

Insights from the Network

Training the next generation of biotech leaders with a Canadian twist

By **Thristan Taberna, PhD Candidate, Zandstra Lab, and Jessica May Corpuz, PhD Candidate, Krawetz Lab**

From June 10 to 19, 2024, Toronto played host to the highly anticipated Summer by Design program, where over 30 rising stars in regenerative medicine from across Canada and around the world converged. This annual event, organized by Medicine by Design in partnership with CCRM, the Rotman School of Management, and the Stem Cell Network (SCN), provided a dynamic platform for emerging leaders in the field to grow their networks and hone their skills across the technology translation continuum. Among the attendees were several SCN Trainees, including Thristan Taberna and Jessica May Corpuz. Here they reflect on their experiences and key takeaways from the program.

Summer by Design: Commercialization in the regenerative medicine space

Over time, leaders in the field of regenerative medicine have recognized that forming multidisciplinary teams and leveraging the commercialization pathway will help bring novel scientific discoveries to the clinic. The Summer by Design program brought trainees together from around the world to learn about the commercialization process within the field of regenerative medicine and grow their networks.

A wide range of topics were covered during the program including ideation, company creation, good manufacturing practices, intellectual property, and marketing strategies. Each of these modules were led by experts in the field who made the topics accessible to those of us who were not as familiar to the commercialization landscape. Those who were further along in their commercialization journey weren't at a loss though as there were many opportunities to ask these experts questions. In addition to the modules, which were more lecture style, SbD hosted Rotman Coffee Chats and a Toronto Ecosystem Day, more informal sessions where leaders in the regenerative medicine field shared their journeys with us and answered our questions about career and personal development.

Communicating science through stories

The program also included practical workshops on science communication. During these sessions, it became evident that when thought leaders present, they exemplify not just their acumen of scientific expertise, but more importantly, empathy. Participants were challenged to do the same. At the end of the program, SbD hosted a research showcase where participants had the opportunity to present their work. The main caveats — we only had three minutes, and we could not use slides. SbD partnered with Talk Boutique to prepare us. Our coaches from Talk Boutique encouraged us to present our research by telling stories. We discussed practical aspects of storytelling. What do we do with our hands? How do we enter the stage? What is a good posture? How should we modulate our voice? Where should we look when we speak? What makes a good story?

In addition to these discussions, we found the group coaching sessions to be unique and valuable. Each of us had the chance to rehearse and tell our stories. With many eyes watching, it was not exactly the most comfortable feeling to be in the spotlight for many of us. Luckily, the coaches and participants built a safe space for growing and learning. We were encouraged to be creative, to make mistakes, and to improve. We received feedback from our peers and coaches. We received positive support and continuous encouragement to iterate through many versions of our stories. Despite only having a short time to prepare, all of us told captivating stories of hope and curiosity at the showcase. For some, these sessions also fortified the confidence needed to deliver on our social responsibility of communicating our knowledge to the broader community.

Beyond the modules and building connections

Now between the commercialization modules, coaching sessions, and practicing our pitches in front of the mirror, you would think that we would be too tired for anything else after our long days (typically running from 8am to 5pm). Despite our busy schedules, we somehow always had the time (and energy) to hang out and make lasting memories with one another. A scavenger hunt given to us by the SbD team further encouraged us to explore Toronto, a new city to many of us, and had many groups running around the city and sharing meals together.





The friendly competition between groups turned into an intense race to see who could collect the most points by the end of the program. Our group loved the scavenger hunt so much that we even added our own personal tasks such as visiting Niagara Falls, enjoying many Danish pastries, tricking a German into singing karaoke, seeing how many times our fellow Dutch and Mexican colleagues could get lost during an outing, and seeing how many times we could walk to the CN tower over the week. The shared experiences of the intense eight-day program, adventures around the city, and sharing our graduate student stories, made us a tight knit group who will be friends for many years. With friends all around the globe, each being experts in their fields, we now know who to hit up if we're visiting another country or have any scientific questions.

**Would we recommend the program?**

Yes. Classes may be grueling and there may be a freak thunderstorm at the exact time that we walk to the building, but it was a great experience learning about the commercialization process and connecting with professionals and fellow researchers around the globe.

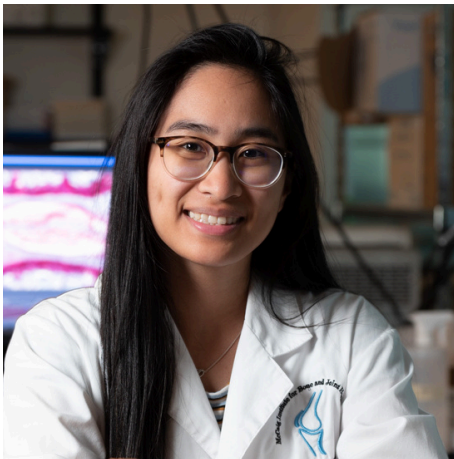
Thristan's takeaways

Looking back, I would consider SbD as a key highlight of my PhD training. Here are three main takeaways for me:

- Building your professional network could sometimes lead to life-long friendships: Our shared passion for regenerative medicine inspired us to participate in SbD, where we found ourselves immersed in thought-provoking and respectful scientific discussions on topics like stem cells, cell therapies, flow cytometry, and even our favorite fluorophores. This environment fostered recognition of our individual scientific strengths, paving the way for potential collaborations. Beyond the science, our time together brought us closer as we explored a new city, braved a summer rainstorm in Toronto, savored picnics, and sought the best tacos and guacamole. The experience at SbD allowed us to connect on a deeper level, sharing our unique PhD journeys, and building a supportive community that embraced vulnerability and authenticity. I'm grateful for the bonds we formed and the stories we shared.
- Reminding yourself that unconventional positions exist after graduate school: At SbD, we had the privilege of meeting many experts in "unconventional" roles, which reassured us that there are numerous fulfilling paths beyond the typical choices of academia or industry after a PhD. While many see these as the only two options—becoming a professor in academia or a scientist in industry—it became clear that you can do both or pursue entirely different careers. There is a constant demand for talent, making it essential to remain open to non-traditional roles or even create new positions that align with your unique skills and interests.



- ▶ Being proud and inspired by Canada’s leadership in the field of regenerative medicine: Throughout my studies, I have developed a strong sense of pride in Canada’s contributions to regenerative medicine. Seminal work by pioneers like James Till and Ernest McCulloch laid the foundation for our understanding of stem cell properties, and many current leaders in the field, including my academic mentor Dr. Peter Zandstra, are part of this legacy. It was exciting to see Dr. Michael Sefton at one of the sessions and to meet PhD trainees from Dr. Robert Zweigerdt's lab, as we explored Canada's biomanufacturing space together. As a biomedical engineering trainee, this experience was inspiring. Meeting these giants in regenerative medicine and witnessing the success of Canadian innovation through CCRM fills me with hope that the complex, advanced cell therapy products we're developing today may one day be used therapeutically.



Jessica’s takeaways

Similar to Thristan, SbD will be one of my core memories when I look back at my PhD journey. I met many amazing people and made many great memories. As for what I learned during the program (aside from all the commercialization and translational knowledge), it can be summarized into 3 main points:

- ▶ A professor in academia and a bench scientist in industry aren’t your only options after your PhD. There are many options out there so you should pursue your passions, do your best to position yourself for success, and sometimes let serendipity play its part.
- ▶ Don’t be so nervous before giving talks. Ian Keeling (one of our Talk Boutique coaches) taught us a pep talk to tell ourselves if we are feeling unworthy before a talk. “Is this thing of value? Am I pretty good at this? If YES, I am not wasting anyone’s time.” Once you’ve overcome your nerves, make sure to smile and use your hands when presenting.
- ▶ Use LinkedIn. Make those connections and share what you’re up to. This is something I will actively try to do after attending SbD.