



## Girls Get WISE Science Summer Camps: An incredible opportunity

*By Shabad Kaur*

Career experience in adolescence is one of the most crucial building blocks of life that many individuals do not have the opportunity to encounter. For the age groups of 12-16-year olds, experience is what derives conversation in order for them to make career decisions in high school that will impact their future. Discovering mathematical talent or falling in love with human anatomy, can influence minds and allow students to discover their passion. But, the lack of exposure to a range of different opportunities can limit students to only certain or “main” career options that they may not be interested in. Specifically, although the representation of women has increased in areas of STEM, there is still a significant lack in areas such as engineering. I previously read that women made up 34% of STEM bachelor's degree holders and only 23% of science and technology workers and are under-represented in these fields.<sup>1</sup> Due to this, it is evident now more than ever that opportunities must be presented to young women in order to expand their knowledge on incredible STEM career options.

One of the most incredible opportunities that I took part in and allowed me to expand my interest in STEM was the Girls Get WISE Science Summer Camp. The camp was a week-long event that exposes young women to the sciences, technology, engineering, and math. The activities were so valuable because they were educational along with enjoyable. In particular, some of them included hatching and growing zebrafish, learning basic coding, the process of welding, forensic science, engineering challenges and over 10 more activities. In particular, the zebrafish lab was one of the unforgettable STEM activities that I participated in. The lab activity allowed the campers to view and assist in the process of hatching zebrafish eggs. We learnt about the temperature they resided in, the parts of the embryo, and even basic lab rules. It gave youth such as myself the opportunity to use petri dishes, pipettes, and microscopes. The exposure to a biology lab at a young age allowed me to be more informed when I entered the Pre-IB program in high school. Although my biology class was fast paced, I was able to easily catch up because I knew how to use a microscope and understood the safety rules of a lab that I learned in the WISE camp. Another activity included welding with the NSCSC. In my mind, welding was just a small job done by construction workers, but what I did not know is that it is one of the most important pieces to an industrial site. All the campers and I got first-hand experience on wielding through a VR simulator that gave us an understanding on the level of difficulty. The camp was an absolutely incredible experience and the hands-on activities made it worthwhile.

---

<sup>1</sup> Wall, Katherine. “The Underrepresentation of Women in STEM (Science, Technology, Engineering, and Mathematics and Computer Science) Has Attracted Considerable Attention, and Many Have Wondered Whether Women Are More Likely than Men to Quit STEM Programs at University. Using Data from the Education and Labour Market Longitudinal Platform (ELMLP), This Study Follows a Cohort of Students Who Enrolled in a STEM Program in 2010 over a Number of Years, in Order to See the Extent to Which Women and Men Persist in and Eventually Graduate from STEM Programs.” Persistence and representation of women in STEM programs. Government of Canada, Statistics Canada, May 2, 2019. <https://www150.statcan.gc.ca/n1/pub/75-006-x/2019001/article/00006-eng.htm>.

The camp also allowed different spokespersons to come in and talk about their careers along with the activities and separately with role-model sessions. One of the issues and lack of attention that surrounds STEM today, is the variety of careers. When asked about STEM, most people tend to classify well known careers such as doctor, engineer, or the computer sciences. While these are large parts of STEM, there are so many more jobs in this field that go highly unrecognized that even pay really well. Through these role model sessions, I met many individuals with extremely unique STEM careers such as biochemist, economist, web developer, psychologist, and many more. Along with the role model session, all the activities done were also included with individuals who worked in that field which allows them to talk about their personal experiences with that career, while the students participate. For example, during the solving a forensic code session, employees from Lockheed Martin Canada were able to answer my questions about the process of codes and crypts. This allowed me to gain a better understanding of the cryptic code as well as get direct answers from professionals in the field.

Not only did the camp allow me to get to know the rest of the campers better, but created friendships with many girls that I am still in touch with today. It allowed me to come together with individuals who are also passionate about STEM and discuss our opinions and experiences. On the itinerary, the camp also included an ice cream social which resulted in pulling me out of my comfort zone and interacting with other individuals. The camp did not just have an amazing group of girls, but an incredible group of camp leaders and volunteers. They worked endlessly and tirelessly in order to ensure all the girls had an amazing experience and felt included.

As the need for women in STEM fields increases, it's crucial more than ever to help spread the word and allow youth women to gain interest in these fields. The lack of knowledge however, prevents this from happening. The girls' get wise STEM summer camp helped me create an experience that allowed me to acquire a biased interest in the STEM field. Through exposure and activities, the camp defined each aspect of the sciences and technology and allowed me to learn what I am passionate about. For me as a racial minority, I was worried about fitting in and not getting the experience towards discovering a range of careers, but this camp allowed me to meet a diverse and excited group of individuals that boosted my confidence. Many high schoolers are still unsure about the career path they would like to follow but experiences such as science camps allow them to have choices and gain experiences which allows interests to form. Specifically, when issues for women such as the gender wage gap come into play, it is less likely for them to even consider entering STEM fields due to fear. It's important to work towards diminishing this fear by battling it with a passion for science. The WISE science camp gave me the courage and allowed me to obtain a desire for the sciences as well as created meaningful connections. Listening to powerful women, participating in challenging activities, and exploring areas of STEM that I didn't even know existed, allowed the days of my summer to be very well spent. I was extremely fortunate to be a part of the WISE Science Summer Camp and only wish that every girl could get the same opportunity.