Charting Your Future
A Guide to a Career in Medicine
“The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head.”

- Sir William Osler
Choosing a career path is a daunting task. Some people have a seemingly innate and directed passion for a particular field that they pursue headlong from day one. For the rest of us, the path can be more circuitous. Whatever your own course has been thus far, if you now find yourself contemplating a life in medicine, know that you are committing to a lifelong climb. The ascent into the field is steep and demanding, requiring motivation, dedication, and spirit.

By being a McGill student, you have already taken a step in the right direction. Among the best comprehensive universities in Canada, McGill University is a dynamic, research-intensive institution, committed to ensuring an outstanding learning experience for its students. The university and its organizations are constantly striving to develop new and innovative programs to help students succeed.

Medical Direction (M.D.) is an example of such a program. Provided by the Science Undergraduate Society (SUS), Medical Direction is an undergraduate program to enhance the medical experience of interested students. With opportunities to shadow doctors and researchers in their working environments, experience speakers and informative events, and benefit from medical humanitarian trips to Central America, Medical Direction strives to help you better understand the medical profession, and make a more informed decision in the future.

The newest piece of the puzzle is this guide. Written, researched, and compiled by a large group of devoted undergraduate students, it is intended for both the savvy and the clueless. With information covering basic requirements, the application process, local and international medical schools, residency, and more, this guide is the survival manual for navigating the often rocky and constantly changing medical terrain.

Overall, with this guide and all the other services of Medical Direction, we hope to broaden students’ horizons, and allow them to get a taste of the medical world before they finish their undergraduate degrees.

We wish all readers the best of luck in their endeavours.

Sincerely,

Heather Johnson  
Academic Director  
Medical Direction

Neil Issar  
President  
Science Undergraduate Society
TABLE OF CONTENTS

GETTING INTO MEDICAL SCHOOL 4
a. Entrance Requirements 4
  i. Course and Degree Requirements 4
  ii. GPA 5
  iii. The MCAT 8
  iv. GPA and MCAT Comparison Table 10
b. Building Up Your CV 12
  i. Volunteering 12
  ii. Leadership 12
  iii. Clinical Experience 13
  iv. Research 13
c. Application Process 15
  i. Types of Programs 15
  ii. How and When to Apply 16
  iii. Application Questions and the PSE 19
  iv. Letters of Reference 20
  v. Supporting Documents 21
  vi. The Interview 21

INTERNATIONAL MEDICAL SCHOOLS 23
a. Ireland 23
b. Caribbean 25
c. USA 26
d. Financing Your Education 27
e. Being an IMG 27

CANADIAN MEDICAL SCHOOL 28
a. Typical Curriculums for Canadian Programs 28
b. Tuition and Expenses 30

RESIDENCY 30
a. Canadian Resident Matching Service 31
b. Types of Specialties 32
c. Being a Resident 34
d. The American Way 34
GETTING INTO MEDICAL SCHOOL

a. Entrance Requirements

i. Course and Degree Requirements

Each of the 17 medical programs in Canada has its own specific set of requirements for prospective students. The majority of Canadian programs will admit students after they have completed three years of post-secondary education, though some schools require the completion of a full bachelor’s degree. Most schools do not care what you major in, but have a list of required courses that you must have completed or be scheduled to complete at the time of your application.

Below are two tables that summarize the basic degree and course requirements of Canadian medical schools. For a more in depth look, McGill students can consult the SUS Redbooks website (see Resources for McGill Students). For the most accurate, detailed and up-to-date information, students should consult the websites of individual medical programs.

Degree Requirements and Duration of Medical Programs in Canada

<table>
<thead>
<tr>
<th>Number of Years of Undergraduate Study Required</th>
<th>Duration of Medical Program</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>3 years</td>
</tr>
<tr>
<td>2</td>
<td>- U. of Calgary</td>
</tr>
<tr>
<td></td>
<td>- U. of Saskatchewan</td>
</tr>
<tr>
<td></td>
<td>- U. of Alberta</td>
</tr>
<tr>
<td>3</td>
<td>- McMaster</td>
</tr>
<tr>
<td></td>
<td>- U. of Ottawa</td>
</tr>
<tr>
<td></td>
<td>- Queen’s</td>
</tr>
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<td></td>
<td>- U. of Toronto</td>
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<tr>
<td></td>
<td>- U. of British Columbia</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- U. of Manitoba</td>
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<tr>
<td></td>
<td>- Northern Ontario</td>
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<tr>
<td></td>
<td>- Western</td>
</tr>
<tr>
<td></td>
<td>- McGill</td>
</tr>
<tr>
<td></td>
<td>- Memorial</td>
</tr>
<tr>
<td></td>
<td>- Dalhousie</td>
</tr>
<tr>
<td>DEC or equivalent</td>
<td>- U. de Montréal</td>
</tr>
<tr>
<td></td>
<td>- U. de Sherbrooke</td>
</tr>
<tr>
<td></td>
<td>- U. de Laval</td>
</tr>
</tbody>
</table>

Required Courses for Medical Programs in Canada

Universities not shown in the table below have no specific required courses. Laval, Sherbrooke and l’Université de Montréal have required courses at the CÉGEP level.
The numbers below represent the number of equivalent McGill *credits* required. “L” denotes that there must be a laboratory component, while “R” denotes that a course is recommended but not absolutely necessary.

<table>
<thead>
<tr>
<th></th>
<th>Life Sciences</th>
<th>General Biology</th>
<th>Physiology</th>
<th>Biochemistry</th>
<th>General Chemistry</th>
<th>Organic Chemistry</th>
<th>General Physics</th>
<th>Statistics</th>
<th>Calculus</th>
<th>Social Sci. and Humanities</th>
<th>Languages</th>
<th>English</th>
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<td>U. of Alberta</td>
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<tr>
<td>U. of Sask.</td>
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<td>6</td>
<td>6</td>
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<td>6</td>
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<td>6</td>
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<tr>
<td>U. of Manitoba</td>
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<td>18</td>
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<td>Northern Ont.</td>
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<tr>
<td>U. of Ottawa</td>
<td>6L</td>
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<td>12*</td>
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<td>6</td>
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<td>Queen’s</td>
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<td></td>
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<tr>
<td>U. of Toronto</td>
<td>6</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6 (12 total in expository writing)</td>
</tr>
<tr>
<td>McGill</td>
<td>6L</td>
<td>6L</td>
<td>6L</td>
<td>3L</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>6L</td>
<td></td>
</tr>
<tr>
<td>Memorial</td>
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<td>6</td>
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</tbody>
</table>

*Organic Chemistry and General Chemistry must be accompanied by a lab

### ii. GPA

Your GPA will play an important role in decisions regarding your acceptance. Each year, most universities determine a cut-off score; if an applicant’s GPA falls below the cut-off, their application is not considered. These cut-offs vary from year to year, depending on the pool of applicants. However, it is important to keep in mind that the GPA cut-off is not the average GPA for admitted students – if you just make the GPA cut-off, it is important to supplement your application with a great MCAT score or terrific recommendations and extra-curriculars. For a list of GPA cut-offs for Canadian Medical Schools, see the table in the following section.

Methods of calculating the GPA can vary from school to school. The following is a brief summary of how GPAs are calculated for various Canadian programs:
University of British Columbia – GPA is calculated in three ways: overall academic average (including summer courses and graduate courses with grades, if applicable), most recent sixty credits average, and prerequisite average (if a class is failed and/or repeated, an average of both attempts will be taken)

University of Alberta – All courses completed while registered as a full time student are considered; if more than 4 full years of undergraduate study have been completed, the lowest year GPA is dropped; summer and spring courses are only included if they are prerequisites

University of Calgary – The GPAs for the best two complete years of full-time study are averaged; courses taken during the summer are not included in the calculation, but are considered in terms of academic background

University of Saskatchewan – The best two full undergraduate years of study complete at the time of application will be considered; summer courses not considered

University of Manitoba – An Adjusted Grade Point Average (AGPA) is calculated for each applicant, based on all undergraduate university courses including those taken in Summer Session and during part-time studies (does not include graduate level courses)

Northern Ontario Medical School – Courses are weighted according to the year of study (see website for details); additional undergraduate courses completed after a degree is awarded are not considered

University of Western Ontario – only those years in which at least 5 full or equivalent courses (30 credit hours) are taken between September and April will be used in the calculation of GPA; the five best courses will be used if the student is required to take more than 5 full courses because of program requirements; minimum GPA must be met in EACH of the two undergraduate years; summer courses are not included

Queen’s University – All courses are considered (including summer courses); applicants who do not meet the GPA cut-off will have the most recent two full time years of completed undergraduate study considered

McMaster – All degree level courses are considered (including supplementary and summer courses) with the exception of courses taken as Pass/Fail.

University of Toronto – GPA is calculated using grades from all courses taken at an undergraduate level on a full time basis; for students applying after three years of University study, one full-course equivalent grade per full year of study will be eliminated (i.e. for three years of study, the 3 lowest overall grades will not be included in calculations); summer courses are not included in the GPA, though they do count towards the fulfillment of prerequisites

University of Ottawa – The WGPA is calculated based on years as a full-time students; a full-time academic year where the equivalent of four (4) full-year courses is taken is accepted and counted in the WGPA only if the missing course/credit is completed either as an additional course within another academic year or as a summer course; summer courses are accepted for the credit value but are not included in the WGPA calculation
McGill – Students must maintain a full course load (see their website for details); courses taken in the summer or alternative/additional sessions are acceptable so long as the courses taken are an additive to the program

*Université de Montréal, Laval and Sherbrooke* - The French Universities in Quebec follow a different system; A “cote de rendement universitaire” (CRU or R) is used to assess a student’s academic profile. This takes the difficulty of the program into account as well as the student’s performance relative to the class average. University of Laval displays the formula for calculating the CRU at [http://www.reg.ulaval.ca/sgc/crl](http://www.reg.ulaval.ca/sgc/crl).

Dalhousie University – Calculation is based on a full class load (5 classes each year) in the two most recent years of study; an applicant’s best 3 out of 4 years of full time study will also be considered

Memorial University of Newfoundland – Courses from all years of University/College level study are considered

* For application to the Medical Schools listed in Ontario, one must convert their GPA using the OMSAS 2009 conversion table found at [http://www.ouac.on.ca/omsas/pdf/c_omsas_b.pdf](http://www.ouac.on.ca/omsas/pdf/c_omsas_b.pdf).

References:


“Calculation of GPA/Weighting Formula.” University of Toronto Faculty of Medicine, January 11, 2009. <http://www.facmed.utoronto.ca/programs/md/admissions/0910/requirements/Academic_Qualifications/Calculation_of_GPA_Weighting_Formula.htm#>


“Examples of Full Course Loads at Other Universities.” University of Saskatchewan College of Medicine, January 11, 2009. <http://www.medicine.usask.ca/education/admissions/examples-of-full-course-loads-at-other-universities>
iii. The MCAT

Brace yourselves - the most dreaded exam for all pre-meds is the Medical College Admission Test (MCAT). Not all schools in Canada require the MCAT, though they generally will look at your MCAT score if you have taken it. Approximately 5 hours in length, this test will examine your critical thinking, writing and problem solving skills. The exam is divided into 4 sections: Physical Sciences, Biological Sciences, Verbal Reasoning and the Writing Sample.

Physical Sciences and Biological Sciences

These sections will test your ability to solve problems in general chemistry and physics (Physical Sciences) along with biology and organic chemistry (Biological Sciences). Each section contains 7 passage-based sets of questions and 13 independent questions. Each passage-based set consists of four to seven questions.

Verbal Reasoning

This section will test your ability to understand, evaluate, and apply information and arguments presented in written paragraphs. This section consists of 7 passages, each of which is about 600 words long, taken from the humanities, social sciences, and natural sciences. Each passage-based set consists of five to seven questions.

Writing Sample

This section consists of two 30-minute essays that assess skill in the following areas:
- Developing a central idea
- Presenting ideas cohesively and logically
- Writing clearly, with grammar and syntax at the level appropriate for a first-draft composition

The writing sample does not assess:
- Your knowledge of biology, chemistry or physics
- Your knowledge of the medical school application process or the medical profession
- Social and cultural issues outside the general experience of university students
Each essay will be graded twice on a scale of 1-6, giving you 4 individual scores for the section. Your numeric score is then converted to a letter grade ranging from J to T, with J being the lowest and T being the highest.

**General Time Frame for the MCAT**

<table>
<thead>
<tr>
<th>Test Section</th>
<th>Questions</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Tutorial (optional)</td>
<td>10 minutes</td>
<td></td>
</tr>
<tr>
<td>Non-Disclosure Agreement</td>
<td>5 minutes</td>
<td></td>
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<tr>
<td>Physical Sciences</td>
<td>52</td>
<td>70 minutes</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>10 minutes</td>
<td></td>
</tr>
<tr>
<td>Verbal Reasoning</td>
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<td>60 minutes</td>
</tr>
<tr>
<td>Break (optional)</td>
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<td></td>
</tr>
<tr>
<td>Writing Sample</td>
<td>2</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>10 minutes</td>
<td></td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>52</td>
<td>70 minutes</td>
</tr>
<tr>
<td>Void Question</td>
<td>5</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Survey</td>
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<tr>
<td><strong>Total “Seat” Time</strong></td>
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<td>5 hours, 20 minutes</td>
</tr>
</tbody>
</table>

Total time does not include check-in time on arrival at the test center.

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**The Computer based MCAT**

In January 2007, the paper version of the MCAT was completely discontinued and since then the computerized version took its place. The computer based MCAT offers several advantages, such as a shorter test day, more opportunities to take the MCAT during the year, a quicker scoring process and enhanced security. Going digital does come with a cost – the price to register for the 2009 computerized version is $225.

The computer based test will allow you to change your answers within a given section. However, you will not be able to view or change any answers to a previous section once you’ve begun a new section. You will also have the ability to highlight passages and strike out answer choices. Scrap paper is provided for working out problems, which will be collected and discarded at the end of each session. Those with fast typing skills will appreciate the ability to type up their writing sample. Unfortunately, spell check is not available.
Registration for the MCAT will continue to be through the MCAT web site. Registration can open as early as 5 months before the test date and closes approximately two weeks prior to the test date. Be sure to register early as seats fill up quickly.

For more information on the MCAT, please read the 2009 MCAT Essentials which can be found at http://www.aamc.org/students/mcat/.

References:


iv. GPA and MCAT Comparison Table

Out of Province Applicants Cut-offs

<table>
<thead>
<tr>
<th>University</th>
<th>GPA</th>
<th>MCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PS</td>
</tr>
<tr>
<td>British Columbia</td>
<td>2.8</td>
<td>n/a</td>
</tr>
<tr>
<td>Alberta</td>
<td>3.7</td>
<td>7</td>
</tr>
<tr>
<td>Calgary</td>
<td>3.6</td>
<td>-</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>3.7</td>
<td>8</td>
</tr>
<tr>
<td>Manitoba</td>
<td>3.3/4.5</td>
<td>7</td>
</tr>
<tr>
<td>Northern Ontario</td>
<td>3.0</td>
<td>n/a</td>
</tr>
<tr>
<td>McMaster</td>
<td>3.0</td>
<td>n/a</td>
</tr>
<tr>
<td>Western Ontario</td>
<td>3.7</td>
<td>9</td>
</tr>
<tr>
<td>Toronto</td>
<td>3.6</td>
<td>9</td>
</tr>
<tr>
<td>Queen’s</td>
<td></td>
<td>See note below</td>
</tr>
<tr>
<td>Ottawa</td>
<td>3.5</td>
<td>n/a</td>
</tr>
<tr>
<td>McGill</td>
<td>3.5</td>
<td>9</td>
</tr>
<tr>
<td>Montreal</td>
<td>R</td>
<td>n/a</td>
</tr>
<tr>
<td>Laval</td>
<td>R</td>
<td>n/a</td>
</tr>
<tr>
<td>Sherbrooke</td>
<td>R</td>
<td>n/a</td>
</tr>
<tr>
<td>Dalhousie</td>
<td>3.7</td>
<td>10</td>
</tr>
<tr>
<td>Memorial U.</td>
<td></td>
<td>See note below</td>
</tr>
</tbody>
</table>
In Province Applicant Cut-Offs

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<th>MCAT</th>
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<td>n/a n/a n/a n/a n/a n/a</td>
</tr>
<tr>
<td>Alberta</td>
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<td>7 7 7 - - 21</td>
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<tr>
<td>Calgary</td>
<td>3.2</td>
<td>- - - - -</td>
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<td>Saskatchewan</td>
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<td>8 8 8 N 26</td>
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<td>Manitoba</td>
<td>3.3/4.5</td>
<td>7 7 7 M 21</td>
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<td>Northern Ontario</td>
<td>3.0</td>
<td>n/a n/a n/a n/a n/a n/a</td>
</tr>
<tr>
<td>McMaster*</td>
<td>3.0</td>
<td>n/a n/a 6 n/a n/a</td>
</tr>
<tr>
<td>Western Ontario</td>
<td>3.7</td>
<td>8 8 8 O 24</td>
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<tr>
<td>Toronto</td>
<td>3.6</td>
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<td>Queen’s</td>
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<td>Ottawa</td>
<td>3.5</td>
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<tr>
<td>McGill</td>
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<tr>
<td>Montreal</td>
<td>R</td>
<td>n/a n/a n/a n/a n/a n/a</td>
</tr>
<tr>
<td>Laval</td>
<td>R</td>
<td>n/a n/a n/a n/a n/a n/a</td>
</tr>
<tr>
<td>Sherbrooke</td>
<td>R</td>
<td>n/a n/a n/a n/a n/a n/a</td>
</tr>
<tr>
<td>Dalhousie</td>
<td>3.3</td>
<td>8 8 8 - 24</td>
</tr>
<tr>
<td>Memorial U.</td>
<td>See note below</td>
<td></td>
</tr>
</tbody>
</table>

- PS – Physical Sciences
- BS – Biological Sciences
- VR – Verbal Reasoning
- WS – Writing Sample
- n/a – MCAT not required (* For McMaster, only Verbal Reasoning section is required)
- R – The French universities work under cote R (For more Info please see below)

A dash indicates that information was not available

Notes:
- Each GPA is calculated out of a 4.0 scale except for University of Manitoba
- Memorial University of Newfoundland: The mean grade point average of successful applicants in 2007/08 was 3.70 on a 4.0
- Queen’s University: The GPA cut-off for applicants’ final academic year can fluctuate every year. The most recent minimum cGPA was 3.68. Minimum scores for MCAT (cut-offs - vary from year to year): Biological Sciences 10, Physical Sciences 10, Verbal Reasoning 10, Writing Sample P

References:


b. Extra-curriculars

When considering your application, a medical school will look not only for a sound GPA and MCAT score, but also evidence of community involvement and interests outside academia. Doctors should be well rounded individuals, and extra-curricular involvement is a great way to demonstrate the qualities valued in a physician. Being involved in your school and community not only looks great on your application, but can also help you develop a wide variety of skills that can’t be learned in a lecture hall.

Every applicant is different, and their applications are considered accordingly. There is no specific set of recommended activities that you must do in order to be a competitive candidate. Forcing yourself to get involved in areas that don’t interest you for sake of beefing up your resume is not a good idea. Furthermore, strong commitment to a few activities often reflects better than joining every club you can find. The best way to get involved is to find activities and pursuits that you genuinely enjoy and help you grow as a person.

i. Volunteering

It goes without saying that compassion is an essential quality in a physician. Equally important is a commitment to improving the lives of others. Volunteer work not only demonstrates these attributes, but gives you an opportunity to give back to your school or community, develop interpersonal skills and expand your interests. By finding a placement that you thoroughly enjoy, volunteer work can be a great way to balance and enrich your life.

There are tons of volunteer opportunities in at McGill and in the Montreal area. At the beginning of both the fall and winter semesters, the Science Undergraduate Society hosts volunteer fairs where students can learn about the various volunteer organizations and find out how to get involved. You can also check out SSMU Activities Night (held in September and January), as many McGill student clubs provide volunteer opportunities. Numerous opportunities are available through the student societies themselves, so check out the SSMU and SUS websites and listservs. Be proactive! Medical schools look for initiative in their applicants, so don't wait around for someone else to arrange these experiences for you.

ii. Leadership

While being involved in clubs can demonstrate your interests, admissions committees are also looking for leadership qualities. It just shows that you are competent and capable of taking on responsibility. This does not necessarily mean that you need to become a group president or member of the executive, though these are possibilities. Something as simple as being a peer tutor can demonstrate leadership, as it shows your ability to be a mentor to your peers.

Student societies, such as SSMU, SUS and AUS (as well as departmental societies) provide many opportunities to demonstrate leadership. Get involved early on, and later you can move on to roles of greater and greater responsibility.

CaPS organizes several leadership conferences and seminars throughout the year (see Resources for McGill Students). These can be worthwhile, as leadership qualities will help you in all areas of your life.
**iii. Clinical experience**

Clinical experience is volunteer work or employment in the medical field. This can include volunteering or working in a hospital, clinic, medical research lab or nursing home. The type of experience can vary, but it should give you insight into your chosen career. You will be investing at least seven years of your life to complete your medical training, so you should know what you are getting yourself into.

Naturally, you will want to have completed some clinical experience before you apply to medical school, or at least be scheduled to begin. When you start is therefore dependent on when you plan to apply (i.e. after two years of study or three). It is always best to start early; commitment to an endeavour reflects well, and building relationships with supervisors can translate to a letter of reference in the future.

There are many ways to obtaining clinical experience. Hospitals in the Montreal area are nearly always looking for new volunteers. Most require a commitment of approximately three hours a week for at least three or four months. A multitude of different positions are available, so go by their volunteer offices or check out their websites to learn more. Visiting the website for McGill University Health Centre (http://www.muhc.ca/) can direct you to information on many of the hospitals near the McGill campus. While many of the positions require you to be able to speak French, as least a little, there are positions where you can get by without it. You can also call hospitals and clinics about working in labs, or ask your family doctor for contacts. If you are having a lot of difficulty, swing by CaPS and talk to a career advisor (see Resources for McGill Students).

References:

<http://chemistry.about.com/library/weekly/aa042502a.htm>

**iv. Research**

Research is another experience valued by admissions committees. Not only does it gives you hands on lab experience, but exposes you to an alternative career path. Participating in research will teach you a variety of skills and techniques, and may inspire you to pursue a joint MD/MA or MD/PhD program.

One of the simplest and most direct ways to get involved with research is to go talk to your professors. Read up on their research to figure out whose work interests you most. It is also helpful to talk to students who have previously worked in their labs; research methods differ, and while the subject matter may interest you, the methodology might not. Once you have done your homework, you can visit professors during their office hours or you can set up appointments. Be sure to bring a copy of your CV and unofficial transcript. Be polite when expressing your desire to work with them, and be gracious if turned down. They may know of colleagues who are accepting student researchers, so be sure to ask if they can direct you to someone else. It can also be helpful to talk to TAs and departmental staff – they may know which individuals tend to hire undergraduates.

The website for the Office of Undergraduate Research has a database of professors who tend to hire students. It provides information on what level of education is generally required and whether or not positions tend to be paid. However, the database is not a job listing – there is no guarantee that professors listed are hiring. You can check out the database at http://www.mcgill.ca/science/ours/proflist/.
At the beginning of each semester, the Faculty of Science hosts “Soup and Science” – a week-long event where professors have three minutes to present their current research. Afterwards, students have a chance to mingle with professors over free lunch. It’s a great way to find out about what’s going on in each department and network with professors. You can also check out the Undergraduate Research Conference held each October, which features work done by current undergraduate researchers.

McGill offers several research based and field study courses. ‘396’ courses are three credit electives that can be taken within or outside your department. Honour programs generally have a research component that is completed during U3. There are also several summer research awards available for undergraduate students at both the national and provincial level.

Internships are becoming increasingly popular with science students. An internship is a paid, full-time position related to your field of study and completed during your undergraduate years. Credited internships through the Faculty of Science can take two forms: the IP (Interim Practicum) or the IYS (Internship Year in Science). The IP is a four month program completed during the summer. It is worth zero credits and appears as Pass/Fail on your transcript. The IYS is an 8-16 month program that begins in January, May or September. By successfully completing two IP sessions or one IYS results, you will have “Internship” added to the name of your program on your diploma. Internship postings can be found on the CaPS website, and more information about the program can be found at http://www.mcgill.ca/science/internships-field/internships/.

For more information on undergraduate research, you go by the Office for Undergraduate Research or check out their website at http://www.mcgill.ca/science/ours/.

References:


c. Application Process

Applying to medical school can be daunting process. Deadlines, supporting documents, personal essays and autobiographical statements...it takes time, hard work and a lot of organization to craft a successful application. But knowledge is power, so read on!

i. Types of Programs

Students usually have questions about the variety medical degrees offered by various schools. Programs offered vary greatly from school to school, and equivalent degrees can go by different names.

The MD\textsuperscript{12}, or Doctor of Medicine (MD from Latin for \textit{Medicinae Doctor}) is a professional degree offered in various countries like United States and Canada. This is equivalent of a Bachelor of Medicine or Bachelor of Surgery (MBBS or MBChB) offered by schools in Great Britain and other Commonwealth countries. At McGill, the same degree is called a MDCM\textsuperscript{3}. The MD is the main degree pursued by future doctors.

In many Canadian and American medical schools, it is possible to graduate with a joint degree. Depending on the university, one can obtain a PhD, a MBA or even a law degree in addition to the MD. Here are examples of some common joint medical degrees:

\textit{MD/MBA} – A joint medical degree with management (Master of Business Administration). This is usually a 5 year program (first year – management, next four years – medicine). In most cases, there are additional application requirements. For example, for McGill Medical School, an applicant must send in two additional referees and the autobiographical letter content is different\textsuperscript{4}.

\textit{MD/PhD} – This provides a chance for one to do research while in medical school. Usually, it is a 7 year program, with the first two years spent learning the basics of the medical curriculum followed by three to four years of graduate studies. The last two years are spent to completing medical program. As with the MD/MBA, there are some additional application requirements\textsuperscript{5}.

\textit{MD/JD} – A joint medical-law degree. Many schools require the LSAT to apply to this program, but some do not. The program takes a total of seven years. At University of Chicago, students spend the first two years in medical school. They then leave for law school and come back to finish their medical program after. \textsuperscript{6}

\begin{itemize}
\item \textsuperscript{1} “Bachelor of Medicine/Bachelor of Surgery.”
\item \textsuperscript{2} “Definition of M.D.”
\item \textsuperscript{3} “Programs.”
\item \textsuperscript{4} “Joint MD, CM & MBA Program”
\item \textsuperscript{5} “Joint MD, CM & PhD Program”
\item \textsuperscript{6} “MD/JD Program”
\end{itemize}
MD/AM – This program is designed to prepare physicians for leadership roles in health administration. Students usually finish this degree in five years\(^7\).

MD/MPH – A joint medical degree with a degree in Master of Public Health. If you feel that medical education focuses too much on the individual patient and ignores the global picture like world health issues, this program may be for you. Many American Universities offer this program\(^8\).

Many Universities have programs unique to their Faculty of Medicine. If you are interested in pursuing more than your basic MD, be sure to check out all the possibilities!

References:


**ii. How and When to Apply**

For most medical programs in Canada, applications are submitted directly to the medical school. For Ontario Medical Schools, applications go through the OMSAS (Ontario Medical School Application Service). Certain Ontario schools require addition components of the application submitted directly to the medical school.

As the details vary greatly between schools, we have not summarized it here. You can consult McGill Redbooks as a general guide, and visit the websites of the various schools for detailed information.

When applying to a medical school, there are many deadlines to keep track of. The following tables show key deadlines, as well as when to expect to hear back regarding an offer of admission.

\(^7\) “MD/AM in Public Policy”

\(^8\) “MD/MPH List of Programs”
## Deadline Information for Canadian Medical Programs (Non-Ontario)

<table>
<thead>
<tr>
<th>University</th>
<th>App. Open</th>
<th>App. Due</th>
<th>Dates for other Documents</th>
<th>Interview Offers Dates</th>
<th>Offers of Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. of British Columbia&lt;sup&gt;9&lt;/sup&gt;</td>
<td>June</td>
<td>September 1 + transcripts + Proof of Residency if applicable</td>
<td>Nov 1: MCAT Scores&lt;br&gt;March 10: Supplemental application&lt;br&gt;June: Final Transcripts</td>
<td>Dec.</td>
<td>Jan. May</td>
</tr>
<tr>
<td>U. of Alberta&lt;sup&gt;10&lt;/sup&gt;</td>
<td>June</td>
<td>Nov 1 + 2 hardcopies of Official Transcript</td>
<td>June 13&lt;sup&gt;th&lt;/sup&gt;: 2 hardcopies of Official Final Transcript</td>
<td>-</td>
<td>Mid March May 15</td>
</tr>
<tr>
<td>U. of Calgary&lt;sup&gt;11&lt;/sup&gt;</td>
<td>July</td>
<td>October 15 + copies of references and transcript</td>
<td>June: Final Transcripts&lt;br&gt;Early Feb. Feb. May 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. of Sask. 12</td>
<td>Aug. 1</td>
<td>November 1 + mail Official Transcripts</td>
<td>March 1: Individual notices of Interviews&lt;br&gt;Feb. 15 Late March May 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGill: Quebec Residents&lt;sup&gt;14&lt;/sup&gt;</td>
<td>-</td>
<td>Jan. 15</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGill: OOP&lt;sup&gt;9&lt;/sup&gt;</td>
<td>-</td>
<td>Nov. 15</td>
<td>Jan 23&lt;br&gt;Feb 13 &amp; 16 March 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalhousie University&lt;sup&gt;15&lt;/sup&gt;</td>
<td>Sept. 2</td>
<td>November 3</td>
<td>-</td>
<td>Early Feb. March to April May 15</td>
<td></td>
</tr>
<tr>
<td>Memorial University&lt;sup&gt;16&lt;/sup&gt;</td>
<td>First Week of July</td>
<td>Oct.15&lt;sup&gt;*&lt;/sup&gt;</td>
<td>-</td>
<td>Jan. to March Mid-March End of March (Early June for Nfld.)</td>
<td></td>
</tr>
</tbody>
</table>

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<sup>9</sup> "UBC Faculty of Medicine - MD Undergraduate Admissions - Application Timelines 2009/2010."

<sup>10</sup> "Undergraduate Medical Education - Doctor of Medicine Admissions."

<sup>11</sup> "APPLICANT MANUAL 2008 - 2009."

<sup>12</sup> "Important Dates for Applicants — College of Medicine, University of Saskatchewan."

<sup>13</sup> "Faculty of Medicine - Medical Admissions."

<sup>14</sup> "Deadlines/Key dates"

<sup>15</sup> "Dalhousie Medical Admissions Timeline."

<sup>16</sup> "Faculty of Medicine - Admissions-Faculty of Medicine."
# Deadline Information for Ontario Medical Programs

<table>
<thead>
<tr>
<th>University</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>McMaster University</td>
<td>March or April&lt;sup&gt;17&lt;/sup&gt;</td>
</tr>
<tr>
<td>Northern Ontario School of Medicine</td>
<td>Mid Feb, Mid March and April&lt;sup&gt;18&lt;/sup&gt;</td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>Early March and April&lt;sup&gt;19&lt;/sup&gt;</td>
</tr>
<tr>
<td>Queen’s University</td>
<td>-</td>
</tr>
<tr>
<td>University of Toronto</td>
<td>Early February, March and April&lt;sup&gt;20&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

## References:

<sup>1</sup> Welcome to the Ontario Universities’ Application Centre. 7 Jan. 2009 <http://www.ouac.on.ca/omsas/pdf/b_omsas_e.pdf>.  


"Dalhousie Medical Admissions Timeline." Admissions, Faculty of Medicine, Dalhousie University. Dalhousie University. 7 Jan. 2009 <http://admissions.medicine.dal.ca/timeline.htm>  


"Faculty of Medicine - Admissions-Faculty of Medicine.” Faculty of Medicine. Memorial University of Newfoundland. 9 Jan. 2009 <http://www.med.mun.ca/Admissions/Important-Dates.aspx>.  


"Important Dates for Applicants — College of Medicine, University of Saskatchewan.” Important Dates for Applicants. University of Saskatchewan. 10 Jan. 2009 <http://www.medicine.usask.ca/education/admissions/calendar-for-applicants>  

<sup>17</sup> "Interviews."  
<sup>18</sup> Application Information."  
<sup>19</sup> “Welcome to the Ontario Universities' Application Centre”  
<sup>20</sup> "Admission Information."
iii. Application Questions and the PSE

For many students, this is one of the tougher parts. You’ve studied hard away to make those GPA and MCAT cut-offs, you’ve worked to get that volunteer and leadership experience, and now you have to go and make yourself sound interesting enough to stand out from the pack. But don’t despair. There are lots of resources out there to help you cope with application questions and essays.

For most medical schools, you must provide an autobiographical letter or an essay. This is sometimes called a PSE, or Personal Statement of Experience. Though each school is different, most will ask that your PSE show why you would make a good physician, using your life experiences to support your arguments. The PSE is typically organized in one of two ways: chronologically or anecdotaly. Chronological style, as you might expect, follows your life from a time you deem relevant up until the present day. In an anecdotal PSE, you would express your message through a relevant story or incident. Both styles have been used successfully, so the choice is up to you.

Here are some tips to keep in mind when setting out to write your PSE21:

- Start your writing well in advance. This essay or letter will be a chance for you to shine from the other applicants, and it may take several attempts to produce something impressive.

- To get yourself started, try writing a long list of accomplishments and experiences. From there, you can start putting together a rough draft, which can then be further edited and modified.

- Always check the specific requirements for the school you are applying to. Some schools have different requirements in terms of format or word limit.

- Organization is important. Make sure that your message is clear and easy to follow.

- Adding an amusing analogy or an anecdote to keep the personal statement interesting for the committee. In general, try to make your statement or answers as original as possible.

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21 “Personal Statement”
Finally, ask other people to proofread your work before sending it in. Spelling and grammatical errors will certainly fail to impress the admissions committee!

In addition to a personal essay / autobiographical letter / PSE, schools may required an “Autobiographical Sketch”, which is generally an enumeration of all your extracurricular activities to date, divided into categories such as employment, volunteer activities, clubs/interest groups, leadership, awards and accomplishments, research, etc. This is a chance to go into detail about your various activities, whereas you might have been constrained by word limits in the PSE. However, one should be careful not to include things just for the sake of including them; as stated on the OMSAS website, “One should include experiences that demonstrate an ability to determine needs in the community and a willingness to play a part in filling those needs”.  

For details on the specific requirements for a particular medical school, you should consult their website.

References:


v. Letters of Reference

Reference letters are an essential part of your application, as it gives a chance for Medical Schools to evaluate your ability to form positive interpersonal relationships and to get a better idea of your personality. Most schools will require at least two references, and many require three. Letters of reference should generally be written by someone who knows you in a professional capacity, be it a professor, a work or research supervisor, or a current physician.

Obviously, you want the authors of your letters of reference to know you as well as possible. It is therefore important to cultivate relationships with your supervisors and professors. Visiting a professor’s office hours is a good way to make yourself known to them. Try going to them with intelligent questions about the material they teach or about their own work. It is also important to follow up with relationships; don’t ask a professor you had in first year to write your letter of references if you haven’t had any contact with them since. Good relationships take time, so start networking and building personal connections with professors early.

When it comes time to ask for a letter of reference, make sure that the person you ask is comfortable with the task. A good idea is to ask if they are able to write you a “positive” letter of reference. If they are not able to write you a fantastic letter of reference, it is better to ask someone else. Be clear with what you are looking for. You can help your recommender out by offering to sit down with them for an

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22 “OUAC: Professional Applications.”
23 “Recommendation Letters.”
interview in order to get to know you better\textsuperscript{24}. Bring a summary of your extra-curriculars, a copy of your transcript, and anything else you can think of.

Finally, remember to give your referrer enough time to put together a good letter. Coming to them a week before the deadline will likely fail to impress them. It is also essential that you acquaint them with the format required by the particular medical schools.

References:


\textbf{vi. Supporting Documents}

You will also be required to submit supporting documents with your application, such as school transcripts and proof of citizenship/residency. You may also be required to submit proof of proficiency in English. You can consult Rebooks and the school websites for more details.

\textbf{vii. The Interview}

The final hurdle in this arduous process is the interview. The interview can be terrifying, but luckily, there are lots of McGill resources to help you prepare. Career Planning Services regularly offers workshops on preparing for Medical School Interview, for both the traditional and MMI formats. You can also schedule appointments with Career Advisors who can help you prepare one on one. For more information, see the section on CAPS later on in this document.

\textbf{The Traditional Interview}

Many schools still conduct traditional interviews. The candidate is typically interviewed by one or two members of the faculty. Sometimes, a current medical student is also present to ask and answer questions.

Here are a few tips to consider when preparing for your interview\textsuperscript{25}:

\textit{Take the middle ground} – Giving an answer you believe the interviewer wants to hear will not necessarily help you; likewise, giving an extremely outlandish answer in an attempt to be original can hurt instead of help

\textit{Personalize your answers} – Take the time to get to know yourself. Think about how each of your experiences has influences you. This can help make your answers more personal and memorable.

\textsuperscript{24} Abraham
\textsuperscript{25} “Medical Interview Tips.”
Organize your thoughts – What you say isn’t the only thing that matters; how you express yourself is important too. Practice delivering your responses in a clear and organized manner.

Learn up on current medical issues – There is a good chance that they will ask you some questions regarding the current state of health care or ethical issues in medicine. You do not have to know all the details of every issue, but you be able to back up your opinions.

Multiple Mini Interviews (MMI)

Some Canadian schools have begun to adopt a new interview format known as the Multiple Mini Interview. Pioneered at McMaster, the interviews are designed to test for “non-cognitive characteristics” associated with being a good doctor. This new format not only reduces examiner bias, but provides multiple chances for insight into the applicants’ personality.

During the MMI, candidates make visits to 10, 10-minute stations in which they are presented with various scenarios. Candidates are given 2 minutes to acquaint themselves with the situation, then have 8 minutes to deal with it.

Examples of a possible scenario:

Parking Garage (Communication Skills) – The parking garage at your place of work has assigned parking spots. On leaving your spot, you are observed by the garage attendant as you back into a neighbouring car, a BMW, knocking out its left front headlight and denting the left front fender. The garage attendant gives you the name and office number of the owner of the neighbouring car, telling you that he is calling ahead to the car owner, Tim. The garage attendant tells you that Tim is expecting your visit. Enter Tim’s office.

Placebo (Ethical questions) – Dr. Cheung recommends homeopathic medicines to his patients. There is no scientific evidence or widely accepted theory to suggest that homeopathic medicines work, and Dr. Cheung doesn’t believe them to. He recommends homeopathic medicine to people with mild and non-specific symptoms such as fatigue, headaches and muscle aches, because he believes that it will do no harm, but will give them reassurance. Consider the ethical problems that Dr. Cheung’s behaviour might pose. Discuss these issues with the interviewer.

The MMI comes with its own set of challenges, but in some ways can be less stressful than a traditional interview. CaPS has recently begun to offer workshops to help prepare for the MMI (see the Resources section).

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26 Alexander
27 “Multiple Mini Interview (MMI) Fact Sheet”
28 “What is the MMI (Multiple Mini Interview)?”
**Etiquette**

As with all interviews, general etiquette rules apply: Turn off your cell phone, don’t chew gum, be otherwise polite and respectful. Remember to follow an appropriate dress code; overly casual or provocative clothing should be avoided\(^2^9\). Above all, be polite, even outside the interview room\(^3^0\).

References:


**INTERNATIONAL MEDICAL SCHOOLS**

Each year many Canadian students go abroad in order to pursue a medical education. This generally has little to do with Canadian med school standards and is mostly due to the limited number of medical school spots available in Canada.

In this section you will find a brief, but helpful, guide to applying to Ireland, US, and Caribbean- (the three most popular destinations among Canadians) and a list of resources that you can access for further information.

**a. Ireland**

Ireland is a popular destination for Canadians, mostly due to the fact that with an Irish M.D. you can practice virtually anywhere. However, the popularity is decreasing due to the expense of an Irish medical education.

*The Universities*

University College Cork- www.ucc.ie  
University College Dublin- www.ucd.ie  
University of Limerick- www.ul.ie  
The Royal College of Surgeons in Ireland- www.rcsi.ie

\(^2^9\) Alexander  
\(^3^0\) “Interview Etiquette.”
Application

All North American students must apply through the Atlantic Bridge program (www.atlanticbridge.com). A standard of 3 references is required. Once your preliminary application is accepted, you will be required to give an interview with the respective university representative in North America. Requirements for application to the four-year program include a B. Sc. and a valid MCAT score. Scores and GPA cut-offs differ from university to university; details are available at each university’s respective website. However, it is generally noted that the requirements are not as rigorous as Canadian or US schools.31

Programs

If you have a B.Sc., you will be able to apply to the Four-year Graduate Entry Program. The curriculum is delivered over four years: Junior, Intermediate, Senior 1 and Senior 2. The core biomedical sciences, medical sciences, behavioural sciences and clinical competencies are the focus of the Junior and Intermediate Cycles. The two Senior Cycle years concentrate on clinical medicine and its subspecialties. At first, students get to work with stimulated patients but by second year begin having direct patient contact in a hospital affiliated with the university.32

Fees

The tuition fees range from €38,000 to €46,000 per year (approximately 60 000 to 73 000 CAD at the current exchange rate). This may sound bad, but there are many ways you can finance your education. These options are included at the end of this section as it applies to all universities.

After finishing your medical degree

Most students tend to return to either US or Canada after medical school. An Irish medical degree is accepted in all Commonwealth countries, EU nations, US and Canada, however you must give the licensing exams just as any other medical student in US or Canada. Since getting a residency in Canada is difficult, despite being a Canadian citizen, most Canadians end up in the US.35 There are approximately 7,000 residency spots for Non-US med school graduates. Most forums, such as the Student Doctor Network (SDN), suggest that students wishing to obtain a residency in US or Canada should opt to do their Elective in US or Canada, as this seems to help the residency application.

Visa

US and Canadian citizens who hold a valid passport do not require a visa to enter Ireland. Find out more at www.atlanticbridge.com.

31 “UK & Ireland -.”
32 “The Atlantic Bridge Program | The Schools | Royal College of Surgeons in Ireland.”
33 The Atlantic Bridge Program | Frequent Questions | Frequent Questions.”
34 “Physician / Resident Forums [ MD / DO ] -.”
36 “The Atlantic Bridge Program | Residency | USA Residencies.”
b. Caribbean

Caribbean universities are becoming more popular with Canadian students, as their fees are quite low compared to Ireland and US. Another big advantage to studying in the Caribbean is that some schools offer their last two years (clinical training) in an American hospital. This makes passing the USMLE, and thereby obtaining a residency placement, a little bit easier.37

Application

The MCAT is optional for most schools. An undergraduate degree, a letter of recommendation, an essay and an interview are required. A competitive applicant generally has a GPA of 3.2 and MCAT scores of 7 or 838. Required courses include one year of each of General (Inorganic) Chemistry, Organic chemistry, English, Physics, and Biology, in addition to one semester of Mathematics.

Program

Detailed information is found on the website from each school but extremely similar to the curriculum of American medical schools. The electives all occur in American universities and are appointed by the university. This offers a great advantage if you wish to live and practice medicine in either Canada or US.

Most Well Known Universities:

- Ross University (Dominica)
- St. George’s School of Medicine (Grenada)
- Saba University (Saba)

References:


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37 Raza
38 Raza
c. USA

The United States is the most popular choice among Canadian students by far. There are so many medical schools in US that you can't possibly apply to all of them. One way to narrow down your options is by knowing which schools actually consider international students. Most state universities do not consider out of state applicants let alone international students. As a result, an American medical education can be quite expensive, as private universities generally have large tuition fees.

Requirements

Each university has specific requirements. In general, they tend to require:
- 1 year of General Chemistry (with lab)
- 1 year Biology (with lab)
- 1 year Physics (with lab)
- 1 year Calculus
- 1 year Organic Chemistry (with lab)
- ½ year Molecular Biology
- ½-1 year of Biochemistry (only a handful of school want a full year; also note BIOL 201 counts as a biochemistry course since it includes metabolism)
- ½-1 year of English
- 1 year of humanities (That is any two courses which are considered Humanities for e.g. Economics, Sociology, Anthropology etc)

Various forums indicate that having lab courses is quite important, therefore it may be wise to invest some elective credits to taking labs if you entered McGill as a U1 student and did not take many of the first year courses with lab components.

MCATs are required in all schools. US schools put a lot of emphasis on your MCAT scores, and each university will have their own cut-offs. You will find these cut-offs explicitly mentioned in any US medical school guidebook. A highly recommended guidebook is the Medical School Admission Requirements (MSAR). It provides detailed information on GPA, MCAT scores and other statistics, and can be ordered online via AMCAS.

Application

Application is done via AMCAS (American Medical College Application Service). You must first submit your Primary Application, which contains an autobiographical essay. The college then sends you their secondary application, which in most cases includes more essay questions. At this point you have to submit references. If they are satisfied with your secondary application, you will be called in for an interview. You must travel to each university for the interview, which can be difficult in terms of time and transit costs, through some schools may offer you accommodation in their residences for one night.

Visa

Everyone has to get a F1 visa. You can find more specific information at http://educationusa.state.gov/ and http://www.unitedstatesvisas.gov/.
d. Financing Your Education

Tuition fees sounds may very expensive especially if you compare it to your undergraduate tuition. However, this doesn’t necessarily have to stand in your way. Here are some ways to help finance your education...

Canadians

Student line of credit: Since future doctors are considered a “good” credit risk, students usually are able to take get up to $150,000 in loans from most major banks. The good thing is that the payments for the loan can usually be deferred until 12 months after completing residency. These loans are not only for studying in Canada, but are also available for students studying in Ireland, the US, the Caribbean and many other places. Talk to your bank to find out more.

Canada Student Loan Program: The government also provides loans for students to study medicine abroad. All Irish schools affiliated with the Atlantic bridge Program are approved institutions of CSLP. Students can take from 5000$-6000$ loan per semester. Note: policies might differ from province to province and so you should visit www.canlearn.ca for further information.

Americans:

Federal Stafford Loans: Can secure up to $20,500 per year (www.staffordloan.com)

Grad PLUS loans: Full cost of education, includes travel, living expenses, books etc. (www.salliemae.com)

Federal Student aid: www.fafsa.ed.gov

References:


e. Being an IMG

An International Medical Graduate (IMG) is a physician who received a medical degree outside of a Canadian medical school (accredited by the Committee on Accreditation of Canadian Medical Schools), or outside of a United States medical school (accredited by the Liaison Committee on Medical Education). In Canada, the term IMG refers to the place of medical education. An IMG may be:

- a Canadian citizen or permanent resident who went abroad to study medicine
- a Canadian citizen or permanent resident who studied medicine abroad before immigrating to Canada
- a citizen of another country who studied abroad and is visiting Canada temporarily to study, teach, or do research
- a citizen of another country who studied medicine and lives abroad\(^\text{40}\)

For IMGs to practice medicine in Canada, they must fulfill several requirements. In addition to passing licensing exams and proving language proficiency, each province has its own set of hoops. For example, if you want to come back to Ontario, you have to sign a Return of service (ROS) with the Ontario provincial government, and they place you in an underserved community for up to 5 years\(^\text{41}\).

Many students who studied abroad choose not to return to Canada due to the amount of bureaucratic red tape they have to go through, either remaining in the country they studied medicine or going to the USA. For more information, visit www.img-canada.ca

References:


\(^{40}\) "Your Personal Circumstances."

\(^{41}\) "IMG Routes to Licensure in Ontario."
CANADIAN MEDICAL SCHOOLS

For many undergraduate students intent on pursuing a career in medicine, getting into the medical school of their choice is like finding the Holy Grail. But in truth, the quest has just begun. Now that you’ve been admitted, what is in store for you?

a. Typical Curriculums for Canadian Programs

“A physician fulfills two roles in service to the patient: that of a professional and of a healer. This is referred to as physicianship.”

Most Canadian medical programs follow a general structure: two years of class-learning, followed by two years in a hospital setting.

During the first and second years, students go through systems-based and integrated instruction on the basic sciences in a coordinated series of units. The curriculum is designed for students to have the opportunity for small group activities in labs and discussion groups, as well as independent learning activities supported by computer-assisted instruction. There are formative and summative assessments throughout many units with reduced emphasis on “final examinations.” The classrooms and teaching methods vary from school to school. Some medical schools may emphasize teaching one subject at a time, smaller classrooms, and discussing case studies during lecture, while others have large class sizes similar to undergraduate settings. Currently, most medical schools follow the traditional teaching methods.

The first 18 months cover the basic knowledge required to practice medicine. First year courses are focused on the human body, including anatomy, histology, biochemistry, embryology, and neuroanatomy. When asked how their undergraduate education prepared them for material in medical school, a former Physiology Honours students currently studying Medicine at McGill said that “It definitely made the first one and a half years much easier - we had seen almost all of the material before in a different context. The downside to this was that it also made things somewhat boring and repetitive during that time, but we still had to study.”

We all hear about how much studying it takes to succeed in medical school. But what is so different about medical school in comparison to your undergraduate courses? “One major difference from undergrad was the sheer amount of material that we are expected to absorb in one unit,” says the same McGill medical students, “In medicine, you learn to become comfortable with not knowing every single detail before writing an exam because it is impossible to know everything.” At a workshop at University of Columbia designed to help first year medical students cope with stress, presenters cautioned students about succumbing to pressure, “Don’t stress out because someone else is studying 12 hours a day and you’re not. Find out what works for you, stick to it, and you’ll be fine.”

Students get introduced to clinical medicine in their second year, getting familiar with in-patient and ambulatory settings. They are taught to do physical examination, consider medical ethics and practice evidence-based medicine. They also do rotations in various clinical disciplines. Second year consists of

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42 Faculty of Medicine. McGill University.
43 Kuther
44 Brunk
courses on disease and treatment, courses such as pathology, pharmacology, microbiology, and immunology. Additionally, students are trained in interacting with patients by taking their medical histories and physical examination. At the end of second year, students are required to take the United States Medical Licensing Examination (USMLE-1 given by NBME) to determine if they have the competence to practice medicine.

Third and fourth year are the internship periods, also called clerkship, where students experience hands-on the different medical specializations offered. Rotations that require more responsibility are done during the fourth year. Electives are also offered during fourth year. Students must start to decide which sub-field of medicine they are interested in practicing in order to apply to a residency program. What’s the hardest part about clerkship? “...learning to be OK with feeling stupid 99% of the time - something that none of us are used to. It is absolutely impossible to always be prepared because we never know what kind of cases we will be seeing on a given day.”

Once your four years (or three, in some cases) are completed, you are official designated as a “doctor”. However, there is still a long way to go before you are allowed to practice on your own. The next step is residency, which will be explained in the following section.

References:


Faculty of Medicine, McGill University. 31 Jan. 2009 <http://www.medicine.mcgill.ca>


b. Tuition and Expenses

There is no doubt about it – tuition is expensive. Though it is far cheaper than an education at a private American university, Canadian tuition fees be up to 17 000 CAD (except in Quebec, where there is a cap on tuition fees). In addition to tuition, there are often many other fees associated with studying medicine, especially in third and fourth years when you begin clinical rotations.

In 2007, a third of medical students questioned believe that their student debt once they graduated would exceed 80 000 CAD. Many in the field believe that high student debt will lead to a greater shortage of family physicians as medical students begin to choose to pursue higher-paying specialities.

There are entrance scholarships available for most Canadian medical school programs. You can visit their websites for more information. Many of the schools websites will also provide estimates of the total cost per year, factoring in fees for supplies and living expenses.

References:


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45 Kuther
46 The Canadian Press
RESIDENCY

After completing your fourth year of medical school, you're ready to begin residency. Residency usually takes three or more years to complete and gives students the opportunity to learn in the clinical setting of a hospital or other health care centre. This portion of your medical training also allows you to specialize in one of the many disciplines of medicine and is a very important decision. The specialty you choose will likely be your practising field for the rest of your career, so it isn’t a decision that should be made hastily. What skills does this discipline require? What type of lifestyle can you expect in this field? What is the amount of training needed? These are all questions to be addressed when making such an important decision.

References:


a. Canadian Resident Matching Service

The matching process is handled by the Canadian Resident Matching Service (CaRMS), an independent non-profit organization that works as a bridge between applicants and medical schools. It also offers a universal and nonbiased approach for medical students to apply for residency across Canada. Students are asked to submit applications and rank the programs that are offered by schools across Canada. The various medical schools then rank the applicants based on their submitted applications. A computer consolidates this information and uses an algorithm to match prospective students with residency programs in such a way that students are enrolled in their top choices and that the most qualified students are matched for each program. Each program must meet a specific quota of students which differs for Canadian medical graduates and International medical graduates (IMGs).

The two tables below lists the match results based on their discipline choices as well as all disciplines in Canada and their respective resident quotas for the application process in 2008.

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47 “Medical Training/Licensure System in Canada.”
48 “Strolling through The Match.”
49 “CaRMS – About CaRMS.”
50 “CaRMS – Operations – The Match Algorithm.”
### Match Results for the Canadian Graduates by Discipline Preference
#### 2008 First Iteration R-1 Match

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**Note:** Ninety one percent (91%) of Canadian Medical Graduates matched to their ultimate career choice for the First Iteration.
### Match Results for the IMGs by Discipline Preference

#### 2008 First Iteration R-1 Match

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**Total** 247 58 994 1299

References:

“CaRMS – About CaRMS.” [CaRMS](http://www.carms.ca/eng/index.shtml), February 1, 2009

“CaRMS – Operations – The Match Algorithm.” [CaRMS](http://www.carms.ca/eng/operations_algorithm_e.shtml), February 1, 2009

“CaRMS – Operations – Reports & Statistics – R-1 Match Reports.” [CaRMS](http://www.carms.ca/eng/operations_R1reports_08_e.shtml), May 18, 2009
b. Types of Specialties

There are many, many different types of specialties, are it would be impossible to go into them all here. For a complete list of possible specialties in Canada, you can visit the website of the Royal College of Physicians and Surgeons of Canada at http://rcpsc.medical.org/information/index.php.

Here is a summary of some of the more popular specialties, as well as some that you may not have even known existed!52

Family physicians demonstrate competence in the patient-centred clinical method. They show an understanding of patients’ experience of illness (particularly their ideas, feelings, and expectations) and of the impact of illness on patients’ lives. Family physicians have an expert knowledge of the wide range of common problems of patients in the community, and of less common, but life threatening and treatable emergencies in patients in all age groups.

Anatomical Pathology is the study of the morphologic aspects of disease and includes subspecialties that may be oriented towards specific organ systems.

Cardiac Surgery is the study of diseases of the pericardium, heart and great vessels. The resident should be able to diagnose and manage a patient with cardiac disease, as well as perform surgery, and postoperative care.

Community Medicine deals with the health of populations. The Community Medicine specialist uses population health knowledge and skills to play leading and collaborative roles in the maintenance and improvement of the health and well-being of the community through health promotion, disease prevention and health protection. The Community Medicine specialist demonstrates skills in leadership, development of public policy, design, implementation and evaluation of health programs and applies them to a broad range of community health issues.

Emergency Medicine is concerned with the management of acute illnesses and injury in all age groups.

Forensic Pathology is a subspecialty of Anatomical Pathology and General Pathology which applies basic pathologic principles of the two specialties to the medico legal and judicial systems to determine causes and manners of death.

An internist is a specialist trained in the diagnosis and treatment of a broad range of diseases involving all organ systems, and is especially skilled in the management of patients who have undifferentiated or multi-system disease processes. An internist cares for hospitalized and ambulatory patients and may play a major role in teaching or research.

Neurology is the study of the nervous system in health and disease.

Plastic surgery focuses on the management of complex composite tissue defects.

Psychiatry is the branch of medicine concerned with the biopsychosocial study of the etiology, assessment, diagnosis, treatment and prevention of mental, emotional and behavioural disorders.

52 The Royal College of Physicians and Surgeons of Canada
disorders.

Transfusion Medicine is the branch of laboratory and clinical medicine that deals with all aspects of the collection, testing, preparation, storage, transportation, pretransfusion testing, indications for, infusion and safety of human blood components and products, nonhuman alternatives and alternative products manufactured by recombinant DNA technology.

References:


c. Being a Resident

When you become a resident, you'll be caring for patients directly and learning from your experiences. As a resident, your duties will primarily involve treating patients, performing medical histories, reviewing patient updates, writing admitting orders as well as handling cases with a group of fellow residents. This is often supplemented with brief lectures or conferences which focus on clinical skills practised in the hospital.

In residency, you'll often be “on call”, meaning you'll be working at the hospital upwards of 30-36 hours every 2nd, 3rd, or 4th day. Although it may be daunting, it is reasoned to be beneficial to the resident by giving them the opportunity to handle as many cases possible and learn from those experiences. At this point in your career, your wallet won't be taking as much as a hit since you will be compensated for your hard work. Canadian residents are paid workers, receiving an average salary of 48 000 CAD.

References:


“Salaries & Benefits” CaRMS. February 1, 2009

d. The American Way

Medical schools in the United States similarly use a private, non-profit organization to handle the matching process. The National Resident Matching Program (NRMP) uses the same techniques as CaRMS to match students with residency programs. Just as in Canada, residency takes the form of paid on-the-job training, usually in a hospital. Most D.O.s (Doctors of Osteopathic Medicine) serve a 12-month rotating internship after graduation and before entering a residency, which may last 2 to 6 years. For other specialties, the residency lasts anywhere from 3 to 7 years, with length of residency training varies depending on the specialty chosen. Family practice, internal medicine, and paediatrics require 3 years of training, while general surgery requires 5 years. After completing residency, a doctor usually spends one to three years of additional training in a subspecialty to become highly specialized in a particular field.

53 Bianco
54 “Salaries & Benefits”
55 “NRMP: Residency Match.”
As in Canada, a physician still must obtain a licence to practice medicine from a state or jurisdiction of the United States in which they are planning to practice. All States, the District of Columbia, and U.S. territories license physicians. To be licensed, physicians must pass a licensing examination – a final examination immediately after residency or after 1 or 2 years of practice is necessary for certification by the American Board of Medical Specialists or the American Osteopathic Association. There are two levels of certification through 24 specialty medical boards. For certification in a subspecialty, physicians usually need another 1 to 2 years of residency. Most certifications must be renewed after six to 10 years, depending on the specialty. For a summary of the Canadian licensure system, see the following section.

References:


**PRACTISING MEDICINE IN CANADA**

It is impossible to describe the practise of medicine in a few short paragraphs. The following is intended to give some insight into a few key aspects of a medical career. The only real way to tell if medicine is right for you is to talk to someone who has experienced it! Talk to a current doctor, listen to their stories, and above all ask questions. It can also help to volunteer at a local hospital, since it exposes you to the work environment and to patient care. Becoming a doctor requires a huge investment of time, money and energy, so it is well worth your while to determine if this is the right career for you.

**a. Licensing**

Once you have completed your residency, you are able to go out and practise medicine on your own. However, you must first obtain a valid medical licence. The general steps are as follows:

1) A certification exam is administered by either the College of Family Physicians of Canada (for general practitioners) or the Royal College of Physicians and Surgeons of Canada (for surgeons and specialists) must be written. In Quebec, the exam for all applicants is administered by the College des Médecins du Québec. Through comprehensive examinations, the certifying bodies determine if candidates have been appropriately prepared according to established educational standards.

2) The Medical Council of Canada Evaluating Examination must be written by graduates of international medical schools only (these individuals may also have to complete additional years as residents at a Canadian medical school).

3) Licentiate of the Medical Council of Canada (LMCC) must be completed. It consists of two examinations. Part I is a multiple choice, computer-based test, while Part II is a practical exam that tests for clinical skills.

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56 American Medical Association
57 “Registration to Practise Medicine in Canada.”
58 Canadian Institute for Health Information
Specific requirements for the practise of medicine vary by province and territory, especially for international medical graduates, or IMGs.

Upon completion of the required conditions, the physician is issued an Independent Practice Certificate. This authorizes the holder to engage in independent, unsupervised medical practice, but limited to the areas in which he or she is educated and experienced. The holder of the Independent Practice Certificate is entitled to all the rights and responsibilities of a physician in that province or territory and must pay the annual membership fee to maintain the Certificate\textsuperscript{61}

References:


b. Ethics

The practise of medicine is associated with a host of ethical issues. In a day of ever shifting values and ever increasing technological capabilities, the list of morale issues faced by doctors continues to grow. Physicians in Canada are bound by a Code of Ethics, as outlined by the Canadian Medical Association. “Fundamental” responsibilities include “Consider first the well-being of the patient...engage in lifelong learning...” and “...Refuse to participate in or support practices that violate basic human rights...”\textsuperscript{62}. The code goes on to talk about responsibilities towards patients, touching on topics such as confidentiality, consent, and doctor-patient relationships. Also addressed are responsibilities towards society, the medical profession, and towards oneself. Naturally, the scope of morale issues faced by medical professionals cannot be encompassed in a 54 point article, but the Code serves as a guideline for Doctors, not only in precise wording but also in its spirit. The Code of Ethics was last updated in 2004, and can be found on the Canadian Medical Associations website.

References:


\textsuperscript{59} “Qualifying Examination Part I.”
\textsuperscript{60} “Qualifying Examination Part II.”
\textsuperscript{61} Canadian Information Centre for International Medical Graduates
\textsuperscript{62} “Code of Ethics.”
c. Work Conditions

i. Work environment

The work environment of a doctor depends largely on what kind of work he or she does. General practitioners and family physicians tend to work in private practices, hospitals and clinics. Many work in group practices over solo ones in order to share on overhead costs and provide support for each other. Specialists and surgeons tend to be more localized in hospitals, though some do operate out of private offices.

Working in a rural community as opposed to an urban area poses its own sets of challenges. Specialists are less common or father away, therefore GPs have to provide a wider range of services. Many programs are in place to attract doctors to rural settings, including recruitment bonuses and bursaries for students who choose to practise there.

National Physician Survey, 2007. National Results by Province and Canada

Q13b. Main patient care setting (i.e. the setting where you spend the most time providing patient care). Please check only one.

| Province | NL n=905 | PE n=446 | NS n=947 | MB n=152 | QC n=805 | ON n=2626 | MB n=1556 | SK n=805 | AB n=947 | BC n=258 | YT n=95 | Total n=10170 |
|----------|----------|----------|----------|----------|----------|------------|----------|----------|----------|---------|----------|
| Private office clinic (excluding free standing walk-in clinics) | 33.1% | 40.5% | 45.7% | 48.0% | 34.2% | 52.0% | 42.7% | 45.1% | 43.4% | 52.7% | 45.5% | 45.7% |
| Community clinic, Community health centre | 12.2% | 13.5% | 5.9% | 6.5% | 8.3% | 3.3% | 11.2% | 7.0% | 5.1% | 4.8% | 15.5% | 5.0% |
| Free-standing walk-in clinic | 1.1% | 1.1% | 3% | 1.1% | 8% | 1.2% | 1.4% | 2.1% | 2.4% | 2.4% | 2.6% |
| Academic health sciences centre (ehc) | 22.6% | 0.0% | 22.9% | 8.6% | 27.3% | 17.9% | 24.6% | 12.5% | 20.4% | 13.0% | 1.7% | 19.6% |
| Community hospital | 20.0% | 21.7% | 11.7% | 18.5% | 8.0% | 14.4% | 5.7% | 18.6% | 15.2% | 16.2% | 26.8% | 13.5% |
| Emergency department (in community hospital or ehc) | 5.2% | 4.4% | 6.1% | 14.6% | 7.6% | 4.7% | 5.6% | 5.6% | 6.4% | 4.7% | 3.4% | 5.6% |
| Nursing home, Home for the aged | 9.9% | 1.1% | 4.3% | 21.5% | 6.3% | 3% | 4% | 4% | 2% | 0% | 7% |
| University, Faculty of medicine | 7.3% | 0% | 7.6% | 0% | 4% | 7.5% | 2.2% | 1.4% | 5% | 0% | 7% |
| Administrative office | 0% | 0.9% | 2% | 0% | 2% | 1% | 3% | 2% | 1.5% | 1% | 0% | 1% |
| Research unit | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% | 2% | 1% | 0% | 1% |
| Free-standing lab, diagnostic clinic | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 3% |
| Other | 2.4% | 4.4% | 4.2% | 5.4% | 9.5% | 2.6% | 2.7% | 3.4% | 3.7% | 3.9% | 0% | 4.7% |
| NA | 5% | 1.1% | 1% | 2% | 3% | 3% | 1% | 0% | 4% | 0% | 0% | 3% |
| NR | 1.5% | 1.1% | 1.6% | 7% | 1.6% | 1.2% | 6% | 2% | 9% | 7% | 1.7% | 1.2% |

Total 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

Notes:
Includes only respondents who provide patient care.
NR=No Response.
The responding sample (size n) has been weighted to represent the population (size N). Further detail available at www.nationalphysiciansurvey.ca.

63 “Health Careers - General Practitioners and Family Physicians.”
64 “Practice Options.”
There is no doubt about it – doctors work hard. In 2007, the average work week for the employed Canadian was 36.5 hours\(^{65}\). In contrast, the average work week for the Canadian doctor was 51.66 hours, not including time they spend on-call\(^ {66}\). According to the 2007 data, specialists work slightly more hours per week than general practitioners, while men tend to work more hours than women. The average distribution of a doctor’s time, according to the National Physician Survey, can be seen in the table below.

**Q31. Average weekly work hours – excluding on-call activities.**

<table>
<thead>
<tr>
<th></th>
<th>FP/FPs or Other Special</th>
<th>Sex</th>
<th>Age Groups</th>
<th>All Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (n=724)</td>
<td>Mean (n=111041)</td>
<td>Mean (n=63675)</td>
<td>Mean (n=5440)</td>
</tr>
<tr>
<td>Direct patient care</td>
<td>52.79</td>
<td>25.25</td>
<td>25.17</td>
<td>24.79</td>
</tr>
<tr>
<td>without a teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>component</td>
<td></td>
<td>26.29</td>
<td>25.17</td>
<td>28.29</td>
</tr>
<tr>
<td>Direct patient care</td>
<td>3.57</td>
<td>8.03</td>
<td>5.89</td>
<td>5.25</td>
</tr>
<tr>
<td>with a teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>component</td>
<td>7.35</td>
<td></td>
<td>6.98</td>
<td>5.65</td>
</tr>
<tr>
<td>Teaching/Education</td>
<td>1.59</td>
<td>2.12</td>
<td>1.53</td>
<td>1.50</td>
</tr>
<tr>
<td>Indirect patient care</td>
<td>6.38</td>
<td>5.31</td>
<td>5.59</td>
<td>6.42</td>
</tr>
<tr>
<td>Health facility</td>
<td>0.78</td>
<td>1.23</td>
<td>1.06</td>
<td>1.20</td>
</tr>
<tr>
<td>committees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing practice</td>
<td>1.57</td>
<td>1.70</td>
<td>1.77</td>
<td>1.35</td>
</tr>
<tr>
<td>Research</td>
<td>8.3</td>
<td>2.52</td>
<td>1.76</td>
<td>1.31</td>
</tr>
<tr>
<td>Administration</td>
<td>1.75</td>
<td>2.77</td>
<td>2.43</td>
<td>1.87</td>
</tr>
<tr>
<td>CME/CPO</td>
<td>3.03</td>
<td>3.40</td>
<td>3.26</td>
<td>3.09</td>
</tr>
<tr>
<td>CME/CPO</td>
<td>2.86</td>
<td></td>
<td>3.60</td>
<td>3.02</td>
</tr>
<tr>
<td>Other</td>
<td>1.09</td>
<td>1.41</td>
<td>1.38</td>
<td>1.06</td>
</tr>
<tr>
<td>Total hours</td>
<td>49.77</td>
<td>53.79</td>
<td>53.61</td>
<td>47.49</td>
</tr>
<tr>
<td>worked/week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Includes only respondents who indicated greater than zero hours per week.
- The responding sample (size: n) has been weighted to represent the population (size: N). Further detail available at www.nationalphysiciansurvey.ca.

**Average Hours Worked Per Week by Physicians, by Sex and Broad Specialty, 2007**

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\(^{65}\) “Work – Weekly Hours Worked.”

\(^{66}\) “2007 National Physician Survey”
d. Income and Expenses

With hefty tuition fees and many years of hard work in mind, many students wonder just how much money they can expect from a career in medicine. Remuneration methods for doctors vary by province and by specialty. A common method is “Fee-for-service”, where each time a patient visits a doctor, the doctor then bills the provincial government for the service or procedure performed67. Some doctors are paid by salary, others by day or by hour (called “sessional”), while still others are paid by a “blended” model which, as the name suggests, is a combination of other methods68.

Below is a table of average yearly payments (using the fee-for-service model) for doctors according to their type of practice and their province. In 2004-2005, family doctors were making upwards of $200 000 per year. Specialists tend to make more money than general practitioners, with surgical specialties being the most rewarding financially.

It is important to note that these figures do not represent net income. They do not include taxes or overhead costs, which can be quite substantial. While no one would argue that doctors do not make enough to live a very comfortable lifestyle, it is not the highest paying job out there, and pursuing medicine simply for the money is unlikely to be worth it!

| Table 1. Average Payment per Fee-for-Service Physician Who Received at Least $60,000 in Payments by Type of Practice, 2004–2005 |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Family Medicine  | 215,931          | 220,742          | 185,448          | 211,734          | 164,568          | 213,088          | 217,390          | 238,775          | 232,742          | 198,365          | 202,481          |
| Medical Specialties | 314,621          | 334,107          | 206,830          | 285,549          | 180,817          | 278,094          | 216,069          | 284,063          | 276,809          | 245,174          | 248,694          |
| Internal Medicine | 330,869          | 334,107          | 237,610          | 361,263          | 219,434          | 351,826          | 255,867          | 349,879          | 321,970          | 317,202          | 301,450          |
| Neurology        | 233,342          | n/a              | 378,531          | 317,953          | 202,764          | 256,120          | 214,724          | 253,297          | 238,245          | 244,494          | 237,083          |
| Psychiatry       | 259,752          | *                | 149,307          | 195,751          | 119,698          | 184,170          | 159,857          | 236,324          | 234,570          | 170,632          | 170,444          |
| Pediatrics       | 275,824          | *                | 201,470          | 244,223          | 168,315          | 235,227          | 255,389          | 206,477          | 226,115          | 205,423          | 210,655          |
| Dermatology      | 300,178          | *                | 352,402          | 292,889          | 246,669          | 304,680          | 255,681          | 366,660          | 578,134          | 312,692          | 306,682          |
| Physical Medicine | n/a             | n/a              | 177,313          | 167,875          | 200,260          | 192,213          | *               | 167,438          | 170,362          | 185,046          | n/a              |
| Anesthesia       | 344,637          | *                | 164,175          | 220,956          | 171,798          | 289,396          | 262,026          | 283,938          | 278,600          | 245,030          | 248,934          |
| Surgical Specialties | 367,822          | 329,280          | 321,293          | 375,199          | 240,343          | 361,045          | 337,476          | 406,161          | 427,550          | 353,479          | 334,012          |
| General Surgery  | 353,659          | 548,103          | 275,596          | 326,577          | 211,790          | 359,220          | 328,416          | 351,099          | 370,425          | 321,685          | 298,819          |
| Thoracic/Cardiovascular Surgery | n/a | 178,264          | 457,144          | 297,335          | 432,402          | 392,824          | 641,318          | 647,370          | 383,766          | 406,372          |
| Urology          | 368,699          | n/a              | 379,062          | 364,946          | 270,173          | 355,042          | 263,477          | 367,558          | 363,818          | 401,124          | 339,338          |
| Plastic Surgery  | *               | t                | 236,061          | 295,403          | 179,325          | 279,653          | 329,920          | 329,297          | 370,033          | 245,477          | 269,055          |
| Neurosurgery     | n/a             | *                | 131,620          | 400,764          | *               | *               | *               | 348,847          | 297,649          | *               | *               |
| Ophthalmology    | 411,889          | 333,846          | 466,156          | 507,299          | 313,445          | 457,667          | 469,556          | 652,834          | 608,308          | 546,647          | 450,026          |
| Otolaryngology   | 475,293          | *                | 333,502          | 388,563          | 259,892          | 348,880          | 257,072          | 419,487          | 543,338          | 322,564          | 333,392          |
| Obstetrics/Gynecology | 293,640        | 297,433          | 296,497          | 289,673          | 245,733          | 351,024          | 327,038          | 363,536          | 402,055          | 289,802          | 316,831          |
| Total Specialties | 335,554          | 330,837          | 264,842          | 320,896          | 207,727          | 305,765          | 254,246          | 334,168          | 328,680          | 282,677          | 278,656          |
| Total Physicians | 263,996          | 252,638          | 216,776          | 259,334          | 185,751          | 258,090          | 236,695          | 277,930          | 270,328          | 232,756          | 237,492          |

67 “Practise options”
68 Canadian Institute for Health Information

Source: NROB, CIE
Q29c. Please indicate the amount of debt, directly related to your medical education, that you expect to have upon completion of medical school.

<table>
<thead>
<tr>
<th>Expected debt upon completion of medical school</th>
<th>1st year or 2nd year or 3rd or 4th year or All students</th>
</tr>
</thead>
<tbody>
<tr>
<td>no debt</td>
<td>11.9% 9.3% 10.0% 10.4%</td>
</tr>
<tr>
<td>less than $1,000</td>
<td>.1% .6% .4% .4%</td>
</tr>
<tr>
<td>$1,001 to $5,000</td>
<td>3.0% 2.3% 2.3% 2.5%</td>
</tr>
<tr>
<td>$5,001 to $10,000</td>
<td>5.4% 4.4% 3.2% 4.3%</td>
</tr>
<tr>
<td>$10,001 to $20,000</td>
<td>8.9% 6.1% 6.0% 7.2%</td>
</tr>
<tr>
<td>$20,001 to $40,000</td>
<td>11.3% 11.8% 12.4% 12.0%</td>
</tr>
<tr>
<td>$40,001 to $60,000</td>
<td>10.4% 10.8% 11.7% 11.0%</td>
</tr>
<tr>
<td>$60,001 to $80,000</td>
<td>7.9% 9.7% 10.4% 9.4%</td>
</tr>
<tr>
<td>$80,001 to $100,000</td>
<td>8.6% 10.9% 12.4% 10.8%</td>
</tr>
<tr>
<td>$100,001 to $120,000</td>
<td>10.5% 11.1% 8.7% 9.9%</td>
</tr>
<tr>
<td>$120,001 to $140,000</td>
<td>4.6% 5.5% 5.7% 5.2%</td>
</tr>
<tr>
<td>$140,001 to $160,000</td>
<td>5.8% 5.5% 6.1% 5.9%</td>
</tr>
<tr>
<td>Over $160,000</td>
<td>2.7% 4.6% 5.5% 4.3%</td>
</tr>
<tr>
<td>I prefer not to provide this information</td>
<td>3.1% 1.8% .7% 1.8%</td>
</tr>
<tr>
<td>NR</td>
<td>5.8% 5.5% 4.5% 5.2%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0% 100.0% 100.0% 100.0%</td>
</tr>
</tbody>
</table>

NR= No Response.

References:


CONTINUING MEDICAL EDUCATION

Since the beginning of institutionalized medical instruction, health practitioners have continued their learning beyond the realm of medical school. The need to maintain competence and to learn about new and developing areas of the medical field inspired the creation of activities formulated to do just that. Grand rounds, case discussions, and journal clubs constituted beneficial learning experiences, as they encouraged discussion among peers and allowed physicians to cover a lot more material than if they did it on their own.

Today, these activities have become more sophisticated and have grown to include: live events such as conferences, written publications, online programs, audio courses, video, or other electronic media¹. Interactive self-reflective learning programs are developed, reviewed, and sometimes even presented by Key Opinion Leaders or specialists in the field, ensuring the quality of information delivered.

**a. Requirements**

Physicians can subscribe to a variety of recognized organizations through which physicians can maintain their accreditation. In addition to processing certification of events, these organizations approve programs, oversee the activities and provide networking opportunities.

**Canada:** Certification is provided by the *College of Family Physicians of Canada* (CFPC) and the *Royal College of Physicians and Surgeons of Canada* (RCPSC). The CFPC requires 250 credit-hours over a five year cycle, with a minimum of fifty credits earned each year. An additional 24 credit-hours of higher learning per cycle are also required to earn and maintain fellowship within the college. Moreover, each province and territory requires documentation of ongoing CME for licensure. The RCPSC certifies its specialist physicians through the Maintenance of Certification Program. For each five year cycle, fellows are required to document 400 credits, with a minimum of 40 credits per year.

**United States:** Many states require CME for medical professionals to maintain their licenses. The major accrediting body is the *Accreditation Council for Continuing Medical Education* (ACCME).

**b. Recognized Societies**

**Canada**

*College of Family Physicians of Canada (CFPC)²*

Founded in 1954, the CFPC is the national medical association which supports family physicians in providing high quality health care to their patients. Each province and territory has its own chapter.

Although members were always required to participate in CME, in 1995, the College introduced MAINPRO® (Maintenance of Proficiency), an integrated and comprehensive program tying together the various policies pertaining to CME. Designed to be flexible and fair, MAINPRO® is based on the principles of adult learning, enabling members to maintain their practice knowledge and skills. It includes the guidelines for maintenance of membership and maintenance of certification.
Fédération des médecins omnipraticiens du Québec (FMOQ)³

Although the CFPC has a Québec Chapter, the FMOQ was developed to serve family physicians in Québec. In addition to offering their own Plan d’autogestion de développement professionnel continu (PADPC) structure to CME programs, family physicians can submit the same program for CFPC credits.

Royal College of Physicians and Surgeons of Canada⁴

The RCPSC is a national, private, nonprofit organization established in 1929 by a special Act of Parliament to oversee the medical education of specialists in Canada. Its mission is as an organization of medical specialists dedicated to ensuring the highest standards and quality of health care.

A physician may be certified by the RCPSC without becoming a Fellow of the College. Fellows use the designation FRCPC (Fellow of The Royal College of Physicians of Canada) or FRCSC (Fellow of The Royal College of Surgeons of Canada) depending on their qualifications.

United States

Accreditation Council for Continuing Medical Education (ACCME)⁵

The ACCME sets and enforces standards in physician education within the United States. Its mission is to provide physicians with opportunities to maintain competence and learn about the latest developments in medicine.

c. Accreditable Activities

Please note that this is a general description of the types of programs the CFPC may accredit and be eligible for Mainpro-M1 credits (only one of three different types of credits).

Group Learning Activities
Conferences, courses, workshops, scientific assemblies, lectures and seminars, in addition to clinical rounds and journal clubs involving groups of physicians are eligible for Mainpro credits, so long as they have been approved by the CFPC.

Academic Activities
Faculty development activities, conducting research and preparing manuscripts for publication are all types of academic activities that are eligible for Mainpro-M1 credits. A maximum of 75 credits may be claimed for any combination of these activities during any 5-year cycle.
Contributing to the medical community
Members who make contributions to the medical community, either via participation in a medical community, being an examiner for family medicine and emergency medicine examinations, or being a peer reviewer for medical journals, are often exposed to material and information that can be applied directly to their practices and are thus eligible for credits. A maximum of 75 credits may be claimed from these activities over a 5-year cycle.

Self-Reflective Learning Activities
Mainpro credits can be claimed for self-reflective learning activities such as internet-based studies of critically appraised peer-reviewed articles, or practice audits (physicians evaluate treatment and practice habits, assessing their performance). CFPC members who reside and practice in the United States, who wish to maintain their CFPC membership, may claim Mainpro credits for these.

Individual consideration
In special circumstances, members can request that an unaccredited learning activity (e.g. traineehips, fellowships and medical missionary activities such as Médecins sans frontiers) be considered for Mainpro credits.

d. Resources

ACCME: http://www.accme.org
CFPC: http://www.cfpc.ca/
FMOQ: http://www.fmoq.org/
RCPSC: http://rcpsc.medical.org/

References


ALTERNATIVE CAREERS IN HEALTH SCIENCES

a. Medical Research

A viable alternative for classic medical school exists in the turf of medical research. There are countless areas of interesting and rewarding fields of study. If you have an inquisitive mind and enjoy interacting with people from different educational backgrounds, then biomedical research might be just what you are looking for.

Undergraduate Research Course

McGill offers Undergraduate Research Project Courses 396 with the goal of offering invaluable research experience to undergraduate students. It provides an introduction to research which is readily available to all science students with at least one term of undergraduate study and a cumulative GPA of 3.00.69

The course (OURS 396) is an elective course containing a substantial research component which requires independent work with a final report worth 50% of your final grade.70

Many departments such as Anatomy and Cell Biology, Physics, and Chemistry offer the 396 course. For a complete list of departments offering the course and more information, please visit the course website.

Graduate Research

If you wish to pursue research past your undergraduate studies, you may continue your education in a masters or doctoral program. Graduate research programs are a broad theme and these exists in different shapes and forms all across Canada. However, its main purpose can be summarized as training in research. During the first year of graduate school, you may be required to do a lot of background reading just to understand the basics of your chosen field. In the next few years, you will work to establish your topic, as well as finding an advisor who will guide you through the research process and the writing of your dissertation. At the end of the program, you will publish your findings and present your ideas to your peers. If you are considering graduate research, it is probably helpful to talk to current graduate students and to obtain more information through the specific school’s websites.

Employment

If you decide that research is right for you, and you are eager to solve many of today’s unanswered questions, there are numerous options for careers in a variety of research fields such as (next page):

69 "396 undergraduate research project courses."
70 "396 undergraduate research project courses/"
You may use your knowledge and skills to work for corporations such as pharmaceutical companies. Also, you will have an opportunity to join many research institutions such as universities and hospitals all across Canada. From there you can apply for funding from the Canadian Institute of Health Research.

To apply for CIHR funding, you must:

- Be affiliated with an eligible Canadian institution or organization by the time the funding begins
- Not be employed by Canadian federal government departments or agencies or for-profit organizations unless affiliated with a university
- Not have a financial interest holding of more than 5% in a company proposed as an industry partner for research funding

For more detailed information regarding the funding process and about medical research as a career, you can visit the CIHR website.

References:


71 “Funding overview”
b. Pharmacy

Is pharmacy for you?

It’s a common misconception that pharmacists do little more than transfer pills from larger bottles to smaller ones with personalized labels. In reality, pharmacy is an incredibly demanding and patient-centric career that requires both an intensive amount of scientific knowledge and fantastic people skills. Pharmacists are responsible for tailoring a patient’s medications to suit their needs, based on consultations with both the patient and the prescribing physician. Once a plan is worked out, it’s up to the pharmacist to educate the patient about their medication: how much to take, when to take it, if it’s okay to mix them, potential health risks and side effects, and a whole host of other information. Since pharmacists fill this vital communicative role, it’s essential that they be well versed in current information on any drugs they are providing, and are approachable enough for a patient to ask their own questions or come to the pharmacist with concerns. With the wealth of new information that becomes available on an almost-daily basis about recently developed drugs or modifications to existing drugs, pharmacy also requires you to be a “lifetime learner” in order to properly educate the public and create effective medication plans for patients.\(^72\) This is all a lot to ask of just one person, but if you enjoy a great challenge, then pharmacy just might be your niche.

Laying Your Pre-Pharmacy Pathway

After receiving your undergraduate degree, the next step to becoming a pharmacist is registration in an accredited pharmacy program. As with medicine, there’s no defined major that’s most suitable for aspiring pharmacy students, so long as certain course pre-requisites are met. For Canadian pharmaceutical schools, the general course requirements are listed below, but it’s always best to check with a school’s specific requirements in order to guarantee you’re doing everything you need to get in. You can also consult McGill Redbook to view more details on entrance requirements and the application process.

General Undergraduate Course Requirements for Canadian Pharmacy Schools

One full year of each of the following:
- General chemistry (with lab)
- Organic chemistry (with lab)
- Biology (with lab)
- English

One semester of each of the following:
- Physiology
- Cell biology
- Calculus
- Statistics

\(^72\) “How to Become a Pharmacist.”
Some schools may also require:
− One or more courses in public speaking/debate
− A full year of calculus
− That all English courses be composition-based
− Social sciences or humanities courses including but not limited to one semester each of:
  economics, public speaking, sociology and cultural anthropology
− One course each in microbiology and anatomy
− One year physics (with labs)

**Standardized Testing**

Many Canadian pharmacy schools require applicants to sit the Pharmacy College Admissions Test (PCAT) and submit their scores as part of the application process, or to sit an admissions test designed and administered by the university. Please refer to school-specific sites to determine if you will need to write the PCAT or another test to gain admission to the school of your choice.  

**Certification**

Upon completion of a bachelor’s degree in pharmacy from an accredited university, aspiring pharmacists must complete an examination by the National Pharmacy Examining Board of Canada and complete an apprenticeship or internship for practical experience, as well as meet any requirements laid out by provincial regulatory associations.

**Canadian Pharmacy Association**

This site offers a fantastic overview of opportunities in the pharmaceutical industry and a skills and personality profile of a good pharmacist (found under the “about pharmacy in Canada” tab). There is also a complete list of accredited Canadian pharmacy programs with links to each school, information on the National Pharmacy Examining Board of Canada and charts detailing the requirements of each provincial regulatory authority for in-province, out-of-province or internationally educated pharmacy students. Check it out at http://www.pharmacists.ca/index.cfm.

**Resources:**


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73 "Pharmacy."
74 "Licensing of Pharmacists."
c. Optometry

Is optometry for me?

During the course of a regular eye examination, optometrists evaluate the eye for physical deformities and determine the cause of any visual impairment and prescribe appropriate treatments. This can range from simply prescribing glasses or contact lenses to compensate for lens deformities, to medication for glaucoma, to surgery for more serious defects such as cataracts. It is also the responsibility of the optometrist to administer any required pre- and post-procedural care for patients referred to a surgical practice. Optometrists also have to watch out for systemic diseases that can initially manifest in the eye, such as hypertension or diabetes.

Most optometrists are engaged in private practice, allowing them to set hours that accommodate both the needs of the patient and the personal needs of the practitioner. Alternative opportunities include research, teaching or health care policy development. If you’re seeking a less-harried lifestyle than the typical physician, but still want to use your scientific knowledge to help people on a day-to-day basis, you might want to look into optometry as a potential career.

Laying Your Pre-Optometry Pathway

There are only two accredited optometry schools in Canada. The University of Waterloo offers English-language instruction, while the Université de Montréal offers a French-language optometry program. There are, however, a number of accredited optometry schools in the United States. In order to apply for admission to Canadian optometry school, you need to complete at least three years of an undergraduate degree at an accepted university, preferably in a science program.

The course requirements listed below apply to the University of Waterloo and serve as a bare-minimum guide, please refer to school-specific websites for information regarding admissions to programs at the Université de Montréal or in the United States.

Undergraduate Course Requirements

One full year of each of the following:
- General biology (with lab)
- Physics (with lab)
- Physiology

One semester of each of the following:
- English
- Ethics
- Psychology
- Microbiology
- General chemistry (with lab)
- Organic chemistry
- Biochemistry

75 "Optometry as a Career."
The following courses are recommended to enhance your optometry studied and fulfill B.Sc requirements, but will not be specifically reviewed by the admissions committee:

- Human anatomy
- Embryology
- Genetics
- Histology
- Immunology
- Linear Algebra or Geometry or Trigonometry

**Standardized Testing**

Many schools require the completion of the Optometry Admissions Test (OAT), administered by the Association of Schools and Colleges of Optometry. The test surveys the applicant’s knowledge of the natural sciences and also has reading comprehension, quantitative reasoning and physics components.

**Certification**

In order to practice as an optometrist in Canada, you must complete a four-year university program in optometry, accredited by the Accreditation Council on Optometric Education and then pass a national examination administered by the Canadian Examiners in Optometry, as well as meet any requirements of the relevant provincial regulatory authority. An extra year of residency training upon completion of the Doctor of Optometry degree is not required for certification, but is becoming an increasingly common practice.

**Great Resources for Pre-Optometry Students**

**University of Waterloo**

The University of Waterloo offers the only accredited English-language pharmacy program in Canada and their website has both a comprehensive summary of the process of becoming an optometrist and a detailed breakdown of everything you need to do, academically or otherwise in order to gain entrance to their program. Check it out at http://www.optometry.uwaterloo.ca/.

**Canadian Association of Optometrists**

The CAO website has a brief overview of the path to a career in optometry which may serve as a good jumping-off point for your research, but the most valuable resource this site provides is a list of accredited optometry programs in the United States that are recognized by Canadian regulatory authorities, with links to each school’s website, so that you have more options than just the University of Waterloo when you’re applying to an optometry program.
Université de Montréal

Si vous préférez d’étudier l’optométrie en Français, visitez le site web de l’école d’optométrie de l’Université de Montréal à http://www.opto.umontreal.ca/

References :


d. Dentistry

Is dentistry for me?

Do you think that dentistry is all about poking around in people’s mouths, prescribing painful orthodontic treatments, and championing flossing and the thrice-daily brushing of teeth? If you answered “yes” to that question, maybe you should consider some of the lesser-known duties of a dentist, such as:

1) Detection and management of oral conditions: Did you know that dentists are the first line of defence against systemic diseases such as oral cancer or hypertension?

2) Restoration and Reconstruction: If you’ve ever chipped a tooth and needed it repaired or replaced, you’d know that it’s a dentist that creates the new and improved version, from moulding it to inserting it in your mouth, so that your smile is as good as new.

3) Surgery: No, it’s not limited to pulling out the wisdom teeth of unfortunate teenagers. Dentists also correct facial and dental deformities resulting from accidents or birth defects.

If that piqued your interest but you are unsure if you’re personally suited to be a dentist, here’s some good news: since you’re reading a medical careers guidebook, chances are that you have a high level of aptitude in science and are looking for a career that both challenges you and allows you to interact with and help people in a variety of situations, all key aspects of any good healthcare professional. If you’ve also got excellent manual dexterity and spatial judgment, an interest in being self-employed, or a genuine desire to help people maintain and improve their oral health, you’re already well on your way to a potential career in dentistry.  

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80 "Pursuing a Career in Dentistry"
Laying Your Pre-Dental Pathway

As you’ll see in the specialization and certification section below, you won’t be eligible to take the National Dental Examining Board qualifying examination until you’ve graduated from an accredited dental program.\(^8\) However, long before you think about graduation or writing your dental boards, you need to think about getting into the dental program you’re interested in, so here’s what you need to consider in planning your attack (you can also check out SUS Redbooks for more requirement information:

General Undergraduate Course Requirements for Canadian Dental Schools

One full year of each of the following:
- General chemistry (with lab)
- Organic chemistry (with lab)
- Biology (with lab)
- Physics (with lab)
- English

One semester of each of the following:
- Statistics
- Biochemistry

Many schools also require:
- Two full year courses in social sciences, humanities or a foreign language

Some schools may require:
- A full year of math, and/or biochemistry and/or physiology
- At least some psychology or microbiology\(^2\)

Standardized Testing

All accredited dental schools in Canada and the United States require applicants to sit the Dental Aptitude Test and submit their scores in order to gain admission. The test has both a written and a practical component and is administered twice-yearly (in November and February) at test centers across Canada. Students may submit Canadian DAT results to accredited schools in the United States, but may not use American Dental Association DAT scores to apply to Canadian schools, as the American test lacks a practical component.\(^3\)

Specialization and Certification

Upon graduation from an accredited dental program or accredited qualifying program, you’ll need to pass both the written and practical components of the national licensing examination, administered by the National Dental Examining Board, unless you intend to practice in the province of Quebec. If you plan to attend an out-of-province medical school and then return to practice in your home province, you

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\(^8\) “General Certification and Licensure.”
\(^2\) “Dentistry.”
\(^3\) “DAT Information.”
may also have to apply for a license from your provincial regulatory authority. Once you have completed these steps, you will be certified to practice general dentistry in Canada.  

If you’re interested in pursuing a dental specialty, you’ll have a few more hoops to jump through. There are nine different certified dental specialties in Canada, each presided over by an individual regulatory agency. Not all dental schools have the requisite training programs for each specialty, so if you’re interested in any of the specialties listed below, it’s best to do some research on which schools offer the appropriate programs.

Possible Dental Specialties
- Dental Public Health
- Endodontics
- Oral and Maxillofacial Surgery
- Oral Medicine and Oral Pathology
- Orthodontics and Dentofacial Orthopedics
- Pediatric Dentistry
- Periodontics
- Prosthodontics
- Oral and Maxillofacial Radiology

Great Resources for Pre-Dental Students

Canadian Dental Association

The Canadian Dental Association website is a great first stop on your research journey. Under the tab “Dental Profession”, they break down the entire process of becoming a dentist into distinct steps, from registering for the DAT to achieving specialty certification. They’ve got all kinds of links to help you get the information you need, such as contact information for Canadian dental schools, national and provincial regulatory authorities, and a list of accredited programs in the United States for those interested in pursuing their dental education south of the 49th parallel. Check it out at http://www.cda-adc.ca/cdacweb/en/.

Commission on Dental Accreditation of Canada

The CDAC website is really designed for institutions seeking accreditation for their dental programs, but reading up on the expectations for institutional programs will give you a good idea of what a dental school might in turn expect from you, particularly if you’re interested in specialization. It’s also got a nifty search feature that allows you to select a specialty and see a list of schools in Canada which offer an accredited program for that specialty, with links to contact information for each school. Check it out at http://www.cda-adc.ca/cdacweb/en/.

References:


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84 "General Certification and Licensure."
85 "Dental Specialties."
86 "Search for Accredited Programs."
e. Other Careers

There are many other careers out there for someone who’s interested in medicine. If you need help getting started on your search, or simply need help navigating your way through all the different possibilities, drop by CaPS (learn more in the following section).

**RESOURCES FOR MCGILL STUDENTS**

As a McGill student, you have a multitude of resources available to you – if you know where to look. The following is a brief guide to the various services on campus that can help you achieve your medical dreams.

a. Medical Direction and the Science Undergraduate Society

Medical Direction (MD) is a new initiative of the Science Undergraduate Society (SUS) which aims to enhance the medical experience of interested students. MD provides opportunities to shadow doctors and professionals in health-related fields in their working environments, along with numerous speakers, information events, and chances to network with current medical students. In February 2009, MD organized a humanitarian trip through Global Medical Training (GMT) to Panama City, where McGill students had the opportunity to observe doctors in action and assist in basic patient care. In time, MD hopes to expand its services to provide insight to a variety of different careers. You can learn more about Medical Direction on its website, http://md.sus.mcgill.ca/, or on its facebook group.

Medical Direction is but one of many services the Science Undergraduate Society provides to students with dreams of a medical career. Other services include:

- SUS Peer tutoring
- Redbooks
- Seminars
- Career fairs
- Charity events
- Speakers from a variety of disciplines and backgrounds
- Volunteer and leadership opportunities
SUS Peer tutoring is a terrific resource for students. Need help making that GPA cut-off? Sign up to receive free tutoring from a fellow student who has previously received an A- or higher in the course. Need volunteer experience, or simply look to contribute? Become a peer tutor in a course you aced – in addition to being a rewarding experience, you will receive a letter of reference from the dean stating the number of hours you contributed.

Kaplan, one of the Society’s sponsors, provides McGill science students a 15% discount on their MCAT preparation courses (email the SUS VP Academic for more information). They also give SUS several courses to raffle off at their events and to auction off for charity. SUS events are advertised around campus as well as in weekly emails to science students.

**b. McGill Redbooks**

Run by the Science Undergraduate Society, Redbooks is a website that provides general admissions information for graduate programs such in Medicine, Law, Pharmacy and Dentistry. It features all Canadian universities with a rapidly expanding selection of international schools. The information listed is updated annually and links are provided the official websites. Redbooks is a great way to learn about what programs are out there and to check that you are on the right tract to achieving your goals. You can visit Redbooks at [http://redbooks.sus.mcgill.ca/](http://redbooks.sus.mcgill.ca/).

**c. Career Planning Service (CaPS)**

CaPS is a service funded by student-service fees available for students of all faculties, both full and part-time. It is an excellent resource for all things career-related, from building a CV and developing networking skills to finding the career that is right for you.

Throughout the year, CaPS offers a multitude of workshops for undergraduate students. Topics include:

- Alternative Careers in Life Sciences
- Cover Letter Practice Session
- CV Writing
- Grad School Personal Statements
- Interview Techniques
- Med School Interviewing
- ...and many, many more

The CaPS Resource Center is a wonderful source of print and electronic information. They carry numerous books on Medical School Admissions and medical careers in general. Not sure if medicine is right for you? The Resource Center is full of information on alternative careers. Useful information can also be found on the CaPS website, such as Podcast and Print versions of popular workshops.

CaPS also offers counselling from their talented Career Advisors. Advisors can be seen during drop-in hours or by appointment. You can come to them with any questions you may have regarding your career plan, or lack-thereof. You can inquire about summer jobs or how to get involved with research. You can even get them to go over your personal statement for graduate/medical school or to help you
out with your interview skills. To make the most of your time with an advisor, make sure to prepare questions in advance and check out other CaPS resources. CV advising is also available on a drop-in basis during the year. CaPS can get pretty busy between January and March, so it’s good to plan ahead and get down to CaPS as early as possible.

For those who aren’t dead set on a medical career, the Program for the Advancement of Career Exploration (PACE) is a great way to learn about other options. This series of four workshops helps to identify your skills and interest and match them to potential vocations.

CaPS also provides a Mentor Program in which undergraduate students are paired with McGill Alumni and staff from a variety of fields and industries. A mentor is a source of advice and insight into life after graduation and possible careers. Generally, there are not many healthcare professionals available as mentors, but the number and type of mentors available is continuously changing. Even if you can’t get a mentor in the exact field you are interested in, the program can help to expose you to different possibilities.

Check your inbox every month for CaPSScoop – the CaPS newsletter and primary publication. It provides information about upcoming CaPS events along with useful career advice. You can also search and sign up for upcoming events and workshops on MyFuture (https://csm-caps.mcgill.ca/students/).

It’s never too early to start planning for the future. Visit CaPS in the Brown Student Services Building, Room 2200, and check out their website at http://www.mcgill.ca/caps/.
CONCLUSION

Medical Direction began providing its services for undergraduate students early this year; this guide is meant to be a fountain of information as to how you can make the choice and improve your standing to be accepted into a medical profession, if that is what you want to do. Remember: medicine is a lifestyle choice.

Once you’ve made the decision to move into medicine, Medical Direction is there to help. We help students find the resources they need to procure a career in medicine – a service that is indisputably valuable and relevant, especially in such a high-demand career track. If you take the steps outlined in this guide, you will be headed in the right direction to becoming a happy and successful medical doctor.

For questions, comments, or more information: medicaldirection@gmail.com.

“The desire to take medicine is perhaps the greatest feature which distinguishes man from animals.”

- Sir William Osler
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