Preparing your graduate school application!

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AT THE NATIONAL CAPITAL OF CANADA
University of Ottawa is the largest bilingual university worldwide, with 10 different faculties from the different realms of human knowledge. Our vibrant campuses house more than 40,000 students including thousands of graduate students!
Are you thinking of studying in Ottawa?

<table>
<thead>
<tr>
<th>ATTRIBUTES</th>
<th>SCORE</th>
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<tbody>
<tr>
<td>A good job market</td>
<td>100.0</td>
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<tr>
<td>Affordable</td>
<td>15.3</td>
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<tr>
<td>Economically stable</td>
<td>96.0</td>
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<tr>
<td>Family-friendly</td>
<td>98.6</td>
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<tr>
<td>Income equality</td>
<td>73.1</td>
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<tr>
<td>Politically stable</td>
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<tr>
<td>Safe</td>
<td>91.0</td>
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<tr>
<td>Well-developed public education system</td>
<td>92.9</td>
</tr>
<tr>
<td>Well-developed public health system</td>
<td>89.4</td>
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</tbody>
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Step 1: Motivation

Property Dr. Alarcón
Faculty of Medicine at University of Ottawa: Leading innovation

Top ten Canada in:

Research income

Faculty research intensity

Graduate student research intensity

www.researchinfosource.com
How expensive is to study in Ottawa?

Tuition fees, housing, groceries, transportation, clothing, medical insurance…

In Ottawa, ≈$1,240/monthly to live no rent in. Those values are very dependent on the province/city. Graduate students might have access to teaching assistantships and part-time jobs. However, those depend on each University regulations.
How do you choose a program?

Think of where do you want to be in 5 years. Do not choose a program without getting to understand:

1. Market size and what possibilities this program will open for you
2. Employability index
3. New programs vs. established ones
4. Reputation/ranking of the university
5. Caliber of potential supervisor (Google scholar)
+100 faculty including core members and researchers from affiliated institutions/hospitals including the Ottawa Hospital, CHEO, and Ottawa Heart Institute to name a few.

The BMI core members conduct high-quality, collaborative research in areas of Cancer Biology, Structural & Chemical biology, Cell, Genetic & Developmental biology, Brain & Mind, Cardiovascular, Metabolism & Lipid biology, Systems & Computational biology, Viral & Bacterial pathogenesis and Immunology.
TWO OF OUR GRADUATE PROGRAMS

- BIOCHEMISTRY (BCH)
- MICROBIOLOGY AND IMMUNOLOGY (MIC)

Doctor of Philosophy (Ph.D.) Specialization in Human and Molecular Genetics is also offered in collaboration with other graduate programs at the Faculty of Medicine. M.Sc. students can also complete a specialization in Bioinformatics through a multidisciplinary collaborative program.
STEP 4: YOUR APPLICATION

*How soon should I start the application process?*

Rushed applications are easily triaged. You should start preparing your application > 12 months prior deadline (VISA processing time varies depending on geographical location)

Some of the most common mistakes applicants make

1. Lack of understanding of minimum requirements for language (EN/FR)
2. Not official transcripts as part of the application
3. Poor selection of those providing support letters
4. Letter of intent/motivation is generic and does not speak on why the applicant would be a good fit for the program

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DEGREE EXPECTATIONS

Depth and Breadth of Knowledge

**MSc:** A systematic understanding of knowledge in the discipline/field; critical awareness of current problems/new insights in the discipline

**PhD:** A thorough understanding of a substantial body of knowledge, relevant knowledge outside the field
DEGREE EXPECTATIONS

MSc: Comprehension of how established methods of research and inquiry lead to new knowledge in the discipline; critical evaluation of current research; ability to develop sustained argument or originality in the application of knowledge.

PhD: Conceptualize, design, Implement research, make informed judgements on complex issues, produce original research of a quality to satisfy peer review and merit publication.
DEGREE EXPECTATIONS

**Application of Knowledge**

**MSc**: apply existing knowledge in critical analysis of new problems

**PhD**: undertake research at an advanced level and thus contribute to development of new knowledge, professional tools, methods etc.
Professional Autonomy

DEGREE EXPECTATIONS

MSc/PhD: Skills necessary for employment - personal responsibility, decision making in complex situations, intellectual independence, ethical behavior consistent with academic integrity, appreciation of broader implications of applying knowledge
DEGREE EXPECTATIONS

Communication Skills

**MSc**: Ability to communicate ideas, issues and conclusions clearly

**PhD**: Ability to communicate complex and/or ambiguous ideas and conclusions clearly
Key elements one would expect to see in a good support letter

Support letters are instrumental for selection process and shortlisting of potential students. A strong recommendation letter should speak about:

1. Potential of the candidate to excel in the proposed graduate program
2. How the applicant ranks amongst the students the recommender has supervised
3. Unique set of skills the applicant has and how those can be further matured in the graduate program
4. Leadership skills beyond grades and awards
**STEP 4.1: SUPPORT LETTERS**

*What elements are detrimental for support letters*

Sometimes, reference letters are the “element” that brings down a good application package. Some elements that are detrimental in support letters include:

1. Generic letters, something not crafted for the applicant or program
2. Letters from individuals that have known the applicant for a very short period of time
3. Letters that are not very enthusiastic or speak in very general terms on research potential and other qualifications
ASKING FOR A SUPPORT LETTER

- When asking for a reference letter be conscious of the time and energy it takes to write a good reference letter (provide a deadline/timeline)
- Make your referee’s life easier:
  - Prepare a brief outline of the main things that need to be highlighted in the letter
  - Take the time to prepare a PDF with the links and important information
  - Send a calendar invite
  - Never offer you writing the letter
  - Make sure the process is a good experience for your reference
Are cover letters important in the selection process?

Cover letters are the one opportunity applicants do have to introduce themselves to the selection committee and admission scholarships. The letters are multipronged documents that if prepared coherently help to:

1. Evaluate the student knowledge and understanding of the graduate program
2. Determine if the student has a clear understanding of the available research programs within the graduate program
3. Provide insights on the language skill level and storytelling skills
4. If a supervisor has been secured: The cover letter allows the selection committee to evaluate how the student will benefit of being admitted to the program
Do you need a supervisor to be admitted in a graduate program?

Graduate programs at BMI follow a two-steps admission process. The first stage after an application package has been reviewed determines if the student is eligible or not. Then, admissible students must identify a supervisor (for programs where a supervisor must be secured, admissible students without a supervisor will not be admitted to the program).
IN THE PAST: SNAIL MAIL, NOW EMAIL

**Subject:** It will be most likely the only thing the person will read

*Strategize your subject:* How do I get this person to open my email?

Add key elements such as GPA, scholarships, awards, or something like that.

Example: Applicant for MSc (GPA XX from University of Ottawa)
WORDING THE EMAIL AND KEY INFORMATION

Open with a cordial salutation, Dear Dr [Last Name]. Never make assumptions on gender in the email. Avoid using “To whom it might concern” or “Sir/Madam”

By now, you know how to critically read a paper… Presenting actual insights on the article makes a difference. PIs receive between 2-50 emails a day for positions. Please be mindful of that.

If you are interested in applying for a graduate program, indicate the exact program, deadlines for application. Then follow with a clear rationale and justification of why are you seeking a position in that lab.

Avoid generic words or use of slang: “I found your research fascinating, intriguing, captivating”
Dear Dr. Alarcon

I took the liberty to send you an email to inquire about the possibility of becoming part of your team as a graduate student (MSc in Biochemistry, uOttawa, deadline application September 10th 2024 at 8 pm ET). I am currently an undergraduate student at the University of Montreal (BSc in Biology). During my Honors, I had the opportunity to study the role of protein degradation on cell differentiation. I consider this field has an essential impact on the rational design of biomaterials, an area your research group is leading in Canada. After reading your latest contribution in Nat Comm 2019, where you elegantly demonstrated that collagen degradation products can modulate myocardial repair in an infarcted murine model, I decided to contact you to inquire about graduate school opportunities in your team. Thus, I would like to respectfully inquire you about a potential sponsorship for a position as a graduate student in your lab. I have also attached my latest CV (OGS format) for your reference.

Sincerely

[Your name]
BSc in Biology
[University/Company affiliation]
Non generic email [Avoid using emails that do not contain your name as part of it]
PREPARING YOUR CV

List your contact information at the top as well as the info for potential references.

For academic purposes use standard formats (OGS, CCV, Biosketch).

Important to highlight beyond academic activities are outreach endeavors.

Remain gender neutral and in some cases, it is good to highlight if you are a member of a visible minority in your field.
FUNDING DATABASES

https://mcconnellfoundation.ca/

https://www.researchnet-recherchenet.ca/

Graduate students (pure gold)

https://research.jhu.edu/rdt/funding-opportunities/graduate/

PDF

https://research.jhu.edu/rdt/funding-opportunities/postdoctoral/

Junior faculty

https://research.jhu.edu/rdt/funding-opportunities/early-career/
I am an email away!

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