



# Annual Report 2018-2019

## 48<sup>th</sup> Frontenac, Lennox & Addington Science Fair

*Expo-sciences de Frontenac, Lennox & Addington*  
**Great Ideas... Great Potential!**

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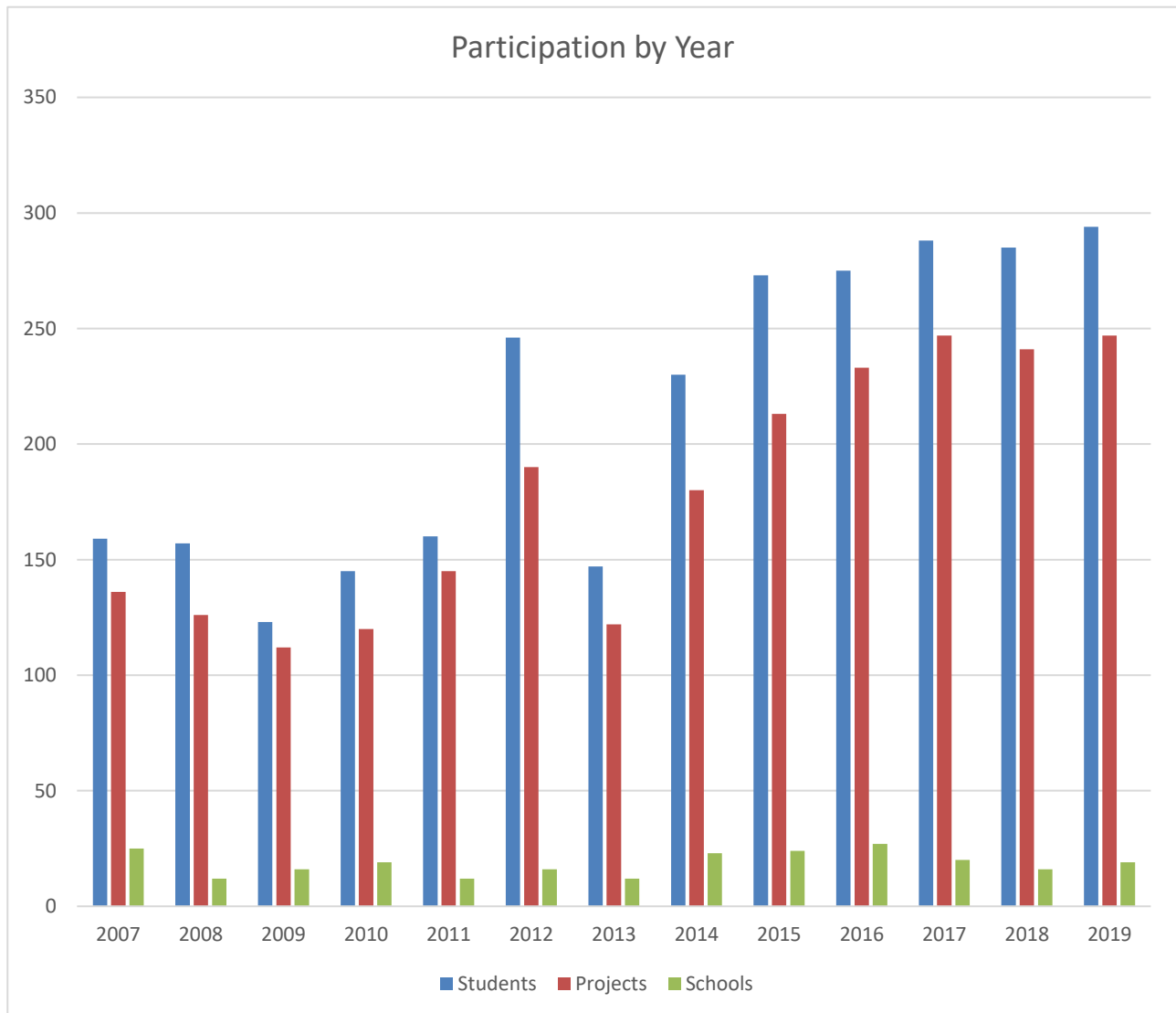
The **Frontenac, Lennox and Addington Science Fair (FLASF)** is the regional science project competition for Grades 5 to 12 students that is run annually in spring in Kingston, Ontario. It is open to English and French language public, Catholic, private and home-schooled students located within the counties of Frontenac and Lennox and Addington.

The **48<sup>th</sup> Frontenac, Lennox and Addington Science Fair** was held on March 28 and March 29, 2019 at McArthur Hall, Queen's University, in Kingston, Ontario.

The Fair was very successful with:

- 294 students competing from 19 schools
  - 92 students awarded medals in four age group divisions, plus 9 trophies, and 6 Best of Fair awards
  - 81 students awarded special awards including cash prizes, science camps, gift certificates, summer internships at a local company, and a university scholarship
  - 5 students travelled to the 2019 Canada Wide Science Fair in Fredericton, NB
- 247 science projects on display
  - students competed in four project divisions:
    - computing & engineering
    - physical & mathematical sciences
    - life & earth sciences
    - human health sciences
- 296 judges from the local science community volunteered their time to meet the students and judge the projects
- 156 students visited the Fair from local schools and participated in Day 2 of Fair workshops
- 42 teachers attended the Fair

- 7 hands-on workshops for visiting students
  - Learning about Sustainability with Dan Hendry, St. Lawrence College
  - Mining and Reclamation with Mining Matters
  - Lego Robotics with RoboGals, Queen’s University
  - Coding with Engineering Connections at Queen’s University
- Keynote Presentation: Lasers! From making lighter cars to watching Black Holes collide with Dr. James Fraser Department of Physics, Engineering Physics and Astronomy at Queen’s University
- All students presenting a project received a special FLASF t-shirt and a FLASF water bottle.



Five of the Best-of-Fair students went on to represent the Frontenac, Lennox and Addington region at the 58th Canada-Wide Science Fair (CWSF). The students did very well, winning three Youth Science Canada awards for excellence and seven university scholarships. The CWSF was held from May 12 to May 19, 2019, in Fredericton, New Brunswick. CWSF is Canada's highest level of science fair competition. It brings together close to 500 students from across the country and provides an experience of a lifetime, with students from all across Canada meeting and interacting with fellow students, and industry and academic professionals in their field of interest. The five FLASF students were accompanied by an adult chaperone and their travel expenses were covered by FLASF.



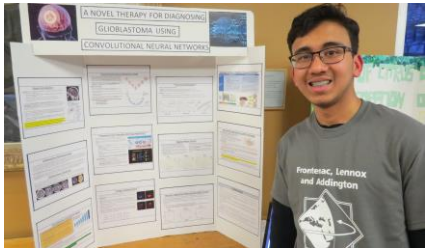

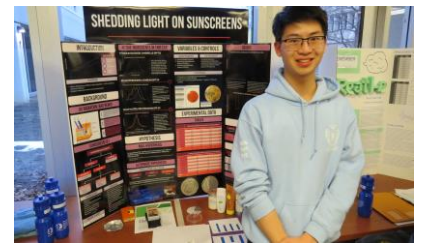
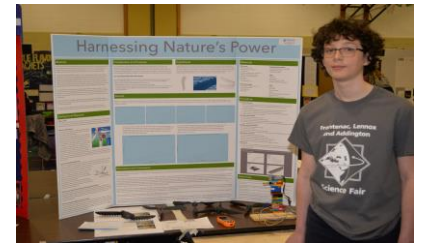

FLASF Best of Fair at  
Canada-Wide Science Fair  
in Fredericton, NB, May 2019  
Leila Smaili, Luca Menard, Beth  
Reid, Hunter Bannon, Dhruv Patel

The regional science fair event (FLASF) and attendance at the national science fair competition (CWSF) are made possible by the generosity of local school boards, companies, educational institutions and provincial organizations. In 2019, 23 sponsors supported FLASF through donations to the general sponsorship program and 37 sponsors provided special awards. Special thanks to the Faculty of Education at Queen's University for providing the site for the Fair.

**Join us for FLASF 2020**  
**Queen's University McArthur Hall**  
**Thursday, March 26 and Friday, March 27, 2019**

## FLASF Best-of-Fair Awards for 2018

Students in Grades 7 to 12 are eligible for the Best-of-Fair awards. The award winners are invited to attend the Canada-Wide Science Fair, held this year in Fredericton, NB. The following students were the 2019 FLASF Best-of-Fair winners:

Best of Fair Award	Names	Project	
<b>GOLD</b>	<b>Dhruv Patel</b>	<b>A Novel Therapy to Diagnose Glioblastoma Through Convolutional Neural Networks</b>	
<b>SILVER</b>	<b>Matteo Bardana</b>	<b>Taking the Solute out of a Solvent to Solve the World's Water Crisis</b>	
<b>BRONZE</b>	<b>Alex Chan</b>	<b>Shedding Light on Sunscreens</b>	
<b>BRONZE</b>	<b>Luca Menard</b>	<b>Harnessing Nature's Power</b>	
<b>HONOURABLE MENTION</b>	<b>Asher Hounsell</b>	<b>How does the thickness of a barrier impact the sound intensity measured through it?</b>	

**Summary Statement of Operations**  
**1 July 2018 to 30 June 2019**

<b>Revenue</b>		
	<b>Sponsorship</b>	<b>\$ 19,800</b>
	<b>Entry Fees</b>	4,395
	<b>Special Awards</b>	3,750
	<b>CWSF 2001 Trust Fund interest</b>	1,429
	<b>HST Refund &amp; Other</b>	-
	<b>NSERC Grant</b>	5
<b>Total Revenue</b>		<b>\$ 29,379</b>
<b>Expenses</b>		
(1)	<b>Students</b>	<b>\$ 18,617</b>
(2)	<b>Judges</b>	1,553
(3)	<b>Sponsors</b>	77
(4)	<b>Fair Operations &amp; Administration</b>	6,069
<b>Total Expenses</b>		<b>\$ 26,316</b>
<b>Net Income</b>		<b>\$ 3,063</b>
(1)	<b><u>Students</u></b>	
	CWSF (5 Students and 2 chaperones)	11,845
	Special Awards	3,700
	Activities/Presentations	-
	Trophies, Medals, T-shirts, Water Bottles & Team Jackets	3,072
		<b>\$ 18,617</b>
(2)	<b><u>Judges</u></b>	
	Supper, Refreshments	<b>\$ 1,553</b>
(3)	<b><u>Sponsors</u></b>	
	Mailings, Annual Report, Post Cards, Banner	<b>\$ 77</b>
(4)	<b><u>Fair Operations &amp; Administration</u></b>	
	Outreach, registration, supplies, parking, rentals, first aid services, security & equipment purchase	4,444
	Bank service charges	88
	Website hosting & domain	470
	HST	1,068
		<b>\$ 6,069</b>

- \$2,979.78 in cheques were outstanding and not cashed as of June 30, 2019
- FLASF administers the cash awards donated by most sponsors for special awards.

## FLASF 2018 Sponsors

<b>Platinum Sponsors</b>	<b>Special Awards Sponsors</b>
<p>INVISTA (Canada) Company Leahurst College* St. Lawrence College*</p> <p style="text-align: center;"><b>Gold Sponsors</b></p> <p>Algonquin and Lakeshore Catholic District School Board* BluMetric Environmental Inc Callidus Engineering E. I. du Pont Canada Company* Empire Life Kingston Process Metallurgy Inc Limestone District School Board* Mine Design Technologies Inc. Northland Power – Kingston Generating Station Novelis Inc. Ontario Power Generation* Queen’s University, Faculty of Arts &amp; Science* Queen’s University, Faculty of Engineering &amp; Applied Science* Queen’s University, Faculty of Health Sciences* Queen’s University, MSTE Group, Faculty of Education* Queen’s University, Office of the Vice-Principal (Research)* RJC Ltd. Engineers Rotary Club of Kingston*</p> <p style="text-align: center;"><b>Silver Sponsors</b></p> <p>Davidson Engineering Ltd..</p> <p style="text-align: center;"><b>Bronze Sponsors</b></p> <p>XCG Consulting Ltd.*</p> <p style="text-align: center;"><b>Special Thanks to</b></p> <p>Faculty of Education at Queen’s University* for providing the site for the Fair</p> <p>Platinum Sponsorship: \$2000 and above Gold Sponsorship: \$500 to \$1999 Silver sponsorship: \$200 to \$499 Bronze sponsorship: \$100 to \$199 * Continuous support for 5 or more years</p>	<p>ACFOMI City of Kingston CMC Microsystems INVISTA Kingston Field Naturalists KFL&amp;A Public Health Kingston Process Metallurgy Inc. Kingston Technology Council Leahurst College Ontario Association of Certified Engineering Technicians and Technologists Professional Engineers of Ontario Queen's University:     Beaty Water Research Centre Award     Centre for Neuroscience Studies     Department of Biology     Eco-adventure Camp, Department of Biology     Enrichment Studies Unit     Department of Biomedical &amp; Molecular Sciences     Department of Chemistry     Department of Geography &amp; Planning,         Explore Camp     Department of Mechanical &amp; Materials Engineering     Department of Pathology &amp; Molecular Medicine     Department of Physics, Engineering Physics &amp; Astrophysics     Engineering Society Science Quest     School of Computing     School of Environmental Studies Rotary Club of Kingston Royal Astronomical Society of Canada Royal Military College of Canada: Department of Military Psychology &amp; Leadership St. Lawrence College:     Behavioural Science Award     Faculty of Applied Science     Health Science Award     Research Department     President’s Award STEAMworks Summer Camp Ted Rogers Innovation Award University of Ottawa Women in Science and Engineering</p>

Key support was provided by the many volunteers who helped before and during the fair, by the judges who shared their enthusiasm for science with the participants, by Queen’s University staff and students who contributed to the running of the Fair, and by the Limestone District School Board who provided support and services.

Many thanks to:

- Keynote speaker, Dr. James Fraser, Queen’s University
- Workshop presenters - Queen’s Engineering Connections, Queen’s RoboGals, Mining Matters, and Dan Hendry