



# Frontenac, Lennox and Addington Science Fair

## FLASF 2021 AWARD WINNERS

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# Frontenac, Lennox and Addington Science Fair

## Best of Fair Awards

### Honourable Mention Plaque

(2403) Capsaicin Annihilation! A study on the best way to neutralize the irritating effects of spicy food

Student: Jude Martin

School: Kingston Christian School

### Honourable Mention Plaque

(2411) The Droplet-Stopping Power of Face Coverings

Student: Isaac Ho

School: Calvin Park Public School

### Bronze Plaque and Trophy

(2304) Fractal Encryption: Securing anything with Sierpiński triangles

Student: Matthew Kabin

School: Calvin Park Public School

### Silver Plaque and Trophy

(4301) Using Machine Learning to Assess Trainee Skill

Student: Olivia O'Driscoll

School: Leahurst College

### Gold Plaque and Queen's University Trophy

(3301) An investigation into the potential of airfoils in producing extra propulsion for bicycles

Student: Luca Menard

School: Homeschooled



# Frontenac, Lennox and Addington Science Fair

## Divisional Award Winners

### Computing and Engineering Division Award - Primary Age Category

#### Honourable Mention

(1306) Solar Zoomer

Student: Yusof Razaghzadeh Shabestari

School: Saint Paul Catholic School

#### Bronze Medal

(1301) Earthquake Proofing Buildings

Student: Adam Viero

School: King's Town School

#### Silver Medal

(1302) The Dog Lifter

Student: Beatrix Davidson

School: Centreville Public School

### Physical and Mathematical Sciences Division Award - Primary Age Category

#### Honourable Mention

(1203) Go Bio With Plastics

Student: Erika Kabin

School: Lakeshore School

(1209) Slippy Slidey Sleds

Student: Quinn Hook

School: Kingston Christian School



# Frontenac, Lennox and Addington Science Fair

## (1211) Magnetars

Student: Tvisha Pavagadhi

School: Lakeshore School

## **Bronze Medal**

### (1207) Light to Rainbow

Student: Mary Jo Davidson

School: Centreville Public School

## **Silver Medal**

### (1205) How Does Temperature Affect Glow Sticks?

Student: Ian Ho

School: Kingston Christian School

## **Gold Medal**

### (1204) Oh Snap!!

Student: Hannah Serviss

School: Kingston Christian School

### (1210) The effect of beach towel color

Student: Sebastien Menard

School: King's Town School

## **Life & Earth Sciences-Non-Human Division Award - Primary Age Category**

## **Honourable Mention**

### (1110) How Dirty is Snow

Student: Landon Sjaarda

School: Kingston Christian School

### (1112) Hydroponics & Tackling Food Security

Students: Wyatt Bailey

School: King's Town School



# Frontenac, Lennox and Addington Science Fair

(1108) Pavlov's Cat

Student: Joshua DeBruyn

School: R.G. Sinclair PS

## **Bronze Medal**

(1107) The Weather Man is Never Correct

Student: Jonathan Hough

School: Kingston Christian School

## **Silver Medal**

(1103) Can Humans Tell the Size of a Dog by its Bark?

Student: Allison Hanna

School: Kingston Christian School

## **Gold Medal**

(1106) Growing Indoor Lettuce!

Student: Daniel Hough

School: Kingston Christian School

## **Human Health Science Division Award - Primary Age Category**

### **Bronze Medal**

(1401) Can You Ever Say No to a Chocolate Chip Cookie?

Student: Aanya Aggarwal

School: Kingston Christian School

### **Silver Medal**

(1405) Hot or cold? How does it affect your brain?

Student: Kahvian Omrani

School: Lakeshore School

### **Gold Medal**

(1404) Spread Kindness Not Germs: Which Masks are the Best?

Student: Hannah Vines

School: King's Town School

(1406) Heart Attacks

Student: Shreeya Darbar

School: Lakeshore School



# Frontenac, Lennox and Addington Science Fair

## Computing and Engineering Division Award - Junior Age Category

### **Bronze Medal**

(2302) Water For Everyone

Student: Erika Vanderwilp

School: Kingston Christian School

### **Gold Medal**

(2304) Fractal Encryption

Student: Matthew Kabin

School: Calvin Park Public School

## Physical and Mathematical Sciences Division Award - Junior Age Category

### **Bronze Medal**

(2205) Vinegar and Baking Soda Rocket

Students: Reed Rickards

School: Kingston Christian School

### **Silver Medal**

(2203) Sailing Faster than the Wind

Student: Liam Dickison

School: Kingston Christian School



# Frontenac, Lennox and Addington Science Fair

## Life & Earth Sciences-Non-Human Division Award - Junior Age Category

### Honourable Mention

(2107) Filling Cracks on the Outdoor Rink

Student: Matthew Hough

School: Kingston Christian School

(2106) Canines, Cats, and Colours

Student: Layne Raycroft

School: Kingston Christian School

### Bronze Medal

(2101) Chewing the Fat

Student: Aeryck Hook

School: Kingston Christian School

### Silver Medal

(2104) Time to Settle the Spore

Students: Evan Cox

School: Mother Teresa Catholic School

### Gold Medal

(2103) How will purple tea react to acid and base?

Student: Eileen Bae

School: Kingston Christian School

## Human Health Science Division Award - Junior Age Category

### Bronze Medal

(2401) Can dance affect your emotion?

Student: Abegail Hall

School: Kingston Christian School

(2409) What is the relationship between the price of nail polish and its durability?

Student: Rebekah Yim

School: Kingston Christian School



# Frontenac, Lennox and Addington Science Fair

## **Silver Medal**

(2406) Good Night Blue Light

Students: Naomi De Jonge

School: Kingston Christian School

## **Gold Medal**

(2403) Capsaicin Annihilation! A study on the best way to neutralize the irritating effects of spicy food.

Student: Jude Martin

School: Kingston Christian School

(2411) The Droplet-Stopping Power of Face Coverings

Student: Isaac Ho

School: Calvin Park Public School

## **Computing and Engineering Division Award - Intermediate Age Category**

### **Gold Medal**

(3301) An investigation into the potential of airfoils in producing extra propulsion for bicycles

Student: Luca Menard

School: Home Schooled

## **Computing and Engineering Division Award - Senior Age Category**

### **Honourable Mention**

(4301) Using Machine Learning to Assess Trainee Skill in Central Venous Catheterizations

Student: Olivia O'Driscoll

School: Leahurst College

## **Human Health Science Division Award - Senior Age Category**

### **Gold Medal**

(4401) Sinister side effects: Determining the Genotoxic Potential of Widely Consumed Pharmaceuticals





# Frontenac, Lennox and Addington Science Fair

Student: Leila Smaili  
School: ÉSC Marie Rivier

## 2021 Special Award Winners

### City of Kingston - Best Environmental Project

\$50 Cash Prize and Plaque  
Erika Kabin – Lakeshore School  
#1203 Go Bio with Plastic!

### INVISTA (Canada) Award for Innovation & Principled Entrepreneurship - Primary

\$50 Cash Prize  
Wyatt Bailey – King's Town School  
#1112 Hydroponics & Tackling Food Security

### INVISTA (Canada) Award for Innovation & Principled Entrepreneurship - Junior

\$75 Cash Prize  
Matthew Kabin – Calvin Park Public School  
#2304 Fractal Encryption: Securing anything with Sierpiński triangles

### INVISTA (Canada) Award for Innovation & Principled Entrepreneurship - Intermediate

\$150 Cash Prize  
Luca Menard – Home Schooled  
#3301 An investigation into the potential of airfoils in producing extra propulsion for bicycles



# Frontenac, Lennox and Addington Science Fair

## **INVISTA (Canada) Award for Innovation & Principled Entrepreneurship - Senior**

\$750 Cash Prize

Olivia O'Driscoll – Leahurst College

#4301 Using Machine Learning to Assess Trainee Skill in Central Venous  
Catheterizations

## **Kingston Technology Council Innovation Award**

\$100 Cash Prize

Luca Menard – Home Schooled

#3301 An investigation into the potential of airfoils in producing extra propulsion for  
bicycles

## **Ontario Association of Certified Engineering Technicians and Technologists Award**

\$50 Cash Prize and Certificate

Adam Viero – King's Town School

#1301 Earthquake Proofing Buildings

## **Ontario Association of Certified Engineering Technicians and Technologists Award**

\$50 Cash Prize and Certificate

Luca Menard – Home Schooled

#3301 An investigation into the potential of airfoils in producing extra propulsion for  
bicycles

## **Professional Engineers of Ontario Award - 1st Place**

\$300 Cash Prize

Olivia O'Driscoll – Leahurst College

#4301 Using Machine Learning to Assess Trainee Skill in Central Venous  
Catheterizations



# Frontenac, Lennox and Addington Science Fair

## **Professional Engineers of Ontario Award - 2nd Place**

\$200 Cash Prize

Luca Menard – Home Schooled

#3301 An investigation into the potential of airfoils in producing extra propulsion for bicycles

## **Professional Engineers of Ontario Award - 3rd Place**

\$100 Cash Prize

Naomi Snoek – Kingston Christian School

#1201 What floats your boat?

## **Queen's University Department of Biology**

\$50 Book Gift Card

Daniel Hough – Kingston Christian School

#1106 Growing Indoor Lettuce!

## **Queen's University Department of Biology**

\$50 Book Gift Card

Landon Sjaarda – Kingston Christian School

#1110 How Dirty is Snow?

## **Queen's University Department of Biology**

\$50 Book Gift Card

Evan Cox – Mother Teresa Catholic School

#2104 Time to Settle the Spore



# Frontenac, Lennox and Addington Science Fair

## **Queen's University Department of Biology**

\$50 Book Gift Card

Layne Raycroft – Kingston Christian School

#2106 Canines, Cats and Colours

## **Queen's University Department of Biology Eco-Adventure Camp Award**

Week at Camp Certificate

Landon Sjaarda – Kingston Christian School

#1110 How Dirty is Snow?

## **Queen's University Department of Biomedical and Molecular Sciences - Medicine, Drugs and Food**

\$50 Cash Prize

Daniel Hough – Kingston Christian School

#1106 Growing Indoor Lettuce!

## **Queen's University Department of Biomedical and Molecular Sciences - Medicine, Drugs and Food**

\$50 Cash Prize

Leila Smaili – ESC Marie Rivier

#4401 Sinister side effects: Determining the Genotoxic Potential of Widely Consumed Pharmaceuticals

## **Queen's University Department of Biomedical and Molecular Sciences - The Amazing Human Body**

\$50 Cash Prize

Shreeya Darbar – Lakeshore School

#1406 Heart Attacks



# Frontenac, Lennox and Addington Science Fair

## **Queen's University Department of Biomedical and Molecular Sciences - The Amazing Human Body**

\$50 Cash Prize

Jude Martin – Kingston Christian School

#2403 Capsaicin Annihilation! A study on the best way to neutralize the irritating effects of spicy foo

## **Queen's University Department of Biomedical and Molecular Sciences - The Microscopic World**

\$50 Cash Prize

Landon Sjaarda – Kingston Christian School

#1110 How Dirty is Snow?

## **Queen's University Department of Biomedical and Molecular Sciences - The Microscopic World**

\$50 Cash Prize

Evan Cox – Mother Teresa Catholic School

#2104 Time to Settle the Spore

## **Queen's University Department of Chemistry Award**

\$200 Cash Prize

Erika Kabin – Lakeshore School

#1203 Go Bio With Plastic!

## **Queen's University Department of Geography and Planning Explore Camp Award**

\$50 Cash Prize

Landon Sjaarda – Kingston Christian School

#1110 How Dirty is Snow?



# Frontenac, Lennox and Addington Science Fair

## **Queen's University Department of Mechanical & Materials Engineering Award**

\$100 Cash Prize

Luca Menard – Home Schooled

#3301 An investigation into the potential of airfoils in producing extra propulsion for bicycles

## **Queen's University Department of Pathology & Molecular Medicine - 1st prize**

\$100 Cash Prize and Certificate

Shreeya Darbar – Lakeshore School

#1406 Heart Attacks

## **Queen's University Department of Pathology & Molecular Medicine - 2nd prize**

\$75 Cash Prize and Certificate

Anjali Patel – Lakeshore School

#1402 Let's Go, Blood Flow!

## **Queen's University Department of Pathology & Molecular Medicine - 3rd prize**

\$50 Cash Prize and Certificate

Jude Martin – Kingston Christian School

#2403 Capsaicin Annihilation! A study on the best way to neutralize the irritating effects of spicy food.

## **Queen's University School of Computing Award - 1st Place**

\$60 Cash Prize and Trophy

Olivia O'Driscoll – Leahurst College

#4301 Using Machine Learning to Assess Trainee Skill in Central Venous Catheterizations



# Frontenac, Lennox and Addington Science Fair

## **Queen's University School of Computing Award - 2nd Place**

\$20 Cash Prize

Matthew Kabin – Calvin Park Public School

#2304 Fractal Encryption: Securing anything with Sierpiński triangles

## **Queen's University School of Computing Award - 3rd Place**

\$20 Cash Prize

Lincoln Touw – Kingston Christian School

#1304 What Materials can block WI-FI Signals the most?

## **Queen's University School of Environmental Studies Award - Junior**

\$50 Book Gift Card

Erika Vanderwilp – Kingston Christian School

#2302 WATER FOR EVERYONE

## **Queen's University School of Environmental Studies Award - Junior**

\$50 Book Gift Card

Benjamin Touw – Kingston Christian School

#2102 Vegetable Power

## **Queen's University School of Environmental Studies Award - Primary**

\$50 Book Gift Card

Erika Kabin – Lakeshore School

#1203 Go Bio with Plastic!



# Frontenac, Lennox and Addington Science Fair

## **Queen's University School of Environmental Studies Award - Primary**

\$50 Book Gift Card

Jacob Busby – Kingston Christian School

#1206 Melted Chocolate

## **Royal Military College of Canada Department of Military Psychology and Leadership Award**

\$50 Book Gift Card and Certificate

Kahvian Omrani – Lakeshore School

#1405 Hot or cold? How does it affect your brain?

## **Royal Military College of Canada Department of Military Psychology and Leadership Award**

\$50 Book Gift Card and Certificate

Amy Bae – Kingston Christian School

#1407 What age group has the best memory?

## **Science Quest, Queen's University Engineering Society Award**

Week at Camp Certificate

Sebastien Menard – King's Town School

#1210 The effect of beach towel color on heat absorption from the sun

## **Science Quest, Queen's University Engineering Society Award**

Week at Camp Certificate

Erika Kabin – Lakeshore School

#1203 Go Bio with Plastics!





# Frontenac, Lennox and Addington Science Fair

## **Science Quest, Queen's University Engineering Society Award**

Week at Camp Certificate

Adam Viero – King's Town School

#1301 Earthquake Proofing Buildings

## **St Lawrence College Behavioural Science Award**

\$100 Cash Prize

Amy Bae – Kingston Christian School

#1407 What Age Group has the best memory?

## **St Lawrence College Fac of Applied Science Award**

\$100 Cash Prize

Oscar Iwasaki – Lakeshore School

#1208 Wind Turbine Project

## **St Lawrence College Health Science Award**

\$100 Cash Prize

Isaac Ho – Calvin Park Public School

#2411 The Droplet-Stopping Power of Face Coverings

## **St Lawrence College President's Award**

\$100 Cash Prize

Allison Hanna – Kingston Christian School

#1103 Can humans tell the size of a dog by listening to its bark?

## **St Lawrence College Research Department Award**

\$100 Cash Prize

Liam Dickison – Kingston Christian School

#2203 Sailing Faster Than the Wind



# Frontenac, Lennox and Addington Science Fair

## **Ted Rogers Innovation Award**

\$100 Cash Prize and Certificate

Olivia O'Driscoll - Leahurst College

#4301 Using Machine Learning to Assess Trainee Skill in Central Venous Catheterizations

## **The Leo Enright Award for Astronomy**

\$100 Cash Prize and Book: Explore the Universe Guide

Reed Rickards – Kingston Christian School

#2205 Vinegar and Baking Soda Rocket

## **University of Ottawa Entrance Scholarship Award**

Olivia O'Driscoll – Leahurst College

#4301 Using Machine Learning to Assess Trainee Skill in Central Venous Catheterizations

## **Women in Science and Engineering Award - Primary**

\$50 Cash Prize and Certificate

Hannah Serviss – Kingston Christian School

#1204 Oh Snap!

## **Women in Science and Engineering Award - Junior/Intermediate/Senior**

\$50 Cash Prize and Certificate

Olivia O'Driscoll – Leahurst College

#4301 Using Machine Learning to Assess Trainee Skill in Central Venous Catheterizations