

Guidelines for applying to Graduate Programs in CANADA

As opposed to the United States, most Canadian graduate schools follow a departmental model (as described above) of admission whereby based on their research interest, students choose the labs of individual thesis supervisors before applying. In such cases, students start working on their thesis projects from their very first day in graduate school in the lab of their chosen supervisor. A few exceptions to this exist, whereby programs might stipulate that students rotate between different labs in the department during the first year of study and decide which lab to work in for their thesis during the second year.

Three examples of prominent graduate programs are listed below that cover both of these cases:

- University of British Columbia, Biochemistry and Molecular Biology (Vancouver - BC) - Single supervisor from the beginning ([Prospective Students | Department of Biochemistry](#))
- McMaster University, Biochemistry (Hamilton - ON) - Single supervisor from the beginning (<https://biochemgraduateprogram.ca/application-procedure/>)
- University of Toronto, Biochemistry (Toronto - ON) - Rotation program ([How to Apply](#))

The admissions procedure for rotation programs is similar to the umbrella programs discussed above in the case of the United States and will not be discussed in detail in this section.

It is important to note that most graduate programs in Canada differ from the United states in two key respects:

- Most graduate programs enter students at the **MSc level**, and based on satisfactory research and academic performance by the second year, allow students to **fast-track into PhD**. At this point, students may choose to write a master's thesis and graduate with a masters degree. Only students with exceptional grade point averages in their bachelors programs (A/ A+) along with sufficient prior research experience and/or publications are allowed to enter directly into PhD after undergraduate studies. Such cases are often rare in life sciences, though, not non-existent. Students holding an MSc degree enter PhD programs directly.
- **Tuition fee:** All students (Canadian citizens and International) are required to pay a minimum tuition fee for the first 4 years of their MSc-PhD programs. This period is often referred to as the residency period at some universities. This tuition fee is usually higher for international students compared to citizens. International students are hence entitled to either higher stipends from their supervisors or differential fee waivers from their departments to bring them on par with local students. The overall amount of the stipend varies from one university to another (and also the province) but is usually sufficient to cover the living and tuition cost of the student.

Guidelines (for departmental model with no rotation program)

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- 1. Visit the departmental website and browse through the list of faculty members** Shortlist faculty members whose research is of interest to you. Go through their publication record (usually links to NCBI pages or important publications are provided on the departmental website). It is generally a good idea to consider the frequency and the impact of publications if one wishes to determine the success of the researcher. Some programs explicitly indicate which supervisors are actively looking for graduate students on their websites. This should be done well in advance of the application deadline.
- 2. Go through key publications**
Focus on the most recent and the highest impact publications for your study. Pay close attention to the experimental techniques used in the papers and if they are of interest to you. Spend some time studying these methods if you are not familiar with them.
- 3. Emailing faculty members**
Write individual, clear and concise emails to the faculty members you're interested in. Indicate clearly your intent to work in their labs, the reason for your interest in their research work, and briefly describe your own research experience. You may attach a CV and unofficial transcript with the email. Your email should be comprehensive and concise enough for the researcher to consider it worth their while to interview you. If you are successful, you will receive an email within a few days of your contact suggesting an interview. You may have multiple interviews, each conducted by each of the interested faculty members.
- 4. Interview**
An interview may last about 30-40 mins. During the interview the faculty member may ask you about your academic background, your most significant research projects and any key findings while also evaluating your scientific reasoning by asking hypothetical research questions. You may also take this opportunity to ask the researcher more about their research work, laboratory environment, supervision style and expectations from graduate students.
- 5. Acceptance by supervisor and application to the program**
Within a few days of the interview, you will receive email from the supervisor(s) with the decision. If the supervisor agrees to take you as your student, you should reply back soon as well affirming your interest to be their student. You and your supervisor might have further correspondences discussing your stipend etc. In the meantime, you should submit your application following the directions on the departmental website. The following documents are required with your application:
 - Transcripts (all post-secondary education).
 - Two-Three letters of reference
 - Resume (CV)
 - Statement of Purpose (SOP)

Standardized Tests: The GRE exam is required by most, **but not all**, Canadian programs for international students. In cases where it is considered optional, a good GRE score might still help boost your chances. TOEFL is required by all programs for international students but not for local students. Both of these tests should have been taken no more than two years before the application.

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Note: It's important to keep in mind that most programs have an earlier deadline for international students compared to local students. Please check the dates for application for international students. Most Canadian universities have both fall and winter intake for graduate students.

In your SOP and/or on the application form, you might be required to indicate the supervisor you have chosen to work with. Upon receiving your application, the departmental program coordinator (and committee) will evaluate your application to make sure you fulfill the requirements for intake and confirm your acceptance with your supervisor.

6. Official acceptance and admission

You should receive a letter from the registrar/ enrollment office at the university confirming your admission to the university. You will also receive an official letter from your supervisor indicating your acceptance and the stipend that you will be offered from his research funds. These documents usually constitute sufficient proof of admission for you to apply for a Canadian study visa.

A good example of a step-by-step guideline to become a graduate student is linked below:
[Becoming a Graduate Student in McGill Biochemistry](#)

For specific questions and/or personalized advice, contact:

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