Spotlight On Careers

Dr. Stephanie Ross

Interview by Pedrum Mohammadi-Shemirani

Dr. Stephanie Ross is a Scientific Advisor at the Canadian Agency for Drugs and Technologies in Health (CADTH). She completed a BSc in Biology at the University of Toronto, and a MSc in Epidemiology at Cambridge University. She earned her PhD in Health Research Methodology at McMaster University under the supervision of Dr. Guillaume Paré. Her doctoral thesis focused on advancements in the field of cardiovascular disease pharmacogenetics. After graduation, she went on to complete a post-doctoral fellowship in genetic epidemiology at McGill University. From there, she transitioned into industry, starting as a clinical research officer (CRO) before advancing to her current role as Scientific Advisor at CADTH.

CADTH is a non-profit organization that is responsible for providing healthcare decision makers with objective evidence to help make informed decisions on drugs, diagnostic tests and medical devices. CADTH provides recommendations on a healthcare product by assessing the evidence supporting its cost, effectiveness, safety, feasibility and input from patients. As a Scientific Advisor, Dr. Ross is responsible for ensuring all reports produced by CADTH exhibit scientific rigor and consistency. She is also responsible for educating staff and other members, and keeping CADTH up-to-date with the most cutting-edge practices in the field.

1. How did your graduate education prepare you for your career?

First, it provided me with a strong background in biostatistics and epidemiology, which formed the basis for much of my work in health research methodology. I also cultivated strong writing skills by drafting scientific papers about my research and gained the ability to critically appraise epidemiological studies, which is a big part of the job here at CADTH. On a related note, I learned how to effectively communicate scientific research; or more broadly, how to take a complex idea and distill it down so different groups of people can understand the core message. Lastly, I gained experience in project management. It's important to be able to keep track of a project and be able to work with different types of people on a team in order to reach the primary goal.

2. What is your average day/week like?

At CADTH, I'm a part of a broader team which includes managers, CROs, external experts and other Scientific Advisors. These teams will be assigned to a common drug review (CDR). This means that we receive a drug submission from a pharmaceutical company who wants to have a drug funded by the different provinces in Canada for a particular group of people. Our primary goal is to assess the drug safety, effectiveness, cost and feasibility. Thus, it's our responsibility to critically evaluate all of the clinical trials, costs and unmet needs related to the drug. Our findings are then sent to a large committee composed of patient group representatives, policy makers, clinicians and health economists. This committee reviews our report alongside patient group input and their own conclusions to arrive at a final recommendation. Their recommendation is sent to all the provinces, which use this information to decide how to implement the drug in their healthcare systems.

I'm usually working on multiple CDRs simultaneously. As a result, my day consists of multiple meetings with different teams, which consist of clinicians, economists and CROs. My role in these meetings is to ensure that all the members properly understand the scientific studies under review. There is a lot of reading and editing involved. I need to review the studies in the CDR and check the reports that we produce. In addition, I spend time on various committees, such as the Mental Health Working Group, where we promote CADTH research to patients and policy makers in the mental health community.

3. What is your favourite and least favourite part about the job?

My favourite part of the job is the variety. We are always learning about different diseases and evaluating different trials. Every study is unique, so there are always new challenges with minimal repetition. I also love working with different groups of people and sharing ideas in meetings, teaching others about epidemiology and learning about the clinical and

economic perspectives of drug reimbursement.

My least favourite part of the job is that it can get busy and hectic. Our projects tend to come in waves and it can take a bit of time to get used to the workflow, but that's part of what makes it exciting too. Also, I work at our satellite office in Toronto, so it can be challenging having to communicate remotely with team members at the main office in Ottawa or in other locations throughout Canada.

4. What is the current demand for MSc or PhD students in your field?

CADTH is growing and recruiting, so there is a demand for recent graduates. In my specific role as Scientific Advisor, it is very common to hold a PhD degree. However, CROs are a diverse group with a mixture of both MSc and PhD graduates across a variety of fields. We are mostly looking for candidates that demonstrate an ability to critically appraise scientific literature and who love to learn.

5. Do you have any advice for current graduate students who would like to envisage a similar career path?

For general career advice, I cannot stress enough the importance of networking. If you can attend scientific conferences or similar events, talk to different company representatives and learn about their jobs. It can also be helpful to talk to friends that have graduated to learn about what they do, and expand your horizons outside of academia. Also, talk to your supervisor about your career aspirations. They may be able to work with you to achieve your goals, or at least connect you with someone who can help you. If someone was specifically interested in Health Technology Assessment, I would recommend taking a course in Health Economics. There are lots of different positions in this field, which range from Health Canada to CADTH to consulting firms to pharmaceutical companies. However, a solid writing foundation, ability to take feedback, and familiarity with the industry will always be helpful.