

A Tip to Pre-Med Students: Don't Put All Your Eggs in the Science Beaker

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ABSTRACT

Every year in Canada, over 10,000 students apply to medical schools across the country.¹ While each of these applicants has a unique story to tell about why they are considering medicine as a career, they are all trying to figure out the best academic pathway in to the program. Arguably, exploring a pathway that provides for a successful career in medicine should be of utmost importance. However, many students are content with their undergraduate science degree despite the majority of the curriculum being of little use to their future medical training and careers.

KEYWORDS: *pre-medical education, undergraduate, science, diversity, medicine*

At the University of British Columbia (UBC), the overwhelming majority of applicants to the medical program have completed a Bachelor of Science degree. This comes as no surprise, as nearly all prerequisite courses for medicine are core components of a science degree.² Furthermore, the Medical College Admissions Test (MCAT), which must be completed by all applicants, has a substantial science component.³ Thus, pursuing a Bachelor of Science degree should ensure that an applicant achieves the required pre-requisites for medical school while providing adequate preparation for the MCAT. After speaking with several prospective medical students and recalling my own undergraduate education, I'm certain that this is a recurring thought process among undergraduate students across Canada. Part of the reasoning behind this thought process is the competitiveness and difficulty of medical school entry. Students worried about these aspects can forget to consider the utility of their undergraduate studies in the future because they are concentrating on short-term goals such as getting an interview invitation. Although a degree in science teaches students to study diligently, a seemingly important fourth-year genetics elective is unlikely to be helpful in preparation for the numerous hurdles medical students must overcome, such as the medical school interview, the Canadian Resident Matching Service (CaRMS) process, and the daily tribulations of running a medical practice.

All medical students entering UBC medical school have gone through a Multiple Mini-Interview (MMI), which is a major part of the selection process for incoming medical classes. Although this interview is slightly different every year, scoring well on it is dependent on the interviewee's ability to present their ideas in an organized and logical way. Prospective students must also have a general knowledge of medical ethics and be able to make decisions surrounding controversial scenarios. Few aspects of a conventional

science degree develop skills in these areas. In contrast, courses focusing on management and organizational behavior teach students how to develop their interpersonal skills and present their ideas in a well-thought-out manner. An example of a specific course offered by UBC that touches on these aspects is COMM 292, Management and Organizational Behaviour, where students focus on learning and practicing presentation skills.⁴ Other undergraduate courses aimed at communication and leadership skill development can greatly contribute to a student's chance of success during the interview. These skills continue to be helpful during CaRMS matching, a selection process for residency placement that nearly every medical student in Canada undergoes. Matching success is not based solely on academic performance: it is more heavily based on how well the applicant will "fit in" among others in the specialty.⁵ Therefore, education in interprofessional behavior is another great asset for students, as building positive therapeutic relationships with patients and other physicians is key to success in residency and medical practice. Thus, any academic advantage that students might have carried into medical school after studying only science — rather than exploring courses in interpersonal studies, communications, or management — is of less long-term value.

The day eventually comes where all medical graduates enter into independent practice. Currently in Canada, 95% of family physicians and the majority of specialists operate on a "fee-for-service" basis, with many setting up companies under their own name to better manage the financial aspects of their practice.⁶ Unfortunately, skills for management of a medical practice are not currently part of most medical school curriculums, including that at UBC. Therefore, MD graduates with a business background are arguably much better prepared to enter into an independent practice from a management perspective. Consideration of this issue as well as that of cost management of healthcare in Canada has led many universities — starting with McGill in 1997 — to offer combined MD-MBA programs.⁷ Although UBC does not currently offer such

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
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a program, discussions exploring the possibility have started as part of the current curriculum renewal process.⁸ As a business education is of value for physicians, undergraduate studies are an ideal time for students to obtain a basic level of understanding of this material.

“**For the current students thinking of a career in medicine, there are so many opportunities to diversify your university education, and many of them could make you a better medical student and physician.**”

When considering which undergraduate degree is most suitable prior to medical school, students must be aware that most Canadian universities, including UBC, do not have bias towards a particular academic background.² Thirty pre-requisite credits from a variety of science courses are necessary to apply to the program at UBC.² This leaves students with some options to fill the remaining 90 credits to round out four years of university studies, the average amount that students entering medical school have.² For many pre-medical students, this might be an unrecognized opportunity to absorb and practice lifelong skills needed in their daily medical practice

Having personally now completed a focused science degree and two years of medical school, I often reflect on how my undergraduate degree will help me during medical practice in the future. For the

current students thinking of a career in medicine, there are so many opportunities to diversify your university education, and many of them could make you a better medical student and physician. Start your training early by diversifying your undergraduate studies. 

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Cosmetic Psychopharmacology: The Ethics of Antidepressant Therapy

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ABSTRACT

Antidepressant medication, a commonly prescribed antidote for the depressed mood, continues to prove its value in primary and psychiatric health care. Its popularity in society requires its administrators and users to reflect on its function not only as a mood enhancer, but also as a modifier of the human self. Inspired by Peter Kramer's *Listening to Prozac*, this commentary on psychological materialism discusses the ethics of antidepressant therapy in the context of the idea of cosmetic psychopharmacology, the psychotherapeutic alternative, and the antidepressant placebo effect.

KEYWORDS: *antidepressants, ethics, depression, psychiatry, cosmetic psycho-pharmacology, cosmetic psychotherapy*

Listening to Prozac, Peter Kramer's chronicle of clinical encounters involving antidepressant therapy, offers insight into the innovation of pharmacological psychotherapeutics.

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An anecdotal exploration of the biological, psychological, and social implications of antidepressants, Kramer's collection of case studies questions whether these drugs medicate mood or alter an individual's sense of self. This issue engenders a discussion about mood enhancers as cosmetic agents and about their prescription in light of both the