



2017 Federal Pre-Budget Submission:
Restoration of Federal Funding for the MD/PhD Program

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Executive Summary

Issue: Under the previous government, the Canadian Institutes of Health Research (CIHR) announced it was cutting federal funding for the MD/PhD program beginning in April 2016. Permanently losing this funding will result in fewer students taking the program and in turn will significantly compromise Canada's ability to innovate in the competitive global field of health research.

Solution: The Association of Faculties of Medicine of Canada (AFMC) calls on the federal government to support the sciences and innovation in health research by:

1. Immediately restoring the \$2.6 million worth of annual funding for the MD/PhD Program; and,
2. Ensuring how best to train and sustain Canada's future physician-scientists is a key part of the discussions surrounding the new Health Accord.

About the Association of Faculties of Medicine of Canada

The AFMC is led by the Deans of the country's 17 Faculties of Medicine and is the only national voice for academic medicine in Canada. The AFMC supports the core mission of Canadian medical schools to promote medical education, research and clinical care.

Research carried out in constituent medical faculties of the AFMC span the domains of fundamental biomedical science, clinical, health systems and population health including societal, cultural and environmental determinants of health. Faculties of Medicine are an essential part of the solution to boosting innovation in health research and training of highly qualified physicians and scientists.

These contributions have provided an incredible return on investment for government at all levels as revealed by the following¹:

- *Stewardship for \$2.9 billion in biomedical and healthcare research revenues in 2014*
- 66.1 billion in total economic impact in 2014
- 3,472 MSc and 954 PhD degrees awarded in 2014/15
- 18,748 current graduate and post-doctoral trainees

About the MD/PhD Program

The MD/PhD Program provides guaranteed financial support to over 100 students training to be both doctors and scientists. For a relatively small investment, Canada receives world-class health researchers who are on the cutting edge of innovation and patient care.

The need for a program that trained clinician scientists was recognized in the early 1980s, when students expressed interest in earning a PhD during their medical education. These students were faced with significant administrative and financial burdens and most ended up not starting a graduate degree.

As a result, the MD/PhD programs were created to target undergraduate students who wanted to go to medical and graduate school, but needed reassurance that they would be supported during their long

educational journey. Money from the MD/PhD Program is meant to support students during their training – though it currently does not cover the entire time that they are in the program.

Facts

- There are currently 118 students enrolled in the MD/PhD program across Canada.
- The MD/PhD program connects scientific discovery with improved patient care.
- The MD/PhD program trains physician scientists who are experts in both the scientific and the clinical sides of medicine.
- It takes 14 years or more to train physician scientists and the earlier they enter the MD/PhD program, the better the outcome.
- Close to 65% of MD/PhD graduates are employed in health research, resulting in greater innovation in Canada's health research sector. This is significantly higher than scientists with a PhD alone.

Funding for the MD/PhD Program

Until this year, the MD/PhD program received \$2.6 million annually from CIHR. Under this model the CIHR administered vouchers worth \$20,000/year for six years to MD/PhD students to help cover their living expenses while at school. It fell short of the cost of living in most cities and did not cover their entire time in the program, but it did represent guaranteed funding.

Under the previous government, CIHR announced it was ending the program as part of their cost cutting measures. CIHR felt it did not fit with their mandate as a granting agency. In a letter to AFMC, CIHR stated that 53% of their funding for graduate studentships went to medical students, which was to make a point that the CIHR has not withdrawn support for medical students wishing to pursue research training. While this is true, and we are grateful for the availability of this funding opportunity for MD/PhD students, these grants do not replace the guaranteed funding provided by the MD/PhD program and, for many students, this represents a substantial barrier to participation in the program.

While there are other provincial and private donors that make contributions to the MD/PhD program, the funding from CIHR made up 35% of the total funding for the MD/PhD program, and that amount is impossible to make up through other donors.

Consequences of Losing Federal Funding

- 1) The MD/PhD program has produced world-class researchers and resulted in important innovations to Canada's health system. Without federal funding Canada's ability to do innovative research in the healthcare field and translate this knowledge to improved patient care will suffer.
- 2) Medical Schools are now scrambling to finance all of their MD/PhD students, but moving forward, some schools will be forced to cut the number of students they admit by as much as 50%. Others will shut down their programs completely and this will further increase regional disparity of highly qualified physician-scientists in Canada.



- 3) The United States recently reinvested in their MD/PhD program which is a major draw for Canada's best and the brightest, and will increase the 'brain drain' to the South in the future.
- 4) Federal involvement in any research is seen as a gold seal of approval by other potential funders. The loss of federal funding for the MD/PhD program will make it more difficult to secure other sources of funding, including private donors, corporate funding, and provincial funding.

Conclusion

MD/PhD students are the future leaders of medical research in Canada. The continuation of the MD/PhD program is essential to attracting our country's brightest medical minds. Losing federal funding means that fewer students will enroll in the MD/PhD program, we will struggle to keep Canadian students in Canada, and innovation in our healthcare system will suffer. For these reasons we are asking you to reinstate the \$2.6 million worth of annual funding for the MD/PhD program and include a discussion on how to improve the MD/PhD program in the broader conversation related to a new federal-provincial Health Accord.

References

1. *The Economic Impact of Canada's Faculties of Medicine and Health Science Partners, August 2014*
https://afmc.ca/pdf/Economic_Impact_Study_Report_FINAL_EN.pdf