The @Ualberta MD/PhD Program

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Director, MD/PhD program
Faculty of Medicine & Dentistry

Associate Chair Education
Department of Oncology
The goal of the MD/PhD program is to provide training towards becoming a Physician-Scientist

Create leaders in medicine that are fluent in both research and clinical practice
"Physician–scientists are traditionally the primary catalysts in bridging the translational gap—that is, the failure to link fundamental new knowledge in the pathobiology of disease with advances in health care and health policy in a timely manner."


Developing the medical expertise to identify clinical gaps and the research credentials to effectively address them
Paths to being a Physician-Scientist

- The MD/PhD program; supported by the FoMD and UME; graduate degree is overseen by FGSR; health related but not necessarily in FoMD

- Clinical Investigator Program; carried out in residency; supported by the Royal College of Physicians and Surgeons of Canada; MSc and PhD options

- MSc level degrees, including Masters in Public Health (MPH)

- Research Fellowships that do not lead to degrees

- Prior graduate degree
Features of Canadian MD/PhD Grads

Characteristics and outcomes of Canadian MD/PhD program graduates: a cross-sectional survey

Michael A. Skinnider BArtsSc, Jordan W. Squair MSc, David D.W. Twa BSc, Jennifer X. Ji BSc, Alexandra Kuzyk BSc, Xin Wang PhD, Patrick E. Steadman MSc, Kirill Zaslavsky BSc, Ayan K. Dey BSc, Mark J. Eisenberg MD MPH, Ève-Reine Gagné MD, Kent T. HayGlass PhD, James F. Lewis MD, Peter J. Margetts MD PhD, D. Alan Underhill PhD, Norman D. Rosenblum MD, Lynn A. Raymond MD PhD
Surveyed 186 eligible alumni of MD/PhD programs (74.7% completed the survey) who had graduated prior to 2015.

A majority (58 [83%]) of the 70 respondents who had completed all training were appointed as faculty at academic institutions.

Among the 58 respondents appointed at academic institutions, 44/57 (77%) dedicated at least 20% of their time to research 25/57 (44%) dedicated at least 50% to research.

133/136 (97.8%) matched with their first residency choice.

The median length of Physician-Scientist training was 13.5 years.

Skinnider et al (2017) CMAJ Open
University of Alberta MD/PhD program

- Over 30 students have graduated since 2002
- Currently, 15 MD/PhD candidates (we admit approximately ~2 students per year)
- 4 years on average to complete the PhD
- Funding available from national vouchers (phasing out), competitive studentships (provincial & national), research grants, and philanthropy
Path 1: notify of intent by October 15 of MD2; apply by Nov. 15

Path 2 and 3: admitted to medical school from a graduate program

PhD at UofA; some exceptions on a case-by-case basis

Meet all PhD requirements of Faculty of Graduate Studies & Research
HOW will you know?

- Already discovered a passion for research (through undergraduate or graduate level experiences)

- Discover through future opportunities (STIR program or summer project); diverse opportunities in FoMD (lab based, patient centered, or population based/epidemiology/trials) and beyond

- Understanding career paths/opportunities (not one size fits all; diverse range of Physician-Scientists you can speak to)

- Talk to me

- Talk to current MD/PhD candidates
Other considerations

- Know your options
- Be informed of processes and requirements for different training programs
- Be proactive; map out where you want to go and how best to get there (develop the necessary skills)
- Consider using an individual development plan to set career objectives
- Seek advice and mentorship
- Be realistic
Contact information

- Visit the FoMD MD/PhD and grad program website:

- Contact me: alan.underhill@ualberta.ca

- Contact Graduate Programs Advisor: fmdgrd@ualberta.ca or phone 780-492-9721
QUESTIONS?