

UNDERGRADUATE MEDICAL EDUCATION PROGRAM (MD)

Undergraduate Medical Education

Mission Statement

The Mission of the Max Rady College of Medicine is to develop and deliver high quality educational programs for undergraduate and postgraduate students of medicine, for graduates and post-doctoral fellows in the basic medical sciences and for physicians in practice; conduct research and other scholarly inquiry in the basic and applied medical sciences; and, contribute to the improvement of health status in Manitoba and beyond by providing advice, disseminating information to health professionals and the public, and by cooperating in the planning for the development and delivery of health care services.

The Mission of the Undergraduate Medical Education Program is to develop, deliver and evaluate a high quality educational program for the MD Program.

Our Graduates will approach their profession with a spirit of Discovery by:

- Welcoming and adapting to the ever-changing nature of medicine
- Appreciating the continuum of basic science and human wellness
- Building a broad and unbiased foundation of medical knowledge
- Maintaining openness to practice medicine and conduct broader academic work in urban hubs and in rural and Northern communities, in Canada and around the world

Our Graduates will embrace Scholarship by:

- Pursuing academic excellence at every stage of their careers as clinicians, researchers, academics, and administrators
- Appropriately applying medical research and innovation to patient care
- Committing to the practice of lifelong learning as professionals
- Committing to the lifelong maintenance of an evidence-based practice
- Healing through knowledge and compassion and acting as educators for patients, allied health professionals, and one another

Our Graduates will lead and collaborate within their communities by:

- Advocating for the health and safety needs of individual patients and collective populations
- Communicating effectively with all health care professionals, including generalists, specialists, and allied professionals and those in related sectors
- Exemplifying professionalism and sustaining a climate of respect in all aspects of their lives
- Fostering an atmosphere of cultural safety for all patients and populations by practicing with open-mindedness and unconditional goodwill.
- Providing expert and compassionate medical care to diverse patient populations in Canada and beyond
- In doing so, graduates of the Max Rady College of Medicine at the University of Manitoba will become exemplary physicians prepared to undertake the responsibilities entrusted to them

Medical education in Manitoba is designed to provide students with the knowledge and experience they need to practice medicine in a profession where new developments in science and public health policy create an ever-changing environment. In the first two years of the program, referred to as Pre-Clerkship, the subject matter is divided into Modules comprised of courses which cover core concepts in Human Biology, Health and Disease. The final two years, referred to as Clerkship are spent in direct contact with patients and doctors in a range of rural and metropolitan clinical settings in which students gain experience with increasing responsibility for patient care and management.

Registration Information

Initial Registration Access Times

Students in the Max Rady College of Medicine Undergraduate Medical Education Program will be given access time to the registration system (Aurora Student) in July. For instructions on how to register online, please refer to the chapter, "Registration Information: Aurora Student". Registration must be complete prior to the first day of classes.

Each student is registering in the same course for both the **Fall and Winter** sessions. Med III students will be able to register in their **Summer** session in mid-March. Students are asked to contact the Administrator, Enrolment via email: anna.urbanik@umanitoba.ca or via telephone: (204) 789-3627 if registering difficulties are encountered.

Courses for the Undergraduate Medical Education program are:

Program & Year	College/ School Codes	Terms	Dept. Number & Course Number	Lecture Section	Lab Section
Medicine I	05	Fall and Winter	UGME 1000	L01	Not Applicable
Medicine II	05	Fall and Winter	UGME 2000	L01	Not Applicable
Medicine III	05	Fall, Winter and Summer	UGME 3000	L01	Not Applicable
Medicine IV	05	Fall and Winter	UGME 4000; UGME 4990	L01	Not Applicable

Web Registration Exceptions

Students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be allowed to register using the web registration system. Students who fall into this category should contact the Administrator, Enrolment at (204) 789-3627 for further information.

Bachelor of Science in Medicine and Summer Early Exposure Programs

Students approved to participate in summer enrichment programs will be registered by the College.

Prior to Registration

New Students: All incoming students must complete an application to the College of Physicians and Surgeons of Manitoba, complete a Heart and Stroke certified course in BLS for Healthcare Providers (HCP-C) and submit the following documentation prior to the first day of class: Immunization records, Adult Criminal Records Check (with Vulnerable Sector search), Child Abuse Registry Self-Check, Adult Abuse Registry

Check, Essential Skills and Abilities (Technical Standards) for Admission, Promotion and Graduation in the MD Program, and Accommodation for Undergraduate Medical Students with Disabilities. If you are unable to submit these documents by the first day of class please contact the Administrator, Enrolment via email: anna.urbanik@umanitoba.ca or via telephone: (204) 789-3627.

Returning Students: All returning students must re-certify their CPR in a Heart and Stroke certified course in BLS for Healthcare Providers (HCP-C) and submit a copy of their card to the Max Rady College of Medicine office prior to the first day of class. Returning students must be registered with the College of Physicians and Surgeons of Manitoba by June 30 of each year and must provide current documentation on Adult Criminal Record Check (with vulnerable sector search), Adult Abuse Registry Check and Child Abuse Registry Self-Check prior to the first day of class.

Faculty Academic Regulations

Admission to the Max Rady College of Medicine

The Applicant Information Bulletin is the official policy document for Admission (<https://umanitoba.ca/admissions/>). The Applicant Information Bulletin is reviewed and updated annually and may be subject to change.

Degrees Offered

- Doctor of Medicine (M.D.)
- BSc (Med) - Bachelor of Science in Medicine
- MD/PhD

Program Pools and Streams

The 4 year general MD Program is open to the following applicant pools and streams:

- Manitoba Applicant Pool
- Bilingual (French/English) Stream
- Canadian Indigenous Applicant Pool
- Out of Province Applicant Pool

Eligibility Requirements for Admission

Refer to the Applicant Information Bulletin (<https://umanitoba.ca/admissions/>) for the Eligibility Requirements.

Additional Requirements

- **Technical Standards Requirement:** the Max Rady College of Medicine has identified the requisite skills and abilities for admission, promotion and graduation in the MD program. These standards can be found here (http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/policies.html).
- The University of Manitoba and the Max Rady College of Medicine is committed to providing all students equal access to learning opportunities. If you are a student with a diagnosed learning disability (permanent, chronic, or temporary) who may require academic accommodations, please contact Student Accessibility Services (<http://umanitoba.ca/student/accessibility/new-and-future-students.html>) at 204-474-7423 or by email (student_accessibility@umanitoba.ca) to learn more about the confidential supports that are available.
- **Adult Criminal Record, Child Abuse Registry and Adult Abuse Registry Checks:** all applicants must complete a self-declaration regarding adult criminal records, pending criminal charges and registration on the child abuse registry as an offender. This self-declaration must

be done at the time of application. An adult criminal record check, declaration of pending criminal charges and child abuse registry self-check are required at the time of registration and annually thereafter.

- **Professional Registration:** all medical students must be eligible for and become registered with the College of Physicians and Surgeons of Manitoba (CPSM) by the time of registration. Eligibility requirements can be viewed on the CPSM website (<http://www.cpsm.mb.ca>).
- Immunization requirements can be viewed here (http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/immunestatus.html).
- Students must have CPR designated as "Health Care Provider Level C" acceptable to the standards of the Heart and Stroke Foundation at the time of registration in Year 1. Students must have annual renewal of their CPR registration acceptable to the standards of the Heart and Stroke Foundation throughout the Undergraduate Medical Education Program. Evidence of current renewal must be provided on an annual basis prior to the beginning of the academic year. Failure to comply may result in exclusion from all academic programs until renewal is obtained.

Eligibility Requirements for Transfer

Applications for transfer are only accepted from students registered and in good standing in a medical school accredited by CACMS or LCME. Transfers can only be considered if there is a seat available through attrition. Details regarding the transfer policy can be found here (http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Transfer_Policy_approved_by_Senate_11.7.18.pdf).

Academic Regulations

Limited Access will not affect registration for the current Academic Year, which includes Fall, Winter, and Summer terms. See University Policy and Procedures – Repeat Course Policy – Section 2.5 (a) Limited Access (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/repeated-course-policy/>).

The provisions of the General Academic Regulations (<https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/>) and the University Policies and Procedures (<https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/>), apply to all students. Max Rady College of Medicine regulations and requirements change from time to time. Detailed information concerning the general regulations governing admissions, evaluation, academic progress and withdrawal for an undergraduate medical student may be obtained from the Undergraduate Medical Education Office. These regulations include the following:

- A student will not be permitted to register unless the student is in good academic and financial standing from the previous year.
- No year may be repeated more than once.
- A student who withdraws from the Max Rady College of Medicine without prior written notice will be considered to have terminated connection with the College and will not be eligible for re-admission.
- A student who withdraws from the College having given due notice of intention to withdraw is eligible for re-admission. If re-admission is approved the student will be required to conform to the rules and regulations, fee schedules, sequence of courses, in effect at the time of such readmission.
- A student may, after completion of the work of a full year, be granted a leave of absence for one year subject to certain conditions related to the purpose of the leave of absence and on subsequent

registration will be required to conform to the rules and regulations, fee schedules, and sequence of courses in effect at the time of such registration.

- A student who has been or expects to be prevented from attending any regular examination by reason of illness or other cause beyond the student's control should at once notify the Associate Dean, Student Affairs and must abide by the requirements of the Deferred Examination Policy and Procedures.
- The College Executive Council reserves the right to require a student to withdraw from the program for which the student is enrolled when it believes the student to be unsuited, on general considerations of scholarship, or conduct for the profession, or the field within the profession, to which the program of studies normally leads. This right prevails notwithstanding any other provision in the college regulations.
- Each student is required to present the personal and professional appearance, attitudes and behaviours expected of members of the medical profession. The Max Rady College of Medicine has a process through which lapses in professionalism are reported, investigated, and, when necessary, will result in remedial or punitive actions up to and including dismissal.
- Each student must complete the undergraduate program for the M.D. degree of the Max Rady College of Medicine within seven years of entry to first-year Medicine, exclusive of those students undertaking additional academic pursuits which are acceptable to the Progress Committee. When a student fails to complete the program, Progress Committee will review the academic record of the student. The reasons for the prolonged duration of the student's program are confidential but must be approved as valid by the Associate Dean, UGME.

Requirements for the Degree of Doctor of Medicine (M.D.)

Every candidate for the degree of Doctor of Medicine must have satisfied the following requirements:

- Subsequent to the successful completion of the required university studies, a student must have attended four full sessions of not less than nine months each in this or some other school of medicine approved by the University of Manitoba, the last two years of which must have been spent as a student of the University of Manitoba.
- A student must have completed the required work, have fulfilled satisfactorily all special requirements, have received satisfactory grades throughout the entire medical program, and have discharged all indebtedness to the university.

Degrees: All degrees in Medicine will be conferred by the Senate of the university on the recommendation of the College Executive Council at a regular meeting of the University Senate or at a meeting specially called for that purpose.

Requirements for Registration to Practice Medicine

A university degree in medicine does not in itself confer the right to practice the profession of medicine in Canada. That right is obtained from a provincial registering body in the particular province in which the graduate desires to practice, and follows the successful completion of the Medical Council of Canada's two qualifying examinations.

Federal Registration: The Medical Council of Canada

The Medical Council of Canada was established in 1912 by the Canada Medical Act. Its purpose is to grant a qualification to practice medicine acceptable for license in every province of Canada. It is not a licensing body, but "anyone who secures the diploma of the Medical Council of

Canada by examination is registered on the Canadian Medical Register. This registration entitles one to become licensed to practice medicine in any province in Canada upon payment of the necessary fee and on meeting other provincial requirements."

The Medical Council of Canada examinations are normally taken by undergraduate medical students of the University of Manitoba at the end of the fourth year. There is a fee for this examination. Examinations are held annually in Winnipeg in April, August, and October, and registration for these examinations may be made with:

The Registrar, Medical Council of Canada
1021 Thomas Spratt Place
Ottawa, ON K1G 5A2

The deadline for application is usually in December; candidates are advised to contact the Medical Council of Canada (<https://mcc.ca/>) for current information.

Provincial Registration

The College of Physicians and Surgeons of Manitoba is the regulation body for the physicians in Manitoba. Each medical student must be registered with the College of Physicians and Surgeons of Manitoba in each year of the academic program. For information on registration in Manitoba contact:

The College of Physicians and Surgeons of Manitoba
1000-1661 Portage Ave.
Winnipeg, MB R3G 3T7
Telephone: (204) 774 4344
Website: <http://cpsm.mb.ca/>

The Program for the M.D. Degree

Governance

The program and its curriculum are the responsibility of the Curriculum Executive Committee. The policies, regulations, implementation and modifications of the educational program for the M.D. degree are determined by the Curriculum Executive Committee on the recommendation of the College Executive Council, Pre-Clerkship Curriculum Committee and the Clerkship Curriculum Committee. The Curriculum Executive Committee is chaired by the Associate Dean, UGME. The Curriculum Executive Committee is responsible for the curriculum and teaching in the educational program leading to the M.D. degree.

General Statement

The UGME program has undergone an exhaustive comprehensive curriculum renewal process which commenced in 2010. The new clerkship was introduced in August 2013, and the new pre-clerkship was introduced in August 2014. The curriculum was created to be a fully integrated spiral scaffold curriculum throughout all 4 years that fulfills UGME global objectives, *Future of Medical Education* (FMEC) recommendations and LCME/CCME standards. It was fashioned to be a Person to Community Centered curriculum (as opposed to organ system or department-based).

The program is a continuum over the four years but is divided into the Pre-Clerkship, Years 1 and 2, and the Clerkship, Years 3 and 4, for administrative purposes. The mission and objectives of the program can be found at the following link (https://umanitoba.ca/faculties/health_sciences/medicine/units/chs/educational_programs/preclerkship.html).

The Max Rady College of Medicine does not support students' limitation of their studies to only fields and disciplines of personal interest. Nonetheless, students are encouraged to pursue areas of interest and to develop their own education through clerkship electives and summer clinical exposures or research experiences. Students learn to use information, skills and behaviour from multiple sources of teaching to prevent and solve the health care issues that face their patients and society. Students learn that physicians are part of an interdisciplinary team and health care system that provides accessible, continuous and comprehensive health care.

In order to modify and enhance the educational program, the opinions of students and their evaluation of the program and its teachers are formally sought and respected by faculty. This information is used by the Curriculum Executive Committee to improve the program.

The Plan of the Curriculum Professionalism

Professionalism, that is the behaviour and attitudes befitting medical professionals, is an important component of the Undergraduate Medical Education curriculum. Our goal is to instill the attributes of professionalism and to emphasize to medical learners that professional characteristics and attributes are necessary during the practice of medicine and for the development of their identity as physicians.

The Max Rady College of Medicine has developed a professionalism charter that serves as a framework for defining and demonstrating medical professionalism.

In cases where lapses in the level of professionalism necessary to underpin medical education are reported, single egregious or recurrent lapses in student professionalism may be included on the individual's Medical Student Performance Record. The Max Rady College of Medicine maintains the option to dismiss students on the basis of unprofessional behaviour, regardless of performance in the curriculum.

Pre-Clerkship Program

The goals and objectives of the UGME Pre-Clerkship curriculum are based on the mission and objectives of the undergraduate program. Student assessment is based on achievement of the learning objectives provided to students on-line via a curriculum management system known as Entrada.

The curriculum framework is based upon the principles of scaffolding and integration. The program comprises **Human Biology, Health and Disease Modules** commencing with a module – **Foundation of Medicine**. This module provides a basic science foundation relevant to the study and practice of medicine with the focus on principles, themes and overarching framework- these include normal structure and function of molecules, cells and tissues and how homeostasis is maintained at these levels; how cells respond to perturbations in homeostasis and some of the possible consequences; major mechanisms that underlie the development of disease, and exogenous factors that threaten health.

This is followed by 23 weeks of the **Human Biology and Health Modules** which in sequence are: Blood and Immunology 1, Cardiovascular 1, Respiratory 1, Neuroscience 1, Musculoskeletal 1, Endocrine/Metabolism 1, Obstetrics and Gynecology 1, Gastroenterology, Hepatology, Nutrition 1 and Urinary Tract 1 courses. These courses cover the normal development, anatomy, histology, physiology and processes for the various systems, predominantly basic sciences with clinical cases (normal or abnormal) to contrast or help illustrate normal. Each course will include an overview of burden of illness or diseases related to that system. The courses will be presented in the mornings while

the afternoons will consist of five *Longitudinal Courses* that will proceed throughout all four years. These include:

1. Clinical Reasoning
2. Professionalism
3. Population Health
4. Clinical Skills
5. Indigenous Health

The content, where relevant will parallel the morning module courses.

Following completion of the **Human Biology and Health Modules**, the same course names will appear as **Human Health and Disease Modules**. This is 36 weeks in total with the first 9 weeks completing year 1 of study. **Health and Disease Modules** starts with an Introduction to Infectious Disease and Therapeutics course followed by Cardiovascular 2 and Respiratory 2. Year 2 of study commences with the remainder of the M2 courses in sequence: Blood and Immunology 2, Principles of Oncology, Neuroscience 2, Endocrine/Metabolism 2, Obstetrics and Gynecology 2, Gastroenterology, Hepatology and Nutrition 2, Urinary Tract 2 and Musculoskeletal 2. All the courses are presented as abnormal processes, predominantly clinical cases with review and application of basic sciences. Modules will be presented in the mornings while the afternoons will be five Longitudinal Courses again including:

1. Clinical Reasoning
2. Professionalism
3. Population Health
4. Clinical Skills
5. Indigenous Health

The content, where relevant, will parallel the morning module courses. Each course provides an overview of burden of illness and societal impact of diseases, and for each specific abnormality or disease where relevant the epidemiology, scientific basis and anatomy review, prevention and screening, cultural, social and ethical issues, natural history and prognosis, diagnosis, therapeutics and disease management. These may be covered during the morning module course or the afternoon Longitudinal course. The impact of Translational Research, Evidence Based Medicine and Health Care Systems will be highlighted where appropriate.

Year 1 will conclude with a one week rural primary care exposure.

Year 2 will conclude with a 9 week **Consolidation module**. The module will ensure all the content from the previous modules are assimilated, and includes single symptom presentations with broad differential diagnosis, multisystem disease such as complicated diabetes, "Themes" or disciplines such as pediatrics, geriatrics and systemic diseases such as HIV, SLE and multiple myeloma. The consolidation module begins with the pain management curriculum and the dermatology course.

The two-year Pre-Clerkship curriculum brings together teachers and facilitators from across all College Departments, other healthcare related faculties and disciplines as well as members of the public. All basic medical sciences, including anatomy, molecular biology, biochemistry, human genetics, immunology, microbiology, physiology contribute to the curriculum as do the clinically applied basic sciences of pathology, pharmacology and community health sciences. Clinical departments including anaesthesia, clinical health psychology, family medicine, internal medicine, obstetrics, gynaecology, ophthalmology, otolaryngology

gy, paediatrics, psychiatry, surgery are involved in all aspects of the curriculum.

Methods of Teaching

A variety of approaches are used to facilitate learning. These include self-directed learning, small group sessions, whole group sessions, lab practicals and simulation.

Methods of Assessment

Formative and summative assessments are provided throughout the Pre-Clerkship curriculum. These include self-reflection, learning portfolios, tutor feedback, instructional tests, multiple choice examinations, practical examinations, and short and long answer examinations.

Attendance

Certain learning sessions within the UGME program are designated as required learning events. These are generally sessions in which students are learning in a small group format, patients or their families are involved; clinical skills are being taught; or clinical care is being provided. Attendance at these sessions is recorded and reported to the UGME office, and contributes to the evaluation of the learner's professionalism. The Attendance Policy can be viewed at the following link (<https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/#max-rady-college-of-medicine>).

The procedures outlined in this policy do not preclude course directors, session leaders and instructors from tracking student learner attendance in their sessions and discussing any concerns related to attendance with the learners.

Clerkship Program

The Clerkship component of Curriculum Renewal introduced in 2013 was created to facilitate the integrated 4 year scaffold curriculum with central governance, supervised responsibility for patient care and mandatory academic time with frequent feedback and evaluation. The program is governed by the Clerkship Curriculum Committee.

The Clerkship (Years 3 and 4) consists of **Transition to Clerkship (4 weeks)**, **Core Clinical Rotations (48 weeks)**, **Electives**, and CaRMS interviews (20 weeks), and **Transition to Residency (12 weeks)**

Transition to Clerkship (TTC) (4 weeks)

The goal of TTC is for the students to expand their focus from learning during pre-clerkship years to the actual provision of care in various health care settings. This will help the students translate the knowledge gained in pre-clerkship to the clinical setting and the actual provision of care. This includes the supervised responsibilities that accompany provision of preventative health and management of disease by use of simulation, patient assessments, small group sessions and shadowing experiences.

The **Transition to Clerkship** is launched with a prominent local keynote speaker and reciting of the Physicians Pledge, includes four weeks in various didactic, simulation, and community settings.

Core Clerkship Rotations (48 weeks)

There are four 12 week blocks comprising the following disciplines: Surgery and Anesthesia/Ophthalmology/Radiology/Elective time; Internal Medicine/Emergency Medicine/Ophthalmology; Pediatrics/Obstetrics and Gynecology; Psychiatry with Family Medicine.

For more specific outline see UGME Program Overview. The primary responsibility of the clerks in the program is the care of patients under the supervision of postgraduate students and faculty. Settings for the clerkship experience are varied, including wards and outpatient facilities of the hospitals, doctors' offices, rural settings and community-based hospitals. A formal Academic Half Day occurs weekly with

mandatory attendance shared and created equally by the UGME Office and Longitudinal Courses, and the respective core clinical rotations. The Longitudinal Courses are those that proceed throughout all four years and include:

1. Clinical Reasoning
2. Professionalism
3. Population Health
4. Clinical Skills
5. Indigenous Health

The UGME academic time includes reflection exercises and assignments. An Evidence Based Medicine Course and Capstone Project is included during this time period. The core rotations each have additional scheduled academic sessions.

Electives and CaRMS National Interview Period (16 weeks)

There are 13 weeks of electives prior to the CaRMS National Interview Period. Throughout the elective periods, students must pursue education in a minimum of three different disciplines with a minimum duration of two weeks and maximum duration of eight weeks each. Electives may be pursued in a setting of the student's own choice (including beyond the university), but must be approved by the Director, Electives. Students are responsible for all costs associated with electives and CaRMS interviews, e.g. transportation, accommodation etc.

Transition to Residency (12 weeks)

Following completion of the CaRMS interviews will be two 3 week selective periods selected from a catalogue of options including international selectives and university exchange programs, sandwiching CaRMS match week. During this time period students will be participating in an Evidence Based Medicine Course and Capstone Project. The CaRMS match week will include preparation for PGME sessions including types of practice, leadership skills, team work and medical legal/licensure sessions. Transition to Residency will conclude with a 4 week Comprehensive Review and Advanced Cardiac Life Support (ACLS) course.

Student Assessment and Academic Progress

Responsibility

The policies and procedures for the assessment of the students in the program for the M.D. degree are the responsibility of the College Executive Council.

Progress Committee: The Progress Committee meets regularly to evaluate the performance and progress of students enrolled in the Undergraduate Medical Education program.

The responsibilities of the Progress Committee include:

- Recommending to the College Executive Council the academic standards by which the progress of students are judged and ensuring that examiners have followed the policies and procedures set by the College Executive Council.
- Determining which students may proceed to the next stage of the program or to graduation.
- Determining which students should write supplemental examinations, or be required to take remedial study, or be required to repeat all or part of the academic year before promotion to the next stage of the program or graduation.
- Placing students on Monitored Academic Status or Probationary Academic Status.

- Ensuring that the Student Evaluation Committees have followed the policies and regulations of evaluation that have been approved by the College Executive Council.

The Pre-clerkship and Clerkship Student Evaluation Committees (PSEC, CSEC) conduct the assessment of the students. The knowledge, clinical and communication skills, attitudes and behaviour of the students are evaluated by examination, assessment of performance and completion of assignments.

The responsibilities of the PSEC, and CSEC include:

- Planning and administration of all aspects of student assessment and performance.
- Planning and administration of all supplemental examinations.
- Planning and administration of all other measures of academic performance.
- Planning and administration of remedial training for students with unsatisfactory academic performance.
- The reporting of the results of examinations, supplemental examinations, other academic performance evaluation and remedial training to the Progress Committee.

Evaluation in the Pre-Clerkship Program
Summative Examinations

The PSEC will inform the students of the pre-determined pass mark for each examination at the beginning of their course or module. The students, however, will be given the overall as well as the actual marks obtained in the different sections of the examination. Student results will be reported to them as a pass or fail. Grades and relative performance will be recorded in the students' active files. A student can view his or her active file in accordance with the Student Records Policy and procedures online.

The Max Rady College of Medicine uses a Pass/Fail system where grades are not reported external to the Max Rady College of Medicine. Transcripts and Medical Student Performance Reports will indicate only whether a student has passed or failed a year, course, or module. However, within the Max Rady College of Medicine, student grades will be used to help identify students at academic risk and to help select students for distinctions such as awards and specialized programs.

For modular courses, there are written comprehensive examinations based on the objectives at the end of each course or module. In addition, there are mid-course or mid-modular assessments (often examinations) for each course. Each examination may use various methods of assessment: multiple choice questions, short answer questions, etc. There may also be take-home assignments in each course that contribute to the final mark. Longitudinal courses will have multiple forms of assessment throughout the year, and may include written examinations, take-home assignments, OSCE examinations, or other forms of assessment.

Expectations for student conduct and information related to pass marks for summative examinations can be found in the following UGME policies.

- Examination Conduct Policy
- Examination Results Policy
- Deferred Examinations Policy
- Examination Accommodation Procedures

- Formative Assessment Policy
- Narrative Assessment Policy

Failures of the Evaluation in Pre-Clerkship Years 1 and 2

The UGME Promotion and Failure Policy governs decisions related to student promotion and failure at the Pre-Clerkship level can be viewed here

Students failing a number of examinations up to the maximum allowable failures for modular courses or up to two longitudinal courses are permitted to sit supplementary examinations in accordance with the Supplemental Examination Policy that can be viewed online (<https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/>).

Students who fail any supplementary examination in a first or second year modular course will be given a third attempt to pass the particular course via a second supplemental examination. Students who fail this third attempt will fail the year. Students who fail any supplemental examination in a first or second year longitudinal course will fail that year.

Students who are granted supplemental privileges are expected to undertake remedial study at a time determined by the Director, Remediation. Remediation usually occurs during the summer period. Following the remediation, a student will sit a supplemental examination comparable but different from that failed. The performance of students during the remedial period will be assessed by a preceptor and will normally include an oral and/or written examination and/or repeated OSCE. Students who fail to reach the standard expected after remediation will fail the year.

Students in Year 1 and Year 2 who are successful on the supplemental examination(s) will be promoted.

Students who fail Year 1 or Year 2 will be required to repeat that particular year.

Formative Assessment in Pre-Clerkship

A variety of formative assessments are conducted in Pre-Clerkship including instructional tests, practice questions, reflective writing, self-evaluation, and peer-evaluations.

Remediation in Pre-Clerkship

A student who fails an examination is required to meet with the Director, Remediation for a remediation assessment. The exact nature of the remediation may vary and will be determined on a case by case basis by the Director, Remediation in conjunction with the Course Coordinator. The student will also be required to meet with the Associate Dean, Student Affairs, who may also direct the student to other college members or services for students. Remediation Policy and Procedures can be viewed online (<https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/>).

During the clerkship years students will be assessed on their competence and this will include assessment of their cognitive knowledge and understanding, clinical skills, problem solving and judgement, technical skills, interpersonal attributes and general professional responsibility. Assessment will be the responsibility of the Clerkship Student Evaluation Committee (CSEC).

Methods of Summative Evaluation (General):

The policy and procedures applicable for evaluation are:

- Examination Conduct Policy
- Examination Results Policy

- Deferred Examinations Policy
- Examination Accommodation Procedures

Various methods will be used to assess students, including the final evaluation reports (FITERs); written external NBME examinations and OSCE-type exams. Student performance for assessment purposes during examinations may be recorded in writing, orally, by computer, by audio or by videotaping. All material necessary to generate the mark such as papers, computer records and tapes will be destroyed once the student has passed that evaluation. Such material can be of help to a student needing remediation before the examination.

To achieve this quality assurance, the CSEC may use direct observation or indirect observation by audio and video monitoring. Quality assurance material is subject to the aforementioned regulations of the university and the College. Furthermore, this material, which could identify the individual student will not be released to anyone, other than the Dean and Clerkship Student Evaluation Committee, without the written consent of the student.

The Transition to Clerkship (TTC)

The goal of Transition to Clerkship (TTC) is to prepare the student for clerkship rotations. Students will be assessed for attendance and performance in learning groups. The purpose of student assessment in TTC is to ensure that students are ready to begin the clerkship rotations.

Readiness for clerkship must be demonstrated in many areas including: basic medical knowledge and its application; clinical skills in evaluating patients; analysis of clinical data; problem identification and diagnosis; planning of investigation; planning of management and therapy; relationships to patients and staff. These attributes will be evaluated in a variety of ways throughout TTC.

TTC Method of Assessment:

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the Clerkship Student Evaluation Committee. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the Clerkship Student Evaluation Committee and the student may be failed for the sessions missed. A suitable remedial period may be provided. If the student does not perform satisfactorily in the remedial period the TTC will be failed.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the Clerkship Student Evaluation Committee. In the case of a failing evaluation the reasons for failure must be documented and submitted to the Clerkship Student Evaluation Committee.

TTC Remediation

Failure for Inadequate Attendance:

The coordinator of the block of sessions missed may, with approval of the Clerkship Curriculum Director, provide the student with a remedial course, of comparable educational experience in that subject; the student will have to attend and perform satisfactorily to pass the TTC.

The Major Clinical Clerkships

The Major Clinical Clerkships for students are:

- Family Medicine
- Internal Medicine

- Surgery (Surgical Specialties is a part of this rotation.)
- Obstetrics/Gynecology
- Pediatrics
- Psychiatry
- Anesthesia
- Emergency Medicine

Method of Assessment:

The assessment of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects.

Major Clinical Clerkships Clinical Performance Evaluation:

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found online.

The Midpoint In-Training Report (MITER) is a formative assessment in rotations of four weeks or longer. The student uses this report to complete a self-assessment which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all assessments to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the assessments and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the CSEC. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of CSEC present at the first meeting of the CSEC following the completed rotation. In the case of a tie, the chair of CSEC will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative assessment information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed, and the process will follow that outlined in the Forward Feeding Policy and Procedures found online (<https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/>).

Major Clinical Clerkship Written Examinations:

Students will take the National Board of Medical Examiners (NBME) subject examinations at the end of the following clerkship periods: obstetrics/gynecology, pediatrics, family medicine and psychiatry. For internal medicine, the NBME examination will take place after the internal medicine/emergency medicine block. For surgery, the NBME examination will take place after the surgery/anesthesia block. For students beginning their clerkship in August 2020 or later, the passing standard for the NBME examinations will be set by the CSEC on an annual basis, based on an Equated Percent Score as recommended by the NBME. Students

failing a NBME examination will re-sit this examination as outlined in the Supplemental Examination Policy.

The Brandon Longitudinal Integrated Clerkship (LinC) Evaluations:

As an alternative to the traditional block rotation described above, students will have the opportunity to apply for the Brandon LinC. This clerkship will cover the same clinical presentations and academic material of the traditional block rotation. Moreover, the program will be delivered in a longitudinal fashion with students getting exposure to the major clinical areas multiple times throughout the year. In the family medicine portion of the clerkship students will be exposed to the same preceptors over the course of the entire year for approximately one day a week including small communities around Brandon.

Evaluation and examinations will be the same as the traditional block rotation. The primary benefits of this form of clerkship are to allow students to develop relationships with preceptors, and to provide an exposure to medicine in a rural setting. Opportunities to get more one on one and hands on experience will be enhanced in this environment.

The Comprehensive Clinical Examination (CCE)

The goal of the Comprehensive Clinical Examination (CCE) is to objectively assess student clinical competence in generic skills of data collection, interpersonal relationships, along with the content of the case for diagnosis, investigation, and management of common clinical problems. This examination frequently uses standardized patients to test these clinical skills.

The Minor Clinical Clerkships

- Internal Medicine Selective
- Musculoskeletal Rotation
- Any of the assessments integral to the Population Health Course or Professionalism Course (if applicable)
- Public Health
- Evidence-Based Medicine Course
- Electives
- Transition to Residency Selectives

Minor Clinical Clerkship Method of Assessment:

The assessment of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects.

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found online.

The Midpoint In-Training Report (MITER) is a formative assessment in rotations of four weeks or longer. The student uses this report to complete a self-assessment which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all assessments to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the assessments and

preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the CSEC. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of CSEC present at the first meeting of the CSEC following the completed rotation. In the case of a tie, the chair of CSEC will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative assessment information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found online (<https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/>).

The Transition to Residency (TTR)

The goal of the Transition to Residency (TTR) is to prepare students for residency programs. Students will be assessed for performance on TTR Selectives and in the Evidence-Based Medicine Practice Course. Attendance is mandatory for TTR.

Method of Assessment:

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the CSEC. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the CSEC and the student may be failed for the sessions missed. A suitable remedial period may be provided if determined appropriate by the College. If the student does not perform satisfactorily in the remedial period the TTR will be failed.

The TTR Selectives and Evidence-Based Medicine Practice Course will be assessed by FITER.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the CSEC. In the case of a failing evaluation the reasons for failure must be documented and submitted to the CSEC.

Remediation During Clerkship

A student who has received a failing FITER on a clinical rotation, shall be required to meet with the Director, Remediation for a remediation assessment. Remediation during the clerkship is typically scheduled during electives or other time as determined suitable by the College. The Director, Remediation in consultation with the Clerkship Director, or designate will coordinate this remediation which will include further clinical experience. The policy and procedures governing remediation may be found online.

Clerkship Clinical Performance Remediation:

The CSEC will provide the student who has failed a clinical rotation an appropriate remedial period with the department in which the rotation was failed. The rotation will be an equivalent educational experience to the clerkship failed, and its goal will be to assist the student to reach the expected standard of clinical competence. A similar process of assessment will be used. The remedial rotation will usually be taken during an elective period.

Remediation for NBME Examination Failures:

Students failing any two NBME examinations (in the same subject or different subjects) will be required to meet with the Director, Remediation for a remediation assessment. Where a student has failed two successive NBME examinations in the same subject, the student will be required to complete a remedial period of training from the relevant rotation. The Director, Remediation in conjunction with the Clerkship Director, or designate, will coordinate the remediation; further clinical experience may be needed to meet that purpose. Such a remedial period will be a maximum of four weeks and will usually be taken in an elective period, and followed by a third attempt at the National Board examination.

Remediation for Failure in the CCE:

A remedial CCE will be scheduled at an appropriate time. Remediation supports are available to students upon request.

Failure of a Student in the Clerkship Program

The Clerkship Program is a continuum held over Year 3 and Year 4. A failure of the Clerkship Program is considered to be a failure of one year, please refer to Academic Regulations (p. 2).

Failure of the Clerkship:

The student will be determined to have failed the Clerkship Program if:

1. Failure of Clinical Assessments

The student has received failing evaluations in one or more of the following:

- a. Two major clerkships in different disciplines
or
- b. One major clerkship and:
 - i. its remedial, or
 - ii. a TTC remedial, or
 - iii. a remedial of a minor clerkship
or
- c. Remedials in two of the following:
 - i. A minor clerkship
 - ii. TTC

2. Failure of Examinations

The student has failures in one or more of the following:

- a. A single NBME subject examination three times
or
- b. A total of five NBME examinations
or
- c. The CCE after remediation

3. Remediation Related Failures

If the remediation period recommended for a student, for whatever cause, requires more than ten weeks, then the student will be deemed to have failed the Clerkship Program.

Complete information related to promotion and failure in any year of the Undergraduate Medical Education program can be found in the Undergraduate Medical Education Promotion and Failure Policy and Procedures.

Terms for the Repeat Clerkship

A student who fails the Clerkship Program, be it because of failure of clinical assessments, failure of examinations, or failure of remediation (as above), immediately ceases in the program, and will be required to repeat the Clerkship Program. The Repeat Clerkship will consist of the following, at a minimum: Six-week rotations in each of Internal Medicine, Surgery,

Pediatrics, Family Medicine, Psychiatry, and Obstetrics/Gynecology, plus up to fourteen weeks of electives. The number of elective weeks may be reduced (from fourteen) by the number of weeks of electives already successfully completed. A student in the Repeat Clerkship will also be required to complete the ACLS course (if not already passed) (0.5 weeks), the LMCC refresher course (if not already passed) (4.5 weeks). The student will be granted 3 weeks for CaRMs interviews and two weeks for vacation. Furthermore, if the failure occurred prior to the completion of the Medicine Selective, Musculoskeletal Rotation, Emergency Medicine Rotation, Anesthesia Rotation, Population Health course, Professionalism Course, TTR Selectives, Evidence-Based Medicine Practice Course, then these will be required components of the Repeat Clerkship as well. The student must satisfactorily meet all clinical assessments, examinations, the CCE, as well as remedial rotations (as appropriate), regardless of whether they had been passed previously. The terms of the Repeat Clerkship will be submitted to the Progress Committee for review and final approval.

Terms for Failure of the Repeat Clerkship

The terms for failure of the Repeat Clerkship are the same as listed above in "Failure of a Student in the Clerkship Program (p.)". A student who has failed the Repeat Clerkship will be required to withdraw from the Max Rady College of Medicine program.

Regulations for Students Taking Leave from the Clerkship Program

Students may, for health or personal reasons, withdraw from clinical rotations or take temporary leave. For planned leave, prior permission must be obtained from the Associate Dean, UGME and/or Associate Dean, Student Affairs or designate. For leaves due to sudden or unexpected circumstances, the Associate Dean, UGME, the Director, Clerkship, and the Clerkship Director or designate of the rotation must be informed. Written documentation of the reason for leave will be required by the Associate Dean, UGME. The information is confidential to the Associate Dean, UGME and Associate Dean, Student Affairs or designate. Further information please refer to the Leaves of Absence (LOA) Policy.

Students who require an extended leave from the Clerkship Program may have a delayed graduation.

If a student misses more than 25% of a rotation, the student will not receive credit for the rotation regardless of the reason. The student will be required to repeat the entire rotation.

Brief periods of leave may be taken upon notification and approval by the Director, Clerkship. For complete details on attendance during clerkship please refer to the Student Attendance Policy.

Generally, the Clerkship program is completed in 79 weeks, excluding CaRMS interview time and holiday time. When, due to leaves of absence, a student will take more than 79 weeks, including elective periods, to complete the Clerkship Program the Clerkship Student Evaluation Committee will review the student's record (clinical assessments and examinations) during the Clerkship Program to ensure that the time lost has not compromised the overall achievement of the student.

Reappraisal and Appeal of Failed Rotations and Examinations

A student who has received a failing grade in any course or on any FITER may be permitted to request a reappraisal of the assessment in accordance with the Reappraisal of Student Assessment Policy.

If the student is not accepting of the decision reached by a Reappraisal Committee as outlined in the above stated policy, the student can appeal the decision to the Undergraduate Student Appeals Committee.

A student can appeal a decision of the Undergraduate Student Appeals Committee to the Max Rady College of Medicine Student Appeals Committee and a student appeal of the Max Rady College of Medicine Student Appeals Committee can be brought to the Senate Committee on Student Appeals.

The Max Rady College of Medicine will not accept requests for reappraisal of external examinations. The National Board of Medical Examiners (NBME) provides a Score Recheck Service, details of which are posted on the NBME website (<https://www.nbme.org/>). Students are responsible for the cost of a Score Recheck that may be requested on their behalf by the Max Rady College of Medicine.

Academic Research in Medical Education

Intro Medicine

Part of the educational responsibility of the Max Rady College of Medicine is to perform research on innovations and effectiveness in medical education. Whenever students are the research subjects, all such research must have approval from the Max Rady College of Medicine Research Ethics Board. Where students are studied individually their participation will be voluntary. Research findings will not identify individuals.

Bachelor of Science in Medicine (B.Sc. (Med.)) Program

General Information

The Bachelor of Science in Medicine program is offered over two summer terms; following the first and second year of the undergraduate program in Medicine. The B.Sc. (Med) program is designed to provide the under-graduate medical student with an opportunity to gain firsthand experience in medical research. A large variety of basic science, translational and clinical research projects are available for the student to choose from each year.

The program consists of three components with the option of clinical exposure:

- Research project
- Written report (Completed in Year 2)
- Oral Presentation at the annual symposium (Completed in Year 2)

The program is open to undergraduate students in the Max Rady College of Medicine and, if approved by the Undergraduate Medical Student Research Program Committee. The work for this degree may be carried out in any department of the Max Rady College of Medicine at the University of Manitoba. This full-time program may not be taken concurrently with the One Summer Medical Student Research program or any part of the medical curriculum nor combined with any other programs such as traveling scholarships. The BSc.(Med) Program is only open to students who are in good academic standing and the students must be enrolled in the Max Rady College of Medicine at the University of Manitoba.

To enroll in the B.Sc.(Med) program the student must find a supervisor in any field within the Max Rady College of Medicine. Every September the Program Coordinator posts a list of abstracts with the supervisor's contact information listed. The abstracts provide a snap shot of the research project and also briefly outline what the BSc(Med) student will be doing within the project. Students are welcome to select an abstract from the posted list and contact the supervisor individually or they can seek out a supervisor that is not listed on the posted abstract list. The

main requirement for the supervisor is that they must hold a minimum appointment of Assistant Professor within the Max Rady College of Medicine. Together, the student and supervisor submit an application which includes an abstract, project proposal and the role of the student document to the Undergraduate Medical Student Research Program Committee. If the project proposal is accepted by the committee, students are accepted into the B.Sc. (Med) Program and can then be registered with the university for the B.Sc.(Med) summer sessions. All accepted projects require both a primary supervisor from the Max Rady College of Medicine and a Co-supervisor from any faculty or school at the University of Manitoba. Primary and Co-supervisors must hold a minimum appointment within their academic setting of Assistant Professor. All accepted projects must receive the applicable institutional ethics, biosafety or other approvals prior to commencement of the term. As well, any projects focusing on topics pertaining to indigenous peoples, must be submitted with approval from the appropriate regulatory bodies, such as First Nations and Inuit Branch, etc.

All students are required to present their research findings in both a written report and oral presentation at the conclusion of their second summer. Students are encouraged to produce an interim report due in the second year of their undergraduate training. Students will be evaluated by their Supervisor after the first summer and by the B.Sc.(Med) committee following the completion of the requirements for the B.Sc.(Med) degree. Students will be required to withdraw from the program if they make unsatisfactory progress after the first summer of research.

The B.Sc.(Med) degree will be conferred at the same time as the M.D. degree unless the student, having satisfactorily completed the requirements for the B.Sc.(Med) degree, discontinues the study of Medicine at the University of Manitoba or other approved institution. In this case, the B.Sc. (Med) degree will not be conferred. Students may defer their final dissertation upon approval by the B.Sc.(Med) Director.

The program is on a Pass/Fail basis. Withdrawal from the program (without permission from the Director) outside of the normal voluntary withdrawal time frame will be considered a fail. Authorization for withdrawal while enrolled in the program is through written application to the Director. Withdrawal without permission will result in a Fail grade.

Program Fees

The program fees will be additional to the Max Rady College of Medicine tuition fees. Program fees change annually.

Program Terms

The program runs for 2 summer terms. Each term is generally between 12 and 13 weeks (subject to Max Rady College of Medicine schedule). Students are entitled to a 2 week paid vacation during each term (to be scheduled and approved with project supervisor).

Stipendiary Support

Students receive stipendiary support for each term. Presently support is in the amount of \$7500.00 per term.

Optional Clinical Exposure

The B.Sc. (Med) Program supports participation in a minimum of 48 hours of in-clinic experience over the course of two summers. Please note that this clinical experience is distinct from the Summer Early Exposure (SEE) program. Students interested in participating in SEE must apply separately through UGME and meet the office's application deadline. If B.Sc. (Med) students are approved for SEE, they can complete 40 hours each summer, fulfilling the SEE program's 80-hour requirement.

Participation in any clinical exposure also requires the approval of the student's supervisor to ensure that their research project remains on schedule.

One Summer Medical Student Research Program

General Information

The One Summer Medical Student Research program offers medical students the opportunity to engage in original research, either basic or clinical, under the supervision of a Max Rady College of Medicine supervisor. The program is open to both first and second-year medical students. The specific aim of the program is to develop student skills within the following areas:

- Critical evaluation of data
- Effective communication of results
- Experimental design
- Hypothesis testing

To successfully complete the One Summer Medical Student Research Program, students must complete three components:

- Research project (completed within 1 summer)
- Written report
- Oral Presentation at the annual symposium

The program is open to undergraduate students (in their first or second year) in the Max Rady College of Medicine if approved by the Undergraduate Medical Student Research Program (UMSRP) Committee. The work for this program may be carried out in any department of the Max Rady College of Medicine at the University of Manitoba. This full-time (one summer term) program may not be taken concurrently with the BSc(Med) program or any part of the medical curriculum nor combined with any other programs such as traveling scholarships. Students in their first or second year of medicine in the Max Rady College of Medicine at the University of Manitoba who are in good academic standing may apply for the One Summer Medical Student Research program.

For more information about the One Summer Medical Student Research Program, email: advanceddegreesmedicine@umanitoba.ca.

MD/PhD Program

Purpose

The MD/PhD Program in the Max Rady College of Medicine is designed to produce academic clinician scientists who are interested in a career that combines both research and clinical medicine, providing them advanced clinical, academic and research skills.

Duration

The minimum program of study is the total required by the Max Rady College of Medicine for the MD program (4 years) plus the minimum requirements of the Faculty of Graduate and Postdoctoral Studies (FGPS). Typically, students undertake a 4-6 year research training interval to successfully complete PhD training. Students who obtained advanced/graduate training prior to admission may be granted advanced standing. Students will be considered to be full-time graduate students when they are actively and primarily engaged in research. Planning for completion of thesis requirements and return to third year Medicine to begin Clerkship

full time must be done in consultation with the student's graduate supervisor and UGME.

Note that there are multiple pathways for admission to the MD/PhD program. For clarification, please contact advanceddegreesmedicine@umanitoba.ca.

Eligibility

Medical Students are eligible to apply upon initial admission to Medicine and at any time during the first two years of the MD program. Eligibility criteria should be reviewed on the Advanced Degree website.

Application Process

Potential applicants should carefully review full details on the application process posted on the program website. Students wishing to apply should contact the Director of the Program early in the process. Acceptance will minimally require: 1) identification of a supervisor (within a department at the University of Manitoba which has an approved PhD program) who has adequate resources for the research expenses necessary for the proposed program of study and whose department recommends acceptance, 2) submission of application dossier to the Program Admissions and Advisory Committee and their recommendation for acceptance and 3) acceptance by the Faculty of Graduate and Postdoctoral Studies.

Program Fees

The total tuition fees payable are the sum of the fees required for the MD and PhD programs of study. Continuing fees (Faculty of Graduate and Postdoctoral Studies) are also applicable. MD/PhD trainees that remain in good standing receive renewable stipend funding of \$25,000 per annum for up to 6 years, or until successful defense and submission of their approved final PhD thesis. The renewal of the annual stipend depends on submitting the yearly FGPS progress report to the program office. The 6 years of support is NOT lengthened by any years of support the student receives external to the program.

MD/PhD Trainees are also eligible to obtain up to \$1000 research allowance per year (for up to 6 years) to support: laboratory consumables, applicable software, journal fees, or conference related travel expenses and presentation expenses.

NOTE: The expenses covered to support the research allowance must be pre-approved by the program director prior to purchase.

Administration

After initial assessment of the complete application dossier by the Advanced Degrees in Medicine Program Director, the Program Advisory and Admission Committee, chaired by the Program Director, reviews all eligible applications and makes a recommendation to the host research department. The Program will:

1. review whether adequate resources are available for delivery of the program,
2. be a liaison with the trainee's host research department, the Max Rady College of Medicine, and Faculty of Graduate and Postdoctoral Studies, and
3. monitor student progress.

Please note, the graduate student activities of applicants accepted into the program are governed by FGPS regulations and/or supplemental regulations the host research department.

Coursework

The minimum course requirements of the Faculty of Graduate and Postdoctoral Studies, as defined by the host research department supplementary regulations, are applicable in addition to the normal curriculum of undergraduate medical studies.

Research/Thesis Requirements

The student is required to dedicate their full time to the graduate program to make timely and effective progress towards meeting degree requirements (research and academic) for successful completion. The quality and quantity of research supporting the thesis shall be consistent with that required for all other doctoral candidates in the field. A completed thesis submitted to the students PhD examining committee is required prior to returning to third year Medicine to begin Clerkship full time.

Additional Program Elements: Seminar Series and Research Progress Evaluations

Expectations for both the student and advisor are outlined in the Advisor Student Guidelines- Thesis/Practicum Programs, which must be reviewed and signed prior to any research. Students are required to regularly attend the designated research seminar series or journal clubs organized by the host research department. Students are also encouraged to seek out professional development opportunities offered by the host research department or University encompassing topics including effective writing, teaching training, and academic integrity. Students will be assessed a minimum of once per academic year, as per FGPS guidelines. Students are required to prepare semi-annual updates for distribution to their advisory committee and the program director.

Conferment of the Dual Degrees of MD/PhD

The graduate degree is conferred on the next available date after successful defense of the thesis and submission of the final approved thesis.

MD/MSc Program

Purpose

The combined-degree MD/MSc Program in the Max Rady College of Medicine is designed to begin development of academic clinician scientists by providing them advanced clinical, academic and research skills.

Duration

The minimum program of study is the total required by the Max Rady College of Medicine for the MD program (4 years) plus the minimum requirements of the Faculty of Graduate and Postdoctoral Studies (FGPS; the minimum time is equivalent to two academic terms; see FGPS Academic Guide. Completion of most programs requires more than this and students should review the host research department's supplemental regulations regarding specific requirements. Students who obtained advanced/graduate training prior to admission may be granted advanced standing. Students will be considered full-time graduate students when they are actively and primarily engaged in research. Typically, following completion of Med II, students undertake at least a 2 year interval away from MD training to undertake and complete MSc training. Planning for completion of thesis of thesis requirements and return to third year Medicine to begin Clerkship full time must be done in consultation with the student's graduate supervisor and UGME.

Note that there are multiple pathways for admission to the MD/M.Sc. program. For clarification, please contact advanceddegreesmedicine@umanitoba.ca.

Eligibility

Medical Students are eligible to apply upon initial admission to Medicine and at any time during the first two years of the MD program. Eligibility criteria should be reviewed on the Advanced Degree website.

Application Process

Potential applicants should carefully review full details on the application process posted on the program website. Students wishing to apply should contact the Director of the Program early in the process. Acceptance will minimally require:

1. identification of a supervisor (within a department at the University of Manitoba which has an approved MSc program) who has adequate resources for the research expenses necessary for proposed program of study and whose department recommends acceptance,
2. submission of application dossier to the Program Admissions and Advisory Committee and their recommendation for acceptance, and
3. acceptance by the Faculty of Graduate and Postdoctoral Studies. The MD MSc program provides the Student Stipend and limited Conference travel expenses for approved applicants.

Program Fees

The total tuition fees payable are the sum of the fees required for the MD and MSc programs of study. Continuing fees (Faculty of Graduate and Postdoctoral Studies) are also applicable. MD/MSc trainees that remain in good standing receive renewable stipend funding of \$21,000 per annum for time spent actively engaged in full-time research (approximately 2-2.5 years). Trainees are also eligible to obtain up to \$1000 research allowance per year (for up to 2 years) to support: laboratory consumables, applicable software, journal fees, or conference related travel expenses and presentation expenses.

NOTE: The expenses covered to support the research allowance must be pre-approved by the program director prior to purchase.

Administration

After initial assessment of the complete application dossier by the Advanced Degrees in Medicine Program Director, the Program Advisory and Admission Committee, chaired by the Program Director, reviews all eligible applications and makes a recommendation to the host research department. The Program will:

1. review whether adequate resources are available for delivery of the program,
2. be a liaison with the trainee's host research department, the Max Rady College of Medicine, and FGPS, and
3. monitor student progress.

Please note, the graduate student activities of applicants accepted into the program are governed by the FGPS regulations and/or supplemental regulations OF the host research department.

Coursework

The minimum course requirements of the FGPS, as defined by individuals host research department supplementary regulations, are applicable.

Research/Thesis Requirements

The student is required to dedicate their full time to the graduate program to make timely and effective progress towards meeting degree requirements (research and academic) for successful completion. The quality and quantity of research supporting the thesis shall be consistent with that required for all other MSc candidates in the field. A completed thesis submitted to the students MSc examining committee is required prior to returning to third year Medicine to begin Clerkship full time.

Additional Program Elements: Seminar Series and Research Progress Evaluations

Expectations for both the student and advisor are outlined in the Advisor Student Guidelines- Thesis/Practicum Programs, which must be reviewed and signed prior to any research. Students are required to regularly attend the designated research seminar series or journal clubs organized by the host research department. Students are also encouraged to seek out professional development opportunities offered by the host research department or University encompassing topics including effective writing, teaching training, and academic integrity. Students will be assessed a minimum of once per academic year, as per FGPS guidelines. Students are required to prepare semi-annual updates for distribution to their advisory committee and the program director.

Conferment of the Dual Degrees of MD/MSc

The graduate degree is conferred on the next available date after successful defense of the thesis and submission of the final approved MSc thesis.