

Empowering the Next Generation of Leaders: Science World's 6th Annual *Girls and STEAM* Summit Promises to Deliver an Exciting Day of STEAM Exploration



300 youth will explore and discover the wonders of STEAM in a fun-filled day at Science World including an exciting keynote by renowned inventor of the hand-powered flashlight, Andini Makosinski
Photos and video are available at this [link](#).

Vancouver, BC, October 18, 2023 – Returning for the 6th year is Science World's highly-popular [Girls and STEAM](#) (science, technology, engineering, arts + design, and math) Summit, presented by STEMCELL Technologies. On Saturday, November 4th, 300 young girls, aged 12-14, will take over the dome in a day of hands-on activities, enriching workshops, inspiring mentorship sessions and an engaging keynote presentation.

With a gender gap evident across many STEAM fields, Science World's *Girls and STEAM* program effectively dispels myths surrounding these careers, providing a welcoming environment for girls to engage in STEAM activities, boosting their confidence and interest. Stats show that among high school graduates, women are 30% less likely than men to enroll in a postsecondary STEM program shortly after graduation. The event sheds light on the local STEAM community and available resources for girls and women interested in pursuing a career in these fields.

This year's keynote presentation features [Andini Makosinski](#), a Filipina-Polish Canadian inventor best known for her invention of the *Hollow Flashlight* that runs off the heat of the human hand, and the *eDrink*, a coffee mug that harvests the excess heat of a hot drink and converts it into electricity to charge a phone. The inspiration for Andini's flashlight came from her friend in the Philippines, who had failed a grade in school because she had no light or electricity to study with at night.

Isobel Worrall, Manager of Public Programs and Engagement at Science World, expressed her excitement, saying, "Every year, we're inspired to witness the connections our young attendees make with remarkable professionals in STEAM fields right here in Vancouver. Science World's mission is to break down stereotypes surrounding these careers, showcasing their diversity and accessibility. Whether our participants have a clear career path in mind or are simply eager to explore exciting learning possibilities, this summit provides a unique opportunity to connect with professionals across various fields and build lasting friendships with like-minded girls."

While the terms "women" and "girls" are used for this program, Science World invites attendees and mentors who identify as women, girls, trans, genderqueer, non-binary, two-spirit, and gender questioning.

"Science is about so much more than what happens in the laboratory. It provides a lens that can instill a deep-seated curiosity in young minds and enrich every aspect of our lives," said Sharon Louis, Senior Vice President of Research and Development, STEMCELL. "Scientific education – in the classroom and out in the world – can lead to life-changing experiences and limitless opportunities for young women and girls. STEMCELL is proud to support the Girls and STEAM program to make science more accessible, and help ignite the passion of the next generation of scientists and leaders."

The event will host over 40 mentors from diverse industries, providing opportunities for girls to engage in roundtable discussions with female STEAM leaders, facilitating open and insightful conversations about their respective fields. A 2021 report by [Shared Services Canada](#) reviewed career roadblocks for women in STEM fields citing formal and informal mentorship opportunities as one of the five most impactful steps communities can take to help women pursue STEM careers.

The exciting workshops for the day include:

- **Designing for the Future.** In this workshop, led by the team at BCIT, participants will witness how machine learning can be used to design for the future, solving real-world problems like medical diagnosis and climate modeling. The girls will work together to create a machine-learning model and then experiment with it for data quality and biases. Everyone will take part in selecting and discussing the attributes they want to look for, before trying to "beat the bot".
- **Machines and Us.** This workshop will teach participants how to design machines that are inspired by nature. The Science World team will have girls thinking about something they have encountered in nature, and they will then get a chance to build a representation of it, while also coding its senses and reactions. The workshop will include a mix of artistic design and coding, emphasizing how these two fields work together.
- **Working with the Natural World.** In the first workshop, AECOM & UBC will encourage participants to compete in making water filters to clean the water as much as they can. This workshop will also look at real-world examples where water treatment is taking place and show participants how many different skills are needed to do this effectively. The girls will also be looking at the importance of working with the local community to find the best solution - a key part of engineering. The second workshop will provide participants with an opportunity to create a science experiment from the comfort of their own dish. The team at

Flavourful Science will integrate food and science, looking at the importance of how surface tension is being used to look at the changes in our ocean due to climate change.

- **Understanding our Bodies.** In this inquiry-led workshop, STEMCELL Technologies will take budding scientists through the basics of lab techniques for separating cells and extracting the DNA within. They will explore how scientists get a close-up look at specific cells and the DNA within them. In doing so, participants will begin to recognize how different STEAM fields need to come together to create solutions that help advance science.

Aligned with Science World's purpose of "Science For All", the *Girls and STEAM* Summit is part of the organization's year-long programming and initiatives aimed at inspiring wonder and passion for STEAM. In addition to the annual Summit, Science World conducts mentorship events year-round, enriching the experiences of the girls who attend each event.

Learn more about *Girls and STEAM* at <https://www.scienceworld.ca/girls-and-steam-summit/>

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About Science World

Science World is a BC-based charitable organization that engages the people of British Columbia in STEAM literacy. Their mission is to ignite wonder and empower dreams through science and nature. Their vision is a sustainable future filled with critical thinkers, problem solvers and wonder seekers.

About STEMCELL Technologies

STEMCELL Technologies supports life sciences research with more than 2500 specialized reagents, tools, and services. STEMCELL offers high-quality cell culture media, cell separation technologies, instruments, accessory products, educational resources, and contract assay services that are used by scientists performing stem cell, immunology, cancer, regenerative medicine, and cellular therapy research globally.

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