

Laboratory Medicine

MHSc



The Department of Laboratory Medicine and Pathobiology (LMP) in collaboration with the Department of Obstetrics and Gynecology (OB/GYN), offers a two-year, full-time professional master's graduate program to educate clinical laboratory scientists in one of two fields in Laboratory Medicine: Pathologists' Assistant (PA) or Clinical Embryology (CE).

This unique program requires students to take 9.5 FCE*. The goal of the curriculum is to train students in the practical aspects of laboratory work in these fields, and teach critical thinking and research skills that will position you to advance in these fields of laboratory medicine. You will apply your knowledge to finding solutions to complex problems, resolving serious ethical issues, and developing a strong sense of personal accountability, intellectual rigour, and become a lifelong learner.



Year one

You focus on core academic competencies required to succeed in the field. All PA and CE students take some courses together, including topics such as Cell and Molecular Biology and Biomedical Research Methods, then courses specific to your field.

Year two

You complete a mix of academic and practical components and work on your Capstone research project throughout the year. PAs rotate in laboratories in our partner hospital sites, and CEs train in our dedicated simulation lab: the Clinical Embryology Skills Development Laboratory (CESDL), then in ART lab rotations.

You will learn from and be mentored by world-class faculty and interact with a broad range of professionals working in clinical laboratories. Depending on the field you choose, you will have access to multiple training sites across our partner hospitals such as Mount Sinai Hospital and the Ontario Forensic Pathology Services (OFPS).

** 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

What is a Clinical Embryologist?

You are an essential member of an IVF team. You typically work in a hospital or fertility clinic, responsible for all the laboratory components contributing to the generation and continuing development of healthy embryos that lead to pregnancy.

Number of incoming students: 10

Graduates who found employment: 100%

What is a Pathologists' Assistant?

You are a highly trained healthcare professional who provides various services in surgical and autopsy pathology under the direction and supervision of a certified pathologist. You will often work in a hospital, Forensic Services office, or other laboratory in a private or university setting.

Number of incoming students: 10

Graduates who found employment: 100%

Application Deadline

Please note that we are only accepting applications from domestic students at this time.

Fall 2024 Entry

Deadline: March 4, 2024



How to Apply:
[Imp.utoronto.ca](https://imp.utoronto.ca)
Email: Imp.grad@utoronto.ca

Alumni profiles

Christiana Legaspi, Pathologists' Assistant, Graduated 2022

The program gave me a deeper understanding of the foundations of diseases and how to apply this knowledge in a laboratory setting. Each case during practicum provided an opportunity to think about the biological underpinnings of a disease, and exercise the technical skills of a PA. After the program, I was able to confidently handle, process and cut a specimen

with an appreciation of the pathology at hand. Being able to acquire the technical skills of a PA is fundamental. Every PA has their own style of executing this and with the practicum, I was able to practice these skills frequently enough to acquire my own technique.



Jenna Baffa, Embryologist at Mount Sinai Fertility, Graduated 2022

I am part of a team that handles sperm and oocytes, from the time of collection to fertilization and transfer. The skills I learned throughout my time in the program play an integral role in my current position. The

theoretical knowledge gained through coursework, laid the foundation for understanding what is done in the lab and why. The technical experience I was able to gain during my time in the simulation lab and placement, gave me a unique opportunity to learn the processes and procedures carried out in an embryology lab, before starting a career. I felt prepared to enter this job because the program had trained my brain and my hands, and these are the skills I use each and every day.

