

LASSONDE LAUNCHES THE HELEN CARSWELL STEAM PROGRAM FOR WOMEN – SUMMER 2019

BY ALLAN CARSWELL



The Lassonde School of Engineering welcomed 30 high school girls to participate in a 4-week program of paid research opportunities doing meaningful work in STEAM (Science, Technology, Engineering, Arts, and Math).

The Helen Carswell STEAM Program for Women (previously known as the Summer Research & Mentorship Program) was made possible thanks to a generous gift from the Carswell Family Foundation. This year the program takes on a new name and identity, honouring Helen Aird Carswell, an exemplary leader in STEAM.

Helen was a registered nurse by trade who demonstrated an entrepreneurial spirit. Most notably in 1974, Helen co-founded Optech Inc. with her husband Allan I. Carswell. Today, Teledyne Optech is a world leader in the high-tech lasers with systems on all seven continents, in space, and on the surface of Mars.

Throughout her life, Helen has been active in the arts, playing piano and the violin and singing for many years. She dedicated much of her community service and philanthropic affairs to supporting arts-based programs. The Helen Carswell STEAM Program for Women marks an exciting new development in Lassonde's commitment to advancing equity, diversity, and inclusion in STEAM.

During the opening ceremony, the participating high school girls had the opportunity to hear personal stories from Dean Jane Goodyer and Dr. Allan Carswell. They also heard from program alumna, Ishleen Kaur, who will be starting her undergraduate journey at Lassonde this fall. The new program design was also unveiled during the ceremony. The colourful design treatment embodies the diversity of the program and connections the girls will make throughout the summer.

Over the course of 4-weeks, the girls in the program explored the various facets of STEAM through workshops, artistic activities, and working with Lassonde faculty members on their cutting-edge research. Workshop highlights included a presentation from Association of Ontario Land Surveyors (AOLS), a geocaching scavenger hunt with Professor Mojgan Jadidi, and the Hello Café, hosted by Dean Goodyer. Hello Café is a series of creative problem-solving workshops that encourage girls to think

about issues that affect the daily lives of people around the world. The initiative supports young girls to open their minds, create opportunities, and gain confidence to help those around them.

The high school students worked within the framework of the United Nations' Sustainable Development Goals in their research to address global challenges related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice.

The girls received guidance from current Lassonde student mentors throughout the program. Mentor support will continue after the program's completion, providing the high school students with additional guidance as they explore their future education and career pathways.

Program support was continued for the third year by the Association of Ontario Land Surveyors (AOLS). Thanks to their donation, participants gained exposure to the Geomatics program and related career opportunities. Support was also provided by the Canada Summer Jobs Program.

The Helen Carswell STEAM Program for Women concluded on August 2, culminating in a poster presentation showcasing the girls' research contributions. Throughout the 4-week program they contributed to a variety of research projects ranging from water sanitation to sustainable alternatives to cement and metal. The program closed with the presentation of a collaborative art installation demonstrating each participant's journey and commitment to their UN Sustainable Development Goal.

"I am thrilled at the success of the Helen Carswell STEAM Program for Women. Outreach programs, like this one, support our commitment to encouraging as many young women as possible to consider a career in engineering. By focusing on the United Nations' Sustainable Development Goals, our participants were able to see the social impact engineering and science can have on the world and the results their dedicated efforts can have in generating that impact. The four-week program was nothing short of inspiring," Dean Jane Goodyer said of the program.

For more information on the Helen Carswell STEAM Program for Women, please email outreach@lassonde.yorku.ca

Dr. Allan Carswell,
CM, FRSC, FCAE,
FCASI, P.Eng., D.Sc
Co-founder,
Teledyne OpTech
Vaughan, Ontario