William Petrie Graduate Student Library Scholarship 2020
Recipient: Katrina Good, Faculty of Science
Award-winning Essay

UVic Libraries: A Budding Scientist's Solace

The University of Victoria Libraries have far exceeded my expectations of book-borrowing or silent study spaces. The more I look, the more diverse, valuable support I find to further my degree, and ultimately my career. As I enter my third year as a PhD student in Biochemistry, I am in the thick of my studies, and require more access to information than ever. My project is focused on an important brain protein called Methyl CpG Binding Protein 2 (MeCP2). Its importance in the brain is evidenced by the onset of Rett syndrome, a severe autism-like neurodevelopmental disorder, when MeCP2 is mutated. Despite an outpouring of work by dedicated researchers, MeCP2 remains elusive, with paradoxically promiscuous and highly specific functions simultaneously being reported. My project focuses on the basic science of how MeCP2 works on a molecular level, in an effort to discern its mechanisms of multifunctionality, and to facilitate targeted therapy design.

Studying basic science in a relatively niche field has its challenges. This has recently become markedly apparent, as I am currently writing a literature review on MeCP2. It seems that, in Murphy's Law-esque fashion, especially relevant articles are tucked away in journals with blocked access to UVic. The Interlibrary Loan program surmounts this issue by using, in my opinion, the most important scientific method: sharing. Through UVic's partner institutions, I have personally gained access to informative articles from journals such as Molecular Psychiatry, European Journal of Molecular Genetics, and Nature Reviews Rheumatology. By acquiring all the pertinent information to my research, anxieties about missing critical information are extinguished, and the impact of my soon-to-be-published work is significantly strengthened.

In addition to literature-based learning, acquiring some basic programming knowledge is becoming increasingly important in molecular science. Analyzing gigabytes of sequence data is a daunting task for a researcher without prior training, leading to feelings of embarrassment and dread. The UVic library offers a variety of workshops for people with various backgrounds to learn a new skill. I participated in the "Introduction to data analysis with R-Studio" workshop, where I learned some useful commands, and became more comfortable with the R-Studio interface. I have since been practising assignments from the workshop, and feel that I have been given the confidence to begin tackling challenging datasets.

Finally, I would be remiss to discount the utility of online accessibility to library resources during the COVID-19 quarantine. Without being able to generate data at my workbench, my option for the past two months has been to read and write. If I were unable to conduct research through the UVic Library webpage, I would have lost a term of work, which may have forced me to consider alternate future paths. Despite what I can only imagine is an extremely busy server, I am easily able to go about reading daily. Equipped with more knowledge than I had two months ago, I will be exiting the lockdown with my head up, thanks to the UVic library.