

## David Harris Flaherty Undergraduate Student Library Scholarship 2021 Recipient

By Rachel Li, Faculty of Science

### Award-winning Essay

This past Spring 2021 semester at UVic during COVID-9, I took a course on the principles of genetics (BIOL 230) which included a term research project with related assignments and a final presentation. The *MyGene* project was centered ~~around~~ my selected gene of interest in humans, *BRCA2*. Genes are segments of deoxyribonucleic acid (DNA) that contain genetic instructions passed on from parents to offspring. I selected *BRCA2* (breast cancer 2), a gene that helps maintain the integrity of our complete set of genes by regulating and helping fix mutations in the DNA.<sup>1</sup> *BRCA2* is named after breast cancer because individuals with permanent mutations found within the *BRCA2* gene itself have an increased risk of breast and ovarian cancer than those without.<sup>1,2</sup>

The *MyGene* project was my first large research project and having almost free reign on it made it very intimidating to take on, even with the guidance and help from my lab instructors. Right off the bat, I started researching with no direction or focal point about *BRCA2*, causing me to quickly get overwhelmed by all the available material online. I decided to call the library to see if a librarian could help which, in hindsight, should have been the first thing I did. The librarian informed me of the incredible wealth of online resources the UVic library has and how to find them from the main library webpage.

I visited the library's "Research Tips" page which helped me break down this large project into smaller, significantly more manageable steps and was my guide for the rest of the journey through this project. After learning from the library's tips and videos on developing a research topic, I was ready to recommence learning about *BRCA2* and looking for resources specifically tailored to what I was interested in about the gene.

From the frequently used databases listed on the UVic library website, I mainly used Web of Science and PubMed for my research. These databases had features that allowed me to narrow down the search results and provided me with great resources that were the basis of my project. The databases greatly reduced the amount of time I otherwise would have spent trying to find resources I wanted, like I was before receiving help from the librarian.

While I was building the presentation with the gathered information from my research, I was able to easily book private study spaces in the library where I could focus on my work outside of home and still felt safe in public.

The final step in completing my project was to properly cite the resources I used. For this, I referred to the *APA Style Guide*<sup>3</sup> created by the UVic library which proved to be the most helpful citation guide I have ever used.

With all the help from the UVic library staff and website, I was able to succeed in completing my first large academic research project. Thanks to them, I was able to work on this project with confidence knowing that I could do it and that I'd have loads of support and resources every step of the way, even during a pandemic.

### References

1. Donovan, P., & Livingston, D. M. (2010). BRCA1 and BRCA2: Breast/ovarian cancer susceptibility gene products and participants in DNA double-strand break repair. *Carcinogenesis*, 31(6), 961-967. <https://doi.org/10.1093/carcin/bgq069>
2. National Cancer Institute. (2020, November 19). *BRCA gene mutations: Cancer risk and genetic testing*. <https://www.cancer.gov/about-cancer/causes-prevention/genetics/brca-fact-sheet>
3. University of Victoria Libraries. (2020). *APA style guide*. <https://www.uvic.ca/library/research/documents/apa7.pdf>