

Date	MODULE	TOPIC	Lecturer	Tex. Ref
Wed Sept 8	Introduction	Brief outline of course <i>Students select presentation topics</i>	YM/TS	Robbins (8 th Edition)
Mon Sept 13	Healing and Repair	Cell Injury & Healing and Repair	MD	Chpt 2/Chpt 3
Wed Sept 15	Inflammation	Overview	JG	Chpt 3
Mon Sept 20	Immunopathology	Diseases of Immune System /Hypersensitivity	TM	Chpt 6
Wed Sept 22	Neoplasia I	Illustrative cases	CS	Chpt 7
Mon Sept 27	Immunopathology	Transplantation/MHC & Disease	TM	Chpt 6
Wed Sept 29	Forensic Pathology	Overview	JY	
Mon Oct 4	Neoplasia II	Illustrative cases	CS	Chpt 7
Wed Oct 6	Neoplasia III	Illustrative cases	CS	Chpt 7
Mon Oct 11	Thanksgiving – Stat Holiday No Classes			
Wed Oct 13	Work on Presentation			
Mon Oct 18	Work on Presentation			
Wed Oct 20	Student Presentations		YM/TS	
Mon Oct 25	Mid Term Exam			
Wed Oct 27 1030-1230	Metabolic and Physiological Disorders I		AS	Chpt 24
Mon Nov 1	Developmental & Genetic Disorders I	Overview	PP	Chpt 5
Wed Nov 3 1030-1230	Metabolic and Physiological Disorders II		AS	Chpt 24
Mon Nov 8	Developmental & Genetic Disorders II	Specific examples	PP	Chpt 5
Wed Nov 10	Infectious Diseases Recorded Lecture	Infectious Diseases	MR	Chpt 8
Mon Nov 15	Hemodynamic Disorders I	Overview: The Heart	GF	Chpt 12
Wed Nov 17	Hemodynamic Disorders II	Aorta and Blood Vessels	GF	Chpt 4
Mon Nov 22	Environmental & Nutrition I	Environmental & Nutrition	CT	Chpt 9
Wed Nov 24	Environmental & Nutrition II	Environmental & Nutrition	CT	Chpt 9
Mon Nov 29	Hemodynamic Disorders III	Endothelial Biology	GF	Chpt 4
Wed Dec 1	Work on Essay			
Mon Dec 6	Essay due (Email document to Dr Sharif)			
	Final Exam TBA			

INSTRUCTORS:

MD = Dr. Marc Del Bigio	789-3378	Marc.Delbigio@umanitoba.ca
JG = Dr. John Gartner	789-3382	gartner@cc.umanitoba.ca
PP = Dr. Paul Park	787-2998	ppark@sharedhealthmb.ca
CS = Dr. Camelia Stefanovici	787-8988	cstefanovici@sharedhealthmb.ca
GF = Dr. Gabor Fischer	237-2851	Gabor.Fischer@umanitoba.ca
TM = Dr. Thomas Murooka	474-7208	thomas.murooka@umanitoba.ca
CT = Dr. Carla Taylor	258-1361	carla.taylor@umanitoba.ca
JY = Dr. John Younes		John.Younes@gov.mb.ca
MR = Dr. Marc Ranson		marc.a.ranson@gmail.com
AS = Dr. Abdulrazaq Sokoro	926-7030	asokor@sharedhealth.mb.ca

COURSE EVALUATION PROCESS AND MARKING SCHEME:

Presentation	20
Class Participation	10
Mid Term Exam	25
Essays	20
Final Exam	25
TOTAL MARKS	100

EXAM FORMAT: Short Essays, Multiple Choice

PRESENTATIONS

Process

The instructor will assign the article for review, most likely on the first day of the lecture, to the student(s).

Expectation

The student(s) will give a 20 minute PowerPoint presentation. A review/summary/critique of the assigned article will be undertaken. The presentation will be followed by 10 mins of questions and class discussion. Other students are expected to ask at least one question.

ESSAY

Process and Expectation

The student(s) will write an 8 page essay, double spaced on the assigned topic. No more than half a page should be used for references.

ACADEMIC INTEGRITY: Please note that academic misconduct and plagiarism are unacceptable and will be subject to guidelines established by the University of Manitoba.

 Select the link beside Class Schedule to find available classes for the course.

IMED 7004 - Human Brain Imaging Methods

The role of in vivo brain imaging (e.g., CT, MRI, PET, SPECT) have been rapidly increasing in the multiple disciplines that investigate the human brain in both clinical and nonclinical domains. The basic concepts, mechanisms and analytical techniques will be introduced for different imaging methods. Students will gain knowledge about what can be done and what cannot be done with each modality.

-

1.5 Credit hours

Medicine

Human Anat and Cell Science Department

IMED 7092 - Cell Biology A Introductory

Lecture, seminar, tutorial and/or demonstration course devoted to basic structure and molecular functions of the different parts of the cell, beginning with the nucleus and concluding with the cell membrane. Topics include basic genetic inheritance principles, chromosomes and gene regulation, protein synthesis and sorting, mitochondrial functions and genetics, biochemical and electrical properties of cell membrane functions.

-

3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7094 - Cell Biology B Special Topics

Lecture, seminar, tutorial and/or demonstration course devoted to the coordination and integration of cellular functions in complex multicellular organisms. Topics include functional interactions between extracellular matrix, cytoskeletons and membranes, cell and extracellular matrix interactions, cell-to-cell communication including signal transduction mechanisms, concepts in the regulation of cell growth and cell death and pluripotent stem cells, and their relevance to normal organ/body development and malignancy.

-

3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7096 - Stem Cell Biology: Introduction to the Principles of Regenerative Medicine

"Stem Cell Biology" focuses on current knowledge of stem cell biology and regenerative medicine. We will discuss different conceptual aspects of stem cell properties and potency with a solid coverage of fundamental concepts including stem cell niches and microenvironment. We will further highlight the importance of stem cells in relation to human diseases including cancer (cancer stem cells), spinal cord injury, stem cell modeling of neurological disorders, and transplantation. Finally, this course will have an informative session on important ethical issues surrounding embryonic stem cells. This course is suitable for a broad range of graduate students with relevant research interests in stem cell biology and regenerative medicine. Prerequisite: A basic course in Biology or consent of the instructor(s).

-

1.5 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7098 - Cancer Stem Cell Concepts and Therapeutic Applications

This course will introduce normal and cancer stem cell concepts, with an emphasis on the hierarchical of tumours and the diverse roles of tissue microenvironment in sculpting tumour cell phenotypes. Also, targeting of putative cancer stem cells will be discussed in the context of developing novel treatment strategies. Prerequisite: Undergraduate course in cell biology or consent of

instructor(s).

-

1.5 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7100 - Fundamentals of Neuroscience

An interdepartmental multidisciplinary course providing a comprehensive overview of cellular, molecular, developmental and systems neuroscience, as well as the neurobiology of disease. Emphasis will be placed on the application of the fundamental principles of neuroscience to contemporary lab research. ANAT 7270 will provide instruction in neuroanatomy and structure-function in the nervous system. Prerequisite: Permission of instructor.

-

6.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7104 - Neural Stem Cells: Biology and Regenerative Medicine Applications

This course will discuss current concepts in Neural Stem Cells from basic neurobiology (development, fate specification and maintenance) to their potential clinical applications in treating a broad range of neurological disorders through cell transplantation as well as gene and drug delivery. Neural stem cells play critical roles in the nervous system and the course is developed to build the necessary knowledge for graduate students and residents within all disciplines in neurosciences. Prerequisite: By instructor approval only.

-

1.5 Credit hours

Medicine

Physiology & Pathophysiology Department

IMED 7106 - Stem Cell Therapy and Tissue Engineering

Stem cell therapy opens up new avenues and has the potential to provide permanent solutions to many irreversible disorders in the body. This course will discuss different aspects of stem cell mediated repair and challenges involved in taking stem cells to the clinical applications. This course will further discuss the use of biomaterials based approaches to enhance homing and engraftment of transplanted stem cells in different organs. The course will also provide an overview of current status of stem based clinical trials, regulatory requirements in clinical practice, and ethical issues that arise. Prerequisite: by instructor approval only.

-

1.5 Credit hours

Medicine

Human Anat and Cell Science Department

IMED 7110 - Foundations of Scientific Teaching in Bioscience Education

This course has been designed to provide doctoral students with an overview of evidence-based principles of learning and teaching, and to enable them to incorporate these principles into the scientific teaching theory, within the context of Bioscience education. The course also prepares the students, as future faculty, to think about learning and teaching as a scholarly endeavor.

-

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7112 - Fundamental Cellular Neurobiology

This lecture-based course covers the fundamentals of cellular/molecular neurobiology of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

-

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7114 - Fundamental Neural Development and Plasticity

This lecture-based course covers the fundamentals of development and plasticity of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

-

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7116 - Fundamental Systems Neuroscience

This lecture-based course covers the fundamentals of systems based neuroscience. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

-

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7118 - Fundamental Neurobiology of Disease

This lecture-based course covers the fundamental neurobiology of diseases of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

-

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7120 - Medical Biochemistry

Biochemistry of carbohydrates, lipids, proteins and nucleic acids focused on those areas relevant to structure and function of the human body and disease processes. All students are expected to have completed an introductory biochemistry course. The course will consist of lectures, tutorials, and assigned studies.

-

3.0 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7130 - Foundations in Human Population and Evolutionary Genetics

This course will examine how human evolutionary history and sociogenetic processes have shaped contemporary patterns of genetic variation, how we can use these patterns to understand the histories and relationships of contemporary human populations, and appropriate methods to assay and interpret these genetic variation patterns. Prerequisite: Incoming students must have passed the graduate Medical Genetics (IMED 7170) course or its undergraduate equivalent, Introduction to Human Genetics (BGEN 3020), or equivalent course prior to taking this course.

-

1.5 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7140 - Advanced Topics in Human Population and Evolutionary Genetics

This course will examine the latest genetic evidence on the origins and evolution of anatomically modern humans and their

peopling of the world, the coevolution of genes and culture, and the emergence and dispersal of genetic risk factors for Mendelian and complex diseases and traits that afflict contemporary human populations. Prerequisite: Incoming students must have passed the Foundations in Human Population and Evolutionary Genetics (IMED 7130) or an equivalent course prior to taking this course.

-
1.5 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7170 - Medical Genetics

Designed to introduce graduate students to the field of human genetics. Both basic science and clinical issues will be discussed in this course.

-
3.0 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7180 - Molecular Approaches in Medical Research

For students who wish to understand advances made in medicine/biology through molecular and developmental approaches. Topics for discussion will be selected from the recent literature in consultation with participating students. The course will consist of lectures and discussions as well as written and oral presentation of papers by the students. Prerequisite: consent of instructor.

-
3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7190 - Medical Immunology

This interdisciplinary courses deals with the molecular and cellular mechanisms underlying immunologically mediated human diseases. Prerequisites: IMMU 7070 plus cognate courses in human biology or by consent of instructors.

-
3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7200 - Cancer Biology

One hour per week on the basic (cellular and molecular) and clinical (diagnostic and treatment) aspects of cancer. Students will give one seminar and submit an essay on an assigned topic. Prerequisite: consent of instructor.

-
3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7210 - Epigenetics in Development and Human Diseases

Emphasis on current understanding about the dynamic mechanisms that instruct when and where genomic DNA is turned on or off. We will discuss the epigenetic mechanisms that control differentiation of specialized cell types during development. Additionally, this course will highlight recent advancements on the impact of epigenetics in neurodevelopmental diseases with regards to the etiology, progression, diagnosis and treatment. In this respect, application of stem cell biology in regenerative medicine, genome-wide genetic-epigenetic strategies and gene therapy approaches will be discussed. Prerequisite: A basic course in biology, or consent of instructor.

-
1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7212 - Introduction to the Mechanisms of Disease

(Formerly: PATH 7020) This course introduces the student to the basic principles of disease processes, with use of case models to illustrate mechanisms. An assigned review, in conjunction with an essay and power point presentation will form part of the course. There are no course prerequisites.

3.0 Credit hours

Medicine

Pathology Department

IMED 7242 - Nucleic Acids: Structure and Function in Normal Development and Diseases

This course is designed to provide students with a basic knowledge on nucleic acids structure and function. It will highlight how DNA and RNA contribute to the mechanisms and underlying normal development as well as pathologies including cancer and genetic diseases. To be fully beneficial for the student, it is highly recommended that this course be taken together with IMED 7244.

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7244 - Nucleic Acids: Manipulation in Biomedical Research

This course is designed to provide students with a basic knowledge on nucleic acids manipulation. It will highlight how DNA and PNA can be modified and used in Biomedical Research. To be fully beneficial for the student, it is highly recommended that this course be taken together with IMED 7242.

1.5 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7280 - Medical Computational Biology

"Medical Computational Biology" provides the basic knowledge necessary for students to pursue research in the use of computational methods in biomedical research. The course will focus on concepts necessary for applying computation to genomics, transcriptomics and proteomics experimental data and their application to topics relevant to human health. This course is suitable for a broad range of students with interest in large scale biomedical research. Prerequisites: a basic course in biology and mathematics or the consent of the instructor(s).

3.0 Credit hours

Medicine

Biochem. and Medical Genetics Department

IMED 7290 - Developmental Biology

Emphasizes current principles of organ system development and its application to transgenic approaches to gene function in the context of a whole, developing organism. Prerequisites: IMED 7090 or consent of instructor.

3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7300 - Microscopy, Optics, Imaging and Analysis in Health Research

Theory and practice of modern microscopy, optics, molecular imaging, and analyses used in health research. Participants will gain

in depth knowledge through seminars by local and external experts in the field and by hands-on laboratory work in preparing samples for imaging and analyses. Images will be acquired using equipment at the Genomic Centre for Cancer Research and Diagnosis at the Manitoba Institute of Cell Biology. Students will also participate in interactive tutorials and journal club.

-

3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7302 - Advanced Molecular Imaging

Seminar course in which students will learn about innovative methods and advanced analyses of molecular imaging in biomedical research including 2-dimensional and 3-dimensional fluorescent in situ hybridization, live-cell imaging, spectral imaging, and multi-colour imaging. Students will participate in hands-on laboratory exercises, interactive tutorials and journal club.

-

3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7304 - Functional Genomics and Whole Genome Analyses

Seminar course in which students will learn about functional genomics and approaches to whole genome analyses using array technologies. Course content will be delivered by local and external experts in the field. Students will participate in hands-on laboratory exercises with micro-array platforms and computer-based data analyses, interactive tutorials and journal club.

-

3.0 Credit hours

Medicine

Medicine Interdisciplinary Department

IMED 7410 - Biomedical Trainee Skills

A course theoretical and practical instruction in scientific investigation, including research ethics, research design, data evaluation and presentation, as well as critical reviewing and preparation of applications for research funding.

-

3.0 Credit hours

Medicine

Human Anat and Cell Science Department

[Return to Previous](#)

[New Search](#)


[XML Extract](#)

RELEASE: 8.7.2.4

© 2021 Ellucian Company L.P. and its affiliates.

Catalog Entries

Winter 2022
Aug 03, 2021

 Select the link beside Class Schedule to find available classes for the course.

[PATH 7010 - Investigative Pathology](#)

The student will complete a supervised project in the field of anatomic and/or clinical pathology, the results to be submitted in an acceptable report. The student will be examined on his/her knowledge in the field relating to his project. Prerequisite: PATH 7020 or departmental consent.

-

6.0 Credit hours

[Medicine](#)

Pathology Department

[Return to Previous](#)

[New Search](#)

[XML Extract](#)

RELEASE: 8.7.2.4

© 2021 Ellucian Company L.P. and its affiliates.

University of Manitoba Libraries

Statement for New Program



Faculty	Rady Faculty of Health Sciences
Department	Department of Pathology
Program Name	PhD in Pathology and Laboratory Medicine

The Libraries' collection can support this new program, as it was described in the documents provided.

It is not expected that this proposed change will affect the Libraries' ability to continue to provide services such as research and teaching support, reference assistance, document delivery, and the technical infrastructure which allows the discovery and delivery of the Libraries' resources and services.

The Libraries holds a comprehensive collection of titles related to pathology and laboratory medicine and will be able to support this new program.

Caroline Monnin
Health Sciences Librarian

Carol Cooke
Acting Head, Neil John Maclean Health
Sciences Library

A handwritten signature in blue ink, reading "Kristen Kruse".

Kristen Kruse
Coordinator, Collections Management

A handwritten signature in blue ink, reading "Lisa Hanson O'Hara".

Lisa Hanson O'Hara
Vice Provost (Libraries) & University Librarian

December 10, 2020

Date



July 24 2020

To Whom It May Concern:

Re: Establishment of a Pathology PhD Program

I am pleased to write a recommendation letter to support the initiative of establishing a PhD Program in Pathology.

This initiative is strongly supported by the Department of Research, the Basic Science Departments as well as the Pathology Graduate Committee and is viewed as a potential venue for collaboration.

The College of Medicine is in a unique position to provide research and diagnostic expertise. I am in full support of instituting.

Sincerely,

Brian Postl, OM, MD, FRCPC, FCAHS
Dean, Max Rady College of Medicine
Dean and Vice-Provost, Rady Faculty of Health Sciences
University of Manitoba



**University
of Manitoba**

Rady Faculty of Health Sciences
Max Rady College of Medicine
Biochemistry and Medical Genetics

336 – 745 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3E 0J9
Telephone (204) 789-3593
Fax (204) 789-3900
bmgadmin@umanitoba.ca

December 21, 2020

Dr. Gabor Fischer
Head, Department of pathology
Rady Faculty of Health Sciences
University of Manitoba

Subject: Introduction of PhD Program for Department of Pathology

The Department of Biochemistry & Medical Genetics is pleased to support the Department of Pathology's plans to introduce a PhD program. The Department of Pathology has played and continues to play an important role in the research of faculty at the University of Manitoba. The Department offers a unique research and training environment that is not in conflict with the program in the Department of Biochemistry & Medical Genetics. Indeed, I believe this would enhance the research environment for all trainees in the Basic Medical Sciences. With a growing need for research to have demonstrated relevance in humans, building a strong foundation for graduate training in pathology at the PhD level is critically important to our research and training community.

Sincerely,

Barbara Triggs-Raine
Professor and Head



February 19, 2021

Dr Gabor Fischer
Head, Department of Pathology
Max Rady College of Medicine
Rady Faculty of Health Sciences
University of Manitoba

Re: PhD Program in Pathology Letter of Support

Dear Dr. Fischer:

I am pleased to write this letter to express my enthusiasm and support to roll out a Ph.D. program in the department of Pathology.

I have personally co-supervised (with Dr. Myal) two outstanding students at the Master's program in your department. These students have voiced strong interest in pursuing a doctoral program in pathology had one been available. I strongly believe that the research environment in the department of Pathology will provide an exceptional experience for the PhD students, since it gives access to clinical diagnostic material, and important diagnostic expertise in a basic science environment. This combination offers a unique training environment for the trainees.

I would add that it is very encouraging to see the overwhelming support by the research community. Your initiative is viewed as a stimulating move, by the heads of other basic science departments that would complement the existing programs. The new program will provide multiple opportunities for enhanced collaborations, mutually beneficial projects and successful interactions. The implementation is also strongly supported by the leaders of the Rady Faculty of Health Sciences.

I wish you good luck in implementing the program and happy to provide my unconditional support.

Regards,

Jude Uzonna
Associate Dean
(Research)

Digitally signed by Jude Uzonna
Associate Dean (Research)
Date: 2021.02.19 08:26:56 -06'00'

Dr. Jude Uzonna
Associate Dean (Research), Max Rady College of Medicine
Professor, Department of Immunology
Max Rady College of Medicine
Rady Faculty of Health Sciences
University of Manitoba



University of Manitoba Rady Faculty of
Health Sciences

Department of Human Anatomy
& Cell Science
Max Rady College of Medicine
Basic Medical Sciences Bldg
130-745 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3E 0J9
Fax: (204) 789-3920
Tel: (204) 789-3982

Winnipeg, January 18, 2021

Dr. Gabor Fischer
Head, Department of Pathology
Max Rady College of Medicine
Rady Faculty of Health Sciences
Winnipeg, January 18, 2021

RE: Letter of Support for the PhD program in Pathology

Dear Dr. Fischer,

It is with great pleasure that I write this letter of support for the Department of Pathology PhD graduate program.

The Department of Pathology is in a unique position to have direct access to a wide spectrum of patient specimen samples encompassing neoplastic and non-neoplastic diseases. Clinical scientist members of the Department of Pathology have a broad expertise in diagnostic clinical medicine with expert training in a range of pathology subspecialties and basic science faculty members have expertise from molecular and cellular research to preclinical research using different animal models. This offers a unique combination of qualifications to support a successful PhD training program at this department.

The Departments of Pathology and Human Anatomy & Cell Science (HACS) have a long history of mutual support and successful collaborations in research and teaching activities. Successful research collaborations exist between the departments in the field of brain and breast cancer and in the area of neurosciences. Strong connections in research training between our departments currently exist and Pathology PhD trainees have been enrolled in our graduate program at HACS.

A strong PhD graduate training program at the Department of Pathology would strengthen the existing research capabilities of the Pathology department. This program will enhance translational medical

research at the Rady Faculty of Health Sciences and the University of Manitoba and contribute to the research competitiveness at the University of Manitoba.

Human Anatomy & Cell Science has a strong graduate training program with currently 10 MSC and 12 PhD students enrolled in our program. HACS offers several graduate courses on Gross Anatomy, Neuroanatomy, Histology, Embryology, Developmental Neurosciences, Human Brain Imaging, Morphological Techniques, and Biomedical Trainee Skills. In addition, the department is currently restructuring one graduate course to focus on “mechanisms of cell stress” encompassing ER stress and UPR, autophagy, metabolic cell stress, mitophagy - to name examples. HACS would welcome the opportunity to contribute to the content of newly developed Pathology graduate courses with synergy to our existing graduate training program. Our students’ research would greatly benefit from the opportunity to receive additional education in fundamental pathology concepts.

Complementary expertise in Anatomy and Pathology and strong research expertise in cell and molecular biology in both departments provide the basis for both departments to establish an interconnected graduate program with courses that are mutually accepted in both programs.

I enthusiastically support the PhD graduate program in Pathology.

With kind regards,



Dr. Sabine Hombach-Klonisch
Professor & Head
Dept. of Human Anatomy and Cell Science
Max Rady College of Medicine, Rady Faculty of Health Sciences
University of Manitoba
130-745 Bannatyne Avenue
Winnipeg, Manitoba, R3E 0J9, Canada
Tel: (204) 789-3982
FAX: (204) 789-3920
e-mail: Sabine.Hombach-Klonisch@umanitoba.ca



Lucas Evangelista de Lima Terceiro
MSc student
Dr. Yvonne Myal's Lab
Department of Pathology
University of Manitoba
Winnipeg, Manitoba - CA
Phone: 431 275-3408
e-mail: evangel4@myumanitoba.ca

To whom it may concern:

It is with my great enthusiasm that I write this letter in support to the implementation of a Doctor of Philosophy (Ph.D.) program in the Department of Pathology. I am a currently second-year master student in the Department of Pathology under supervision of Dr. Yvonne Myal (Principal Investigator). One of the main reasons to select this program for my graduate career is the opportunity to be in direct contact with high trained scientists in a very respectful and enjoyable environment. As such, it would be a great opportunity for me to continue my graduate studies as a Ph.D. student in a such good environment at the department of pathology.

Attaining a Ph.D. is an important and critical step for any student who intent to pursue a scientific career either in the academia, medicine or industry. Also, it is an important next step decision that students need to go through after their master studies are completed. For such reasons, I strongly believe that the implementation of a Ph.D program will have a positive impact for all students who are willing to pursue a Ph.D. studies, giving them a much broader range of options going forward in their career. Enrolling in my Ph.D. studies in the Pathology department would give me exposure to directly work alongside clinicians and have access to actual human tissue samples. These factors contribute to a better research development and help to easily address real problems that are been currently affecting patient management. At the current time, this is not an option at the University of Manitoba.

I strongly feel that all the opportunities this program has to offer me, combined with my passion for new discoveries, ideas and approaches, will led me on the right path to become a great scientist that I hope to be. I am incredibly pleased and happy to support the implementation of a Ph.D. program at the Department of Pathology and extremely excited about all opportunities that it will bring to current and future students.

Sincerely,

Lucas Evangelista de Lima Terceiro



**University
of Manitoba**

**Rady Faculty of Health Sciences
Max Rady College of Medicine**

Professor and Head
Physiology & Pathophysiology
434 Basic Medical Sciences Bldg
745 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3E 0J9
T. 204 789 3694
peter.cattini@umanitoba.ca

January 14, 2021

Gabor Fischer MD, PhD
Head, Department of Pathology,
University of Manitoba
Brodie Centre
727 McDermot Avenue
Winnipeg, MB, R3E3P5

Dear Dr. Fischer,

The Department of Physiology & Pathophysiology is pleased to support the Department of Pathology's application for the introduction of a new doctoral program, the "Ph.D in Pathology and Laboratory Medicine". The proposed program will provide members of your unit the important capability of offering doctoral level training in pathology-based research of several diseases/pathologies that have major impacts on the health of Manitobans. Given your department's mix of clinician and basic scientists, and unique access to clinical tissue samples, the proposed doctoral program will be an exciting new capability to facilitate clinically-oriented student thesis projects. This has the potential to encourage new collaborations between members of our departments and thereby enhance the clinical/translational impact of research within the University. We therefore view the proposed doctoral program as unique, and complimentary to our own established PhD program (in Physiology & Pathophysiology).

As you are aware, members of our departments have longstanding common interests in a variety of graduate student training areas and have even worked collaboratively to establish and deliver graduate-level IMED courses (e.g. the 'Fundamental Neurobiology of Disease' IMED7118). I would like to reiterate that members of your unit are welcome to continue to utilize courses such as these (or PHGY courses) for trainees in your programs, as deemed appropriate.

We look forward to continued collaboration on graduate student training / courses going forward, and would be happy to provide any assistance/advice that you think might be helpful as you establish your new program.

Sincerely,

Peter A. Cattini
Professor & Head
Physiology & Pathophysiology
Henry G. Friesen Chair
Endocrine & Metabolic Disorders

/jo



**University
of Manitoba**

**Rady Faculty of Health Sciences
Max Rady College of Medicine**

**Department of Medical Microbiology
and Infectious Diseases**



Keith R. Fowke, Ph.D.
Professor and Head,
Medical Microbiology and Infectious Diseases
Laboratory of Viral Immunology
University of Manitoba
539-745 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3E 0J9
Telephone (204) 789-3818
Fax (204) 789-3926
keith.fowke@umanitoba.ca

Dec 18, 2020

Gabor Fischer MD, PhD
Head, Department of Pathology, University of Manitoba
Brodie Centre, 727 McDermot Avenue, Winnipeg, MB, R3E3P5
Phone: (204) 789-3538
Director of Anatomical Pathology, Shared Health Manitoba
St. Boniface Hospital, 409 Tache Avenue, Winnipeg, MB, R2H2A6
Phone: (204) 237-2851

Dear Dr. Fischer

I'm very pleased to provide this letter indicating the department of medical microbiology and infectious diseases support for your proposed PhD program in the Department of Pathology. I see this program as complementing, not competing with, the other PhD programs in the basic medical sciences program. The PhD program will have one foot in the basic science and the other in diagnostic medicine. As we've seen from COVID-19, diagnostics is very critical component in good and timely health care and there are lots of really interesting research questions that can be addressed. I would add that this PhD program is long overdue. I look forward to our programs and students working together.

I wish you all the best as you develop this program, you have my full support.

Best regards,

Keith Fowke, PhD
Professor and Head, Dept of Medical Microbiology and Infectious Diseases



**University
of Manitoba** | Rady Faculty of
Health Sciences

Office of the Vice-Dean Research
A203 Chown Building
753 McDermot Avenue
Winnipeg Manitoba
Canada R3E 0T6
Phone: 204-789-3375

February 18, 2021

D. Gabor Fischer
Head, Department of Pathology
Max Rady College of Medicine
Rady Faculty of Health Sciences
University of Manitoba

Re: Letter of Support for the PhD Program in Pathology

Dear Dr. Fischer,

I am pleased to provide my full support to the Department of Pathology to establish a PhD program. The department is in a unique position at the junction of basic medical science and diagnostic laboratory medicine to build a successful research program.

The PhD program would complement other basic science research programs and provide a venue for further collaborations. The initiative has been strongly supported by the peer departments and the leadership of the Rady Faculty of Health Sciences, and it is viewed as an exciting opportunity by the research community.

I am looking forward to seeing the program implemented and glad to provide my unreserved support.

Regards,

**Peter
Nickerson**

Digitally signed by Peter
Nickerson
Date: 2021.02.18
09:07:59 -06'00'

Peter Nickerson MD, FRCPC, FCAHS
Vice Dean of Research, Rady Faculty of Health Sciences
Distinguished Professor, Internal Medicine and Immunology
Flynn Family Chair, Renal Transplantation



**University
of Manitoba**

Rady Faculty of
Health Sciences

Max Rady College of Medicine
Department of Pharmacology and
Therapeutics
A205-753 McDermot Avenue
Winnipeg, MB, R3E 0T6
204-789-3553
Pharmacology@umanitoba.ca

30th December 2020

Gabor Fischer MD, PhD
Head, Department of Pathology
University of Manitoba

RE: new PhD program in Pathology

Dear Gabor

The Department of Pharmacology & Therapeutics provides full support for your plan to establish a PhD program in Pathology. Your intention to develop this new program will complement your ongoing MSc in Pathology and will enable you to retain and recruit high quality graduate students. This planned PhD program will couple diagnostic expertise with basic science and so represents a unique training program at the University of Manitoba. Good luck with your application and please contact me if you need any further evidence of our support.

Sincerely,

Paul Fernyhough, Ph.D.
Director, Division of Neurodegenerative Disorders
St. Boniface Hospital Research Centre
Professor and Head, Department of Pharmacology & Therapeutics
University of Manitoba
Tel: (204) 235-3692; E-mail: pfernycastle@sbrca

Response to the review and to the recommendations of the report

The Department of Pathology is thankful to the reviewers for providing a broad assessment of the proposed graduate program and to the Faculty of Graduate Studies for organizing this review. The review is very thorough and incredibly valuable for us. We are also thankful to all the colleagues who participated in the application preparation and review process for the program. A collective team effort involving several faculty members, supporting faculty staff, and leadership of the University of Manitoba and the Faculty of Graduate Studies helped us to prepare this Ph.D. program proposal which has received appreciation in the external review. We are very encouraged and excited to see that reviewers identified numerous strengths of the proposed Ph.D. program and the vision and goals of the proposed Ph.D program to be excellent. The Department of Pathology is thankful for the reviewer's recommendations and is fully committed to implementing these recommendations. We describe here the strategy to address all the recommendations:

5.1. Formal and informal mentorship of both students and supervisors in Pathology.

The Department of Pathology acknowledges the importance of formal and informal mentorship for the students and supervisors and agrees with the reviewers. The departmental leadership shares the same vision and already has established a mechanism to provide such mentorship to the new recruits in the Department of Pathology. For example, a committee comprising of three senior established researchers at the Rady College of Medicine, Dr. Anderson, Dr. Ogilvie, and Dr. Spencer was constituted by Dr. Fischer (the department head) to mentor Dr. Sharif immediately following his recruitment and appointment in August 2019.. The Department of Pathology will continue with this vision to provide excellent mentorship support to all the faculty members and will also implement the same strategy for all graduate students.

5.2. Additional targeted support for Translational Research.

We are in total agreement with the reviewers that translational research is the backbone of breakthroughs. As acknowledged by the reviewers, the Department of Pathology occupies a unique space to facilitate translational research. It is important to note that different funding agencies such as the Rady Faculty of Health Sciences, Manitoba Medical Services Foundation, and Health Sciences Centre Foundation have already led few initiatives to support translational research, we

believe additional funding support (studentships, travel awards, and translational research project funding) will stimulate the translation research. It should also be noted that the Department of Pathology is currently compiling a proposal for translational research studentships, to be discussed with the Rady Faculty leadership.

5.3. Teaching assistantships and career development activities.

The Department of Pathology believes in supporting the students through their academic endeavors and future career development. We will work with the Rady College of Medicine and the Faculty of Health Sciences to devise a mechanism facilitating the teaching assistantship opportunities for the students. As noted and outlined by our reviewers, we aim to pursue two mechanisms to ensure that Pathology graduate students get the teaching/assistantship experience: 1) Facilitate the participation of Ph.D students in the program as teaching assistants for Pathology Resident's scholarly competency activities, and 2) Encourage the involvement of Ph.D students in undergraduate medical education as teaching assistants.

5.4. Enhancing faculty complement

We agree with the reviewers that, keeping in view the unique translational research potential of the proposed Ph.D program, a large number of students will find this program quite attractive, thus increasing the need for expanding the number of faculty members in the future. All three strategies suggested by the reviewers are viable, the Department of Pathology has already been working on these suggestions;

5.4.1 Recruit faculty members with an interest in translational research.

We completely agree with the reviewers regarding the value of recruiting faculty members with an interest in translational research. Dr. Fischer has already initiated such discussions with the leadership of Rady Faculty. The possibilities include recruitment of an additional UMFA member, and recruiting clinician scientists with interest in transitional research.

5.4.2 Facilitate cross-appointments.

We agree that the cross-appointments play an important role in driving the collaborations and developing the critical mass of researchers. Keeping this in view, our Department has recently facilitated the cross-appointment of three professors, namely Dr. Jude Uzonna (Department of

Immunology). Dr. Sabine Hombach-Klonisch and Dr. Thomas Hombach-Klonisch (Department of Human Anatomy) in the Department of Pathology. In the future, we will facilitate more cross-appointments in the Department of Pathology.

5.4.3 Facilitating intellectual involvement of Pathologists in research and graduate supervision.

The Department of Pathology recognizes that the involvement of Pathologists in research activities is crucial for the proposed research program. Currently, there are already several pathologists within the Department of Pathology who actively collaborate with faculty members from different basic Science and clinical departments. We agree with the reviewers that it is important to provide opportunities for the pathologists to get involved in the student's supervisory committee. The Department Head will work with the Departmental graduate committee to devise strategies to facilitate the involvement of Pathologists in supervisory committees and develop a mechanism of providing excellent incentives to the pathologists for their participation in research, and teaching activities with the stakeholders.

The Department will also work with the Faculty of Graduate Studies to facilitate the academic memberships for the pathologist.

5.5 Create a graduate student community.

We are pleased to learn that reviewers had an informative meeting with the students of the Department of Pathology. We are also honored to find that our students have a very positive research experience. The Department of Pathology already has in place weekly grand round seminar series. During these seminars, faculty members, residents and students are allowed to give presentations. As well, on an annual basis, the department invites several external speakers clinicians, basic science researchers, and experts of broad topics of interest to the grand rounds to also give presentations as well. We agree with the reviewers and the Departmental graduate committee will work with the Department Head to ensure that attendance in weekly grand round seminars is mandatory for all the graduate students (MSc, Ph.D., and Pathologist's Assistant) in the Department. Moreover, it will also be compulsory for the graduate students to give a seminar at least once during the academic year.

5.6 Benchmarking the student's journey.

We believe this is an excellent and again, an important suggestion. We agree with the reviewers that having a benchmarking strategy in place, will be helpful in gathering important data which could be used for showcasing to attract excellent trainees and set the standards for the department. This task will be assigned to a department administrator, who will be responsible to collect and discuss that data with the departmental graduate committee during their meetings which are organized regularly by the Department of Pathology.

To ensure that students in the program are aware of the expectations, we are developing a mechanism facilitating a meeting of the departmental chair of graduate studies with the student and the supervisor. During this meeting, the chair of graduate studies will discuss the expectations with the students and also highlight the milestones required for successful completion of the Ph.D. We agree and will ensure that the above-described strategy is also implemented for the MSc program.

5.7 Develop a graduate student handbook.

A detailed graduate studies handbook describing the graduate program is a much-needed and helpful resource. We are thankful to the reviewers for providing the links to handbooks from various institutions with similar graduate studies programs. We agree with the reviewers that a comprehensive and downloadable handbook in the pdf is very important to keep the students informed and help them navigate through their transition in the program. We also agree that FAQs relating to graduate studies should also be present in the handbook. The Department of Pathology will work with the Faculty of Graduate Studies to develop a more comprehensive handbook than the one we currently have in place on our website. We also work with the IT department at Rady Faculty to have an easily accessible link to download the pdf version of the handbook and the FAQs relate to the graduate studies on our departmental website.

As acknowledged by the reviewers there is no standard level of funding provided to the students across various programs at the University of Manitoba, we will work with the Faculty of Graduate Studies to come up with a minimum level of support for the graduate students in the Department of Pathology. This information will be described in the handbook.

5.8 Developing graduate recruitment strategies.

This era of technology and social media provides a variety of different sources for advertisement. As suggested by the reviewers, our Department is planning to launch its Twitter page and the available graduate student positions will also be advertised on that Twitter account.

We agree with the reviewers for having a mechanism in place to assess the transcripts of applicants, especially international students. We are confident that we can solve this with input from Faculty of Graduate Studies in this regard.

5.9 Explore developing procedures for the transfer of students across departments.

Indeed cross department transfer can be an excellent source for excellent Ph.D. students to come to the Department of Pathology. It will require to have comprehensive discussions to figure out the detailed mechanism of cross-departmental transfer. We are determined to address this important issue with the guidance of the Faculty of Graduate studies.

5.10 Revisit part-time Ph.D. admission requirements.

We agree with the reviewers' recommendation that the admission's criteria for the part-time program should be reviewed and explicitly stated. As mentioned by the reviewers at most institutions part-time studies are only available to practicing professionals who require a modified schedule. Now we also have modified our application to explicitly state that part-time graduate studies option are only available to practicing professionals (page 7, section B-6 of the application).

5.11 Timing of candidacy examinations.

As suggested by the reviewers we have changed and moved the candidacy examination to Year 2 for Ph.D. students and also for the students transferring from MSc to Ph.D. (Page 6 of the application).

5.12 Continuous quality review of educational programs.

The Department of Pathology agrees with the reviewer that continuous quality review of the program will be very helpful. We will implement a three-year quality review strategy to our program with interim checkpoints by the Graduate Committee

5.13 Research infrastructure review.

We are glad that reviewers are satisfied with the existing research and teaching infrastructure. We agree to review the research and teaching infrastructure needs as the program expands.

5.14 Develop interdisciplinary modular teaching.

We very much welcomed the suggestion of implementing modular courses, and in consultation with other Departments at the Rady Faculty, we will explore this option further. Our faculty members already participate in teaching for different departments at the Rady Faculty and a modular course will further strengthen the interdepartmental teaching collaboration.

5.15 Reviewing the degree titles to ensure consistency.

We agree with the suggestion to change the name of MSc program to MSc in Pathology and Laboratory Medicine. We will work with the Faculty of Graduate Studies for this modification.

External Reviewers' Report

University of Manitoba

Program: PhD in Pathology and Laboratory Medicine.

Unit: Department of Pathology,
Max Rady College of Medicine,
Rady Faculty of Health Sciences,
University of Manitoba.

Reviewers: George M. Yousef, MD, PhD, FRCPC, MSc, MBBCh
Professor; Vice Chair, Education,
Department of Laboratory Medicine & Pathobiology,
University of Toronto.

Zia A. Khan, PhD
Professor; Chair, Research-based Graduate Programs,
Department of Pathology and Laboratory Medicine,
Western University.

1.0 Preparation

Reviewers were provided a 'New Program of Study' application form, as well as 10 accompanying letters of support. In addition, the Department of Pathology provided a 2-page summary document (~executive summary), listing the highlights of the proposed PhD program. Ample time was provided to review these documents prior to the site visit.

The reviewers were invited to a 3-day virtual site visit on February 14-16, 2022, and met with various stakeholders, both internal to the department and external. The reviewers were advised to prepare a single report that provides both a broad assessment of the proposed graduate program, as well as notable strengths and weaknesses. The reviewers followed this guidance.

Both reviewers found that the organization of the site visit, the administrative and logistical support, were excellent. We thank Terri Martin for the seamless operation, and stakeholders for dedicating their time to meet with us. We particularly appreciate the time and energy that members (students, staff, and faculty) invested in helping us understand the structure and working relationships of the department and the University of Manitoba.

To prepare an external review report, focus was placed on the feasibility of initiating a PhD program, resources available and needed, and interconnections/collaborations with sister departments at the Rady College of Medicine.

2.0 Overview of the Proposed Program

The Department of Pathology at the University of Manitoba is proposing to establish a thesis-based PhD degree program in '*Pathology and Laboratory Medicine*'. Currently, the department offers a thesis-based MSc program in Pathology and a course- and practicum-based professional Pathologist's Assistant MSc program. The proposed PhD program will serve to bridge academic research to the clinical setting and bedside. Entry into the PhD program requires a Master-level graduate degree in Pathology or a related field. Students who start at the MSc level in the department may also request a transfer to the PhD program. There are no mechanisms currently or plans for direct-entry PhD (i.e., students entering the PhD program directly after completing an undergraduate degree). The average length of the program is anticipated to be four years. Students in the PhD program will have a thesis advisory committee tasked with regular monitoring of student's academic progress. To fulfil the requirements of the PhD program, students will complete 12-credit hours of courses, including a mandatory course on "Introduction to Disease Mechanisms" (IMED 7212; formerly PATH 7020). In addition to this mandatory course, two tutorials/modules (similar to non-course milestones) on Research and Academic Integrity will be required. Additional elective courses will depend on the specific area of the student's research and may be identified by the student, in consultation with the supervisor and/or student's advisory committee. A range of courses are available through sister departments at the Rady College of Medicine, including Biochemistry and Medical Genetics, Human Anatomy & Cell Science, and Physiology & Pathophysiology. A successful candidate will also be required to pass a candidacy examination and successfully defend a thesis. Final thesis examination is conducted by a committee that includes an external examiner.

To understand the proposed program, reviewers found the '*New Program of Study*' application form helpful. However, for future reference, reviewers felt that it would have been extremely valuable to include a self-study of the department or current graduate offerings, which would allow the reviewers to properly assess the need for a new graduate program, and how it may interconnect with the current programs. In addition, the number of faculty members/researchers with active research programs and funding would be important.

3.0 Significance of establishing a PhD program in Pathology and Laboratory Medicine

3.1 Continuation for MSc students.

The greatest significance of a PhD program of study is to allow current and future MSc students in the department to continue their research in the same field and/or the same laboratory. Although we only met with a limited number of students, all unequivocally expressed a desire for a PhD program in the Department of Pathology. With student's continued in-depth studies through the PhD program, departmental and student research output would be enhanced.

3.2 Hub for translational research.

The unique space *Pathology* occupies, with one foot in the basic sciences and the other in the clinic, allows it to serve as the natural hub for translational research. Access to research trainees spanning 4-plus years is expected to boost clinical research and the translation of scientific discoveries from bench to the bedside. The new program will play a key role in accelerating implementation of new discoveries into the clinic. In addition, we envision the Department of Pathology at the University of Manitoba to be a natural home for MD/PhD students, combining both academia and clinical activity.

3.3 Pathology tissue archives, biobanks, and databases.

Patient data and biospecimens are an extremely valuable tool for clinical and translational research. Privileged access to formalin-fixed paraffin-embedded (FFPE) tissues, fresh frozen tissues, and other biospecimens, to PhD students in the Department of Pathology is significant. We also see this as an avenue for researchers in sister departments to supervise PhD students through Pathology and gain access to patient data/samples.

3.4 Alignment with Pathology landscape across Canada.

The establishment of a PhD program in the Department of Pathology at the University of Manitoba will align the unit with the general Pathology landscape across Canada. As can be gleaned through data provided in Table 1, a vast majority of Pathology units across Canada offer MSc- and PhD-level training programs, either administered directly through the Pathology unit or in collaboration with related basic science units. We believe this proposed program of study at the University of Manitoba is timely.

Table 1: Undergraduate, Graduate, and Postgraduate Pathology training landscape.

	Hybrid department	Undergraduate thesis-based programs	Undergraduate professional programs	MSc, thesis-based	PhD, thesis-based	MD/PhD	Professional graduate program (PA)	Postgraduate programs
Alberta								
U Calgary			Yes (MLT)				Yes	Yes
U Alberta	Yes		Yes (MLS)	Yes	Yes	Yes	Yes	Yes
British Columbia								
UBC	Yes		Yes (BMLSc)	Yes	Yes	Yes		Yes
Ontario								
U Toronto	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Western U	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Queen's U	Yes			Yes	Yes	Yes		Yes
McMaster U		[-] ¹		[-] ¹	[-] ¹			Yes
U Ottawa				[-] ²	[-] ²			Yes
Manitoba								
U Manitoba	Yes			Yes	proposed	Yes	Yes	Yes
Newfoundland								
Memorial U								Yes
Nova Scotia								
Dalhousie U	Yes			Yes	Yes	Yes		Yes
Quebec								
McGill U	Yes			Yes	Yes	Yes		Yes
Saskatchewan								
U Saskatchewan				[-] ³			Yes	Yes

¹ As part of Health Sciences (not administered by Department).

² As part of a collaborative program (primary program in Biochemistry, Cellular and Molecular Medicine, Microbiology and Immunology, Neuroscience).

³ Health sciences graduate programs.

Abbreviations: BMLSc = Bachelor of Medical Laboratory Science program; MLS = Medical Laboratory Science program; MLT = Medical Laboratory Technologist program; PA = Pathologist's Assistant program.

4.0 Strengths of the Proposed Program

4.1 Invested faculty members in Pathology and at the College of Medicine.

We were impressed by the dedication of faculty members in Pathology and sister departments at the Rady College of Medicine. The department Chair, Dr. Fischer, has obtained a remarkable number of strong collaboration and support letters from multiple departments. It is assuring that the proposed PhD program will not duplicate efforts of another department but will enhance it. We fully agree that this is an opportunity to enhance interdisciplinary collaboration. A backbone of these collaborations is already in place, primarily through cross-appointments, and will likely be strengthened with a PhD program in Pathology and Laboratory Medicine.

4.2 Satisfaction of current trainees.

Although we only met with three students, all expressed their satisfaction and praise for the supervisory influence on their progress. In addition, all students showed a desire to conduct PhD in Pathology and Laboratory Medicine. The level of support provided, financial and supervisory, was clearly seen as a strength.

4.3 Bio-banking facilities, and patient database.

Trainees in the proposed PhD program will benefit from the ineradicable resources in the Department of Pathology, including fresh frozen tissues, paraffin-embedded tissues, and biological fluids. Trainees and their research programs will also benefit greatly from the diagnostic expertise of the Department of Pathology, especially with advanced molecular diagnostics.

4.4 Space and research equipment.

We visited (virtually) two fully furnished and equipped wet laboratories. This space is an open concept design with experiment-driven setup, rather than supervisor/principal investigator-focused. This ensures better interaction dynamic and will give the students more opportunities for high-level performance. In addition, one of the researchers (Dr. Tanveer Sharif) was recently successful in securing a CFI to allow purchase of NanoString nCounter Analysis System, which will be extremely useful to trainees utilizing FFPE and frozen patient samples. There is also a comprehensive suite of core facilities available to researchers and trainees, including nucleic acid sequencing, qPCR, flow cytometry, transgenic facility, and lentiviral facility etc.

4.5 Academic and Research Integrity modules.

Academic and Research Integrity modules, which are mandatory for all graduate students, were seen as a strength. In an ever-changing research landscape, basic underpinnings of research and academic integrity are critical. Most institutions in Canada have developed similar online training modules and it was great to see that these will be available to incoming students.

4.6 Readiness for virtual education delivery.

The SARS-Cov2 pandemic-related laboratory and classroom closures have uncovered the critical need for virtual/distance learning. In our review of the material provided, as well as in our meetings, we note that the program and the department is ready for virtual education, and there are sufficient resources available in the department and at the University of Manitoba to facilitate a virtual learning environment.

4.7 Accommodation and accessibility services.

The program will be supported by the Faculty of Graduate Studies (FGS), which offers a spectrum of supporting services. These services include accessibility services for students and protocols to accommodate students with specific needs or challenges, and remediation process for students who may be facing challenges.

4.8 Library support.

The library resources appear to be excellent. Students can access library resources suitable at the graduate level (for example, bibliographic software and constructing literature reviews) through on-site workshops. We saw no deficiencies and were impressed by the degree of engagement.

4.9 Professional development.

Although professional development activities are in their infancy, this deficit has been recognized by the institution. A new Assistant Professor, with protected time, has been recruited to design professional development activities and training for graduate students. This is viewed as timely and critical. A few institutional resources (for example, ‘Why am I here?’ and coping strategy courses) and provincial resources (for example, ‘level up’) were identified as being currently available to graduate students. We hope that these workshops and activities are being encouraged by the department.

4.10 Administrative and financial support.

Administrative support and financial resources were assessed to be adequate. The administrative folks have the required expertise to run the proposed PhD program. Since the program will be a low enrollment offering for the next few years, additional financial resources are not requested by the department. However, there may be a need for research funding support – as clearly encountered by researchers during the pandemic. It was refreshing to hear that the office of the Associate Dean of Research monitors this critical need and provides bridge funding.

5.0 Recommendations

Reviewers found the vision and goals of the proposed PhD program as excellent. The productive relationship that exists between the department and Faculty of Graduate Studies (FGS) at the University of Manitoba will ensure successful implementation of the PhD program. Here, we provide a few recommendations to help the Department of Pathology strengthen the PhD program, and to tackle potential challenges that may arise in the next few years.

5.1 Formal and informal mentorship of both students and supervisors in Pathology.

In our meetings with the students, departmental faculty, and researchers outside of the department, the need for formal and informal mechanisms for mentoring students and faculty

was highlighted. The current MSc program in Pathology and the proposed PhD program are small, and the emerging emphasis of the department towards basic biomedical research and scholarly activities makes this a pressing recommendation. We are confident that the departmental leadership will be able to devise these mechanisms. We believe that an important step towards this may be to include established researchers from different departments in the student Advisory Committees.

5.2 Additional targeted support for Translational Research.

Translational research is vital as it facilitates new treatments and research knowledge created to actually reach patients waiting for these breakthroughs. Improving this bench-to-beside has become the focus of most academic institutions in Canada. We recommend that Dr. Fisher and his team explore avenues for additional targeted resources for translational research from the Faculty of Health and Sciences (studentships, travel awards, research funding etc.), which will be a great asset to this PhD program. This student-oriented investment will provide an extra layer of strength, recognizing student performance and ensuring that students can network and collaborate with researchers nationally and internationally.

5.3 Teaching assistantships and career development activities.

We acknowledge that there are very limited teaching assistantship positions available to graduate students in the Rady Faculty of Health Sciences. The reviewers noted that it may likely be due to such positions being governed by the Faculty of Science. Though it is always a difficult task, better collaboration between the faculties is needed to provide a critical mass of graduate students in Health Sciences, including in Pathology, with opportunities to develop teaching and mentoring skills. Any effort at the departmental level or Faculty of Health Sciences should be explored to provide these teaching assistantship opportunities for PhD students in Pathology.

Our discussion with departmental members highlighted two mechanisms that may allow Pathology PhD trainees to get teaching experience/assistantships: 1) PhD students in the program could serve as teaching assistants for Pathology Resident's scholarly competency activities, and 2) since Pathology teaches in UME (undergraduate medical education), PhD students could be involved as teaching assistants.

In addition to teaching assistantships, we also recommend getting more career development resources for graduate students, including exposure to electives in other institutions, placement in the private sector, and other academic institutions in Manitoba and nationally.

5.4 Enhancing faculty complement.

The proposed program is expected to be at the small scale for the initial few years. We do anticipate that the program will attract larger number of students as the word gets out and students become more familiar with the offering and scope of the translational research. With this in mind, we recommend the department develop strategies to enhance the faculty complement. This strategy should encompass three simultaneous approaches:

5.4.1. Recruit faculty members with interest in translational research.

Focusing on successful recruitment of new faculty in the Department of Pathology with academic interest would be helpful for the growth of this PhD program. We recommend

continuing with the expansion of the professoriate, in order to nurture, sustain, and improve the academic experience and research productivity of this high performing unit.

5.4.2. Facilitate cross-appointments.

Cross-appointments are budget-neutral but important to develop a critical mass of researchers and graduate trainees. We understand that most Pathology faculty (especially who are inclined and interested in basic medical sciences) are already cross appointed in sister departments at the Rady College of Medicine. We recommend enhancing cross-appointments in the Department of Pathology to fulfill the need for extra faculty members who will ensure the success of the program. Additionally, cross-appointment of researchers outside of the College of Medicine and the University of Manitoba (for example, viral lab of Manitoba) will also be a key for success.

5.4.3. Facilitating intellectual involvement of Pathologists in research and graduate supervision.

One deficiency we note across so-called hybrid departments (not unique to the University of Manitoba) is that Pathologists are usually only consulted at the end of a research study, and in most cases only to examine slides prepared from human specimens or preclinical models. There is a critical need to involve Pathologists from the beginning of a research project – to make sure they are intellectually involved in the study design. Adding Pathologists to the supervisory, and thesis advisory and examination committees of PhD students will ensure better performance and enhance the collaboration between the clinical side and basic science side. To encourage Pathologist's continued involvement in teaching and research, and to enhance these activities, we suggest that the department consider some mechanisms of providing incentives. This may take the form of subsidies to allow more time for academic work, awards, or other recognitions (for example, towards promotion).

Related to this recommendation, we implore the department and the Faculty of Graduate Studies to streamline appointments for clinical faculty in Pathology to allow them to supervise graduate students. Based on our review of the information available on FGS academic membership, the Head of the faculty member's department may recommend academic membership to overcome some of the structural barriers.

5.5 Create a graduate student community.

One of the most rewarding, informative, and important meetings we held was with the trainees (undergraduate, MSc, and PhD). The message we received was loud and clear that the graduate students themselves perceived their research experience as a very positive one. They also expressed a desire for more concrete efforts to build a sense of graduate student community and greater interaction with clinicians. To achieve this goal, we recommend the creation of a monthly graduate student seminar series with mandatory attendance, perhaps with a mix of graduate student presentations and invited speakers, that provides a multi-disciplinary flavour throughout the academic year. In addition, involving thesis-based graduate students (MSc and PhD) together with professional MSc Pathologist's Assistant students, Residents, and Faculty, in Grand Rounds and (hopefully) future departmental seminars in basic, translational, and clinical science would be helpful to all and enhance the culture of scholarship.

5.6 Benchmarking the student's journey.

We recommend that the department invest time and resources early, to develop a benchmarking strategy for graduate students. This benchmarking should span the full journey of the student through the program. Starting at admission, the department should monitor and document critical quality indicators, including the number of applications, cumulative grade averages of applicants, demographic data, and review of how students are selected by the supervisor. Once in the program, major milestones achieved by the students should be recorded, such as abstracts (local, national, and international), peer-reviewed publications, and scholarships and awards etc. Once the students graduate, their subsequent position should be recorded. Showcasing this data will help with the recruitment of excellent trainees and set the standard for the department.

On the flip side, students in the program should also be aware of what is expected at their degree level. Establishing program-level objectives (expectations of knowledge and skills) requires time investment but is critical – for course development and selection, and research output. These program-level objectives will highlight to students as to what is required for them to graduate? Whether they need to have peer-reviewed publications or are expected to? Although we are only reviewing the PhD program, there will be a need to establish what MSc skills look like and what PhD skills look like.

5.7 Develop a graduate student handbook.

At various points in our meetings, the lack of detailed procedures for graduate students was noted. We will use two examples to illustrate this need. First example is related to graduate student funding. Although there is no standard level of funding provided across various programs at the University of Manitoba (as is the case at all institutions), UMGH graduate fellowships are available for graduate students. Students are encouraged to apply to Tri-Council funding as well as other provincial funding mechanisms. Students unable to benefit from these funding mechanisms are provided with a minimum level of support through supervisor's research funding. However, this minimum level was not found in the 'New Program of Study' application or on the departmental website. We were also unable to find graduate student handbook on the website. Second example relates to remediation process. The primary mechanism to catch issues of inadequate progress is through regular Advisory Committee meetings. It was not clear if there are actual procedures in place. For example, what happens when inadequate performance is noted (research or coursework) on the advisory committee form? These two examples illustrate the critical need to develop a graduate student handbook. We are providing the host department with links to handbooks and procedures at similar departments at various institutions: [Western University](#), [University of Alberta](#), [University of Toronto](#), [Queen's University](#), and [Dalhousie University](#). We hope these resources will be helpful to the Department of Pathology at the University of Manitoba to develop a comprehensive graduate handbook.

Although not a point of discussion during our 3-day site visit, we comment here on the graduate program website. Online resources are becoming an increasingly important mechanism for providing current information to faculty and students, and for attracting prospective students. We appreciate the migration of the institutional sites to more user-friendly and visually appealing format. However, more work remains to be done to remove broken links and providing greater content for graduate studies. While this may take time, a comprehensive downloadable pdf of graduate handbook and general FAQs related to graduate studies would be extremely important.

5.8 Developing graduate recruitment strategies.

We suggest that the department develop an effective recruitment strategy, beyond advertising open positions in classes. In this regard, use of technology and social media for recruitment purposes and to showcase the achievements and the successes of the current trainees and alumni would be beneficial.

Related to graduate student recruitment, we request the department work with FGS, and request FGS to take an active role in assessing transcripts of applicants, especially international applicants. We are not aware of any department or unit offering a graduate program to have the required knowledge and experience with assessing transcripts from various institution across the world. This need will likely be amplified for a traditionally medical discipline such as Pathology, which usually attracts a significant number of applications from international students.

5.9 Explore developing procedures for transfer of students across departments.

During our site visit meetings, we discussed the possibility of MSc students in related disciplines but outside of the Department of Pathology to transfer to the proposed PhD program. This was seen as a positive avenue to grow the program and allow for cross-pollination by members of the department. However, it may need to be sorted out as to whether, mechanistically, it can be done. If possible, this transfer mechanism may represent a source of excellent PhD students.

5.10 Revisit part-time PhD admission requirements.

The Department of Pathology is proposing a part-time PhD stream to be available to students. Greater flexibility in the design, delivery, and time-to-completion is being adopted in graduate programs across Canada. Whether called a part-time program or flexible-time program, there is an important purpose that these programs serve. However, the reviewers recommend that the admission's criteria for the part-time program should be carefully reviewed and explicitly stated to ensure that the right candidate is selected for such an option. For example, at most institutions, part-time studies are only available to practicing professionals who require a modified time period and/or delivery option. There was some confusion in our meetings as to the purpose of a part-time program. It is important to clarify that institutions have procedures for accommodation and changing a full-time status of a student temporarily, as determined by need. Part-time studies are not meant for this purpose.

5.11 Timing of candidacy examinations.

As stated in the proposal brief (page 6), a candidacy examination is required by year 3 (36 months). There may be some issues arising from this late candidacy examination. For example, students transferring from a MSc program may be in limbo (transfer is year 2 but candidacy not determined until year 3). Although we were assured that, in practice, most students do hold the candidacy examination earlier, it would be helpful to the department to consider moving the candidacy examination to year 2 for all PhD students (including transfer students). The most important aspects tested in a typical candidacy examination is breadth of knowledge and critical thinking. Having an early deadline for such an examination increases the chances of identifying weaknesses (which may not be caught in the 1-2 advisory committee meetings, that are mostly focused on research progress, and depth of knowledge rather than breadth).

5.12 Continuous quality review of educational programs.

One standard recommendation for any new program is to re-visit the structure of the program and resources – what is working and what needs a revision. A strategic retreat on the different aspects of the educational programs (together with the MSc program) will be critical for success at a later phase, after the program is established. We recommend a three-year review of the program to fine tune any potential obstacles that may have emerged. This in-house retreat should be in addition to the cyclical program reviews that are required provincially.

5.13 Research infrastructure review.

Although we do not see a need for additional research and teaching infrastructure in the next few years, we recommend these resources to be evaluated following the strategic plan development. We are of the opinion that the Department of Pathology will benefit from boosting its infrastructure including bench spaces, equipment, and faculty, if there are desires/plans of expanding the research activities beyond a handful of students.

5.14 Develop interdisciplinary modular teaching.

One area that should be explored is the development of inter-departmental modular courses. This is a model where a course is divided into smaller sub-units of accredited hours that are offered by different departments. Students, under guidance from the supervisor, will be able to mix and match and customize the learning opportunity. Such modular courses would ideally be shared between Pathology and other departments.

5.15 Reviewing the degree titles to ensure consistency.

We will make one last recommendation. We were a little confused with the choice of graduate degree *titles* of the current and proposed programs. As we understand it, the department currently offers two graduate programs: a thesis-based MSc program and a Pathologist's Assistant professional (non-thesis) program. Specifically, the degree title of the current thesis-based MSc in *Pathology* is inconsistent with the proposed PhD in *Pathology and Laboratory Medicine*. In our discussions, it became apparent that this was an oversight. We recommend that the same title be used, either Pathology or Pathology and Laboratory Medicine for both MSc and PhD thesis-based programs. We suggest 'Pathology and Laboratory Medicine', since it will allow the fantastic research and knowledge creation in Laboratory Medicine (Biochemistry, Microbiology etc.) to be a part of this educational program. We do understand that changing the MSc degree title would require a major modification and senate approval. However, we believe it will be helpful.

6.0 Concluding remarks.

We would like to congratulate Dr. Fischer and the University of Manitoba for this timely proposal. This will be a landmark – needed urgently in the area of precision diagnostics and will foster translational research. The benefits of this program go beyond teaching graduate students and will enhance the scholarly activities of faculty members and ensuring more interdisciplinary collaboration locally, nationally and internationally, once the program is officially launched.

We would like to thank Dr. Duhamel, Associate Dean of the Faculty of Graduate Studies, for inviting us to participate in this activity. University of Manitoba should be proud of this outstanding new program initiative. We hope that our recommendations assist in establishing this program and making it successful.

—

Report of the Senate Committee on Admissions concerning a proposal from the Faculty of Education to modify the admission requirements for the Bachelor of Education degree program (2022.09.22)

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 Faculty of Education is proposing to extend a grandfathering clause that was included in the 2022 admission requirements for Physical Education teachable majors and minors, and Musical teachable majors and minors. The proposal requests that the grandfathering be extended to the 2023 intake and the 2024 intake
3. The proposal was approved by the Faculty of Education Council and was endorsed by SCADM on September 22nd, 2022.

Observations:

1. In October of 2020 Senate approved a proposal to revise the admission requirements relating to Physical Education teachable majors and minors. A subsequent proposal to revise the admission requirements relating to Music teachable majors and minors was approved by Senate in June of 2021. These new requirements included a grandfathering clause and was in effect for the 2022 intake only.
2. The faculty has realized that the new requirements were limiting to students who were applying to the program having completed their qualifying course work at the University of Winnipeg. The limitation was that some of the required courses were not available as equivalencies at the University of Winnipeg.
3. Applicants from the University of Winnipeg account for a significant number of the applications to the Faculty of Education at the University of Manitoba.
4. This extension will provide the faculty with enough time to re-think their requirements and introduce a model that does not adversely affect applicants from the University of Winnipeg.

Recommendation:

The Senate Committee on Admissions recommends that the proposal to modify the admission requirements for the Bachelor of Education degree program be approved effective upon approval by Senate.

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.

Respectfully submitted
Laurie Schnarr, Chair, Senate Committee on Admissions



DATE: September 7, 2022

TO: Ms. Laurie Schnarr, Committee Chair, SCADM
Mr. Jeff Adams, Executive Director, Enrolment Services

FROM: Dr. Charlotte Enns, Chair, Faculty of Education Council

RE: Bachelor of Education Music Teachable Major/Minor Admission Requirements and Physical Education Major/ Minor Admissions Requirements

Please consider the following motion that was recently passed by the Faculty of Education Council. As noted in the attached documents, the need for this motion was created by an oversight in previous amendments to the admission requirements for the B.Ed program. The revised admissions proposals did not adequately address how applicants from outside UM will meet the new and very specific requirements. For instance, we discovered that University of Winnipeg does not offer some of the specific coursework for Physical Education indicated as required in the amended admissions. As University of Winnipeg students are the next largest "contributor" to our program after UM students, we feel that it is important to be able to address this oversight. For applicants applying to the Music Teachable major or minor we found that we had made the requirements for music students with a major other than Music Education very stringent. We are recommending an extension of the grandfathering clause for both of these subject areas to allow time for further consultation with the Faculties of Kinesiology and Music to address this oversight in a fair and reasonable manner.

MOTION: *THAT* effective September 2023, the "grandfathering" clause that was included in the 2022 admission requirements for Physical Education Teachable Majors/Minors and Music Teachable Majors/Minors be extended for two additional years; 2023 intake and 2024 intake.

PROPOSAL

Section I- Description of the change

Change Being Proposed and Current Regulation:

The Faculty of Education is proposing amending the new admission requirements to include the “grandfathering” clause; that is, permitting applicants to be admitted under the previous requirements for two additional years, 2023 Intake and 2024 Intake.

For Fall 2023, Fall 2024 only, Applicants to Physical Education teachable major or minor who do not meet the new requirements previously approved will be considered under the Fall 2021 BPE teachable major/minor requirements, and applicants to Music teachable major or minor who do not meet the new requirements previously approved will be considered under the Fall 2021 Music teachable major/minor requirements.

Background Information and Rationale:

On October 7, 2020 Senate approved a motion put forward by the Faculty of Education to revise the admission requirements for Physical Education Teachable Majors/Minors and on June 16, 2021 a motion to revise the Music Teachable Majors/Minors applying Minors for applying to the After-Degree Bachelor of Education Program, both effective for the Fall 2022 intake. We have since discovered that the revised admissions proposals did not adequately address how applicants applying from outside the U of M will meet these very specific requirements.

All applicants must present specific requirements for admission to the After-Degree Bachelor of Education Program, as outlined in the Applicant Bulletin. In reviewing applicants who were unsuccessful to the 2022 intake for a Physical Education teachable major or minor and are now subject to the new requirements we discovered that University of Winnipeg does not offer some of the specific coursework for Physical Education indicated as required. As University of Winnipeg students are the next largest “contributor” to our program we feel that it is important to be able to address this oversight. For applicants applying to the Music Teachable major or minor we found that we had made the requirements for non-Music (Music Education) students more stringent. We are recommending an extension of the grandfathering clause to both these subject areas (see [Appendix Phys Ed](#) and [Appendix Music](#)) to facilitate further consultations between the Faculty of Education and the Faculties of Kinesiology and Recreation Management and the Desautels Faculty of Music to address the difficulties for students who do not hold the exact degree for each of the teachable subjects. Therefore, the above motion is requesting an extension to the full implementation of the new Music and Physical Education Teachable requirements.

Section II - Consultation with other Faculties

As noted above, consultations are pending between Faculty of Education and Faculty of Kinesiology and Faculty of Education and Faculty of Recreation Management and Desautels Faculty of Music.

Section III - Recommendation

The Faculty of Education recommends that SCADM approve the revision of the admission requirements for Physical Education Teachable Majors/Minors from the recently approved to the proposed requirements as described in Section I of this proposal, and that these changes be effective September 2022.



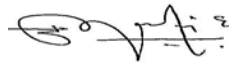
University
of Manitoba

Office of the Vice-President
(Research & International)

110/111 Administration Building
66 Chancellor's Circle
Winnipeg, Manitoba R3T2N2
T: 204 474 6915
F: 204 261 1318
vpri@umanitoba.ca

MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary

FROM: Digvir Jayas, Vice-President (Research and International)
and Chair, Senate Committee on University Research 

DATE: September 26, 2022

SUBJECT: Application to Convert the Manitoba Public Insurance Professorship in Neuroscience to a Chair

The Max Rady College of Medicine, Rady Faculty of Health Sciences is requesting the conversion of the Manitoba Public Insurance Professorship in Neuroscience to a Chair. The Professorship was established in 2014 and, more recently, additional funding has been secured to support the change to a Chair. As you will see in the proposal, there is funding in the amount of \$3.5M available to support the Chair. The proposed change is supported by Dr. Brian Postl, Dean and Vice Provost, Rady Faculty of Health Sciences.

Please include this report and recommendation on the next Senate agenda. Please feel free to contact me should you require any further information.

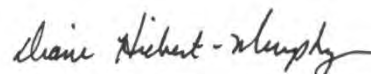
Thank you

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the Report to Senate.

Date: August 22, 2022

To: Digvir Jayas, Vice-President (Research and International)

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



Re: Proposal to Revise the Manitoba Public Insurance Professorship in Neuroscience to a Chair

On behalf of the Max Rady College of Medicine, Rady Faculty of Health Sciences, Dr. Brian Postl has submitted a proposal to change the Manitoba Public Insurance Professorship in Neuroscience to the Manitoba Public Insurance Chair in Neuroscience. The Professorship was initially established in October 2014, and the terms were revised in 2021. This proposed change continues to align with the priorities of the College, the Faculty, and the University and will support research in the area of adult traumatic brain injury.

The policy on Chairs and Professorships specifies that:

- (1) Chairs are established to advance the University's academic goals and objectives;
- (2) Chairs be funded by way of an endowment or through annual expendable gifts for at least five years, or by a combination of endowment and annual expendable gifts;
- (3) Chairs shall normally be attached to a department, faculty, school, college, centre or institute and the goals of the Professorship shall be consistent with that unit;
- (4) The establishment of a Chair normally shall not be tied to the appointment of a particular person;
- (5) Individuals appointed to the Chair shall normally have the academic qualifications commensurate with an appointment at the rank of Assistant Professor, Associate Professor, or Professor; and
- (6) The initial term of the appointment of the Chair will be for five years, with no predetermined limit. If renewal is permitted, such renewal shall be subject to a successful performance review and the availability of funds.

The revised proposal to change the Professorship to a Chair satisfies the above requirements. Funding for the Chair will continue to be derived from the annual interest from a \$3,500,000 endowment fund from Manitoba Public Insurance held at the Health Sciences Centre (HSC) Foundation, and the addition of \$1,500,000 endowment fund created by gifts of \$1,000,000 from the Rady Endowment and \$500,000 from the Department of Surgery.

I support this proposal from the Rady Faculty of Health Sciences and request that you present it to the Senate Committee on University Research for consideration and recommendation to Senate and, in turn, the Board of Governors.

If you have any questions or concerns, I would be pleased to meet with you.



August 16, 2022

Dr. Diane Hiebert-Murphy
Provost and Vice-President (Academic)
210 Administration Building
University of Manitoba
Winnipeg, MB R3T 2N2

Dear Dr. Hiebert-Murphy,

RE: Revisions to the Manitoba Public Insurance Professorship in Neuroscience

The Max Rady College of Medicine would like change the above-noted Professorship into a Chair as we now have achieved a total of \$5,000,000 in endowed funds. The purpose of the Chair in Neuroscience is to provide leadership, scholarship, and mentorship in the area of traumatic brain injury.

The Chair will be funded by the annual interest from a \$3,500,000 endowment fund (created from an initial gift and the more recent additional gift from Manitoba Public Insurance [MPI]) held at the Health Sciences Centre (HSC) Foundation and a \$1,500,000 endowment fund (created by gifts of \$1 million from the Rady Endowment and \$500,000 from the Department of Surgery).

The Max Rady College of Medicine Executive Council met and approved this Chair on August 16, 2022.

Enclosed are the Terms of Reference (with changes highlighted in yellow) for your approval. I support this proposal enthusiastically and without reservation. I look forward to your response in due course. Please let me know if you require any additional information.

Sincerely,

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

Attachment

Copy: Dr. Peter Nickerson, Vice-Dean (Research)
Dr. Ed Buchel, Head, Surgery
Dr. Chris Christodoulou, Head, Anesthesiology

REVISIONS TO THE MANITOBA PUBLIC INSURANCE PROFESSORSHIP IN NEUROSCIENCE

THE MANITOBA PUBLIC INSURANCE CHAIR IN NEUROSCIENCE

EXECUTIVE SUMMARY

In accordance with the procedures and mechanisms for establishing Chairs and Professorships at the University of Manitoba the following is presented:

TYPE OF APPOINTMENT: CHAIR

AREA/NAME OF CHAIR: Manitoba Public Insurance Chair in Neuroscience

PURPOSE AND OBJECTIVE OF THE CHAIR:

The purpose of the Chair in Neuroscience is to provide leadership, scholarship, and mentorship in the area of traumatic brain injury. Establishment of the Chair will allow the Department of Anesthesiology, Perioperative and Pain Management or the Department of Surgery, Max Rady College of Medicine to:

- Promote new methods and techniques for diagnosing, treating and prognosticating patients with severe brain trauma injuries;
- Recruit/retain a junior or mid-career neuroscience researcher with demonstrated expertise in brain trauma research who will devote at least 40% of their time to research;
- Establish and sustain intramural and extramural collaborations, to promote research at the Health Sciences Centre and the University of Manitoba;
- Enhance the Health Sciences Centre and University of Manitoba's competitiveness in national and international peer-reviewed competitions for funding for research;
- Provide mentorship and opportunities for trainees and new researchers who will pursue careers focused on areas relevant to neurosciences;
- Pursue research that will improve patient outcome and functionality, while reducing recovery times;

RELATIONSHIP TO THE PROPOSING UNIT

The Department of Anesthesiology, Perioperative and Pain Management and the Department of Surgery in the Max Rady College of Medicine, Rady Faculty of Health Sciences house the academic and research activity relating to the neuroscience of adult traumatic brain injury.

The Health Science Centre Winnipeg, a Shared Health facility, is the provincial hospital for Manitoba providing all aspects of tertiary care in the neurosciences.

The area of focus (traumatic brain injury) for the Chair in Neuroscience complements our existing chairs and professorships and continues to build on our strong research focus specifically in neuroscience.

THE METHOD BY WHICH THE CHAIR WILL BE FUNDED:

The Chair will be funded by the annual interest from a \$3,500,000 endowment fund (created from an initial gift and the more recent additional gift from Manitoba Public Insurance [MPI]) held at the Health Sciences Centre (HSC) Foundation and a \$1,500,000 endowment fund (created by gifts of \$1 million from the Rady Endowment and \$500,000 from the Department of Surgery). On an annual basis, the HSC Foundation will donate the income generated from the endowment fund held by their organization to the University of Manitoba. This annual discernment amount will be in accordance with the University of Manitoba's current policies on endowment funds and will cover a portion of the University of Manitoba salary and benefits as well as potentially provide research support, as stipulated in the Policy and Procedures for establishing Chairs and Professorships.

GENERAL AND SPECIFIC REQUIREMENTS FOR THE CHAIR

In accordance with the policy and procedures for establishing chairs at the University of Manitoba, individuals appointed to the Chair shall have the following qualifications:

- Canadian Citizen or permanent resident;
- M.D. (Royal College certified in Surgery or Anesthesiology);
- Holding a current academic appointment at the rank of Assistant, Associate or Full Professor;
- Holding a clinical appointment at the Health Sciences Centre, Winnipeg.
- History of excellence in research as evidenced in high quality research output, successful and promising research projects and programs, and significant contributions to the academic and clinical community at the local, national and/or international level;
- History of mentoring junior colleagues and investigators;
- History of effective and productive collaboration with intramural and extramural investigators and institutions.

TERM OF APPOINTMENT:

- The term of the appointment will be for five years.
- The renewal of the appointment for additional terms, conditional upon available funds, will occur in the final year of the term subject to a successful review of the incumbent's performance within the context of the appointee's home department; the process of renewal will be initiated and jointly coordinated by the Vice Dean Research, Rady Faculty of Health Sciences and the Director of Research, Health Sciences Centre, Winnipeg.
- The initial term of the appointment will be for five years, with no limit predetermined for the Chair;
- The incumbent will provide an annual progress report in accordance with the University Policy on Chairs and Professorships. In addition to the reporting requirements stipulated in this policy, the incumbent shall provide an annual report of teaching and research activities to the Dean of the Max Rady College of Medicine and the Director of Research, Health Sciences Centre, Winnipeg. In turn, the Dean/Director of Research shall provide a copy of the said report to individuals that have specifically requested this information.
- Consistent with the incumbent's home department policies, the incumbent will participate in an annual research review by the Department Head or designate.

A successful performance review will provide evidence of the following:

Program of Research, Scholarly Work and Creative Activities

The Chair holder is developing or has an established program either individually and/or as a team. There is evidence of leadership.

Knowledge Generation/Communication

1. Publications – There is evidence of sustained dissemination of new knowledge that is directed towards the academic and/or healthcare community.
2. Presentations – There is evidence of communication of research findings to the academic, professional, or stakeholder community on a regular basis.

Funding

1. Operating – There is evidence that the Chair holder plays a leading role in successful applications to competitive funding organizations individually or as a member of a team.
2. Student Funding – The Chair holder is expected to assist research trainees under their supervision with funding applications.

Student Supervision

The Chair holder is expected to be involved in successful supervision of research trainees.

OTHER PROVISIONS:

- 1) The selection and appointment of an individual to the proposed **Chair** shall be conducted in accordance with the University Policy and Procedures on Chairs and Professorships. The selection committee will include (but not be restricted to):
 - Director of Research, Health Sciences Centre, Winnipeg and the Vice Dean Research, Rady Faculty of Health Sciences will act as Co-Chairs of the selection and renewal committee;
 - Head or delegate, Department of Anesthesiology, Perioperative and Pain Management, Max Rady College of Medicine;
 - Head or delegate, Department of Surgery, Max Rady College of Medicine;
 - Site Medical Lead, Health Sciences Centre;
 - Chief Executive Officer, Health Sciences Centre Foundation.
- 2) The duties and responsibilities of the individual appointed to the proposed **Chair** will be in accordance with the University Policy and Procedures on Chairs and Professorships.
- 3) The incumbent will acknowledge that she or he holds the **Chair** at the Health Sciences Centre and the University of Manitoba in all publications, lectures, and any other activity supported by the fund.
- 4) The incumbent may have a cross appointment to an applicable Department for the purpose of graduate training. The incumbent will participate in an appropriate amount of teaching activity, including for undergraduate and post-graduate trainees and graduate students, where appropriate.



**University
of Manitoba**

**Office of the Vice-President
(Research & International)**

110/111 Administration Building
66 Chancellor's Circle
Winnipeg, Manitoba R3T2N2
T: 204 474 6915
F: 204 261 1318
vpri@umanitoba.ca

MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary

FROM: Digvir Jayas, Vice-President (Research and International)
and Chair, Senate Committee on University Research

DATE: September 26, 2022

SUBJECT: Periodic Review of Research Centres and Institutes

Attached is the report on the Centre for Earth Observation Science (CEOS) 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.

Comments of the Senate Executive Committee:
The Senate Executive Committee Endorses the
Report to Senate.

Report of the Senate Committee on University Research on the Review of The Centre for Earth Observation Science (CEOS)

Preamble:

1. The terms of reference of the Senate Committee on University Research (SCUR), which are found on the University Governance website http://umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/510.html, charge the committee with The Policy for *Research Centres, Institutes and Groups*, that stipulates all research centres/institutes be reviewed by the Senate Committee on University Research (SCUR) on a periodic basis but not less than once every 5 years. Accordingly, and following the approval by Senate of this Policy, the Senate Committee on University Research established a schedule for the review of all research centres/institutes
2. The Senate Committee on University Research met on September 22, 2022 to consider the proposal.
3. For each research centre/institute identified for review, a sub-committee of the Senate Committee on University Research was established. In accordance with the Policy, the task of each sub-committee was to recommend to SCUR on whether a formal, independent review committee should be struck to conduct a full review. If a sub-committee was of the view that a full review of a specific research centre/institute was not warranted, it was further charged with recommending to SCUR on the continuance or termination of the research centre/institute.

Observations:

1. The review process followed that which is outlined in sections 2.6 to 2.13 of the Procedures, and involved a review of annual reports of each centre/institute as well as a report prepared by each research centre/institute director which (as per section 2.8 of the Procedures) contained:
 - a) A description of how and why the centre/institute has achieved or revised its original objectives; a detailed listing of its research and training accomplishments; a current membership list; and a detailed financial statement;
 - b) a five-year plan which identifies future research directions and development strategies;
 - c) letters indicating continued support for the research/centre institute from appropriate department heads and faculty/school deans/directors; and
 - d) the names of individuals who could provide external assessments of the research centre/institute.
2. The membership of this sub-committee was as follows:

Josée Lavoie, Rady Faculty of Health Sciences (Chair)
Warren Cariou, Faculty of Arts
Dawn Sutherland, Faculty of Education
3. The assessment of the sub-committee was as follows:

Thank you for the opportunity to review the Centre for Earth Observation Science (CEOS') Five-Year Review 2017-2021. CEOS is undoubtedly a flagship research centre of the University of Manitoba. CEOS' Vision Statement is, to be global leaders in research, education, training, and public outreach on the science and technology related to Earth System Science. This is to be achieved through 3 interrelated objectives:

- (i) to facilitate and conduct research on aspects of the Earth system by using multidisciplinary approaches, creating partnerships with other academic institutions, industries, communities, and government agencies;
- (ii) to create an environment that fosters the professional and personal development of early career scientists and staff by providing high-quality opportunities for research, education, training, and outreach; and
- (iii) to communicate key research findings to the scientific community, partners and the general public using efficient and effective methods that reach the broadest audience.

CEOS' 126-page report highlights remarkable achievements, namely,

- (i) as of 2021, CEOS reports 148 people as full members, and 21 adjunct members. In 2021, CEOS had 21 Faculty, and 2 Nil appointed researchers; of these, three are international chairs (CERC Laureate, CERC, and a Senior Canada-150 Chair), two are tier-1 Canada Research Chairs (CRCs), four are tier-2 CRCs, and one is an affiliated NSERC Industrial Chair in aerospace engineering.
- (ii) from 2017-21, CEOS reports researchers participated in 150 research projects (p. 8). The report provides examples of key projects (pp. 8-9). The report also cites 675 publications, including 435 peer reviewed publications.
- (iii) from 2017-21, CEOS researchers generated more than \$50M or an average of \$10M/year.
- (iv) between 2017-21, CEOS researchers collaborated with 238 different institutions from 27 different countries. Within Canada, CEOS researchers collaborated with 32 different institutions.
- (v) in the past 5-years CEOS researchers have supervised and supported the research programs of 152 graduate students (102 Masters, 50 PhD), with 67 having graduated. They have also trained over 50 post-doctoral fellows.

The original report was not clear on whether researchers include all members [148], or only researchers directly affiliated with CEOS [21 in 2021]. This was clarified in a separate communication, which could be considered an addendum to the report. As well, this addendum also outlined detailed accomplishments in the inclusion of First Nation and Inuit communities in community-led research, and clear and impressive plans for the future.

CEOS' strategic research direction for the following 5 years will focus on 6 priorities: (1) Arctic and Northern System Science; (2) Freshwater-Marine Interactions; (3) Hazards and Risks in Arctic and Northern Development; (4) Global Climate Connections; (5) Technology Innovation and Development; and (6) Socio-Cultural and Political Relationships. The final priority takes a socioecological approach with a humans-and-nature perspective to investigate the complex interconnections between cultural, economic, technological, political and ecological components of the system. This last objective has seemingly been integrated into the activities of CEOS in the past 5 years, although it is not apparent in CEOS' vision and guiding overarching objectives (cited above). It might be time to revise CEOS's vision and guiding objectives to align with current priorities and reflect CEOS' commitment to increase the number of co-developed projects with Indigenous partners (p. 22). We would have liked to see how this might be pursued detailed under the heading Future Collaborative Initiatives (pp. 23-25), unless the main focus will be with Regional Studies, where such collaborations are mentioned.

In terms of budget, CEOS received approximately \$398,000 from the University of Manitoba and the Clayton H. Riddell Faculty of Environment, Earth, and Resources from the overhead it generates to cover operating costs, as well as a portion of the salaries for technical and administrative staff as well as the Executive Director. In addition, CEOS generates approximately \$5.4M a year from research grants. The financial viability of the centre is not in question.

Recommendation:

The Senate Committee on University Research recommends:

THAT Senate approve the Centre for Earth Observation Science (CEOS), be renewed for a term of 5 years, from January 1, 2022 through December 31, 2026.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Digvir Jayas', written over a horizontal line.

Digvir Jayas, Chair
Senate Committee on University Research