

MHSc in Medical Physiology

Department of Physiology, Faculty of Medicine, University of Toronto

Launch Sept. 2019



The professional Master of Health Science (MHSc) in Medical Physiology degree represents an innovative and relevant alternative to pursue graduate education in Physiology with an explicit focus on the physiology relevant to medicine and human health.

Why?

Every day, a near-infinite amount of data is generated by clinicians at the bedside, researchers at the bench, and new emerging health technologies, but there is a need for individuals that can interpret this new knowledge and draw conclusions from it.

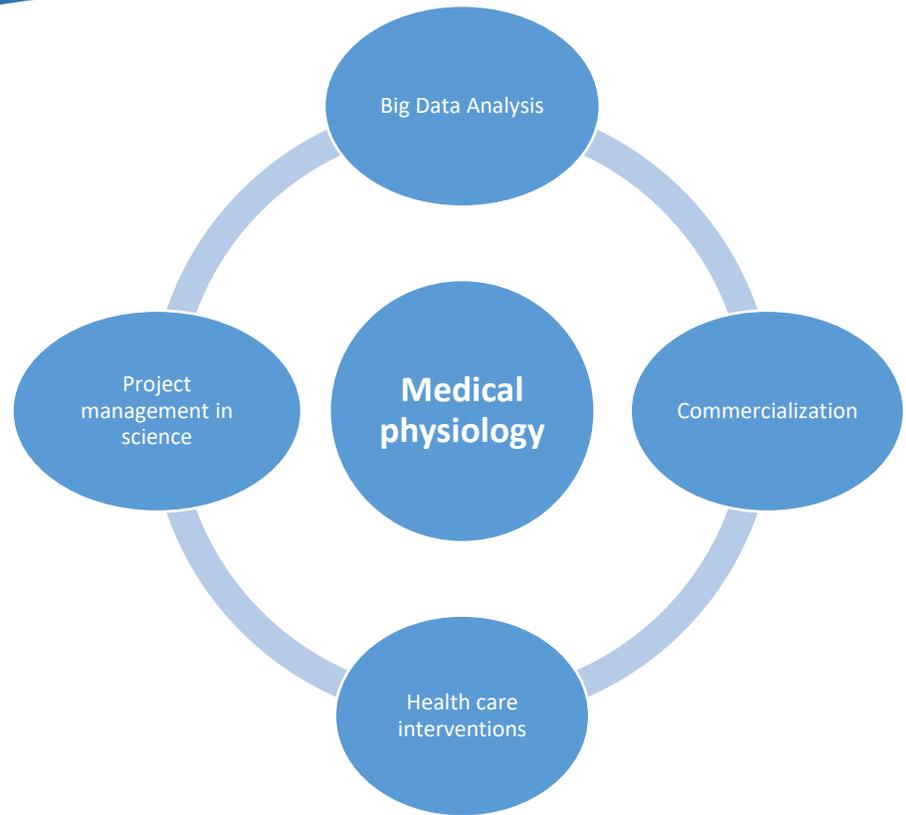
The MHSc in Medical Physiology was created to address the need for graduates who will be interested in the implementation of newly discovered physiological knowledge relevant to human health and put it into practice.

What are the potential Career paths?

Graduates will obtain a skill set that would give them opportunities in the many expanding areas that directly and indirectly affect health care delivery, management and scientific exploration.

- Many of the most important challenges in human health are often caused by multi-factorial changes and are best tackled by multi-investigator research teams. These teams require individuals who can appreciate the high level context of the disease, the specific research areas of the individual teams and how they can all be integrated. These individuals act as project managers. Our students will be able to undertake this role.
- New research findings that are generated often face challenges when it is time to bridge the gap to industry. Our students will be trained to understand the commercialization process and how to bring new scientific discoveries to market.
- In recent years, many emerging technologies are producing very large datasets in health. There is a need for individuals that can interpret big datasets, such as those generated by wearable devices. Our program will train students that can fill those gaps in research, clinical and other health care settings.

Overall the program will provide graduates with training in core competencies, professionalism, and the foundations in physiology related fields that will prepare them for emerging career paths or complement further training.



How will the program prepare students for emerging careers related to physiology?

The program is 1-year (full-time for 3 terms) with one point of entry each September.

Fall Term 1/Winter Term 2

PSL4000Y Seminars and Graduate Professional Development
PSL4010Y Mentored Literature Review Project in Physiology
PSL4030H Clinical Physiology
PSL4040H Big Data and Health
PSL4050H Collaboration and Commercialization in Physiology
Three 0.5FCE Elective graduate only courses in physiology

Summer Term 3

PSL4020Y Medical Physiology Practicum Placement



Graduates will attain required professionalism training, an understanding of how to derive the evidence on which to base decisions on human health, while at the same time increasing the depth of knowledge in their chosen physiological stream.

Tailor your Career Path!

While there are core courses that are required, students have flexibility to tailor their education according to their interests.

- *In PSL4000Y, 12 hours devoted to elective seminars/topics related to career interests (eg. entrepreneurship, project management)*
- *Three 0.5FCE elective courses in physiology area of interest (endocrine, cardiovascular, neuroscience, metabolism)*
- *In PSL4010Y, Mentored literature review in physiology area of interest (endocrine, cardiovascular, neuroscience, metabolism)*
- *In PSL4020Y, Practicum placement in a work environment in a field of interest (biotechnology companies, health care settings, research institutes, non-profits, data analytics)*



What are the Tuition Fees?

Pending program approval, estimated fees are in the range of \$13,000 (Domestic) and \$33,000 (International). These estimates are subject to change.

Who Can Apply?

Domestic or International applicants with a Bachelor or MD degrees and a course in physiology. For further eligibility and application requirements please check physiology.utoronto.ca

No offer of admissions will be made to the program pending final approval by the Quality Council and the Ministry of Training, Colleges and Universities

Expected by June 2019

