The Department of Physiology is dedicated to understanding fundamental physiological processes and translating these to clinical care. It is home to the discovery of insulin, the scientific intuition and curiosity that led Banting and Best to their seminal studies of diabetes.

Our research-based MSc and PhD programs provide advanced training in physiology and significant experience conducting research in a lab. Under the direct supervision of a member of our world-class faculty, students will apply modern experimental methods to further discover and understand of the systems of the human body. Students will also broaden and deepen their knowledge through coursework and seminars. Both programs culminate with an oral defense of a written thesis based on original research.

**Master of Science (MSc)**
In addition to completing a thesis, students complete 1.5 FCE*: PSL1000H (MSc Seminar in Physiology, 0.5 FCE), 0.5 FCE physiology graduate course and 0.5 FCE graduate course in physiology or outside of the department. Students successfully finish this program within 2 years.

**Doctor of Philosophy (PhD)**
In addition to conducting independent and original research that will form their thesis, students complete 2.5 FCE: PSL2000H (PhD Seminars in Physiology, 0.5 FCE), PSL1066H (Research Grant Proposal, 0.5 FCE), 0.5 FCE physiology graduate course, and 1.0 FCE graduate course in physiology or outside of the department. Typically, students successfully complete this program within 6 years.

* Full course equivalent. A typical 0.5 FCE is over one term (13 weeks), meeting 1-2 times per week. A typical 1.0 FCE is over two terms (26 weeks), meeting 1–2 times per week.
Potential career paths

In 2016, the School of Graduate Studies (SGS) tracked the career outcomes of 10,000 PhD students who graduated from the University of Toronto between 2000 to 2015. Below are some career trajectories of alumni from the PhD program in Physiology (n = 140).

Alumni profile

Dr. Gareth Lim, PhD
Graduated 2009

My name is Gareth and during my time in the Department of Physiology, I was amazed by the encouraging and stimulating environment offered by trainees and faculty members. My supervisor was Dr. Patricia Brubaker and, in her lab, I was given the opportunity to grow scientifically and realize my own independence as a researcher.

My advice is to always be willing to ask questions and remember there are never right or wrong questions. Questions may lead to unexpected discoveries that can open new areas of research. It was this line of thinking that led to my interest in the physiological functions of 14-3-3 proteins, which remains the primary area of research in my lab today. I currently lead my own lab at Université de Montréal, where I focus on new treatments of metabolic diseases, including diabetes and obesity.

By the numbers

89 186 10
number of graduate faculty number of MSc and PhD students average class size

Application Deadlines

Below are the deadlines for the MSc and PhD programs.

<table>
<thead>
<tr>
<th>ADMISSIONS</th>
<th>RECOMMENDED DEADLINE</th>
<th>FINAL DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter 2024</td>
<td>October 1, 2023</td>
<td>October 15, 2023</td>
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<tr>
<td>Spring 2024</td>
<td>January 15, 2024 (round 1)</td>
<td>January 28, 2024 (round 1)</td>
</tr>
<tr>
<td>Fall 2024</td>
<td>January 15, 2024 (round 2*)</td>
<td>January 28, 2024 (round 2*)</td>
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<tr>
<td></td>
<td>June 1, 2024 (round 2*)</td>
<td>June 15, 2024 (round 2*)</td>
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</tbody>
</table>

(* domestic only)

How to Apply:
physiology.utoronto.ca
Email: graduate.physiology@utoronto.ca