Sean Vandersluis

Ph.D. Candidate, Stem Cell and Cancer Research Institute,
McMaster University
MBT Class of 2019

Sean is currently a PhD candidate at McMaster University where he is working to find new compounds that specifically target cancerous stem cells for the treatment of leukemia. It was his interest in the drug discovery field, first kindled during his undergraduate education, that led Sean to enroll in the MBT program. Sean wanted to enhance his overall acumen in the area of pharmaceutical development.

For Sean the real-life opportunities to apply the knowledge and skills he learned in classes such as intellectual property, project management, marketing and, of course, pitching to investors is what made the MBT program unique. During the MBT year, in a team with two other MBT students, Sean entered the Innovation4Health Competition, taking on the challenge of designing affordable spine simulators to assist medical students practice different spinal surgeries. After the competition, Sean's team worked with UofC researcher's to obtain additional funding and continue the development of simulators. As part of a separate project with the UofC technology transfer office, Innovate Calgary, Sean carried out market research and developed a product development plan and a market plan for a tech-based start-up.

For his internship, which was funded by MITACS, Sean selected clinical trial operations at Hemostemix, a Calgary-based company. He chose clinical trial management to complement his previous pre-clinical experiences. At Hemostemix, his roles ranged from writing clinical trial protocols, to analyzing company metrics, to evaluating clinical trial financial and temporal effectiveness. In his internship he utilized many skills learned in MBT including project management, clinical trials, regulatory affairs and even advertising and marketing. Sean's talents were quickly recognized, and he continues to work on a part-time basis at Hemostemix while completing his Ph.D.

The most valuable part of the MBT program for Sean was learning how to get complex ideas into reality. A skill that has served him exceptionally well in the Innovation4Health team, the Innovate Calgary project, the Hemostemix internship and in his current Ph.D. work in new medicine discovery. Sean's advice for current and prospective MBT students: "The ability to understand both the scientific and business elements of complex ideas and distill them down to critical and actionable elements will serve you well in the pharmaceutical and biotechnology industries".