

#### **ABSTRACT**

Dr. Christopher Tran is an endocrinologist at The Ottawa Hospital known for his work on medical education and eConsults. He is also a friendly, familiar face for second-year uOttawa medical students in the English stream during their Endocrinology Block. We sat down with Dr. Tran to talk about his current work as well as his perspectives on research and social media use among academics. Dr. Tran also provides advice to medical students with regards to deciding on a medical specialty to pursue and how to approach the CaRMS application process.

#### RÉSUMÉ

Dr. Christopher Tran est endocrinologue à l'Hôpital d'Ottawa et est connu pour ses intérêts en enseignement médical et consultations en ligne. Il est aussi un visage familier pour les étudiants en deuxième année de médecine de l'Université d'Ottawa, volet Anglophone, qui ont eu la chance de le rencontrer durant leur bloc d'endocrinologie. Avec Dr. Tran, nous nous sommes assis et avons discuté de son travail actuel ainsi que de ses perspectives de recherche et de l'utilisation des médias sociaux au niveau académique. Dr. Tran offre également des conseils aux étudiants en médecine par rapport au choix de spécialité ainsi que sur la façon d'aborder le processus de demande de CaRMS.

### Can you tell us a bit about your academic background and your current professional roles?

I'm an academic endocrinologist at the Ottawa Hospital. Prior to that, I finished medical school in Toronto and internal medicine and endocrinology residency training at Ottawa. I then completed 2 or 3 more years of what we call a Clinical Scholar Program. At the Ottawa Hospital, there are different roles that you may have heard of like clinician, educator, investigator, and so on. I'm a clinician educator.

#### What was your master's degree on specifically?

I did a Master of Medical Education. It was a distance program where you complete six courses. Each course is based on a medical education topic, such as curriculum, assessment, faculty developments, and clinical teaching. For each course, you have to write an assignment that ranges from 2,500 to 4,000 words. Once you pass that, you write a 15,000 words thesis project. It took me quite some time, but I'm happy I finished it. At the end of the day you learn a lot.

## How did you choose your career in endocrinology as opposed to some of the other internal subspecialties or even outside of internal medicine?

I knew I didn't want to do surgery, so it was down to primary care services versus internal. I applied to both specialties for CaRMS in my fourth year of medical school, but during

my electives, I chose endocrinology because it sort of mirrors both primary care and internal medicine. I did my endocrinology elective, and I really fell in love with it. Even before that, my senior medicine resident on internal medicine just sat down with me one day and showed me how to write everyone's sugars down, how many units of insulin were given, and how to adjust day-to-day. I just fell in love right then and there. I don't think he had any intention of convincing me to go into endocrinology by doing that, but that small desture made such a big ripple. During my elective in endocrinology, I ended up doing really well and matched to internal medicine. I didn't do endocrinology right away. When I finally did endocrinology in my second year, I knew that was the specialty for me because every day after I went home, I kept thinking to myself, "oh I should have done this better." I was trying to impress other people during that rotation.

Notice how I didn't really tell you what part specifically about endocrinology I thought was interesting. I can go on and on and on about that, but sometimes you just need to know – where do you see yourself in the future? One way to do that is to see if you can see yourself working with the people who are in that field. For example, all the endocrinologists and residents that I worked with, I felt like I could jive with them. Little things like that helped me with that decision.

## Why did you choose to work in an academic center as opposed to a community clinic?

I'll be very candid here. Sometimes you have a choice and sometimes you don't. A lot of it is just what is out there. There are pros and cons of academic versus community. and I think I would have been happy with either. Academia is great because you really stay with the mothership. You're trained in the mothership for medical school and residency, so it's hard to leave and work in the community. I like to stay in academics, and I've been working in Ottawa since 2011. Just knowing that I can bump into people who I've worked with before and those who are not necessarily in my field is quite nice. I like that you can really get involved in medical school and teaching. You can do research and education as a community physician as well. A good example is Dr. Khamisa. She does community medicine, but she's still very much involved in medical education. It was always very intuitive for me to stay academic. A little bit of luck is

also always appreciated, right? When I was about to finish my residency, it just so happened that the division had a few people retiring and another person who was looking to get rid of one of their clinics. I happened to be at the right place at the right time, which helped with the decision.

### As a physician, you're also active on Twitter. Do you see a world where social media plays an important role for medical specialists?

When I post something, maybe I'll get a like and a retweet, if I'm lucky, but do I see that as the future? The answer is yes and no. Even some of the most tech-savvy people are not on social media. I like using it for conferences because it helps me remember what I just learned in that talk. If I want to go back to a conference that I attended two years ago, but I don't remember anything at all about how it changes my practice, I could scroll back to my previous post. It's really just for me, but it's nice if other people see it too. I don't use Twitter very often, but I've managed to find other endocrinologists that work across Canada and that happened to just follow me. It's another way to make connections and network, because you can just DM them with certain questions. I haven't looked into how you harness that into medical learning yet. There are some students that I'll follow. If they post a poster and you just click that like button, it probably makes them happy. I think it's a good way to get recognized for what you do.



### Do you see social media playing a greater role in the world of research?

The people that really like social media and do research, their arguments are that in the world of academic medicine, how do you prove to everyone that you deserve your spot and that you should stay there? It's all about publications; you publish or perish. Questions such as "how many

publications do you have?" and "are these high impact journals?" are very important. There's something else called altmetrics. Some people don't have publications in the New England Journal of Medicine or Lancet, but they have a wide following on Twitter. They're considered experts by just posting on social media. That should be something, right? If it does get to a point where someone decides that your academic portfolio includes your social media presence, I guess it will mean something in the academic future. I don't see a world where you will be expected to be on Twitter all the time in addition to publishing. However, there are a lot of people who do use it, and it's a really good way to get easier exposure.

# Can you tell us about how you developed an interest in research, the research you do, and whether you consider it to be an integral part of your career?

I suppose research is an integral part of my career, but everyone has a different percentage when it comes to research time to clinic time. There is the expectation that you do some scholarly work, and you hope it gets published or disseminated through social media or a poster. Everyone's going to tell you if you start a project, always think about the publication at the end of the day. People don't generally think about research at the start of their career. You came into medicine to help people. It doesn't come natural to everyone, but when you get immersed in the research, you actually enjoy the project. You have something that you can call your own. When you're in academia, you want to be known as the person who knows that one thing. That's advice I was given by a few people. Another piece of advice that I've received is you have to pick something that annoys you. Something that annoys me is written communication and letters that physicians send to each other because a lot of the time, they're not really organized and not really clear. My master's project was looking at the current communication between the specialist and the primary care provider through something called eConsults. If you take something that doesn't interest you and doesn't annoy you, you're going to go into it and like it for a bit but then eventually get bored. So many scholarly projects start, but don't stop. The only way you're going to finish a project is if it annoys you because you want to see it to the end.

## You have quite a bit of research on eConsults. Can you tell us about eConsults?

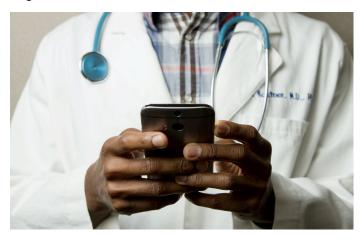
I got involved with eConsults when I was an R2 and wanted to do endocrinology. I emailed the Program Director at the time for any projects. She then introduced me to Dr. Erin Keely, an endocrinologist, and Dr. Clare, a family doctor. They met with me in 2010 and talked about how so many patients get sent from family doctors to specialty offices when the answer to their questions could have been answered by a quick phone call or email consultation. Through that came eConsults, which is electronic consultation. Long story short, your family doctor or even a specialist can send a clinical question based on a patient they just saw to a specialist for advice. They then get that advice back and can choose whether or not to implement that advice for their patient. What's so good about it? The patient doesn't have to wait weeks or months just to see the specialist.

When it came time to decide what to do for my master's project, I married written communication and electronic communication together. You have a bunch of specialists giving advice to primary care providers, but no one is actually telling them if that is a good way to give the advice or not. What is it about the quality of advice that makes it a good eConsult? No one really knows. Also, if you have eConsultants who are giving poor advice, do we want to let them know about that so they can improve? That was basically my master's project in a nutshell – trying to improve written communication from specialists to primary care providers through eConsults.

## Regarding specialists not providing optimal consults compared to others, what are some other downsides you've found with eConsults?

As you can imagine, it doesn't replace the actual specialist. If there's a physical exam that has to be done, then you still end up having to see the specialist. Even so, with the information that the eConsult gives you, you can make the in-person visit a little bit more efficient. Another downside is increased workflow for the primary care providers in that the family doctor actually has to spend time preparing the eConsult and sending it to the specialist. What's the difference between that and sending an actual referral to a specialist? There are a few more steps involved when writing an eConsult but not too many. The primary care provider also has to actually implement the advice. For example, I'm an endocrinologist, and if I tell a primary care provider that, "This osteoporosis case is so easy. All you

have to do is give an intravenous bisphosphonate and call it a day," the poor primary care provider may not have the means to do that. Thus, part of the project is to tell the specialist to give your primary care provider actionable advice. There are some downsides, but they're few and far between I would say. Overall the positives outweigh the negatives.



Do you have any advice to students who are interested in doing research as well as any comments on strategies for balancing clinical versus research duties during training and throughout one's career?

As a clinical student and as a resident and as a staff, you're going to have a ton of balls in the air that you'll be juggling. It's the same thing as balancing everything else in your life. I've been trying to stop saying "I don't have time for that". I now start to say, "I can't commit the time right now". If you really want to do something, you will always find time to do it, especially if a deadline is looming. The advice I give is "you just have to know yourself best". You have to know what really drives you. If you think research is important, but you need deadlines, then you just have to make deadlines. You have to make an agenda and book it in your calendar that you're working on this project at this time. If you have a supervisor, you tell that supervisor, "I will give you this by the end of this day" and then you'll be held accountable for it. You do have time if you look for it.

Also, just make sure you're sleeping well. Don't do too much screen time at night. Don't drink too much coffee if it doesn't make you sleep well. Find other hobbies outside of medicine. These are all things you've heard before because they make sense. Don't just do things because you have to do it. Do something you actually like doing. You

will get so much better at time management with the more responsibilities you get because it's more of a necessity.

On the topic of choosing a career in a specialty, what factors do you think students should take into account as they contemplate pursuing a career in a particular specialty?

There's general career advice that I tend to give people: it is important to not only think about the peaks of why a specialty or subspecialty may be awesome, but also to reflect on the lows of it as well. Wellness has gained some traction over the past few years, and you don't want to be burned out by your job. You must think about reasons why people don't want to do your specialty, and then if you can endure those or ideally like them, that specialty should be for you. For example, why don't people like to do endocrinology? Most of what we do is diabetes, and a lot of people, for understandable reasons, don't want to dedicate most of their career to the field of diabetes. But I absolutely love it. There are so many ways to treat a chronic disease as complex as diabetes, and you have to always take the patient into consideration. It's not just the blood work. You must consider other elements such as the patient's social and financial stressors and incorporate all these new wonderful medications, gadgets and gizmos that are out there. Others, however, might cite various reasons as to why they don't like diabetes. Basically, their reasons for not liking my specialty are reasons I can either endure or really like. For example, there are no procedures in endocrinology, which I'm fine with. I really didn't like surgical procedures much as a student or resident. People also like instant gratification, but it doesn't really matter to me. There are not that many instant gratification moments in endocrinology. When you deliver a baby or when you decompress a pleural effusion, these are what I call "I'm a doctor" moments. In my osteoporosis clinic, it's, "Here, take this medication once a week and I'll see you in 18 months to two years." I like that I can be proactive in the treatment process when dealing with chronic diseases. I can go on and on about different examples of endocrinology as well as other specialties. I love the weird and wonderful pheochromocytomas and acromegaly pituitary stuff, but if you don't like diabetes, you really might not be able to have a meaningful career in endocrinology. Similarly, if you like neurology and love ALS, but you hate stroke, maybe

becoming a neurologist isn't the best choice. Factors like these are what goes into a decision. You should think about what you can endure because at the end of the day, those are the things that are going to burn you out, which you want to avoid in your career.

## Are there any factors that you think students are not taking account early enough?

That's a great guestion. It's hard to answer because it's so hard to know what the right career is for you. After I applied to CaRMS, I did my anesthesia rotations for the very first time, and I thought that it was really cool. I know I just told you that I don't like doing procedures and then here I am, considering anesthesiology! I basically liked the pharmacology behind it and the whole 95% calm and 5% absolute terror. What I'm getting at is that it's so hard to know exactly what you want to do before because you might have ended up having a specialty that is actually better for you. I just sort of say, it's in a personality. It's very natural for us as medical students, residents, physicians to always optimize things. But, I say that you can always try to be comfortable with the second best and third best because you don't know which one is actually the best for you.

Another thing is just being very open to everything. Your heart might be set on one specialty, but if you didn't try other specialties, another one may actually be better for you. They're just too many things out there. When I tried to match for residency, I did not get my first pick. I got my second pick, and I was kind of sad, but it probably ended up being very good for me to come to Ottawa versus staying in Toronto. Maybe I thrived more in Ottawa or maybe I would have thrived more in Toronto, but I'm already here and I am very much happy now.

# Would you be able to provide any advice for students who are interested in pursuing a career in internal medicine and specifically, endocrinology?

There's advice that will get you any specialty and there's advice that might get you the specific one you want. Honestly, the generic advice is so much more important. You need to be happy. Because if you're not happy, you won't do very well. It's not easy. There's a lot of mental health issues out there that everyone just sort of turns a

blind eye to. You need to feel supported. Part of being happy is knowing yourself. Know what annoys you. Know what can bring you up when you're feeling down. And have that supportive network.



Otherwise, pick a specialty that really interests you. Also don't be so worried about what other people want. It's a very natural, human thing. Don't have that mentality because you only know your own program. You have to compete against the rest of Canada and the rest of the world. Pick the specialty that you like and don't be so worried about the competition. Remember you're happy, you're awesome, and you treated everyone nicely. You'll get what you want.

Other advice - if you can, get a research project in the area that you want to pursue. It is helpful, especially earlier on, but it's not a make or break. I can't talk on behalf of other people who look at CVs, but when I look at them, I'm looking for stuff like: Are you doing stuff outside of school? Are you doing one research project or maybe more? If you're doing a research project, how involved are you? I'm not saying beef up your CV, but it's one piece of the puzzle when it comes to interviewing for a spot you want. If you're applying for internal medicine, and you have some research in internal medicine, then that looks good. If you've wanted to do radiology all your life, and you have all your research in radiology, but you now want to do internal medicine, then in your interview you're going to say, "I know what you're thinking! My CV is all radiology. But hey, this is why I like internal medicine." And being successful in that part is getting back to what I said earlier - knowing yourself. This is nothing outside of the usual advice which is: to find something that you like to do and be involved in research if you can, while doing a few extracurriculars

### **INTERVIEW**

and leadership roles. Because if anything, what it'll do is it makes the interview go by so much easier. You have to interview anywhere, and they're always going to ask you stuff about reflections. While you'll have some ePortfolio posts you can look through, you'll want to talk about some of these experiences that you've had personally. Those are usually in your CV.

And finally, clerkship-wise, I'll use internal medicine as an example. When you do your internal medicine rotation, you just tell everyone that you're interested. I've had students who say, "I don't want to tell them or else they'll have higher expectations of me." But if you don't meet those expectations, then it will just be an inspiration to work a little harder. Tell everyone that you're interested because then they might actually give you more responsibility, and that's what you want. You just do everything that no one else wants to do. You may have heard of something called scut work. It's an awful phrase, but what do you call scut work when you become an attending physician? You just call it work. This is all stuff that has to be done for the patient, and sure, it's not glamorous. But if you are able to do that or do stuff like calling families, calling pharmacies - you show them that you're able to go beyond the call of duty. I'll just say to do that on all the rotations you're on.

That way when you are doing your rotations, you're always looking in the future. You're going to need reference letters for your applications. You might ask, "Well, who is a better person to write a letter? The person who is more famous or the person who knows me the best?" And honestly, I don't really think it matters at the end of the day. If you apply for a program that only wants well-known clinicians, then maybe you don't want to go to that program. You want a person who might know you very well. And then if they agree to write a letter for you, then you just have to be shameless about it and say, "Great, I'm going to email you on this date. I'm going to give you my CV at that time. I'm going to tell you about some of the cases we saw together." You should remind them because it might be 3-4 months from the time you ask them. Even if they really like you, they might forget some things.

That's not the secret to success, but they're some things that can help you in the future if you want that specialty. But just being nice to everyone, showing up on time, and doing stuff that no one else wants to do is a really good start. There's nothing specific to internal medicine. For internal medicine, it can be competitive, but I think it has the second most spots among all the residency rotations out there, so there is a program that wants you.