

MEDICINE

About the School of Medicine

The School comprises several departments and divisions including the Undergraduate Medical Education (UGME), the Postgraduate Medical Education (PGME), and the Office for Continuing Professional Development (CPD).

For further information, visit the School's website.

Academic Units within the School of Medicine

Medical Physics

The Medical Physics Unit is a division within the Department of Oncology. It is a teaching and research unit focusing on the role that physics and its related sciences play in medicine and cancer research, especially (but not exclusively) in radiation medicine; i.e., radiation oncology, medical imaging, and nuclear medicine. The Unit offers a Graduate Diploma and an M.Sc. in Medical Radiation Physics. Facilities are available for students to undertake a Ph.D. in Physics administered through the Department of Physics, or a Ph.D. in Biological and Biomedical Engineering administered through the Departments of Biomedical Engineering and Bioengineering, each with a research emphasis on medical physics. These graduate programs are supervised, funded, and hosted by Medical Physics Unit PIs (principal investigators).

The research interests of Unit members include various topics related to the application of physics methods to medicine:

- 3D and 4D imaging, the development of new imaging modalities, and applications of imaging in radiation therapy;
- radiation physics and computational & experimental dosimetry;
- AI and machine learning applications to medical imaging, radiation therapy, and health informatics;
- applications of nano-sciences to medical imaging and therapy;
- numerical modelling of fundamental interactions of radiation with living cells;
- metabolic and functional imaging using radio-nuclides and MRI;
- applications of radiation biology to therapy and radiation protection.

The M.Sc., Diploma, and Ph.D. programs in Medical Physics are accredited by the Commission on Accreditation of Medical Physics Education Programs, Inc., sponsored by the American Association of Physicists in Medicine (AAPM), the American College of Radiology (ACR), the American Society for Radiation Oncology (ASTRO), the Canadian Organization of Medical Physicists (COMP), and the Radiological Society of North America (RSNA).

Master of Science (M.Sc.) Medical Radiation Physics (Thesis) (45 credits)

This two-year program provides a comprehensive introduction to the academic, research, and practical aspects of physics applied to radiation medicine. Students may go on to careers in clinical service as medical physicists in research-oriented hospital settings after clinical residency training; may consider development careers in industry in radiation therapy, diagnostic radiology, or nuclear medicine or nuclear energy; in governmental organizations as radiation safety experts, etc.; or pursue academic careers in university, industry, or

government organizations. Our graduate programs are accredited by CAMPEP (Commission for Accreditation of Medical Physics Education Programs). Medical physicists must go through CAMPEP training (M.Sc. or Ph.D., followed by a residency training) to be eligible to sit certification exams. Certification is becoming a mandatory requirement for eligibility to practise in a clinical environment. The McGill M.Sc. program is research oriented, which has the additional advantage that the roads toward a Ph.D.—followed by academic, industry, or clinical careers—are wide open. The practical and laboratory sections of the program are conducted in various McGill teaching hospitals.

The program comprises:

1. didactic courses in radiation physics, radiation dosimetry, the physics of nuclear medicine and diagnostic radiology, medical imaging, medical electronics and computing, radiation biology, and radiation hazards and protection;
2. seminars in radiation oncology, diagnostic radiology, and miscellaneous aspects of medical physics, e.g., lasers;
3. laboratory courses in radiation dosimetry and medical imaging;
4. an individual research thesis.

Graduate Diploma (Gr. Dip.) Medical Radiation Physics (30 credits)

The Medical Physics Unit offers a Graduate Diploma in Medical Radiation Physics which is accredited as a Certificate in Medical Physics by the CAMPEP (Commission on Accreditation of Medical Physics Education Programs). It allows eligible individuals to retrain in Medical Physics. Applicants should hold a Ph.D. degree and also a B.Sc. in Honours Physics, Physics Major, or related Physics-oriented science.

Medical Physics Admission Requirements and Application Procedures

Candidates applying to the Graduate Diploma must hold a Ph.D. degree and also a B.Sc. in Physics, Physics Major, or related Physics-oriented science.

Application Procedures

McGill's online application form for graduate program candidates is available at mcgill.ca/gradapplicants/how-apply.

See University Regulations & Resources > *Graduate* > *Graduate Admissions and Application Procedures* > Application Procedures for detailed application procedures. Further information regarding the application procedures is available on the Medical Physics Unit website.

Only complete applications will be considered.

Note: When completing the online application, the following information should be entered in the "Application" section to ensure that the application is routed to the correct department:

Under **Program choice:**

"Application type" = Degree, certificate, or diploma

"Term" = Fall 2025

"Department" = Medical Physics Unit

"Program" = Graduate Diploma (Med Radiation Physics)

or

"Program" = Medical Radiation Physics-T

"Status" = Full Time

Under **Additional Questions:**

Please indicate source(s) of funding to cover tuition and student fees + living expenses while studying at McGill University.

Supporting Documents: All supporting documentation must be uploaded to the online application; any documents sent by mail will be considered unofficial and missing from the application. For detailed instructions on how to upload required supporting documents, please see mcgill.ca/gradapplicants/how-apply/applying-mcgill/documents.

Transcripts: All transcripts and degree certificates in a language other than English or French must be uploaded to the application in both the original language version and also in an officially certified English or French language version. If the applicant is accepted, original documents must be presented to the University prior to registration. The grading scale must also be viewable.

English Language Proficiency: Applicants to graduate studies whose mother tongue is not English, and who have not completed an undergraduate or graduate degree from a recognized foreign institution where English is the language of instruction or from a recognized Canadian institution (anglophone or francophone), must submit documented proof of competency in English by submitting a TOEFL iBT or IELTS test score. The original test report must be sent electronically by the testing centre to McGill University; to ensure successful transmission, the student's name given to the testing centre must be identical to the name used for the McGill online application, otherwise the electronic result will not be applied to the McGill application.

Note: McGill institution code = 0935; Medical Physics Unit = 99 (department not listed).

The test must have been taken within the two years prior to date of application review. For a graduate application to McGill for Fall 2025, the test should not have been taken before January 1, 2023. Applicants from some countries are exempt from providing evidence of English language proficiency. For more information, see mcgill.ca/gradapplicants/international/proficiency.

Reference Letters: In order for referees to receive an automated email with instructions to upload their recommendation, applicants must include referees' institutional email addresses in the online application; Gmail, Yahoo, etc. email addresses will not be accepted.

Additional Requirements

The items and clarifications below are additional requirements set by this department:

- GRE is not required for the Medical Physics M.Sc. program.
- Applicants must either complete the "Applicant Statement" portion of the online application, or alternatively, may submit a one-page Personal Statement.
- Applicants are requested to provide information regarding expected funding, etc., under "Additional Questions".

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while application deadlines are set by the Medical Physics Unit and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website; please consult the list at mcgill.ca/gps/contact/graduate-program.

Admissions to the M.Sc. and Graduate Diploma programs are open for the Fall term (beginning in September) only. Applications must be **completed** by January 15 to be considered for the following Fall term, i.e., online application submitted and all required documents uploaded.

Information on application deadlines is available at mcgill.ca/gradapplicants/how-apply/application-steps/application-deadlines.

Admission to graduate studies is competitive; accordingly, late and/or incomplete applications are considered only as time and space permit.

Clinical and Translational Research

Clinical and Translational Research (formerly Experimental Medicine) is a Division of the Department of Medicine charged with the task of providing graduate education in the Department, and enabling professors located in the research institutes of the McGill teaching hospitals and other centres to supervise graduate students. Graduate Students pursue cutting-edge medical research in a unique setting in which Ph.D. and M.D. researchers collaborate, favouring translational research into the pathogenesis and treatment of disease. The Division offers various programs, each of which has different training objectives (see below). The internationally recognized high-quality training our graduates receive is in essence what distinguishes graduates of our programs from the graduates of comparable programs in peer institutions.

Clinical and Translational Medicine Admission Requirements and Application Procedures

Admission Requirements

M.Sc. or Ph.D. in Experimental Medicine
Candidates who hold only an undergraduate degree in the medical and allied sciences (B.Sc. degree or an M.D. degree), must apply to the M.Sc. program, unless they have an undergraduate CGPA of 3.7 or more out of a possible 4.0, in which case they may apply for direct entry into the Ph.D. program. Candidates who already hold an M.Sc. apply directly to the Ph.D. program.

Admission is based on an evaluation by the Admissions Committee, which looks for evidence of high academic achievement, and on acceptance by a research director. All students must be financially supported either by their supervisor or through studentships or fellowships.

In addition to the documentation currently required by Graduate and Postdoctoral Studies, the student must submit a Research Project Proposal Form, a 1–2 page document outlining the M.Sc. or Ph.D. project and a Confirmation of Supervision form.

M.Sc. (Bioethics Option)

Admission to the master's specialization in Bioethics, from the base discipline of Medicine, is limited to students having degrees in Medicine, Nursing, or Physical and Occupational Therapy, as well as any other professional health training degree. Students who do not fit these criteria may be considered for admission on an individual basis.

For requirements, application deadlines, and further information regarding this program, please refer to the Bioethics entry or visit the Master's Specialization in Bioethics website.

M.Sc. or Ph.D. (Environment Option)

Although the requirements and application deadlines remain the same as the M.Sc. and Ph.D., applicants wishing to apply to the Environment Option must submit additional documents that constitute

their application to both the Division of Clinical and Translational Research and the Bieler School of Environment.

Students in the M.Sc. in Experimental Medicine may choose to transfer to the Environment Option; interested students should refer to the departmental website or contact the Student Affairs Office.

****This program is not currently offered.****

Graduate Certificate in Regenerative Medicine

Applicants for the Graduate Certificate in Regenerative Medicine must hold a B.Sc. degree. Applicants must have completed with success the following courses: BIOL 200 Molecular Biology, BIOL 202 Basic Genetics, CHEM 212 Introductory Organic Chemistry 1, their equivalent, or permission of the coordinator.

Graduate Diploma in Clinical Research

The Diploma program is open to health care and research professionals, medical residents, pharmacists, nurses, and those with an undergraduate degree in the medical and allied sciences.

Application Procedures

McGill's online application form for graduate program candidates is available at Applying and admissions | Future Graduate Students - McGill University

Further information is also available on the Division of Clinical and Translational Research website.

Additional Requirements

The items and clarifications below are additional requirements set by this department:

M.Sc. and Ph.D. in Experimental Medicine

- Personal statement
- Curriculum vitae
- Acceptance by a research director (*Confirmation of Supervision* form duly completed)
- Research Project Proposal form, a 1-2 page document outlining the M.Sc. or Ph.D. research project
- Additional documents (in the cases of the M.Sc. (Bioethics Option) and the M.Sc. or Ph.D. (Environment Option))

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while application deadlines are set by the Division of Clinical and Translational Research and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website; please consult the list at mcgill.ca/gps/contact/graduate-program

Information on application deadlines is available on our Division of Clinical and Translational Research website.

Family Medicine

The McGill Department of Family Medicine is home to an exceptional community of primary health care professionals, researchers, students, and support staff, whose mission is to contribute to the health of the population and the sustainability of the health care system in Quebec, in Canada, and internationally by:

- developing research and scholarly activity to contribute to the academic discipline;

- promoting curriculum innovation and education research;
- engaging in international and global health activities;
- developing and engaging in public policy discussions;
- training medical students, residents, and other health care professionals to become committed to primary care, contributing to accessibility, continuity, coordination, accountability, patient-centredness, and health promotion and prevention;
- promoting innovation in family medicine and primary health care delivery and practice.

We understand that research in family medicine and primary care is essential to the achievement of excellence in health care delivery, patient care, and education. Our research division is composed of Ph.D. and clinical researchers who dedicate their efforts to producing and translating knowledge that advances the discipline, practice, and teaching of family medicine and primary care while supporting the scholarly activities of clinicians and residents in the Department. We have developed unique and rigorous research programs for **M.Sc.** and **Ph.D.** students that advance academic excellence in family medicine and primary health care through patient-oriented, community-based research with innovative methodologies and participatory approaches.

Master of Science (M.Sc.) Family Medicine (Thesis) (45 credits)

The M.Sc. in Family Medicine is a research-oriented thesis-based graduate program in family medicine. The objective is to increase the skills of those interested in carrying out research pertinent to the practice of family medicine.

As many relevant research questions cross conventional boundaries of disciplines and research traditions, we incorporate an **interdisciplinary approach** with an emphasis on **participatory research** and **community engagement**.

This program provides training in epidemiology and statistics, as well as in qualitative, quantitative and mixed methods. Students are also oriented for knowledge synthesis, and participatory research approaches.

An emphasis is placed on the relevance of the thesis research to family practice and primary health care. Close links are maintained with the main family medicine clinical sites located around Montreal and Quebec.

Master of Science (M.Sc.) Family Medicine (Thesis): Bioethics (45 credits)

The objectives of this program are to allow students to conduct innovative research in relation to a bioethical issue pertinent to health care and to acquire a working knowledge of bioethical issues from the current viewpoint of other relevant disciplines such as law, philosophy, and religious studies. A minimum of 45 credits is required including the thesis. The research culminates in the preparation of a thesis.

Master of Science (M.Sc.) Family Medicine (Thesis): Medical Education (45 credits)

This program will have very close ties to the Family Medicine Educational Research Group (FMER), which is the corollary of the educational innovations in teaching and research conceived and established in the McGill Department of Family Medicine since 2005. The FMER group's ultimate goal is to advance knowledge to:

1. constantly inform family medicine curricula innovations and continuing professional development to better family physicians' clinical practice;
2. significantly contribute to the development of the family medicine education field of inquiry;
3. rigorously develop and inform medical education policy.

This research agenda of FMER is articulated into four interrelated streams:

1. family physician's professional identity formation;
2. information use and technology in the learning episodes of practicing physicians and organizational learning;
3. program evaluation of educational innovations;
4. knowledge synthesis.

Doctor of Philosophy (Ph.D.) Family Medicine & Primary Care

The Ph.D. program will build upon our M.Sc. in Family Medicine. Research topics in the field of family medicine and primary health care cross conventional discipline boundaries and research traditions. Our training program focuses on patient-oriented, community-based research using innovative methodologies and participatory approaches. The program advances academic excellence in family medicine and primary health care.

Medicine, Family Admission Requirements and Application Procedures

Admission Requirements

Our program encourages the following applicants:

- Practicing family physicians
- Undergraduate university students with a strong interest in family medicine research
- Family medicine residents who are completing their residency and would like to continue with their education by completing an enhanced skills program specializing in family medicine research with the possibility of obtaining an M.Sc. degree. If interested, you may learn more about the Clinician Scholar Program here

What do we look for?

High academic achievement: A cumulative grade point average (CGPA) of 3.4 is required out of a possible maximum CGPA of 4.0, or a GPA of 3.6 is required in the last two years of full-time studies.

Proof of competency in oral and written English: TOEFL: International students who have not received their instruction in English, or whose mother tongue is not English, must pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 86 on the Internet-based test (iBT), with each component score not less than 20 (internet-based test).

Note: The TOEFL institution code for McGill University is 0935. For further information, please refer to the TOEFL website.

Alternatively, students may submit International English Language Testing System (IELTS) scores with a minimum overall band score of 6.5. Original score reports must be submitted (photocopies will not be accepted).

For overseas graduates, an attempt is made to situate the applicant's academic grades among the standards of their universities. Grades are, however, converted to their McGill equivalent. International Grade

Conversion charts, as well as required admission documentation for each country, are provided by Graduate and Postdoctoral Studies and prospective students should refer to these in order to determine if they are admissible to our program.

Application Procedures

McGill's online application form for graduate program candidates is available at mcgill.ca/gradapplicants/how-apply.

See University Regulations & Resources > *Graduate* > *Graduate Admissions and Application Procedures* > Application Procedures for detailed application procedures.

All supplemental application materials and supporting documents must be uploaded directly to the McGill admissions processing system.

- **Supervisor:** All students must be matched to a supervisor to be admitted to our graduate programs; this matching will occur during the application process (i.e., after the applicant has submitted a complete application). After the application has been received, the applicants will have an opportunity to be chosen for an interview with one of our supervisors if the minimum admission requirements have been met. After the application is complete, candidates may contact potential supervisors who interest them for an interview.
- **Application form and fee:** All applicants must complete the Online Application. The application must be accompanied by a non-refundable application fee payable by credit card (Visa or Mastercard); fee amounts and details are listed on the Student Accounts website. Please ensure you apply for the M.Sc. in Family Medicine or the Ph.D. in Family Medicine and Primary Care.
- **Curriculum Vitae:** Please upload the latest version of your CV, which should include a listing of previous research experience and publications. All relevant research experience should be included in your CV since you are applying for a research position in the Department.
- **Letters of Reference:** Two (2) or three (3) letters of reference must accompany any application to our program. These letters must be no more than six months old, must be on letterhead paper, and are required to be uploaded to the admissions processing system. Applicants are encouraged to request references from academic or other professional employers who can evaluate their potential for graduate studies and research, and who can attest to the applicant's research skills. Referees will also be asked to rank each applicant and to provide a size of the comparison (i.e., out of 50 supervised students). **Any applicant having undertaken previous graduate studies (whether at McGill or elsewhere) should make sure that one of the letters of reference is from their graduate supervisor. Please note:** On the application form, applicants must provide the names and email addresses of referees. McGill will contact these referees via email and invite them to upload reference letters on the applicant's behalf (along with the instructions on how to upload the documents). **Neither of these reference letters should be from the proposed supervisor.**
- **Personal Statement:** Applicants must submit a personal statement in which they:
 - a. describe their background and the reasons why they are applying to the desired program;
 - b. describe their research interests and with whom, among the list of potential supervisors, they would like to work;
 - c. describe how they hope to impact family medicine practice; and
 - d. describe future plans upon graduation from the desired program.

The statement should be no more than two (2) pages long.

- **Writing Assessment**
- **Interview**
- **Official Transcripts:** Applicants must submit one (1) official copy of all transcripts for all post-secondary education undertaken (Quebec students need not submit CEGEP transcripts). Unofficial transcripts may be uploaded to the McGill admissions processing system. Official transcripts are required when an offer of admission has been extended. **Please note:** Official transcripts are not required for studies conducted at McGill University.

Additional Requirements

The items and clarifications below are additional requirements set by this department:

- Curriculum Vitae
- Personal Statement – no more than two (2) pages long

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while application deadlines are set by the Department of Family Medicine and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website; please consult the list at mcgill.ca/gps/contact/graduate-program.

Information on application deadlines is available at mcgill.ca/gradapplicants/how-apply/application-steps/application-deadlines.

All supporting documents must be received by February 1 for the Fall semester. Candidates who are interested in our MSc programs are only allowed to apply for the Fall semester. Candidates who are interested in our Ph.D. in Family Medicine and Primary Care program may apply in either the Fall or Winter semesters.

Admission to graduate studies is competitive; accordingly, late and/or incomplete applications are considered only as time and space permit.

Oncology

Graduate Diploma in Oncology

****This program is currently not offered.****

The Graduate Diploma in Oncology provides students the opportunity to gain exposure to the principles and practice of oncology as well as its research domains, while exploring in more detail one of four areas of focus:

- Population and Global Cancer Control
- Psychosocial Oncology/Palliative Care
- Clinical Cancer Research
- Cancer Care Services and Quality

Otolaryngology – Head and Neck Surgery

The Master of Science degree offered by the Department of Otolaryngology – Head and Neck Surgery provides inter-disciplinary training for clinical or basic science research in Otolaryngology. Master's programs can include research on normal function and disease of head and neck structures: otology, neuro-otology, laryngology, rhinology, oncology, surgery, auditory-vestibular sciences,

middle-ear modelling, ototoxicity, genomics, infection, thyroid disease, or genetics.

Otolaryngology Admission Requirements and Application Procedures

Admission to the M.Sc. program requires acceptance by a research supervisor, and the proposed program must be approved by the Department.

Applicants require a strong interest in otolaryngology research. They can be otolaryngologists, physicians, Ph.D.s, dentists, therapists, veterinarians, medical professionals, engineering, or science undergraduates, among others.

The results of the Test of English as a Foreign Language (TOEFL) (minimum of 86 on the Internet-based test—iBT) with each component score not less than 20 is required for applicants to graduate studies whose mother tongue is not English, and who have not completed an undergraduate or graduate degree from a recognized foreign institution where English is the language of instruction or from a recognized Canadian institution (anglophone or francophone).

Application Procedures

McGill's online application form for graduate program candidates is available at mcgill.ca/gradapplicants/apply.

Prospective students should contact research supervisors individually.

Additional Requirements

The items and clarifications below are additional requirements set by this department:

- Curriculum Vitae
- Personal Statement
- Acceptance by a research supervisor, possibly after Departmental coordination

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while application deadlines are set by the Department of Otolaryngology and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website; please consult the list at mcgill.ca/gps/contact/graduate-program.

Information on application deadlines is available at mcgill.ca/gradapplicants/how-apply/application-steps/application-deadlines.

Admission to graduate studies is competitive; accordingly, late and/or incomplete applications are considered only as time and space permit.

Pathology

Pathology is the specialized area of biomedical science that emphasizes the study of disease, and it is therefore one of the most multidisciplinary fields of research. Investigators in a pathology department may be utilizing information and experimental techniques originally developed in almost any area of modern biology and, in return, may contribute new knowledge of benefit to many other disciplines. Research on disease may target any of the organ systems, in normal and abnormal conditions, and studies may be conducted from a structural, functional, or molecular perspective at any level—from the intact organism down to specific components of the individual

cell. Research in pathology often provides a unique link to human data, with an opportunity to translate experimental research into improved methods of diagnosis and therapy.

The Graduate Studies Program in the Department of Pathology has been designed to achieve three major goals:

1. To train students in the design, performance, interpretation, and documentation of laboratory research by guiding them as they carry out a thesis project in one of the many sub-disciplines of pathology.
2. To ensure that students have a comprehensive knowledge of biomedical science, with an advanced and up-to-date understanding of pathology. In addition to the scientific component, Ph.D. candidates should also become familiar with the general principles of diagnostic pathology. (Foreign medical graduates should be aware that this level of conceptual knowledge regarding diagnostic procedures is **not** adequate preparation for clinical employment and those wishing to practice Pathology as a medical specialty should apply for residency training rather than graduate studies.)
3. To provide initial training in effective techniques of scientific communication: organizing and delivering lectures and research seminars; preparing and evaluating manuscripts and grant applications.

The Pathology Department offers research training in a wide variety of areas such as:

- Cancer research, including the fundamental biology of breast cancer, ovarian cancer, brain tumors, soft tissue tumors, and the mechanisms of metastasis;
- Immunology and transplantation;
- Autoimmune disorders;
- Ophthalmic pathology;
- Stem cell biology;
- Pulmonary disease;
- Neurodegenerative disorders;
- Smooth muscle pathophysiology; and
- Genomic biology of cancer.

Modern techniques and equipment include light, fluorescence, and electron microscopy (both transmission and scanning), laser capture microdissection, mass spectroscopy, DNA and RNA sequencing, single cell-RNA sequencing, spatial transcriptomics, liquid biopsy, machine learning, preclinical model development, organoids, microfluidics, CRISPR/CAS9, transgenic mouse models, flow cytometry, cell culture, advanced immunological, pharmacological, biochemical, and physiological techniques, as well as morphometry and computer-aided analysis.

Pathology Admission Requirements and Application Procedures

Admission Requirements

Applicants must have a B.Sc. or an equivalent degree with an extensive background in the physiological and biological sciences. An academic record equivalent to or better than a cumulative grade point average (CGPA) of 3.2 out of 4.0 is required. It is an advantage if candidates have very favourable supporting letters or have demonstrated an exceptional aptitude for research. All candidates are expected to apply

for scholarships and fellowships, which usually require a higher CGPA or other evidence of excellence.

Applicants to graduate studies whose native language is not English and who have not completed an undergraduate or graduate degree from a recognized foreign institution where English is the language of instruction or from a recognized Canadian institution (anglophone or francophone), must submit documented proof of competency in oral and written English. Before acceptance, appropriate exam results must be submitted directly from the TOEFL (Test of English as a Foreign Language) or IELTS (International English Language Testing Systems) Office.

Students are normally accepted into the M.Sc. program, and those candidates showing exceptional ability may be permitted to transfer (fast-track) into the Ph.D. program after one year of training.

Applicants holding a graduate degree (Master's) - or in exceptional cases, an undergraduate degree (Bachelor's) - from a recognized institution are eligible to apply to our PhD program. An academic record equivalent to or better than a **GPA of 3.5** out of 4.0 at McGill is required for those with a graduate degree. To be considered for direct entry following undergraduate studies, a **GPA of 3.7** out of 4.0 is required in addition to considerable and relevant research experience.

For further information, applicants may contact the Teaching Office, Department of Pathology: gradstudies.pathology@mcgill.ca.

Application Procedures

McGill's online application form for graduate program candidates is available at mcgill.ca/gradapplicants/apply.

See Graduate Application Procedures for detailed application procedures.

All applications will be evaluated by the Pathology Graduate Training Committee (GTC). Candidates found suitable must then be accepted by a research director, and adequate funding must be obtained for both personal support and research expenses.

Additional Requirements

- Personal statement
- Curriculum vitae
- Research proposal (when appropriate)

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while application deadlines are set by the Pathology Department and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website; please consult the list at mcgill.ca/gps/contact/graduate-program.

Information on application deadlines is available at mcgill.ca/gradapplicants/how-apply/application-steps/application-deadlines.

Admission to graduate studies is competitive; accordingly, late and/or incomplete applications are considered only as time and space permit.

Psychiatry

McGill University's Department of Psychiatry is one of the most prestigious in the world. In the 1950s and 60s, Heinz Lehmann conducted the first North American clinical trials for antipsychotic and

antidepressant medications. Theodore Sourkes identified the core neurobiological features of Parkinson's disease, and Eric Wittkower and Jack Fried brought together scholars from Anthropology and Psychiatry to create Transcultural Psychiatric Studies. Since then, faculty members and graduate students continue outstanding research in addictions; Alzheimer's and childhood disorders; eating, personality, and mood disorders; stress; trauma; and psychosis. The work is conducted in people and animal models, and also benefits from expertise ranging from neuroimaging and epigenetics to mental health services and public policy. Our work remains at the cutting edge of research on health, disease, and recovery.

Psychiatry Admission Requirements and Application Procedures

Admission Requirements

- A strong background in science and/or social science, as demonstrated by academic achievement equivalent to a GPA of 3.3 (on a 4-point scale) or 3.5 in the last two years
- An outline of the proposed thesis research, to be written by the prospective student in collaboration with an appropriate research supervisor
- Two letters of reference
- TOEFL or IELTS certificate of proficiency in English for non-Canadian applicants whose mother tongue and language of education is not English, with a minimum score of 86 on the TOEFL Internet-based test (iBT), with each component score not less than 20, or 6.5 on the IELTS test

and

Master of Science: Psychiatry (thesis)

- A B.Sc., B.A., B.N., or M.D. degree
- Demonstration of financial support through a scholarship/award and/or by the student's supervisor

Doctor of Philosophy: Mental Health

- A M.Sc., or M.A. degree
- The student's statement of purpose for seeking a Ph.D.
- Confirmation of supervision, including confirmation of funding from the supervisor or from an external scholarship

Application Procedures

McGill's online application form for graduate program candidates is available at mcgill.ca/gradapplicants/how-apply.

See the Application Procedures page for more information.

Additional Requirements

The items and clarifications below are additional requirements set by this department:

- Personal Statement – describing the specific reasons for seeking a Master of Science degree in Psychiatry
- Two Letters of Reference uploaded by the referee - letters must be current (not more than six months old)
- Written Confirmation of Supervision form from the proposed research supervisor

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while

application deadlines are set by the Department of Psychiatry and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website mcgill.ca/psychiatry/education/graduate-program/prospective-students.

Information on application deadlines is available at mcgill.ca/gradapplicants/how-apply/you-apply-mcgill/application-deadlines.

Admission to graduate studies is competitive; accordingly, late and/or incomplete applications are considered only as time and space permit.

Surgical and Interventional Sciences

Surgical and Interventional Sciences offers graduate-level training leading to an **M.Sc.** or a **Ph.D.** degree. At the master's level, in addition to the core program, those who are interested have a new opportunity to choose a concentration in Surgical Innovation, Surgical Education, or Global Surgery. The Surgical and Interventional Sciences division is responsible for the administration of the graduate programs and allows excellent opportunities for training under the supervision of professors located in the Research Institute of the McGill University Health Centre or other McGill teaching hospitals. The scope of the research and close connections with other Montreal research centres and McGill departments provide ample opportunities for collaboration. Research in the Department covers a wide spectrum, including injury, repair, recovery, tissue engineering, transplantation, fibrosis, cancer and stem cell biology, biomechanics, organ failure, surgical stimulation, surgical innovation, education, and evaluative/outcomes research.

Please consult our department page for more information on finding a supervisor.

Surgical and Interventional Sciences Admission Requirements and Application Procedures

Admission Requirements

M.Sc. Core Program

Usually a B.Sc., M.D., or DVM degree is required, with a minimum CGPA of 3.2/4.0. Applications will be accepted from candidates sponsored by a research supervisor willing to provide laboratory space, funding, and direction for their research work.

M.Sc. Concentrations

Generally a B.Sc. in biological, biomedical, and life science; physical science; computer science; an M.D. degree; or a B.Eng. is required. Exceptionally, on a case-by-case basis, an applicant holding a B.Com.; B.C.L./LL.B.; or B.A. or B.Sc. in humanities and social sciences will be considered. An applicant must have a minimum CGPA of 3.2/4.0.

Ph.D. Program

Admission is usually through one of the M.Sc. programs, either upon completion of the M.Sc. degree, or by transfer from the first year of M.Sc. to the second year of Ph.D. studies, within the Department. Request for such transfer is to be made in writing by the thesis supervisor during the candidate's first year of M.Sc. studies. A candidate for transfer must submit an application to the doctoral program according to normal procedures and deadlines. **Transfer is granted on the basis of an examination administered by the student's Research Advisory Committee.** Exceptional students with a minimum 3.5/4.0 CGPA may apply directly to the Ph.D. program.

Students with an M.Sc. degree from other departments or from other recognized universities whose M.Sc. topic is closely related to the subject of their Ph.D. research may be admitted directly into the Ph.D. program, at the level of Ph.D. 2, at the discretion of the Department.

Exceptional students with a master's degree unrelated to their proposed research may be admitted to Ph.D. 1.

Graduate Certificate and Graduate Diploma

Generally a B.Sc. in biological, biomedical and life science; physical science; computer science; an M.D. degree; or a B.Eng. is required. Exceptionally, on a case-by-case basis, an applicant holding a B.Com.; B.C.L./LL.B.; or B.A. or B.Sc. in humanities and social sciences will be considered. An applicant must have a minimum CGPA of 3.2/4.0.

Application Procedures

McGill's online application form for graduate program candidates is available at mcgill.ca/gradapplicants/how-apply.

See University Regulations & Resources > *Graduate* > *Graduate Admissions and Application Procedures* > Application Procedures for detailed application procedures.

Additional Requirements

The items and clarifications below are additional requirements set by this department:

- Curriculum Vitae
- Research Project Proposal
- Confirmation of Supervisor
- Letter of Understanding
- Tuition Assistance

Additional Requirements for the Concentrations in Surgical Education and Surgical Innovation and M.Sc. Non-Thesis, M.Sc. Non-Thesis Oncology

- Letter of Intent – A letter of intent from the students describing their reasons for pursuing the concentration of their choice, what their qualifications are, and why they should be accepted.
- Interview session – Students applying to the concentration in Surgical Education or in Surgical Innovation may be requested to attend an interview session either in person, by phone, or via Skype.

Application Dates and Deadlines

Application opening dates are set by Enrolment Services in consultation with Graduate and Postdoctoral Studies (GPS), while application deadlines are set by Surgical and Interventional Sciences and may be revised at any time. Applicants must verify all deadlines and documentation requirements well in advance on the appropriate McGill departmental website; please consult the list at mcgill.ca/gps/contact/graduate-program.

Information on application deadlines is available at mcgill.ca/gradapplicants/how-apply/you-apply-mcgill/application-deadlines.

Admission to graduate studies is competitive; accordingly, late and/or incomplete applications are considered only as time and space permit.

Available Programs

- Clinical Research (Gr. Dip.) (30 credits)
- Experimental Medicine (Ph.D.)
- Experimental Medicine (Thesis) (M.Sc.) (45 credits)
- Experimental Medicine (Thesis): Bioethics (M.Sc.) (45 credits)
- Experimental Medicine (Thesis): Digital Health Innovation (M.Sc.) (45 credits)
- Experimental Medicine (Thesis): Environment (M.Sc.) (45 credits)

- Experimental Medicine: Environment (Ph.D.)
- Family Medicine & Primary Care (Ph.D.)
- Family Medicine (Thesis) (M.Sc.) (45 credits)
- Family Medicine (Thesis): Bioethics (M.Sc.) (45 credits)
- Family Medicine (Thesis): Medical Education (M.Sc.) (45 credits)
- Medical Radiation Physics (Gr. Dip.) (30 credits)
- Medical Radiation Physics (Thesis) (M.Sc.) (45 credits)
- Mental Health (Ph.D.)
- Mental Health (Thesis) (M.Sc.) (45 credits)
- Oncology (Grad. Dip.) (30 credits)
- Otolaryngology (Thesis) (M.Sc.) (45 credits)
- Pathology (Ph.D.)
- Pathology (Thesis) (M.Sc.) (45 credits)
- Regenerative Medicine (Gr. Cert.) (15 credits)
- Surgical and Interventional Sciences (Non-Thesis) (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Non-Thesis): Oncology (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Ph.D.)
- Surgical and Interventional Sciences (Thesis) (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Thesis): Digital Health Innovation (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Thesis): Global Surgery (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Thesis): Surgical Education (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Thesis): Surgical Innovation (M.Sc.) (45 credits)
- Surgical and Interventional Sciences (Thesis): Surgical Outcomes Research (M.Sc.) (45 credits)
- Surgical Innovation (Gr. Cert.) (15 credits)
- Surgical Innovation (Gr. Dip.) (30 credits)

School of Medicine

680 Sherbrooke St. West, Suite 1701
Montreal QC H3A 2M7
Website: mcgill.ca/schoolofmedicine

Medical Physics

Medical Physics Unit, DS1-4556
McGill University Health Centre – Glen Site
Cedars Cancer Centre
1001 Décarie Boulevard
Montreal QC H4A 3J1
Telephone: 514-934-1934 ext. 44158
Fax: 514-934-8229
Email: margery.knewstubb@mcgill.ca
Website: mcgill.ca/medphys

Medicine, Experimental

Division of Experimental Medicine
Department of Medicine
1001 Decarie Boulevard
Montreal QC H4A 3J1
Telephone: 514-934-1934, ext. 34699 or 34700 or 36465
Email: experimental.medicine@mcgill.ca

Website: mcgill.ca/expmed

Medicine, Family

Department of Family Medicine
5858 Côte-des-Neiges Road, 3rd Floor
Montreal QC H3S 1Z1
Email: graduateprograms.fammed@mcgill.ca
Website: mcgill.ca/familymed/education/graduate-programs

Oncology

Gerald Bronfman Department of Oncology
5100 de Maisonneuve Blvd West, Suite 720
Montreal QC H4A 3T2
Website: mcgill.ca/oncology

Otolaryngology – Head and Neck Surgery

Department of Otolaryngology – Head and Neck Surgery
MUHC (Royal Victoria Hospital)
1001 Boul. Decarie, D05.5709
Montreal QC H4A 3J1
Telephone: 514-934-1934, ext. 36386
Website: mcgill.ca/ent

Pathology

Department of Pathology
Duff Medical Building
3775 University Street, Room B4
Montreal QC H3A 2B4
Telephone: 514-398-3045
Email: gradstudies.pathology@mcgill.ca
Website: mcgill.ca/pathology

Psychiatry

Department of Psychiatry
1033 Pine Avenue West
Montreal QC H3A 1A1
Telephone: 514-398-4176
Fax: 514-398-4370
Email: graduate.psychiatry@mcgill.ca
Website: mcgill.ca/psychiatry

Surgical and Interventional Sciences

Surgical and Interventional Sciences (formerly Experimental Surgery)
Montreal General Hospital
1650 Cedar Avenue, T5-110
Montreal QC H3G 1A4
Program Administrator: Micha Huynh,
exsu.admissions@mcgill.ca, 514-396-2190
Graduate Program Coordinator: Sharon
Turner, gradstudies.surgery@mcgill.ca
Student Affairs Coordinator: Laura
Epure, surgicalresearch.med@mcgill.ca
Website: mcgill.ca/surgicalandinterventionalsciences