

High School Student Resources

Updated May 2023

Looking for additional opportunities to get involved with research and health sciences? Check out the resources below for a glimpse into the different types of outreach programs available for high school students in BC.

BC Children's Hospital Research Institute offers high school students and teachers the opportunity to learn more about the latest in biomedical and clinical research.

Interact with scientists and experts, participate in research activities and visit facilities as you discover different careers in the health sciences.

For the latest event information <u>visit our website</u> or <u>join our mailing list</u>. For more information contact <u>researchevents@phsa.ca</u>.

Please note BC Children's Hospital is not affiliated nor has personal knowledge of any of the programs below. For any questions, please contact the program organizers directly.

Student Programs

	Program Name	Hosted By	Description
	Operation Medical School	OMS	Operation Med School is a non-profit,
			student-run organization that hosts one-day conferences in Canada and the US to educate
<u>ھ</u>			youth about the journey of a medical career.
) ri	PuMP+ Vancouver	Prospective Medical	PuMP is a Canadian charity founded by youth,
nte	<u> </u>	Professionals	led by youth. The organizational objective is
Me			to help aspiring life and health sciences
<u>~</u>			students better prepare for different career
es			paths.
ţ	High School Student Science	Centre for Heart	For one week in spring and fall, 8 students are
Fec	Week Sample Agenda	Lung Innovation	invited to participate in various hands-on
Workshops, Lectures & Mentoring	D'atacha alaa 0	11-1	laboratory sessions and seminars.
do	Biotechnology & Bioengineering Conference	University of Waterloo &	The Biotechnology and Bioengineering Conference is an annual conference organized
ksł	(bioTEC)	Canadian University	and hosted by Canadian students who strive
/or	(SIGTEG)	Students	to promote some of the newest and most
>			interesting developments at the intersection
			between biology and engineering.
	<u>StemCellTalks</u>	UBC Let's Talk	StemCellTalks is a free public outreach
		Science	initiative in partnership with Let's Talk
			Science. It was established to facilitate
			knowledge transfer between academia and
			high school students pertaining to the science and practical ethics of stem cells.
	IMPulse Mentorship Program	UBC Cedar STEM	The Indigenous Mentorship Program for
		Outreach and	Indigenous high school students provides an
		Mentorship Program	opportunity to develop meaningful
			relationships with role models at the
			university who understand their cultural
			history, and to experience elements of the
			university campus first-hand.

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Workshops, Lectures & Mentoring	Future Science Leaders	Science World	Future Science Leaders is an after-school science enrichment program for teens designed to unleash creative potential and build a life-long network of like-minded peers while engaging curious minds with the nature of STEAM.
	YWCA High School Mentorship	YWCA Metro Vancouver	The YWCA High School Mentorship program is a one-to-one mentorship program for girls and gender diverse youth. Mentors from the industry support youth as they explore career options, build pathways for their future, nurture their leadership skills and address barriers they may experience along the way.
	R2AC STEMx	Race to the Cure	Race to a Cure is a national platform striving to create opportunities that empower youth interested in science, technology, engineering, and math through comprehensive research, civic improvement, and social welfare.
	SFU Science in Action	SFU Faculty of Science	The SFU Science in Action program brings students from the greater Vancouver community to SFU's Burnaby campus for hands-on workshops.
	Cafe Scientifique Vancouver	Cafe Scientifique	Cafe Scientifique exists so that anyone with an interest in a topic can go along to hear scientists explain the science they do. Join in the discussion, ask the questions you want answered and learn more about a subject.
	UBC Pathways to Medicine Club	UBC Medical Students	Run by current UBC Medical Students, the UBC Pathways to Medicine club offers
	Sign-Up Form		equitable access and guidance to students who would like to learn more about the field of medicine and about BC's only Medical School. This club will give you an opportunity to speak with current medical students, physicians, and others.
	eMentoring	The Society for Canadian Women in Science and Technology (SCWIST)	Want to explore STEM careers and find out what engineers and scientists do every day? Need some school or career advice that's tailored to you? Sign-up for the eMentoring program to be put in touch with professional women in a STEM career who closely match your own interests.
	<u>UBC Science</u>	UBC Faculty of Science	UBC Science brings together a community of students and scholars for its commitment to discovery and innovation, both in the lab and in the classroom.
	Pre-Health Shadowing	Pre-Health Shadowing	Meet with healthcare professionals from various domains and specialties to get an inside look at their education and career paths.
	Science Fairs	Science Fair Foundation	Science Fairs offer students the opportunity to present original scientific research and innovative projects to their communities.
	UBC Geering Up	UBC Faculty of Applied Science	UBC Geering Up Engineering Outreach is a non-profit organization with the mandate of promoting science, engineering, and technology to youth across BC.

Program Name		Hosted By	Description
Summer Programs	Xavier Pelletier High School Internship Program	BC Cancer Agency Trev and Joyce Deeley Research Centre (DRC)	The Trev and Joyce Deeley Research Centre is pleased to offer high school programs geared towards grade 11 students. These programs have been designed to provide high school students an opportunity to explore cancer research from the front lines and learn the latest techniques in the fight against cancer.
	SHAD	SHAD Canada	(Vancouver Island) SHAD is a month-long program for grades 10 & 11 students. At SHAD, students collaborate and build meaningful relationships outside of their home province. Each campus, and each design team, has a mix of rural and urban participants from diverse economic backgrounds. Students learn the value of their own perspectives and the differing perspectives of those around them.
	Research Exploration Opportunity	STEM Fellowship	The Research Exploration Opportunity offers high school students the unique chance to participate in cutting-edge research at partner universities across Canada.

Program Name		Hosted By	Description
Classroom Resources	 <u>UBC Let's Talk Science</u> <u>SFU Let's Talk Science</u> <u>UVic Let's Talk Science</u> <u>UBC Okanagan Let's Talk Science</u> <u>UFV Let's Talk Science</u> 	Let's Talk Science and Canadian Universities	Let's Talk Science connects with youth through classroom or community group visits, virtually and in-person. Free of charge, these outreach volunteers arrive on-site to incorporate hands-on/minds-on science, technology, engineering and math (STEM) learning activities for your programs or events.
	Tech-Up	Science World	Through Tech-Up, Science World delivers province-wide programs for students and teachers that include coding, computational thinking and digital skills.
	GeneSkool	Genome BC	Genomics is one of the most rapidly advancing areas of science with research providing solutions to a vast number of global challenges. Geneskool provides a variety of resources and programs for students in grades 9 through 12 that make learning about genomics fun.
	Skype a Scientist	Skype a Scientist	Skype a Scientist has a database of thousands of scientists and helps them connect with classrooms. They give students the opportunity to get to know a real scientist and get the answers to their questions straight from the source.
	Michael Smith Laboratories	DNA Fingerprint Fieldtrip	During this field trip, students will get a chance to isolate their own DNA, learn about DNA replication, learn about the amazing PCR (polymerase chain reaction) procedure, and they will also run a DNA gel to visualize their results.

Volunteering

Minimizing the risk of COVID-19 and protecting the safety of our community is the first priority. With the situation regarding COVID-19 continuing to evolve, opportunities for volunteering may be limited in any healthcare setting.

The following list of organizations have established volunteer programs:

- <u>BC Children's Hospital</u>
- BC Women's Hospital & Health Centre
- <u>BC Cancer Agency</u>
- <u>Vancouver Coastal Health</u>
- <u>Providence Health Care</u>
- <u>Canuck Place Children's Hospice</u>
- Ronald McDonald House
- BC Children's Hospital Foundation
- <u>Canadian Blood Services</u>
- Alzheimer Society
- <u>Canadian Cancer Society</u>
- <u>Diabetes Canada</u>
- <u>Canadian Mental Health Association</u>
- Canadian Liver Foundation
- Canucks Autism Network
- Heart & Stroke
- <u>Kidney Foundation</u>
- <u>Cystic Fibrosis Canada</u>
- Leukemia & Lymphoma Society of Canada
- MS Society
- St. John Ambulance
- <u>Go Volunteer</u> Connecting member organizations with volunteers
- Volunteer BC
- Volunteer Canada
- Government of Canada

Interested in volunteering at BC Children's Hospital Research Institute?

The research institute does not currently have a formal placement process for high school students. However, those who are interested can get involved in research by volunteering to work with investigators at BC Children's Hospital.

Students are encouraged to <u>view the profiles of BCCHR investigators</u> and contact the research teams directly about available opportunities. Use the website's filter option to identify areas of research that are of interest to you. Please note, for safety reasons you must be at least 16 years old to volunteer onsite.

Health Research Organizations

Do you want to learn more about the latest advancements in medical research happening in BC? Check out the websites below to discover more about health research in the Lower Mainland:

- BC Children's Hospital Research Institute
- Women's Health Research Institute
- <u>BC Mental Health and Substance Use Services Research Institute</u>
- <u>BC Cancer Research Institute</u>
- Vancouver Coastal Health Research Institute
- <u>Providence Research</u>
- <u>UBC Centre for Heart Lung Innovation</u>
- <u>UBC Life Sciences Institute</u>
- <u>BC Centre for Disease Control</u>
- <u>Centre for Molecular Medicine & Therapeutics</u>
- UBC Centre for Blood Research
- <u>UBC Centre for Brain Health</u>
- Other UBC-affiliated research institutes, centres, organizations and hospitals

Participate in Research:

- <u>BC Children's Hospital Research Institute</u>
- REACH BC
- Vancouver Coastal Health Research Institute