

**LETTERS TO THE MJM****PHYSICIAN-SCIENTIST TRAINING THROUGH MD/PHD PROGRAM**

Dear *MJM*:

The physician-scientists, sometimes known as the clinical-investigators, have long been identified as an "endangered species" (1, 2, 3). In Canada, MD/PhD programs have been formalized in a number of medical schools since the 1980s (4). The Canadian Institutes of Health Research (CIHR) provides funding each year to support a limited number of students wishing to pursue a career that combines medicine with scientific research at one of nine institutes across the country (5). Students enrolled in these joint MD/PhD programs typically spend seven to nine years to complete it, during which they not only meet the requirements of the medical curriculum, but also defend their research work done at the PhD level. Funding offered by the CIHR, in the form of an annual stipend and research allowance, is available for up to six years.

The Canadian medical school that offers the joint MD/PhD degree run their programs differently. For example, some schools limit the length of time spent in the program, while other schools are less stringent. In addition, financial support available in addition to CIHR funding varies among schools. Furthermore, the manner in which the graduate research is integrated with the medical curriculum also differs with each school - some require that the PhD be completed all at once, while others allow students to alternate between programs in several month segments, until both programs are completed.

The Faculty of Medicine at McGill University in Montreal, Quebec, has maintained an active MD/PhD program for more than 10 years. The program typically accepts three MD/PhD students into the first-year medical class (6), but also accepts application from second-year medical students who are in the process of completing their pre-clinical training. On top of the annual stipend and research allowance, the program also pays for the students' graduate school tuition, and have additional funding that supports the students' travel to select scientific conferences. Additional scholarships are also available to certain students at the discretion of the MD/PhD advisory committee. The MD/PhD program coordinator, Dr. Jacquetta Trasler, herself a clinician-scientist, organizes weekly meetings for MD/PhD students in all years to give informal talks about their research. These meetings primarily provide

the opportunity for students to stay scientifically well rounded, by learning about topics outside their field of study, but also serve to ensure that the students stay in touch with one another, as well as members of the MD/PhD advisory committee. McGill's MD/PhD program requires that each student complete his or her PhD in less than four years; and to ensure that this requirement is met, the MD/PhD advisory committee maintains close contact with each student, identifying issues that may hinder a student's progress through the chosen research project, and helping to provide solutions to problems that may arise during their course of study.

During informal conversations that I had with other McGill MD/PhD students, it was apparent that most of us felt positively about McGill's MD/PhD program. However, we do share some common concerns about the program - concerns that may reflect those of MD/PhD students at other universities. At the Canadian Society for Clinical Investigation annual conference, in September 2002, I will present these issues in the MD/PhD town hall discussion. The first area of concern was funding. We thought that better funding could be provided either by CIHR or by the faculty's MD/PhD program during the pre-research years. Furthermore, the travel allowance currently provided by CIHR should be increased to allow students more freedom in experiencing an integral and essential part of their research training. The second area of concern was that the provincial quota for out-of-province students was impeding our program from accepting the best MD/PhD candidates, as well as possibly preventing students from working with their preferred supervisors and/or research topics. Elimination of such quotas for the MD/PhD program would probably be helpful in solving this problem, especially since CIHR, the main funding source for an MD/PhD student during his or her research years, is a federal agency. The third area of concern was the lack of knowledge regarding career options after obtaining the MD/PhD degrees. Trainees were unclear about which residency training programs are supportive toward residents who want to continue doing both medicine and research. We think that there should be a central database, or source where MD/PhD trainees could find out this type of information. This would be much better than what some of us currently rely on - namely, anecdotes by past MD/PhD students.

Sincerely,

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