



Frontenac, Lennox and Addington Science Fair

FLASF 2023 AWARD WINNERS

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Frontenac, Lennox and Addington Science Fair

Best of Fair Awards

Honourable Mention Plaques

(#2127) Protecting Our Food from Climate Change

Student: Shreeya Darbar

School: Module de l'Acadie

(#2125) Microplastics in Hair Products

Student: Jack Washburn

School: Calvin Park Public School

Bronze Plaque and Trophy

(#2302) Programming Positivity

Student: Echo Middaugh

School: Calvin Park Public School

Silver Plaque and Trophy

(#3402) Stopping Cancer in Its Tracks; How Does Fructose Enable Cancer Cell Metastasis?

Student: Izabela Quest

School: Loyalist Collegiate & Vocational Institute

Gold Plaque and Queen's University Trophy

(#2353) Dexter: An Affordable, Functional, Myoelectric Prosthetic Hand

Student: Shail Patel

School: Calvin Park Public School



Frontenac, Lennox and Addington Science Fair

Divisional Award Winners

Computing and Engineering Division Awards - Primary Age Category

Gold Medals

(#1301) Current state and future direction of self driving vehicles

Student: Ryan Varma

School: Leahurst College

(#1351) SuperSonic

Student: Sarah Kettaneh

School: Ecole Madelaine de Roybon

Human Health Science Division Awards - Primary Age Category

Honourable Mention

(#1404) How does Colour affect Taste?

Student: Arunabha Chattopadhyay

School: King's Town School

Bronze Medals

(#1401) What is Mononucleosis?

Student: Lauren Marchand

School: Lakeshore School

(#1451) SmartGuard

Student: Judy Kettaneh

School: Ecole Madelaine de Roybon

Life and Earth Sciences Division Awards - Primary Age Category

Bronze Medals

(#1102) The Case of the Missing Ingredients

Student: Stella Grace

School: King's Town School

(#1151) Bean Bending With Different Environments

Students: Allen Gao and Michael Wang

School: Catarauqui Woods Public School and James R Henderson Public School



Frontenac, Lennox and Addington Science Fair

Silver Medal

(#1105) Fabric Fitness
Student: Lexi Springer
School: Lakeshore School

Gold Medals

(#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans
Student: Charlie Vines
School: King's Town School

(#1103) How to Make Mars Habitable?
Student: Alexandria Xu
School: Lakeshore School

Physical and Mathematical Sciences Division Award - Primary Age Category

Silver Medal

(#1201) Conservation of Energy: A Rube Goldberg Machine illustrating concepts in Physics
Student: Maya Thakrar
School: Lakeshore School

Computing and Engineering Division Awards - Junior Age Category

Honourable Mention

(#2304) Lichtenberg Burning: Can this Phenomenon be Replicated on Wood?
Student: Logan Cahill
School: Calvin Park Public School

Bronze Medals

(#2351) How does the fin shape of a rocket affect altitude?
Student: Lindsay Surra
School: LDSB Elementary Virtual School

(#2301) The effect of house shape on wind resistance
Student: Sebastien Menard
School: King's Town School

(#2354) Heated windshield wiper
Student: Xander Liu
School: Calvin Park Public School



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Silver Medals

(#2311) Making a Self Driving Electric Car
Student: Shivikka Vigneswaran
School: Calvin Park Public School

(#2310) Where's the Crime At?
Student: Sharaf Karim
School: Calvin Park Public School

Gold Medals

(#2303) How Do Weight, Width, and Depth Affect Boat Resistance?
Student: Misha van Anders
School: Calvin Park Public School

(#2302) Programming Positivity
Student: Echo Middaugh
School: Calvin Park Public School

(#2353) Dextera: An Affordable, Functional, Myoelectric Prosthetic Hand
Student: Shail Patel
School: Calvin Park Public School

Human Health Science Division Awards - Junior Age Category

Honourable Mentions

(#2432) Metal ions role in Alzheimer disease
Student: Chloe Jugroot
School: King's Town School

(#2415) Sounds of the Heart
Student: Kian Thakrar
School: Calvin Park Public School

(#2425) Can Positive and Negative Imagery Affect Math Performance?
Students: Allison Hanna
School: Kingston Christian School

Bronze Medals

(#2420) La puissance des poumons
Students: Sonia Malik and Vicky Malik
School: Ecole Secondaire Marie-Rivier



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(#2433) Antibacterial sprays on medical scrubs using plants found in Canada

Student: Sadie Michelutti
School: Calvin Park Public School

(#2451) Automatic Insulin Pump

Student: Omar Alghamdi
School: Calvin Park Public School

Silver Medals

(#2418) Est-ce que le coeur aime les drogues?

Student: Gloria Fokam
School: Ecole Secondaire Marie-Rivier

(#2435) Rise Up

Student: Luqmaan Brewster
School: Calvin Park Public School

(#2412) How Do Age, Gender, and Religion Affect Views on Gender?

Student: Jillian Hunt
School: Calvin Park Public School

Gold Medals

(#2411) Identifying Novel Multi-Omic Profiles Correlated with Prognosis of Thyroid Papillary Carcinoma

Student: Anjali Patel
School: Calvin Park Public School

(#2403) To fry or not to fry (The fate of vitamin C)

Students: Adam El-Bardawil and Mostafa Fetar
School: Calvin Park Public School

Life and Earth Sciences Division Awards - Junior Age Category

Honourable Mentions

(#2111) What really happens to alcohol when you cook with it?

Student: Erika Kabin
School: Calvin Park Public School

(#2108) Regeneration for Future Generations

Student: Alex Franklin
School: Calvin Park Public School



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(#2132) The Little Pump that Could

Student: Jackson Louie

School: Lakeshore School

Bronze Medals

(#2153) Does Temperature Affect Microgreen Growth?

Student: Arie Van Buren

School: King's Town School

(#2121) Plants vs Caffeine

Student: Aikem Dhanoa

School: Calvin Park Public School

(#2126) How Shorelines Affect Waves

Student: Adison Manor

School: Calvin Park Public School

Silver Medals

(#2101) What is the dirtiest way to transfer money?

Student: Stella Li

School: Calvin Park Public School

(#2154) How Vitamins Affect Plants

Students: Wen Guo and Gillian Zhang

School: Calvin Park Public School

Gold Medals

(#2127) Protecting Our Food From Climate Change

Students: Shreeya Darbar

School: Module de l'Acadie

(#2125) Microplastics In Hair Products

Student: Jack Washburn

School: Calvin Park Public School

(#2152) My Aquatic Ecosystem

Students: Elleanna Scott

School: Calvin Park Public School



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Physical and Mathematical Sciences Division Awards - Junior Age Category

Honourable Mentions

(#2251) Charging an Electric Vehicle En Route

Student: Dylan Williams

School: King's Town School

(#2219) Utilizing carbon dioxide

Student: Sophie Yao

School: Calvin Park Public School

Bronze Medals

(#2214) Do Illegal Substances Affect Pitching Performance?

Student: Eamon McKay

School: Calvin Park Public School

(#2202) Telescopes

Student: Raina Cosman

School: Leahurst College

(#2207) A Study of How Objects Affect Magnetic Pull

Student: Alexander Todd

School: Calvin Park Public School

Silver Medal

(#2213) The Science of Archery: Does Arrow Length Matter?

Student: Toby Nuttall

School: King's Town School

Gold Medal

(#2201) PH Paper: Plant Based vs Commercial

Student: Max Meleschuk

School: Calvin Park Public School

All Division Awards - Intermediate Age Category

Honourable Mention

(#3101) Testing Nanosilver on Daphnia Magna

Students: Alina Czyczyro

School: École Secondaire Marie-Rivier



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Silver Medal

(#3351) SUN RAY: a warm design solution for solastalgia using seamless technology
Students: Sama Moustafa and Jannah Sultan
School: Kingston Secondary School and Loyalist Collegiate & Vocational Institute

Gold Medal

(#3402) Stopping Cancer In Its Tracks; How Does Fructose Enable Cancer Cell Metastasis?
Student: Izabela Quest
School: Loyalist Collegiate & Vocational Institute

All Division Awards - Senior Age Category

Honourable Mention

(#4351) Protecting the Motherland - one byte at a time
Students: Blake Conod and William Levesque
School: École Secondaire Marie-Rivier

Bronze Medal

(#4251) Analyzing the Absorption Spectra of Aqueous Metal Salts
Students: Gemryl Laxina and Gracie Peters
School: Holy Cross Catholic Secondary School

Silver Medal

(#4401) Interactions between Environmental Chemicals and Drug Biotransformation
Student: Yasmine Smaili
School: Kingston Secondary School

Gold Medal

(#4301) Depressed or Not? Using Large Language Models to Predict Depression from Social Media Posts
Student: Jonathan Li
School: Kingston Secondary School



Frontenac, Lennox and Addington Science Fair

2023 Special Award Winners

ACFOMI Michel Sarrazin Awards

\$50 Cash Prizes and Certificates

(#2418) Est-ce que le coeur aime les drogues?

Student: Gloria Fokam

School: École Secondaire Marie-Rivier

(#2420) La puissance des poumons

Students: Sonia Malik and Vicky Malik

School: École Secondaire Marie-Rivier

(#3401) La transformation bactérienne: résoudre le problème de la résistance bactérienne

Student: Arianne Rhéaume

School: École Secondaire Marie-Rivier

(#3451) Résistance Antibiotique

Student: Nicholas D'Alessio

School: École Secondaire Marie-Rivier

City of Kingston - Best Environmental Project Award

\$100 Cash Prize

(#2113) How about Stone Paper Straws?

Student: Ian Ho

School: Calvin Park Public School

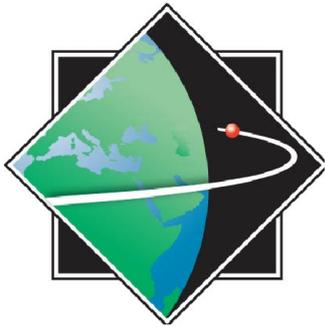
GreenCentre Award

\$300 Cash Prize

(#2317) From Fracture to Fertilizer: Growing Green with Biodegradable Arm Casts

Students: Haya Farooq and Saanvi Vig

School: Calvin Park Public School



Frontenac, Lennox and Addington Science Fair

INVISTA (Canada) Awards for Innovation and Principled Entrepreneurship – Primary Category

\$100 Cash Prizes

(#1301) Current state and future direction of self driving vehicles

Student: Ryan Varma

School: Leahurst College

(#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans

Student: Charlie Vines

School: King's Town School

INVISTA (Canada) Awards for Innovation and Principled Entrepreneurship – Junior Category

\$175 Cash Prizes

(#2310) Where's the Crime At?

Student: Sharaf Karim

School: Calvin Park Public School

(#2353) Dextera: An Affordable, Functional, Myoelectric Prosthetic Hand

Student: Shail Patel

School: Calvin Park Public School

INVISTA (Canada) Award for Innovation and Principled Entrepreneurship – Senior Category

\$750 Cash Prize

(#4301) Depressed or Not? Using Large Language Models to Predict Depression from Social Media Posts

Student: Jonathan Li

School: Kingston Secondary School

Kingston Field Naturalists Award

Book Gift Certificate

(#2152) My Aquatic Ecosystem

Student: Elleanna Scott

School: Calvin Park Public School



Frontenac, Lennox and Addington Science Fair

Kingston Process Metallurgy Award

Summer Job or Cash Prize

- (#4251) Analyzing the Absorption Spectra of Aqueous Metal Salts
Students: Gemryl Laxina and Gracie Peters
School: Holy Cross Catholic Secondary School

Leahurst College Awards

\$75 Gift Cards

- (#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans
Student: Charlie Vines
School: King's Town School

- (#2306) Improving Intersections
Student: Anson Storms
School: Calvin Park Public School

- (#2303) How Do Weight, Width, and Depth Affect Boat Resistance?
Student: Misha van Anders
School: Calvin Park Public School

- (#2131) What material is the most efficient against thermal energy transfer?
Student: Vianne Dumont
School: Calvin Park Public School

- (#2301) The effect of house shape on wind resistance
Student: Sebastien Menard
School: King's Town School

Ontario Association of Certified Engineering Technicians and Technologists (OACETT) Award

\$100 Cash Prize and Certificate

- (#2251) Charging an Electric Vehicle En Route
Student: Dylan Williams
School: King's Town School



Frontenac, Lennox and Addington Science Fair

Peer Award – Primary Category

\$50 Gift Card

(#1202) Hydraulics

Student: Krisha Patel

School: Lakeshore School

Peer Award – Junior Category

\$50 Gift Card

(#2353) Dexter: An Affordable, Functional, Myoelectric Prosthetic Hand

Student: Shail Patel

School: Calvin Park Public School

Peer Award – Intermediate/Senior Category

\$50 Gift Card

(#4301) Depressed or Not? Using Large Language Models to Predict Depression from Social Media Posts

Student: Jonathan Li

School: Kingston Secondary School

Professional Engineers of Ontario (PEO) Award - 1st Place

\$300 Cash Prize and Trophy

(#2351) How does the fin shape of a rocket affect altitude?

Student: Lindsay Surra

School: LDSB Elementary Virtual School

Professional Engineers of Ontario (PEO) Award - 2nd Place

\$200 Cash Prize

(#2251) Charging an Electric Vehicle En Route

Student: Dylan Williams

School: King's Town School



Frontenac, Lennox and Addington Science Fair

Professional Engineers of Ontario (PEO) Award - 3rd Place

\$100 Cash Prize

(#1351) SuperSonic
Student: Sarah Kettaneh
School: Ecole Madelaine de Roybon

Queen's University Department of Biology Awards

\$50 Gift Cards

(#1103) How to Make Mars Habitable?
Student: Alexandria Xu
School: Lakeshore School

(#2106) Capillary Action and pH
Students: Phoenix Graham
School: Calvin Park Public School

(#2118) How Does Music Affect The Behaviour Of Dogs?
Student: Youxin Wang
School: Calvin Park Public School

(#2152) My Aquatic Ecosystem
Student: Elleanna Scott
School: Calvin Park Public School

Queen's University Department of Biomedical & Molecular Sciences Awards (Medicine, Drugs & Food)

\$50 Cash Prizes

(#2451) Automatic Insulin Pump
Student: Omar Alghamdi
School: Calvin Park Public School

(#3402) Stopping Cancer In Its Tracks; How Does Fructose Enable Cancer Cell
Metastasis?
Student: Izabela Quest
School: Loyalist Collegiate & Vocational Institute



Frontenac, Lennox and Addington Science Fair

Queen's University Department of Biomedical & Molecular Sciences Awards (The Amazing Human Body)

\$50 Cash Prizes

(#2413) How Does Stress Affect Memory Loss?

Student: Griffin Gauthier
School: Calvin Park Public School

(#4401) Interactions between Environmental Chemicals and Drug Biotransformation

Student: Yasmine Smaili
School: Kingston Secondary School

Queen's University Department of Biomedical & Molecular Sciences Awards (The Microscopic World)

\$50 Cash Prizes

(#2102) The Cell-O-Scope

Student: Tvisha Pavagadhi
School: Calvin Park Public School

(#3402) Stopping Cancer In Its Tracks; How Does Fructose Enable Cancer Cell
Metastasis?

Student: Izabela Quest
School: Loyalist Collegiate & Vocational Institute

Queen's University Department of Chemistry Award

\$200 Cash Prize

(#2125) Microplastics In Hair Products

Student: Jack Washburn
School: Calvin Park Public School

Queen's University Department of Geography & Planning Explore Camp Award

\$100 Cash Prize

(#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans

Student: Charlie Vines
School: King's Town School



Frontenac, Lennox and Addington Science Fair

Queen's University Department of Mechanical & Materials Engineering Award

\$100 Cash Prize

(#2303) How Do Weight, Width, and Depth Affect Boat Resistance?

Student: Misha van Anders

School: Calvin Park Public School

Queen's University Program in Mechatronics & Robotics Engineering Award

\$100 Cash Prize

(#2353) Dextera: An Affordable, Functional, Myoelectric Prosthetic Hand

Student: Shail Patel

School: Calvin Park Public School

Queen's University Department of Pathology & Molecular Medicine Award - 1st Place

\$100 Cash Prize and Certificate

(#2434) Some Aspects of COVID-19 and Its Vaccine

Student: Svava Patel

School: Lakeshore School

Queen's University Department of Pathology & Molecular Medicine Award - 2nd Place

\$75 Cash Prize and Certificate

(#2302) Programming Positivity

Student: Echo Middaugh

School: Calvin Park Public School

Queen's University Department of Pathology & Molecular Medicine Award - 3rd Place

\$50 Cash Prize and Certificate

(#2415) Sounds of the Heart

Student: Kian Thakrar

School: Calvin Park Public School



Frontenac, Lennox and Addington Science Fair

Queen's University Department of Physics, Engineering Physics & Astronomy Awards

\$150 Cash Prizes

(#2212) Investigating Heat Transfer

Student: Ellen Goldring

School: Calvin Park Public School

(#1201) Conservation of Energy: A Rube Goldberg Machine illustrating concepts in Physics

Student: Maya Thakrar

School: Lakeshore School

Queen's University School of Environmental Studies Awards

\$50 Gift Cards

(#2317) From Fracture to Fertilizer: Growing Green with Biodegradable Arm Casts

Students: Haya Farooq and Saanvi Vig

School: Calvin Park Public School

(#2127) Protecting Our Food From Climate Change

Student: Shreeya Darbar

School: Module de l'Acadie

(#2318) Water Filters

Students: Muntaqa Ahmed and William Kerr

School: Calvin Park Public School

Queen's University Engineering Society Science Quest Awards

Week at Science Quest Camp Certificate

(#1301) Current state and future direction of self driving vehicles

Student: Ryan Varma

School: Leahurst College

Week at Girls' Quest Camp Certificate

(#1201) Conservation of Energy: A Rube Goldberg Machine illustrating concepts in Physics

Student: Maya Thakrar

School: Lakeshore School



Frontenac, Lennox and Addington Science Fair

Week at Eco Camp Certificate

(#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans
Student: Charlie Vines
School: King's Town School

Royal Military College of Canada Department of Military Psychology & Leadership Awards

\$100 Cash Prizes

(#1404) How does Colour affect Taste?
Student: Arunabha Chattopadhyay
School: King's Town School

(#2416) Biased much? | How perceived race and/or gender affects bias
Student: Oona Berger
School: Calvin Park Public School

(#4301) Depressed or Not? Using Large Language Models to Predict Depression from Social Media Posts
Student: Jonathan Li
School: Kingston Secondary School

Rotary Club of Kingston Environmental Sustainability Awards

\$100 Cash Prizes

(#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans
Student: Charlie Vines
School: King's Town School

(#2151) Hydroponics
Student: Ryder Bailey
School: Calvin Park Public School

Royal Astronomical Society Leo Enright Award for Astronomy

\$100 Cash Prize

(#2202) Telescopes
Student: Raina Cosman
School: Leahurst College



Frontenac, Lennox and Addington Science Fair

Sanofi Biogenius Canada Award

\$100 Cash Prize

(#2125) Microplastics In Hair Products

Student: Jack Washburn

School: Calvin Park Public School

St. Lawrence College Behavioural Science Award

\$100 Cash Prize

(#2302) Programming Positivity

Student: Echo Middaugh

School: Calvin Park Public School

St. Lawrence College Faculty of Applied Science Award

\$100 Cash Prize

(#2353) Dextera: An Affordable, Functional, Myoelectric Prosthetic Hand

Student: Shail Patel

School: Calvin Park Public School

St. Lawrence College Health Science Award

\$100 Cash Prize

(#4403) The effect of stress on the immune system

Student: Malak Belhadjhamida

School: Kingston Secondary School

St. Lawrence College President's Award

\$100 Cash Prize

(#2127) Protecting Our Food From Climate Change

Student: Shreeya Darbar

School: Module de l'Acadie

St. Lawrence College Research Department Award

\$100 Cash Prize

(#2303) How Do Weight, Width, and Depth Affect Boat Resistance?

Student: Misha van Anders

School: Calvin Park Public School



Frontenac, Lennox and Addington Science Fair

STEAMworks Summer Camp Awards

Week at STEAMworks Summer Camp Certificates

(#1103) How to Make Mars Habitable?

Student: Alexandria Xu

School: Lakeshore School

(#1105) Fabric Fitness

Student: Lexi Springer

School: Lakeshore School

(#1107) Magnetic Oil: How Ferrofluid Can Help us Clean Up Our Oceans

Student: Charlie Vines

School: King's Town School STEAMworks Summer Camp Awards

(#1301) Current state and future direction of self driving vehicles

Student: Ryan Varma

School: Leahurst College

University of Ottawa Entrance Scholarship Award

\$1000 Entrance Scholarship

(#4301) Depressed or Not? Using Large Language Models to Predict Depression from
Social Media Posts

Student: Jonathan Li

School: Kingston Secondary School