Future Science Leaders

Presented by Acuitas Therapeutics

Information Session

2025-2026 Program Year





Land Acknowledgement

I would like to acknowledge we are gathered on the traditional, unceded territory of the Musquam, Squamish, and Tsleil-Waututh peoples on which we work, play and learn.

Introductions

Agenda

- 1. Program Overview
- 2. Application Process
- 3. Questions





Program Overview





The FSL mission

is to empower BC's inquisitive youth to pursue, achieve, and excel in their STEM aspirations.

Science World created *Future Science Leaders* in 2011



How do we accomplish this?

- 1. Meet and learn from professionals in a variety of careers
 - 2. Create a lifelong network of like-minded peers
- 3. Develop the skills critical for a career in science: technical skills and science communication
 - 4. Collaborate with others through scientific projects
 - 5. Learn to think critically in a scientific context

Discover (Year 1)

- Grade 10/11
- Variety of many STEAM fields
- topics anywhere from flood assessments to cancer genetics
- Single experiment group project
- Write and present a scientific poster

Innovate (Year 2)

- Grade 11/12
- Streams;
 - Applied Science
 - Life Science
- Learn advanced technical skills
- 10-week individual project
- Write and publish a scientific paper

Implement (Year 3)

- Grade 12 only
- Professional development program
- 6-month individual project
- Write and publish a scientific paper
- Give TED-style talk

Program Details





Discover Program Details

- **Term:** 8-months (September April)
 - includes Winter and Spring breaks
- Frequency: Weekly 2-hour sessions
- Location: Vancouver, Science World
- Session times & days (current)
 - Tuesday 4pm-6pm
 - Tuesday 6:30pm-8:30pm
 - Thursday 4:00pm-6:00pm
 - Thursday 6:30pm 8:30pm



Discover Course Overview

1. Scientific Process

2. Science Communication

-led by Science World team

-10 sessions

-2 events

Example: 2024/2025 Schedule

1. Civil Engineering

2. Immunology

3. Data Science

4. Mathematics

5. Particle Physics

6. Social Science

7. Ecology

-led by STEAMProfessionals-16 sessions

-Topics depend on expertise of invited guests



Future Science Leaders Staff

- 1. Background in Science or Engineering (*Biology, Mechatronics, Neuroscience*)
- 2. Background in Informal Learning/Facilitation (Youth programs, tutoring, museums)

Guest Instructors (examples from previous years)

- 1. Engineers with the City of Vancouver
- 2. Ecologist with Squamish Streamkeepers
- 3. Particle Physicist with TRIUMF
- 4. PhD students at UBC and SFU
- 5. Professors of Pathology, Digital Health from UBC



Scientific Inquiry Projects

- Lessons to support students to engage in their own projects
- **Observational studies** that collect data from the natural environment to analyze.
 - e.g. Tracking animal populations in local parks and their impact on the environment
 - e.g. Surveying the mental health of high school students
- Experiments that tests a variable.
 - e.g. At home filters to remove microplastics from washing machines.
 - e.g. Varying material to generate energy from rainfall (tribeoelectiric nano-generators)



Additional Opportunities

Field Trips

- Ex. University labs (TRIUMF, Quantum Matter Institute, CEME)
- Ex. Local STEM companies (Acuitas Therapeutics, Amgen, STEMCELL)

Virtual Field Trips

- Particle accelerators outside BC, Ecology Labs on Vancouver Island
- Reference Letters
- Volunteer opportunities
- Eligibility to the Year 2 and Year 3 program





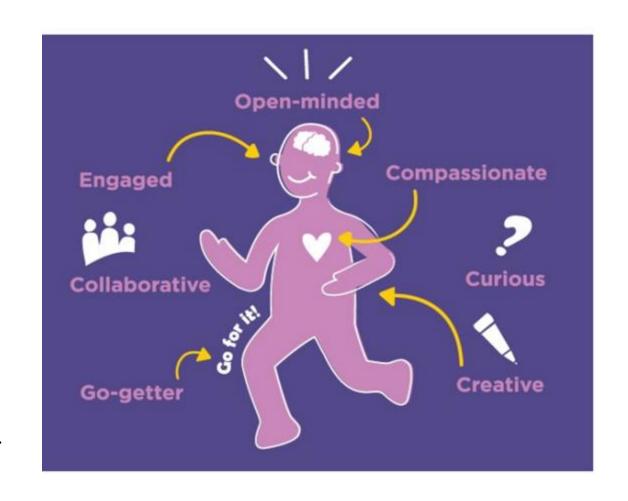
Application Process





Eligibility

- Grade 10 or 11 in September 2025
- Born in 2010 or earlier
- Can <u>demonstrate</u> that they are:
 - Team player (compassionate, collaborative)
 - Internally motivated (curious, gogetter, engaged)
 - Growth mindset (open-minded, compassionate, creative)
- Can commit to the time (2hrs session +
 <2hrs homework + travel)



HINT: In your application, highlight each of these areas!

Application Process

1. Complete **application** online (February 1st - April 30, 2025)

The application form released on our website

www.scienceworld.ca/futurescienceleaders/

- ☐ Fill out your contact information
- ☐ Acquire 1 Academic reference contact information
- ☐ Short answer questions Demonstrate an excitement for learning about STEAM (inside and <u>outside</u> of school)



Application Process

- 2. Eligible students invited for an **interview**
- ☐ In-person interview
- ☐ Includes a Group activity + Individual questions
 - Team Player, Intrinsic Motivation, Growth Mindset
- 3. Registration and fee payment \$1450 + tax
 - We will ensure financial assistance is available to those who need it most, and we look forward to continuing to welcome students from a wide range of backgrounds to our FSL program
 - Fees assure student access to programming, additional workshops, in-person field trips, FSL events, access to scientific equipment, project materials, and STEM mentors



Contacts

Questions or comments:

- Sean Lipsit, Program Manager
 - slipsit@scienceworld.ca

Websites:

- Read stories about alumni and find out more details:
 - scienceworld.ca/futurescienceleaders/
- Examples of student work:
 - <u>futurescienceleaders.com</u>



Thank you to our donors

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Foundation







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John Murphy & Leslie Lee
John & Dana Montalbano

Marion Mann & Scott Shaw

We also acknowledge the financial assistance of the Province of British Columbia.

Thank you for attending! Questions?

Sean Lipsit

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Upcoming Application Workshops:

February 12, 2025 (4:30 – 5:30 PST)

March 13, 2025 (4:30 – 5:30 PST)

Future Science Leaders Application Workshop Registration 2025



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