2017 Science Fairs
IN THE COMMUNITY
Science Fair Guide

Career Training
Online Resources
Workshops
Mentorship

Find Your Regional Science Fair:
Cariboo / Mainline
Central Interior
Central Okanagan
East Kootenay
Fraser Valley
Greater Vancouver
Northern BC
North Okanagan / Shuswap
Northern Vancouver Island
Pacific Northwest
South Fraser
Vancouver Island
West Kootenay & Boundary
Yukon / Stikine

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Academic, personal management and teamwork skills... form the foundation of a high-quality Canadian workforce both today and tomorrow.

— Employability Skills Profile: What are Employers Looking For? (Ottawa: The Conference Board of Canada)
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INTRODUCTION

Science Fairs offer students the opportunity to create original scientific research, innovative projects and develop 21st Century learning skills; critical and creative thinking, collaboration and communication. Projects can be displayed at various levels of competition: school, district, regional, national and international.

Students who develop Science Fair projects always agree that they enjoy project-based learning while investigating the world around them. Their Science Fair project work provides an opportunity to extend science beyond the classroom and to take an in-depth look at topics that are of interest to them personally.

The finalists from the Regional Science Fairs are invited to attend the national fair where they share a week of competition, socializing, cultural activities, scientific tours and workshops with their like-minded peers. The Youth Science Canada showcase event, the Canada-Wide Science Festival (CWSF) is the largest extracurricular youth activity related to science and technology in Canada. Each year, 500 young scientists are chosen to compete from the top ranks at over 100 regional science and technology fairs staged across the country. Some students also go on to attend international Science Fairs.

SCIENCE FAIR FOUNDATION OF BRITISH COLUMBIA

The Science Fair Foundation of British Columbia is the largest science and technology outreach network in the Province supporting science education by inspiring curiosity through the Science Fair Program. The Foundation enables BC Science Fairs to attract vital corporate sponsorship and funding. It is a not-for-profit, charitable organization which was incorporated in February 1998 to ensure ongoing financial support of the Science Fair Program.

The Science Fair Foundation of British Columbia exists for the following purposes:

1. To organize, raise funds for, support, stage and advertise Regional, Canada-Wide and International Science Fairs held in British Columbia which are organized by qualified donees as defined under the Income Tax Act.
2. To promote Science Fair activity in British Columbia.
3. To provide assistance to students from British Columbia to participate in Science Fairs held within British Columbia and elsewhere.
4. To act as the host organization for future Canada-Wide Science Fairs to be held in the Province of British Columbia.
5. To improve the efficiencies and effectiveness of qualified donees who are responsible for the organization and operation of the Regional, Canada-Wide and International Science Fair activities in British Columbia.
GRADE CATEGORIES AT THE CANADA-WIDE SCIENCE FAIR LEVEL

Junior: Grades 7 and 8  
Intermediate: Grades 9 and 10  
Senior: Grades 11 and 12

TYPES OF PROJECTS

Experiment: Actively test a hypothesis by manipulating one variable and controlling others.

Innovation: Design and test new devices, models, theories, or method in any science discipline.

Study: Analyze collections of data using accepted methods from the sciences.

GETTING STARTED

Research your Topic
Read articles and books; observe related events; gather existing information; look for unexplained or unexpected results. Talk to professionals; write to companies; obtain or construct needed equipment.

Organize and Theorize
Organize your research. Narrow down your hypothesis by focusing on a particular idea.

Make a Timetable
Allow plenty of time to experiment and collect data. Make sure you leave time to write a paper and put together an exhibit.
Plan your Experiment, Study or Innovation
Write a research plan to explain how you will do your experiment.

Ethics and Safety Pre-Approval
To ensure that your project will be eligible to compete, review ethics and safety regulations at: www.ethics.youthscience.ca.

Consult your Teacher/Supervisor
Discuss your work with an adult supervisor on an ongoing basis.

Conduct Your Experiment, Study or Innovation
Keep detailed notes of every experiment, measurement and observation. Change only one variable at a time when experimenting. Include control experiments in which none of the variables are changed. Include sufficient numbers of trails in both control and experimental groups.

Examine Your Results
When you have completed your experiments, examine and organize your findings. Did your experiment give you the expected results? Are there other causes that you had not considered or observed? Were there errors in your observations? If possible, analyze your data statistically.

Draw Conclusions
Which variables are important? Did you collect enough data? Do you need to conduct more experimentation?

HELPFUL HINTS
• Your title should be simple and represent your research accurately.
• If elements of your project cannot be safely exhibited at the Fair, incorporate photographs of important phases of your experiment to use in your display.
• Photographs of people require their consent.
• Your display should be presented logically and be easy to read. When you arrange your display, imagine you are seeing it for the first time.
• Make your display stand out. Use neat, colourful headings, charts and graphs. Homemade equipment, construction paper and coloured markers are excellent for project displays. Pay special attention to the labelling of graphs, charts, diagrams and tables.
• Be sure to adhere to the size limitations and safety rules when displaying your project. Check with your Regional Science Fair.

Check out the full Guide to Completing Your Science Fair Project at: www.sciencefairs.ca/Resources
BRITISH COLUMBIA REGIONAL SCIENCE FAIRS

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#BCScienceFair
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All Regional Fairs are affiliated with Youth Science Canada
TEAM BC AT THE 2016 CANADA-WIDE SCIENCE FESTIVAL

Each year, the Canada-Wide Science Festival (CWSF) brings hundreds of Canada’s brightest young minds together to compete, network and foster interest in science at the highest level of Science Fair competition in Canada.

This year, 71 participants selected from the 13 regions throughout BC and the Yukon presented projects at McGill University in Montréal, QC at the 55th CWSF. Team BC (above) brought home 114 awards and scholarships including 5 gold medals, 13 silver medals, 20 bronze medals, 16 Special Awards and 60 Scholarships!

For full list of award recipients, please visit www.sciencefairs.ca/Science-Fairs

The 2017 Canada-Wide Science Festival will be held in Regina, Saskatchewan May 14 - 20, 2017

Montréal 2016
2016 INTERNATIONAL SCIENCE FAIRS

Taiwan International Science Fair

BC students who have attended a minimum of 2 Canada-Wide Science Fairs are eligible to apply for the Taiwan International Science Fair.

In 2016, Austin Wang (right) received a gold medal for his project *A Novel Method to Identify Genes in Electron Transfer of Exoelectrogens* and Daniel O’Reilly (left) received a bronze medal for his project *Remedies Recovered from Roof Top Resources*. They were accompanied by Pat Offin, a retired teacher and long-time Science Fair advocate and volunteer.

For more information on eligibility and how to apply, please visit: www.sciencefairs.ca/TISF

Intel International Science & Engineering Fair (Intel ISEF)

The Intel ISEF is the world’s largest international pre-college science competition attracting 1,700 high school students from over 75 countries. CWSF alumni are invited to apply to join Team Canada-ISEF to attend the 2017 Intel ISEF in Los Angeles, California on May 14 - 19.

BC students, Austin Wang (centre) and Raymong Wang (no relation), received the top award of US$75,000 at the 2016 and 2015 Intel ISEF, respectively.
18TH ANNUAL SCIENCE FAIR FUN RUN
Athlete’s Village Plaza, Vancouver

Join us on May 28, 2017 to help fundraise for The Dr. Michael Smith Science Fair Endowment in support of Science Fair programs across BC!

This family event is filled with fun science activities and is the largest timed 5K run in BC. Participants can meet finalists who have just returned from the Canada-Wide Science Festival and view their award winning projects. You will also receive a customized technical t-shirt and FREE entry to TELUS World of Science with registration.

Join our fundraising campaign to be eligible for more prizes!

For more information, visit: sciencefairs.ca/FunRun

@ScienceFunRun #ScienceFunRun
Reveal Your Potential

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“We acknowledge the financial support of the Ministry of Education of British Columbia, the Province of British Columbia and the Government of Canada.”

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