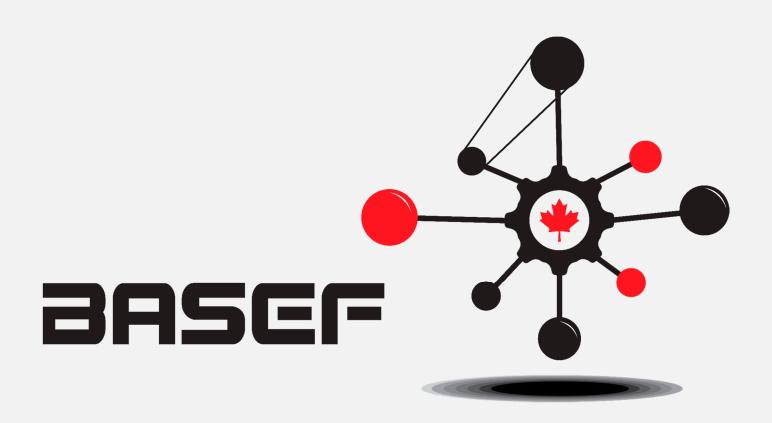


Welcome to the 2024 Bay Area Science & Engineering Fair sponsored by









Competition Host



Hillfield Strathallan College Learn with Joy. Live with Purpose.

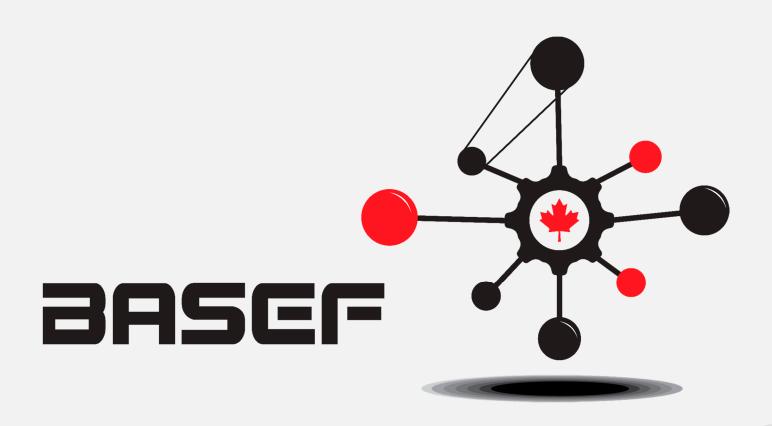


Awards Ceremony Host



FUTURE READY







Our Sponsors



Primary Fluid Systems Inc.









Diamond Sponsors









Platinum Level Sponsors





Hillfield Strathallan College Learn with Joy. Live with Purpose.



Gold Level Sponsors











Silver Level Sponsors













Silver Level Sponsors











Bronze Level Sponsors











Bronze Level Sponsors







Encouraging growth and development



Friends of BASEF

Banting and Best (\$1000+) Peter Child

Bondar (\$500+)

Steve & Cathy Hayman Mantecon Partners Susan & Peter Olynyk

Polanyi (\$200+)

Dan & Debbie Bowman
Nick & Helen Efthimiadis
Paul & Pam Lakin
Paul & Pam Lakin
Paul & Pam Lakin
Renato & Enza DeTina
Dr. Nicola Simmons
John & Eleanor O'Flynn

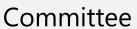
McGill (\$50+) Linda Millar

In addition, BASEF has received donations from a number of individuals who wish to remain anonymous



Benefactors







Volunteers



Safety Inspectors



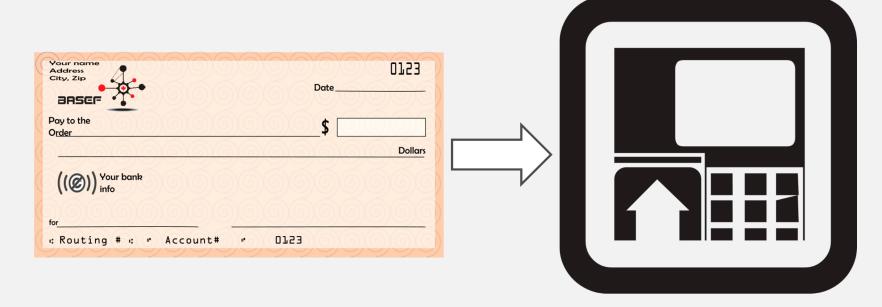
Registration



Our Volunteers

Are you ready?





Deposit those cheques!



Instructions

- 1. Donors/presenters make their way to the stage from the bottom left.
- 2. Students: When we call your name, proceed to the bottom right of the stage.

Donors





Special Awards



ArcelorMittal Dofasco Awards



ArcelorMittal Dofasco Central Trades & Services Department Award

William Xu

P13
Accessible microscopy! A cellphone microscope for high-resolution, large FOV, and high-speed imaging

Dundas Valley Secondary School Dundas





ArcelorMittal Dofasco Chemical Testing Award

Alia Wahban

P03
Redefining the Landscape of Hydrogen Safety using Innovative Gasochromic Technology

Hillfield Strathallan College Hamilton





ArcelorMittal Dofasco Commercial Department Award

Lily Song

P16 Talk to the Hand

North Park Collegiate and Vocational School Brantford





ArcelorMittal Dofasco Engineering Award

Harnarain Bharj

J01 Coat Rack Heater

Rolling Meadows Public School Burlington





ArcelorMittal Dofasco Environment Award

Anaum Farhan & Alishba Fayyaz

L15 Alumify

Rattlesnake Point Public School Milton





ArcelorMittal Global R&D Hamilton Award for Outstanding Research

Luca Piccoli & Gabriel Di Nicola

C14
Water Is Not Enough; Maintaining Electrolyte Balance
During Illness

Our Lady of Peace Stoney Creek



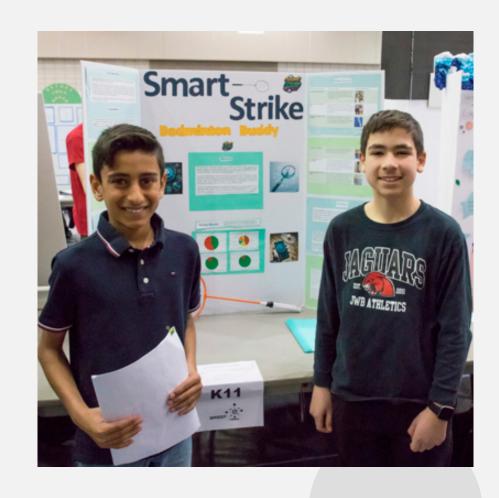


ArcelorMittal Global R&D Hamilton Award for Technology Application

Ege Alper & Ayaan Mawji

K11 Smart Strike Badminton Buddy

John William Boich Public School Burlington



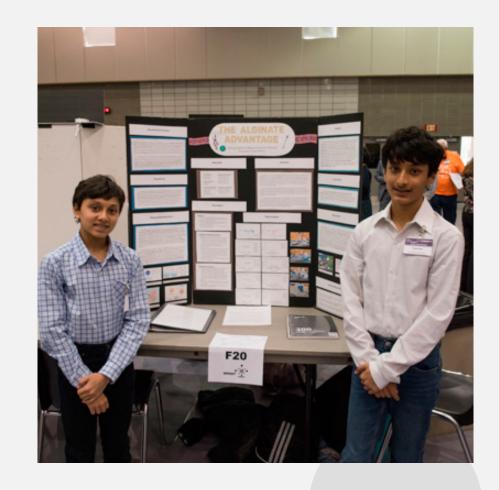


ArcelorMittal Dofasco Hot Mill Award

Rahul Rao & Vivaan Kar

F20 The Alginate Advantage

W. H. Morden Public School Oakville





ArcelorMittal Dofasco Human Resources Training & Development Award

Luke Powell

N21 Flashify: An Innovative Flash Card Alternative

> Aldershot High School Burlington



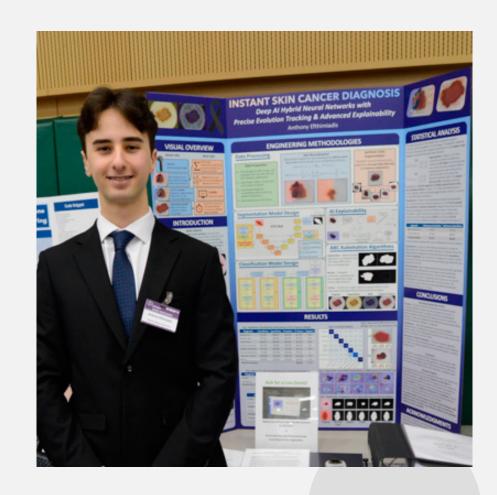


ArcelorMittal Dofasco Information Systems Award

Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





ArcelorMittal Dofasco Ironmaking Award

Daniyal Qazi & Zayn Qazi

P08
From Pixels to Predictions: A Deep Learning Method to Detect Pneumonia in Chest X-Ray Images

W. H. Morden Public School Oakville





ArcelorMittal Dofasco Material Handling & Logistics Department Award

Kieran Blimkie

N16 Orebot Mk 1

Notre Dame Secondary School Burlington



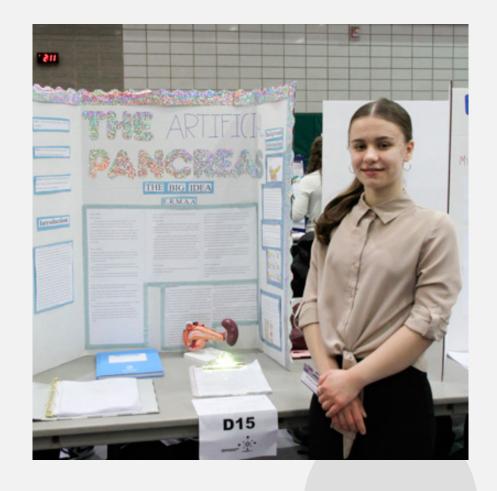


ArcelorMittal Dofasco Medical Department Award

Weronika Szymala

D15
The Artificial Pancreas

Bishop Ryan Secondary School Hamilton



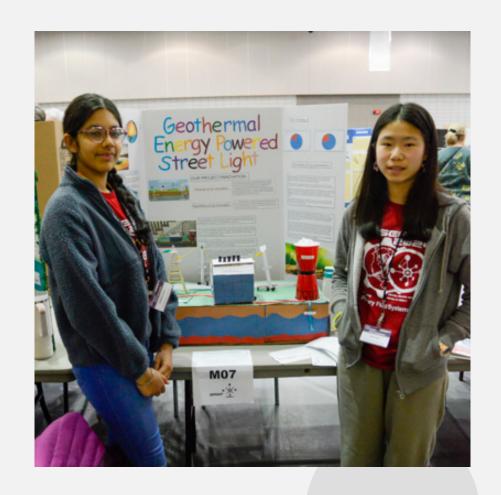


ArcelorMittal Dofasco Pickling and Cold Rolling Award

Rishibha Arora & Nina Chen

M07 Geothermal Energy Powered Street Light

John William Boich Public School Burlington





ArcelorMittal Dofasco Process Automation Award

Anabella Kinsella & Joshua Mithun

K07 EZ Dispenser

St. Bernadette Dundas





ArcelorMittal Dofasco Product Development Business Process Award

Maya Parachin

K16 The Frytastic Fry Fit

Oakville Christian School Oakville





ArcelorMittal Dofasco Quality Systems Award

Zoya Waseem

K20
Pneumonia Detective: The Effectiveness of a
Pneumonia Detection ML VS. Medical Practitioners

Al-Falah Islamic School Oakville



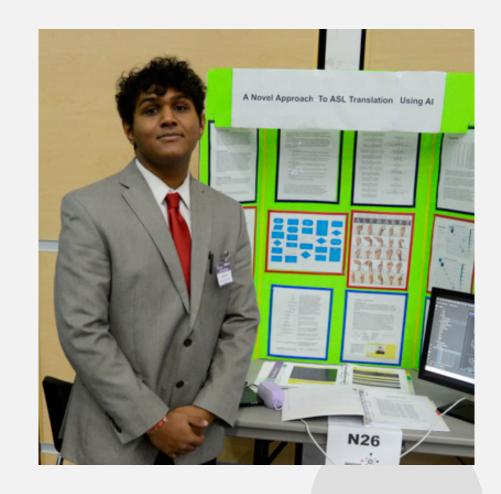


ArcelorMittal Dofasco Steelmaking Award

Vedant Sheel

N26 A Novel Approach to ASL Translation Using Al

Waterdown District Secondary School Waterdown





Artistically Inspired Display Awards



Artistically Inspired Display Award

Sameeha Salman

F12 When life dims your lights, just add a Conductor!

Al-Falah Islamic School Oakville



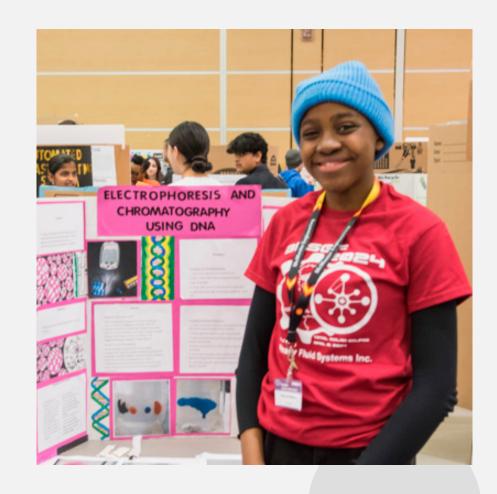


Artistically Inspired Display Award

Hanniel Ndibmun

G04 Electrophoresis and Chromatography: Real Life Applications

> Cathy Wever Hamilton





Association for Iron & Steel Technology Northern Chapter Awards

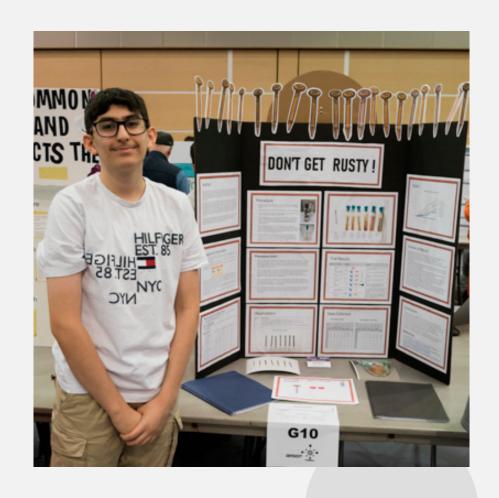


Association for Iron & Steel Technology Northern Chapter Award - Third

Rayan Mousa

G10 Don't Get Rusty!

Al-Falah Islamic School Oakville





Association for Iron & Steel Technology Northern Chapter Award - Second

William Xu

P13 Accessible microscopy! A cellphone microscope for high-resolution, large FOV, and high-speed imaging

Dundas Valley Secondary School
Dundas





Association for Iron & Steel Technology Northern Chapter Award - First

Alia Wahban

P03
Redefining the Landscape of Hydrogen Safety using Innovative Gasochromic Technology

Hillfield Strathallan College Hamilton





Bay Area Health Trust Scholarship / Paul Lakin Life Sciences Award

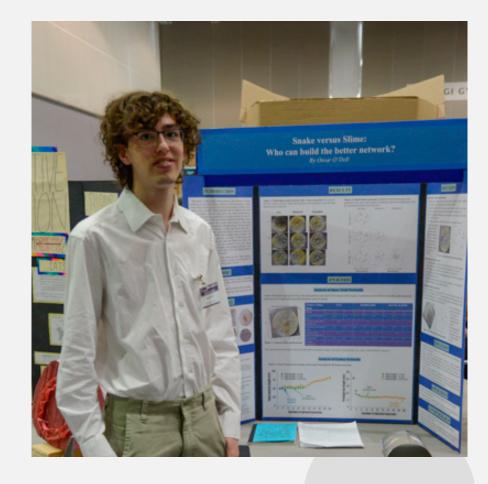


Bay Area Health Trust Scholarship, Paul Lakin Life Sciences Award

Oscar O'Dell

A19
Snake versus Slime: Who can build the better network?

King's Christian Collegiate Oakville





Dr. Laura Blew Social Sciences Awards

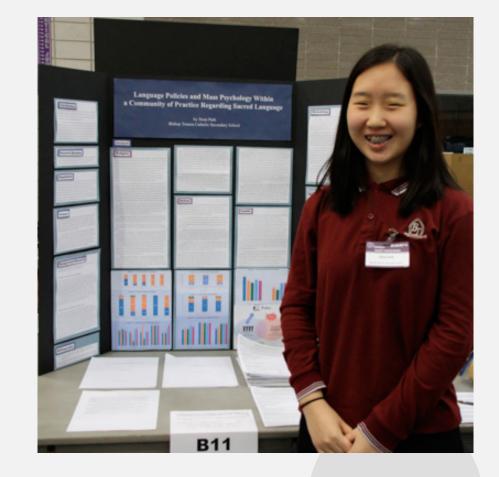


Dr. Laura Blew Social Sciences Award

Jieun Park

B11 Language Policies and Mass Psychology Within a Community of Practice Regarding Sacred Language

> Bishop Tonnos Secondary School Ancaster



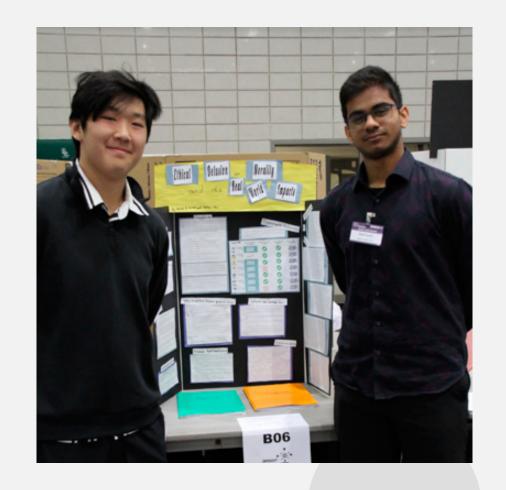


Dr. Laura Blew Social Sciences Award

Nitish Suresh & Nathan Hua

B06 Ethical Delusion on Morality and its Real World Impacts

> Aldershot High School Burlington





Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Awards



Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award

Anaum Farhan & Alishba Fayyaz

L15 Alumify

Rattlesnake Point Public School Milton





Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award

Kieran Blimkie

N16 Orebot Mk 1

Notre Dame Secondary School Burlington





Canadian Meteorological and Oceanographic Society Awards



Canadian Meteorological and Oceanographic Society (CMOS) Award - Second

Filip Veljkovic

L20 SODIS in Canada 2 - Works With Global Warming, too!

> Corpus Christi Secondary School Burlington





Canadian Meteorological and Oceanographic Society (CMOS) Award - First

Daksh Srivastava

L16
Modeling Sea Surface Salinity and Temperature
Impact on Phytoplankton & Whales: Canadian Atlantic

Pilgrim Wood Public School Oakville





Canadian Nuclear Society (Golden Horseshoe Branch) Awards

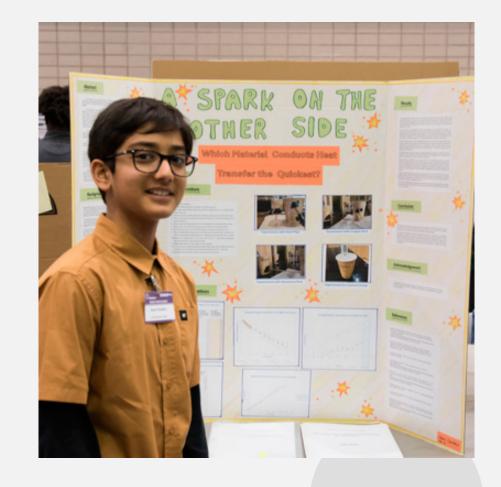


Canadian Nuclear Society (Golden Horseshoe Branch) Awards - Junior

Umar Chaudhry

F05 A SPARK ON THE OTHER SIDE: Which material conducts heat transfer the quickest?

> Al-Falah Islamic School Oakville





Canadian Nuclear Society (Golden Horseshoe Branch) Awards - Junior

Dithira Muthukumarana & Jared Smith

L13
CO2 Free Ethanol Powered Cars?

St. Matthew Hamilton



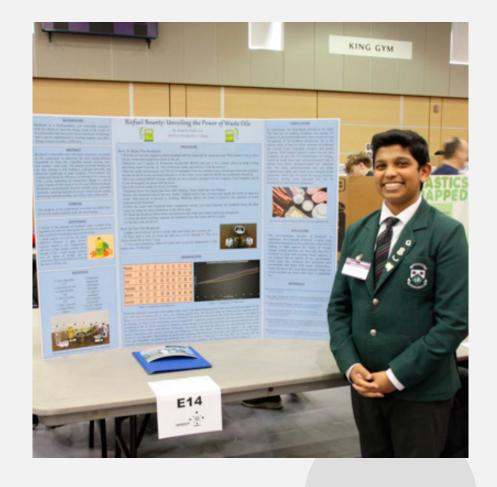


Canadian Nuclear Society (Golden Horseshoe Branch) Awards -Intermediate or Senior

Raahith Rajkumar

E14 Biofuel Bounty: Unveiling the Power of Waste Oils

> Hillfield Strathallan College Hamilton



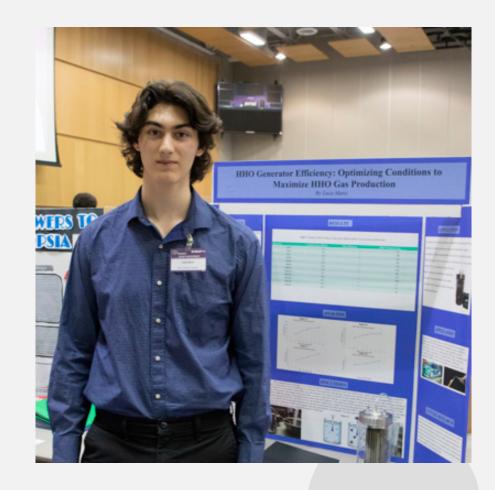


Canadian Nuclear Society (Golden Horseshoe Branch) Awards-Intermediate or Senior

Luca Maric

K05 HHO Generator Efficiency: Optimizing conditions to maximize HHO gas

> King's Christian Collegiate Oakville





Doris Casey and Gwen Nicolls Disability Solutions Awards



Doris Casey & Gwen Nicolls Disability Solutions Award

Shambhvi Dua

B14
Decoding Brainwaves: A Machine Learning Approach
to Seizure Prediction

White Oaks Secondary School Oakville



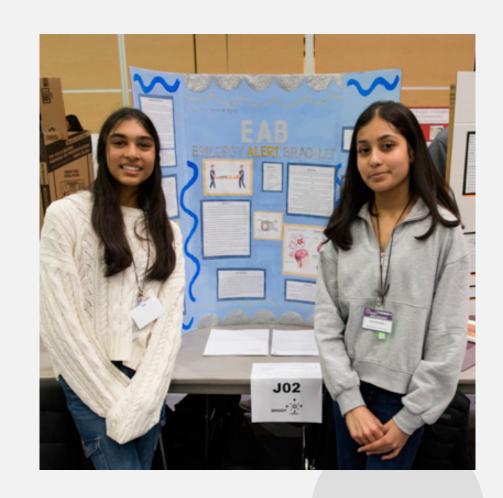


Doris Casey & Gwen Nicolls Disability Solutions Award

Nina Banerjee & Smira Belwalkar

J02 The E.A.B (Epilepsy Alert Bracelet)

John William Boich Public School Burlington





Chemical Institute of Canada - Hamilton Section Awards

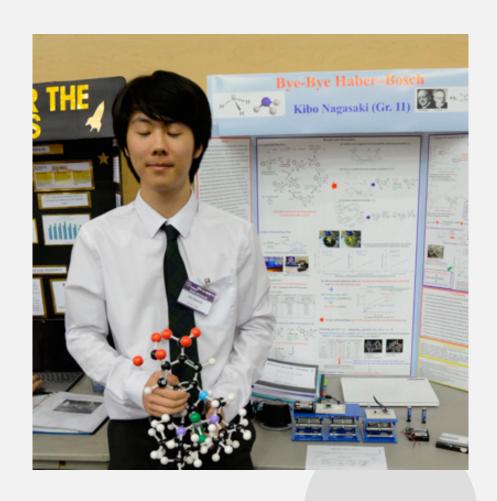


Chemical Institute of Canada (Hamilton Section) Award

Kibo Nagasaki

N10 Bye-Bye Haber–Bosch

> Mentor College Mississauga



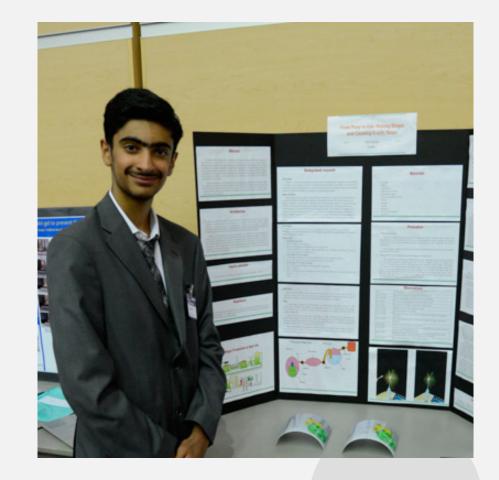


Chemical Institute of Canada (Hamilton Section) Award

Sahil Danda

N08
From Poop to Gas:Making Biogas and Cleaning it with
Water

W. H. Morden Public School Oakville



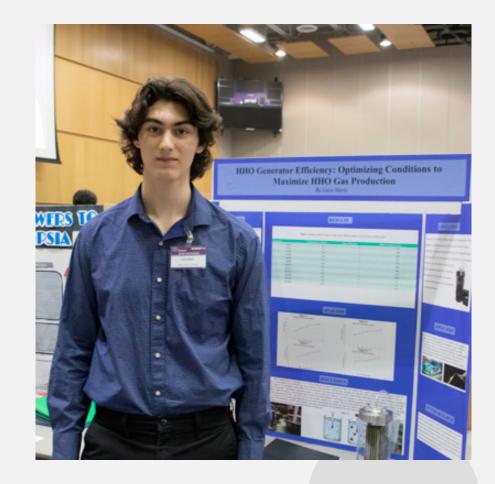


Chemical Institute of Canada (Hamilton Section) Award

Luca Maric

K05 HHO Generator Efficiency: Optimizing conditions to maximize HHO gas

> King's Christian Collegiate Oakville





Conservation Halton Awards



Conservation Halton Environmental Sciences Award

Irene Su & Glareen Javidi

A14 Optimal Watering Patterns for Sunflower Development

> Munn's Public School Oakville



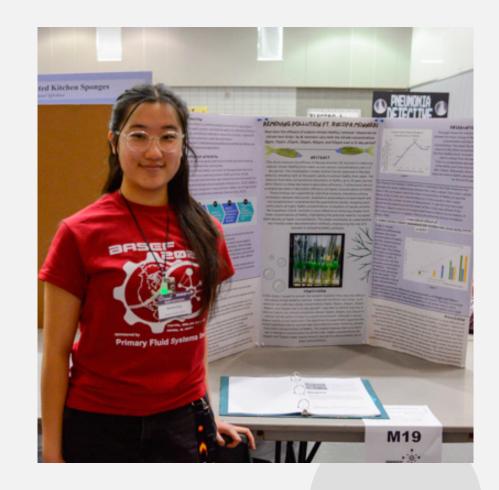


Conservation Halton Environmental Sciences Award

Bohmie Song

M19 Removing Pollution feat. Bacopa monnieri

> Westdale Secondary School Hamilton





Dillon Consulting Awards

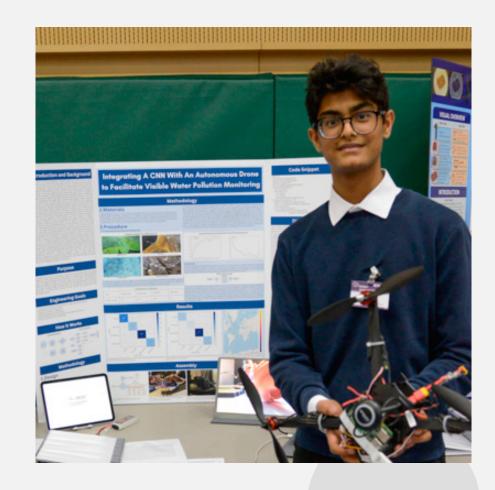


Dillon Consulting Science and Engineering Award

Anish Rathod

P10
Integrating A CNN With An Autonomous Drone To
Facilitate Visible Water Pollution Monitoring

Burlington Central High School Burlington



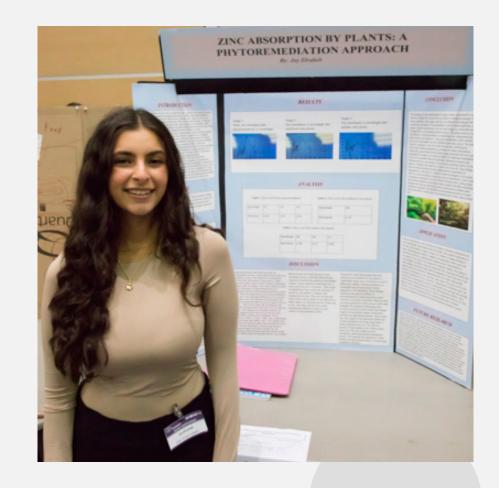


Dillon Consulting Biological Sciences Award

Joy Elraheb

L18 Zinc Absorption by Plants: A Phytoremediation Approach

> King's Christian Collegiate Oakville





Dr. M. Doyle Award

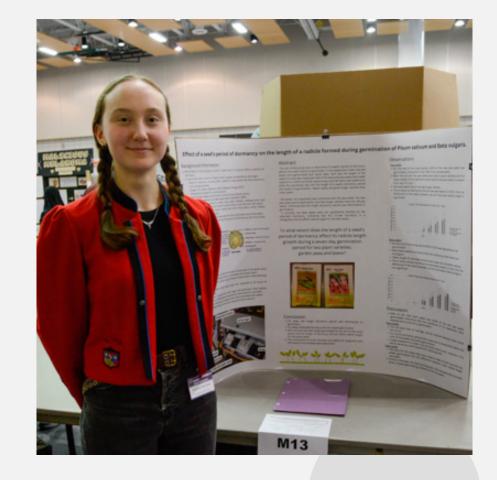


Dr. M. Doyle Biology Award

Artemisia Frolic-Smart

M13
Effect of a seed's period of dormancy on the length of a radicle formed during germination

Westdale Secondary School Hamilton





Environmental Inspiration Award

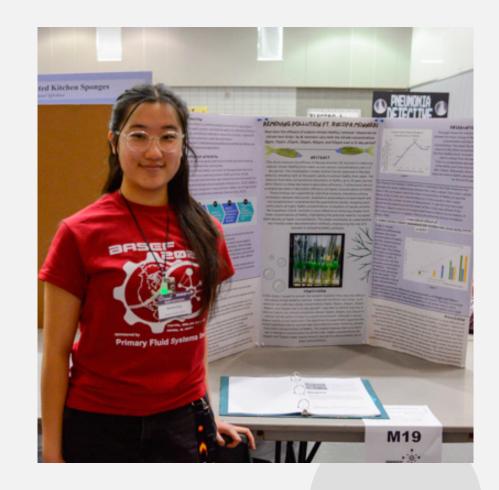


Environmental Inspiration Award

Bohmie Song

M19 Removing Pollution feat. Bacopa monnieri

> Westdale Secondary School Hamilton





Electrical Contractors Association of Niagara Hamilton Awards



Electrical Contractors Association of Niagara Hamilton Award

Obaida Abu dagga & Ahmed Saeed

G03 Homemade Tesla Coil

Ancaster Meadow Ancaster





Electrical Contractors Association of Niagara Hamilton Award

Gavin McKerracher

K01 EPIC (Escapement Piezoelectric Impact Converter)

> Rolling Meadows Public School Burlington





Farncombe Family Digestive Health Research Awards



Farncombe Family Digestive Health Research Award

Claire Marsh

B03
The Gluten Sensor: Detecting Gluten in Food Using
Artificial Intelligence and TinyML

M. M. Robinson High School Burlington



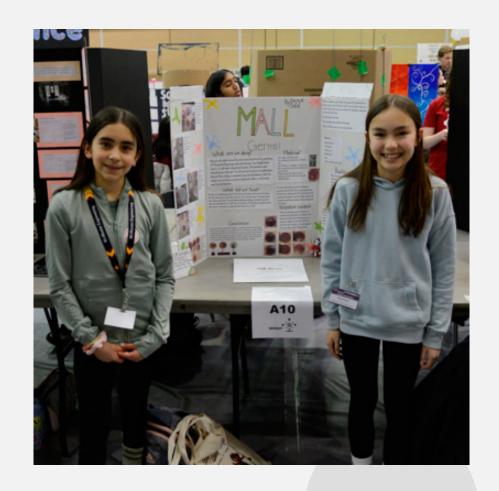


Farncombe Family Digestive Health Research Award

Sofia Mejia Perfiliev & Emily Berger

A10 Mall Bacteria

Charles R. Beaudoin Public School Burlington



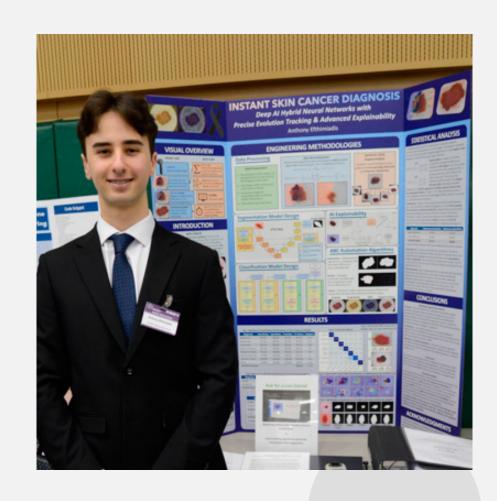


Farncombe Family Digestive Health Research Institute Grand Award

Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





Firestone Institute for Respiratory Health Award



Firestone Institute Respiratory Health Award

Kiera Mitchell

F09 Modelling Spread and Infection Risk for COVID-19 in Hallway Scenarios

> Delhi District Secondary School Delhi





Gowling WLG Innovation Awards

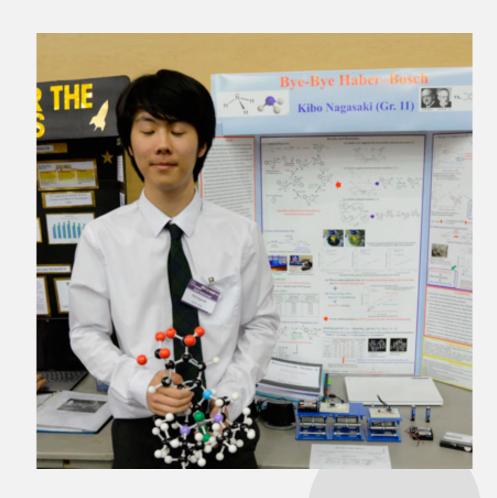


Gowlings Innovation Award -Honourable Mention

Kibo Nagasaki

N10 Bye-Bye Haber–Bosch

> Mentor College Mississauga



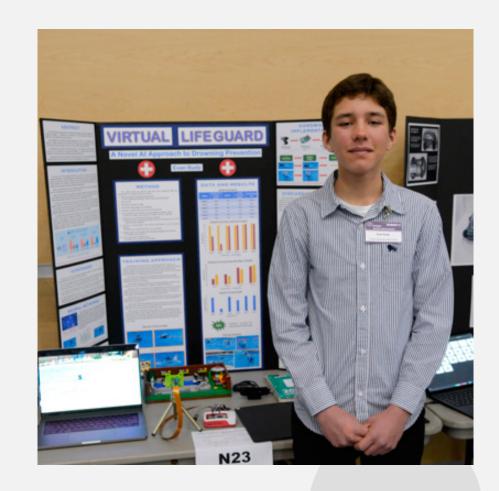


Gowling WLG Innovation Award - Runner-up

Evan Budz

N23 Virtual Lifeguard: A Novel Al Approach to Drowning Prevention

Charles R. Beaudoin Public School Burlington



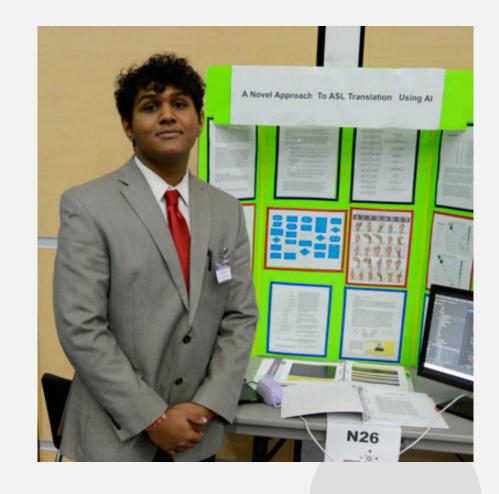


Gowling WLG Innovation Award - Grand Winner

Vedant Sheel

N26 A Novel Approach to ASL Translation Using AI

Waterdown District Secondary School Waterdown





Hamilton Academy of Dentistry Awards

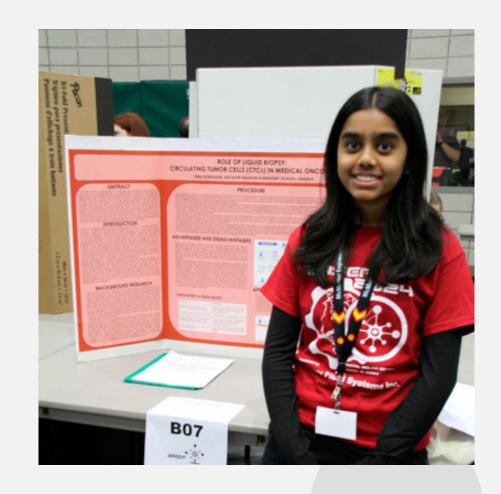


Hamilton Academy of Dentistry - Third

Hiba Sowdagar

B07 Role of Liquid Biopsy: Circulating Tumor Cells (CTCs) in Medical Oncology

> Ancaster Meadow Hamilton



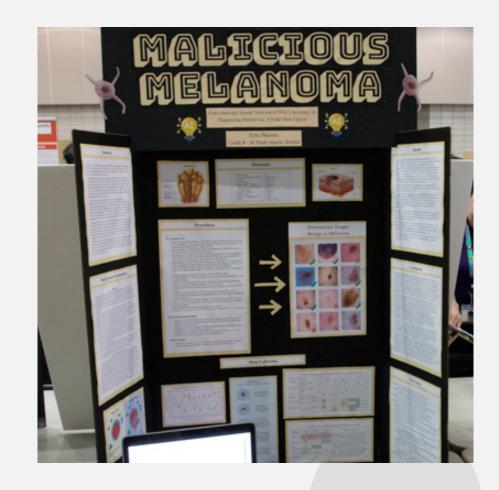


Hamilton Academy of Dentistry Award - Second

Zoha Waseem

K10
Malicious Melanoma: Convolutional Neural Network's
Accuracy in Diagnosing Malignant Melanoma

Al-Falah Islamic School Oakville



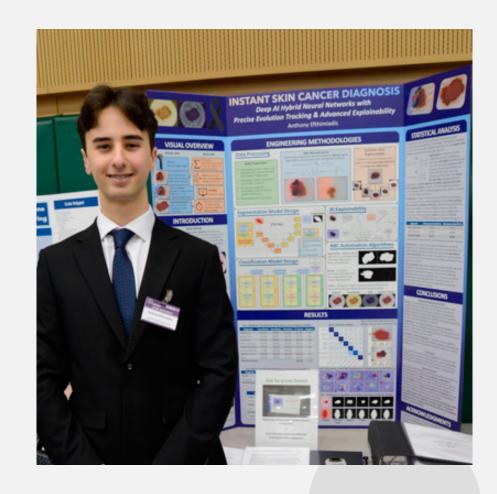


Hamilton Academy of Dentistry Award - First

Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





Hamilton Amateur Astronomers Awards

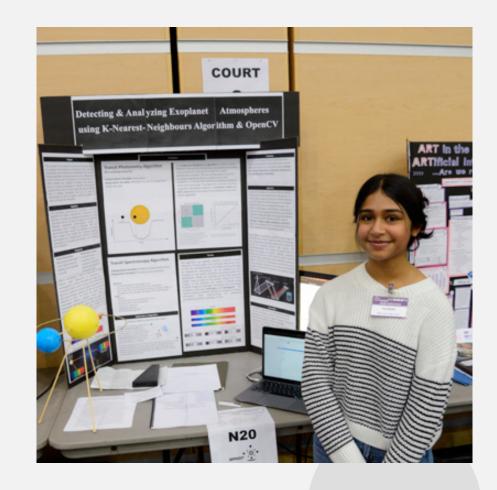


James A. Winger Award- Junior

Fiza Mehfil

N20 Detecting and Analyzing Exoplanet Atmospheres using K-Nearest-Neighbours Algorithm and OpenCV

Milton District High School
Milton





James A. Winger Award-- Senior

Brodi Ouwendyk

F11
Stopping Potentially Hazardous Objects in Space with High-Velocity Spacecraft

Delhi District Secondary School Delhi





Hamilton Association for the Advancement of Literature, Science & Art

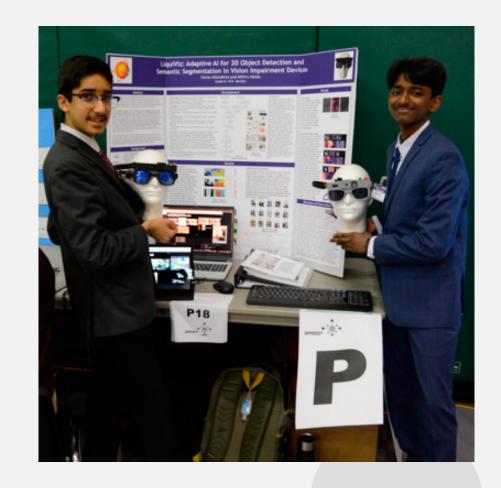


Hamilton Association da Vinci Award

Imran Allarakhia & Mithru Naidu

P18 LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

> W. H. Morden Public School Oakville





Hamilton Wentworth Occasional Teacher Awards



Hamilton Wentworth Occasional Teachers - Environment & Education Award

Katherine Prokipczuk

M14 Light Pollution

Ancaster Meadow Ancaster





Hamilton Wentworth Occasional Teacher - Healthy Lifestyles Award

Luca Piccoli & Gabriel Di Nicola

C14
Water Is Not Enough; Maintaining Electrolyte Balance
During Illness

Our Lady of Peace Stoney Creek





Hamilton Wentworth Occasional Teacher - Presentation & Aesthetics Award

Rachael Orphanos & Madelyn Stokes

A20 Destructive Digestion: Foreign Objects in our Pets Digestive Tract

Hawthorne Village Public School Milton





Harrison Family Chemistry Award

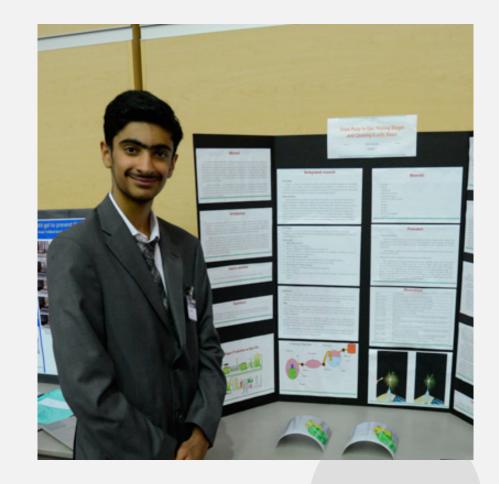


Harrison Family Chemistry Award

Sahil Danda

N08
From Poop to Gas:Making Biogas and Cleaning it with
Water

W. H. Morden Public School Oakville





Hillfield Strathallan College Awards of Excellence



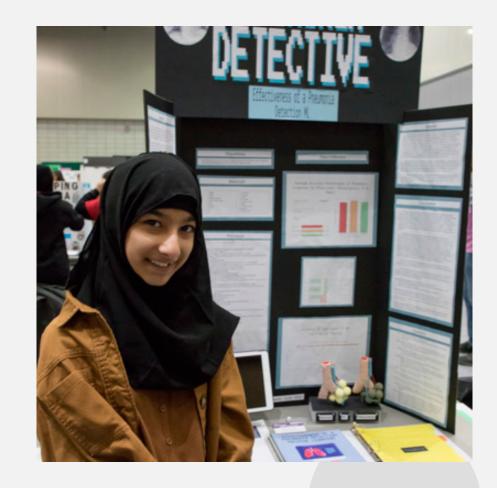
Hillfield Strathallan College Awards of Excellence - Life Sciences Award

Zoya Waseem

K20

Pneumonia Detective: The Effectiveness of a Pneumonia Detection ML VS. Medical Practitioners

Al-Falah Islamic School Oakville



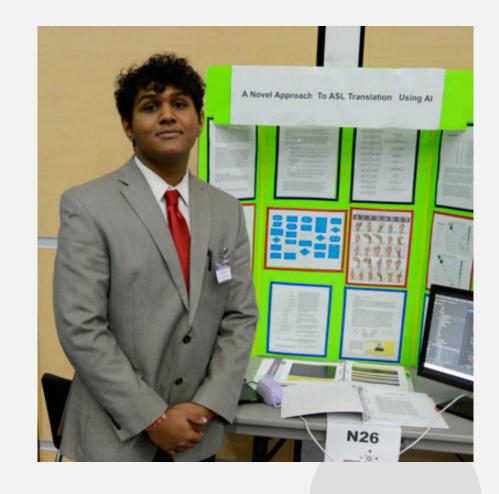


Hillfield Strathallan College Awards of Excellence - Scientific Process Award

Vedant Sheel

N26 A Novel Approach to ASL Translation Using Al

Waterdown District Secondary School Waterdown





Hillfield Strathallan College Awards of Excellence - Innovation Award

William Xu

P13 Accessible microscopy! A cellphone microscope for high-resolution, large FOV, and high-speed imaging

> Dundas Valley Secondary School Dundas





Hillfield Strathallan College Entrance Scholarship Award

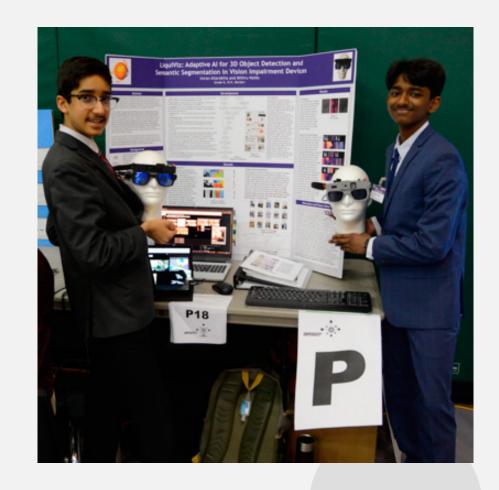


Hillfield Strathallan College Entrance Scholarship Award

Imran Allarakhia & Mithru Naidu

P18 LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

> W. H. Morden Public School Oakville





John W. Howard Materials Research Award



John W. Howard Materials Research Award

Zaid Kulasic

F07
Evaluation the Effectiveness of Insulation Materials

Al-Falah Islamic School Oakville





IEEE (Institute of Electrical and Electronic Engineers) Hamilton Section Awards



IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award

Nicholas Pacifici

H08 The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using Al

> St. Mary Secondary School Hamilton





IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award

William Xu

P13
Accessible microscopy! A cellphone microscope for high-resolution, large FOV, and high-speed imaging

Dundas Valley Secondary School Dundas





International Science & Engineering Affiliated Fair Awards

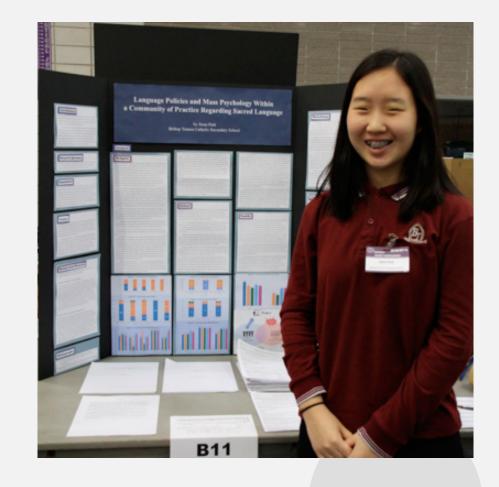


American Psychological Association Award

Jieun Park

B11 Language Policies and Mass Psychology Within a Community of Practice Regarding Sacred Language

> Bishop Tonnos Secondary School Ancaster



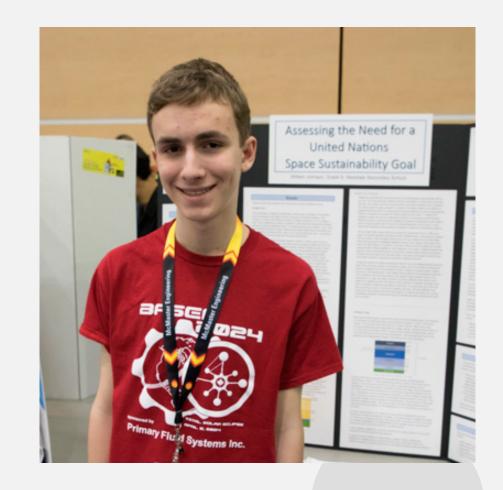


Ricoh USA, Inc. Award

William Johnson

L14 Assessing the Need for a United Nations' Space Sustainability Goal

Westdale Secondary School Hamilton



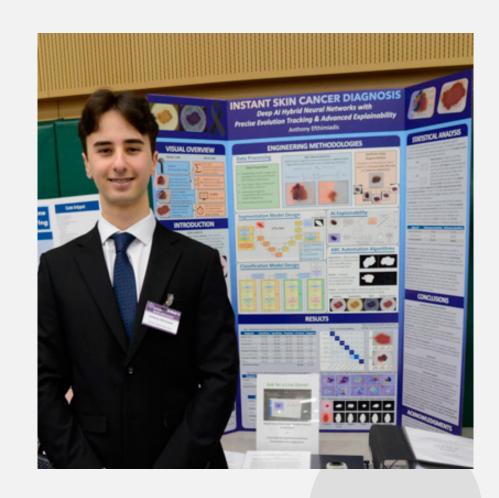


U.S. Agency for International Development (USAID) Award

Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





Yale Science & Engineering Association Award

Shangyi Zhang

J13
A Two-Modal Robot for Adaptability in Diverse
Environments With Rolling Locomotion and Walking
Gait

White Oaks Secondary School Oakville





Laurentian Chapter of SETAC Awards

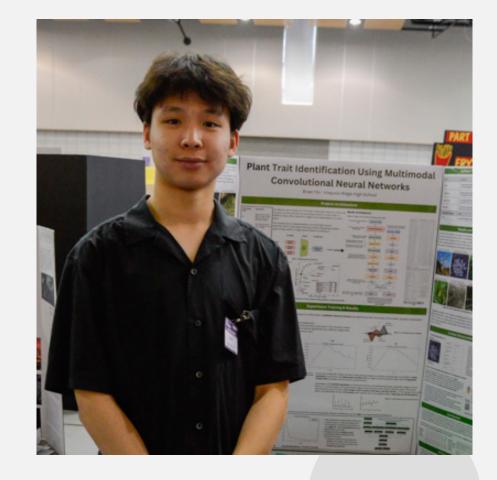


Laurentian Chapter of SETAC Award

Brian Yin

M15
Plant Trait Identification Using Convolutional Neural
Networks

Iroquois Ridge High School Oakville



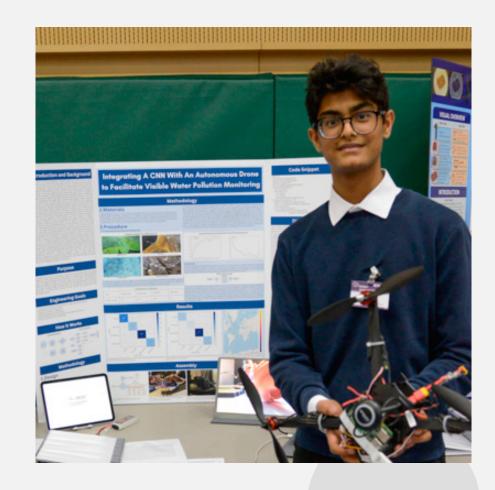


Laurentian Chapter of SETAC Award

Anish Rathod

P10
Integrating A CNN With An Autonomous Drone To
Facilitate Visible Water Pollution Monitoring

Burlington Central High School Burlington





Dr. Colin J.L. Lock Memorial Chemistry Award



Dr. Colin J.L. Lock Memorial Chemistry Award

Kai Truant

E19
True Blue: A Safer Way to kill Bacteria and Viruses with Light

Ancaster High Ancaster





Ola Lunyk-Child Memorial Health Awards



Ola Lunyk-Child Memorial Health Science Award - Third

Bahaa Al Deen Alsaadi & Zena Alsaadi

J12
Bits to Bedside: An Ingenious Exploration of Machine
Learning in Triage Assessments

Al-Falah Islamic School Oakville



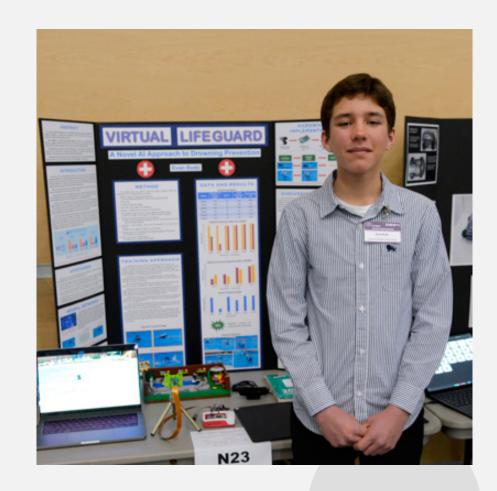


Ola Lunyk-Child Memorial Health Science Award - Second

Evan Budz

N23 Virtual Lifeguard: A Novel Al Approach to Drowning Prevention

Charles R. Beaudoin Public School Burlington



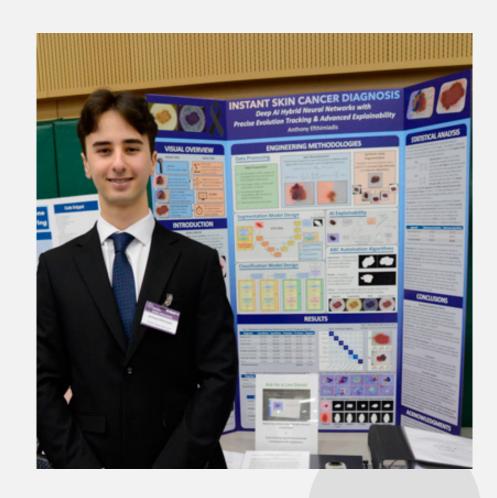


Ola Lunyk-Child Memorial Health Science Award - First

Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





Mahut-Brent Award for Young People in Science and Engineering



Mahut-Brent Award for Young People in Science and Engineering

Claire Marsh

B03
The Gluten Sensor: Detecting Gluten in Food Using
Artificial Intelligence and TinyML

M. M. Robinson High School Burlington





McMaster University Department of Chemical Engineering



McMaster Department of Chemical Engineering Award

Alia Wahban

P03
Redefining the Landscape of Hydrogen Safety using Innovative Gasochromic Technology

Hillfield Strathallan College Hamilton





McMaster University Department of Chemistry and Chemical Biology Award

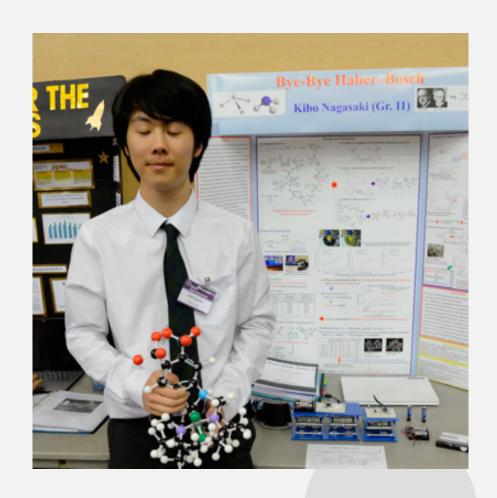


McMaster University Department of Chemistry and Chemical Biology Award

Kibo Nagasaki

N10 Bye-Bye Haber–Bosch

> Mentor College Mississauga





McMaster University Faculty of Engineering Entrance Awards

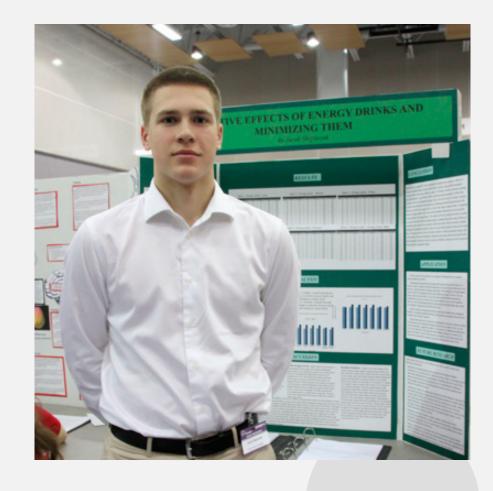


McMaster University Faculty of Engineering Entrance Award

Jacob Olejniczak

C17 Negative Effects of Energy Drinks and Minimizing Them

> King's Christian Collegiate Oakville



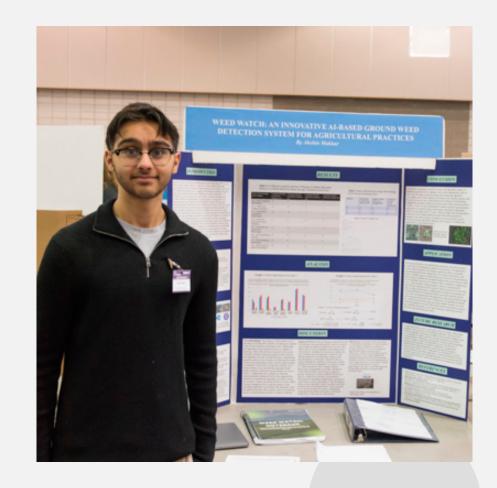


McMaster University Faculty of Engineering Entrance Award

Akshin Makkar

H12 Weed-Watch: an Innovative AI-Based Ground Weed Detection System for Agricultural Practices

> King's Christian Collegiate Oakville





McMaster University Faculty of Engineering Entrance Award

Lily Song

P16
Talk to the Hand

North Park Collegiate and Vocational School Brantford





McMaster University MGD Institute for Infectious Disease Research Awards

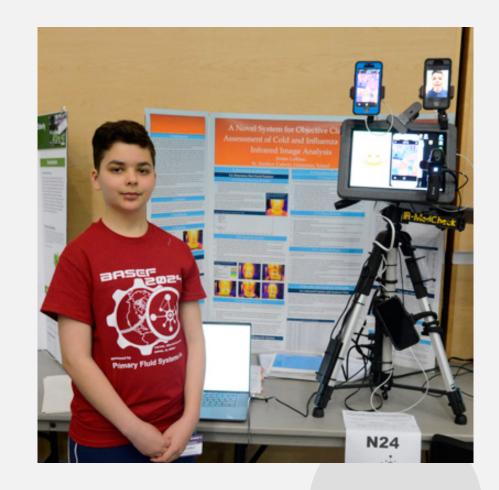


Michael G. DeGroote Institute for Infectious Disease Research Award

Jordan LeBlanc

N24
A Novel System for Objective Clinical Assessment of Cold and Influenza Using Infrared Image Analysis

St. Matthew Elementary School Oakville





Michael G. DeGroote Institute for Infectious Disease Research Award

Zoya Waseem

K20

Pneumonia Detective: The Effectiveness of a Pneumonia Detection ML VS. Medical Practitioners

Al-Falah Islamic School Oakville



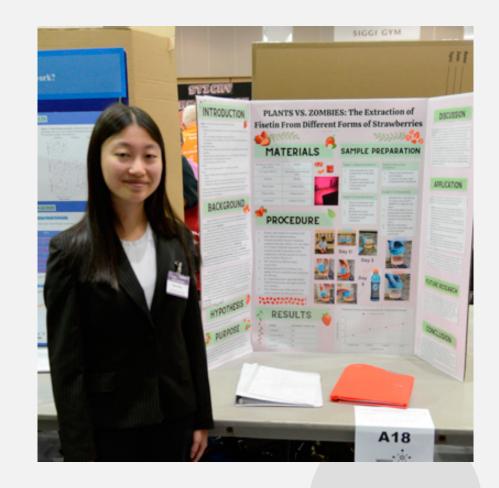


Michael G. DeGroote Institute for Infectious Disease Research Grand Award

Season Wang

A18
Plants Vs. Zombies: The Extraction of Fisetin from Different Forms of Strawberries

Oakville Trafalgar High School Oakville





McMaster University School of Earth, Environment and Society

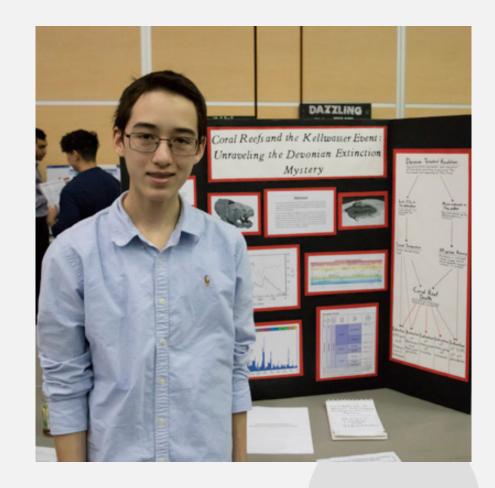


Earth and Environmental Sciences Award

Tristan Barkman

L11
Coral Reefs and the Kellwasser Event: Unraveling the
Devonian Extinction Mystery

Home Schooling
Brantford





Geography Award

Daksh Srivastava

L16 Modeling Sea Surface Salinity and Temperature Impact on Phytoplankton & Whales: Canadian Atlantic

> Pilgrim Wood Public School Oakville





Mechanical Contractors Association Hamilton Niagara Award



Mechanical Contractors Association Hamilton Niagara Award

Shangyi Zhang

J13
A Two-Modal Robot for Adaptability in Diverse
Environments With Rolling Locomotion and Walking
Gait

White Oaks Secondary School Oakville





Mohawk College Building & Construction Sciences Awards

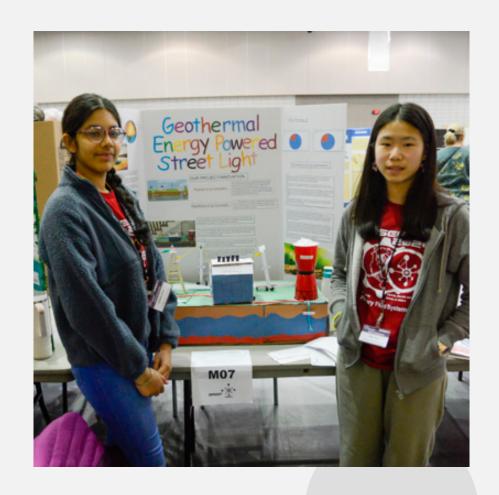


Mohawk College Building & Construction Sciences Awards - Civil Engineering

Rishibha Arora & Nina Chen

M07 Geothermal Energy Powered Street Light

John William Boich Public School Burlington





Mohawk College Building & Construction Sciences Awards - Transportation Engineering

Dithira Muthukumarana & Jared Smith

L13
CO2 Free Ethanol Powered Cars?

St. Matthew Hamilton





Mohawk College Building & Construction Sciences Awards - Building Sciences

Zaid Kulasic

F07
Evaluation the Effectiveness of Insulation Materials

Al-Falah Islamic School Oakville





Mohawk College Electrical Engineering Technology Awards

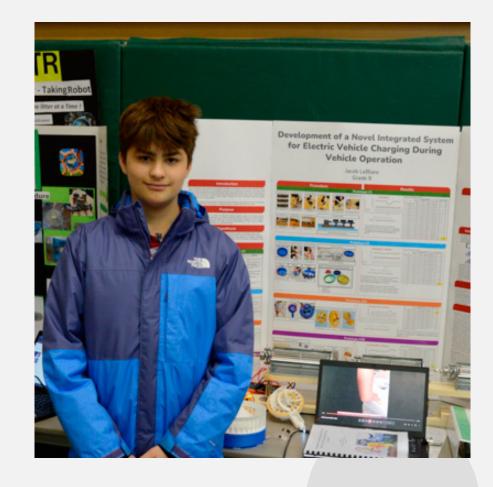


Mohawk College Electrotechnology -Computer Engineering Technology Award

Jacob LeBlanc

P02
Development of a Novel Integrated System for Electric
Vehicle Charging During Vehicle Operation

Abbey Park High School Oakville





Mohawk College Electrotechnology -Electrical Engineering Award

Cordelia Simmons

P17 Hydroplaning Detection and Prevention Using an Al Neural Network

North Park Collegiate and Vocational School Brantford



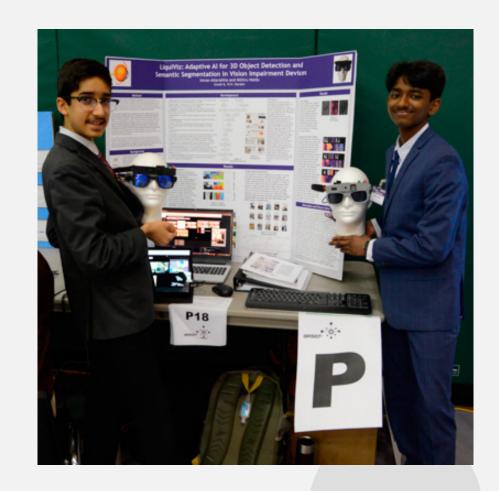


Mohawk College Electrotechnology -Energy Systems Award

Imran Allarakhia & Mithru Naidu

P18 LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

> W. H. Morden Public School Oakville





Mohawk College Mathematics Awards



Mohawk College Mathematics Awards - Junior

Jonathan Vidican

J15 Chaos, break the wave!

St. Mary Elementary School Oakville



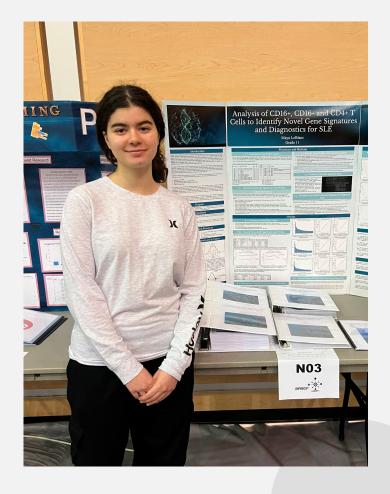


Mohawk College Mathematics Awards - Senior

Maya LeBlanc

N03
Analysis of CD16+, CD16- and CD4+ T Cells to Identify Novel Gene Signatures and Diagnostics for SLE

Abbey Park High School Oakville





Mohawk College Computer Science & Information Technology Excellence Awards

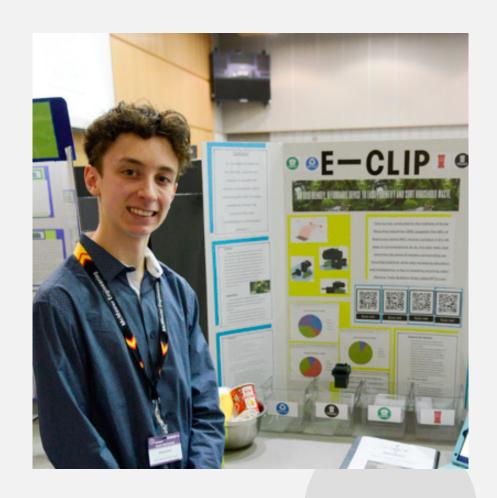


Mohawk College Computer Science & Information Technology Excellence Award

Ethan Horn

M03 E-Clip

Rolling Meadows Public School Burlington





Mohawk College Computer Science & Information Technology Excellence Award

Leah Dear

P04 Quick Scribe

Rolling Meadows Public School Burlington





Mohawk College Computer Science & Information Technology Excellence Award

Aya Gharbia

G17
The Wi-Fi dilemma: Who Is Blocking My Signal? The effect of different building materials on Wi-Fi

Al-Falah Islamic School Oakville





Nelson Steel Awards

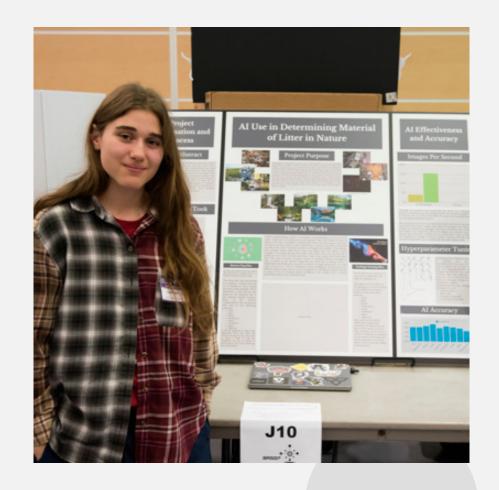


Nelson Steel Award

Evelyn Peart

J10 Al Use In Determining Material Of Litter In Nature

> Tiger Jeet Singh Public School Milton





Nelson Steel Award

Dithira Muthukumarana & Jared Smith

L13
CO2 Free Ethanol Powered Cars?

St. Matthew Hamilton





New Health Scientist Award

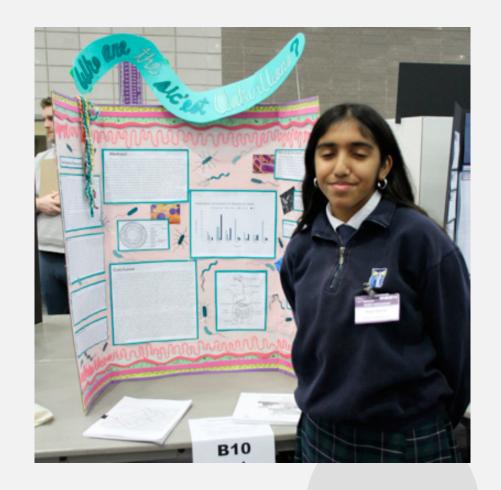


New Health Scientist Award

Avaya Sharma

B10 Who Are The Sic'est Oakvillians

> Oakville Christian School Oakville





Nikola Tesla Innovation Awards

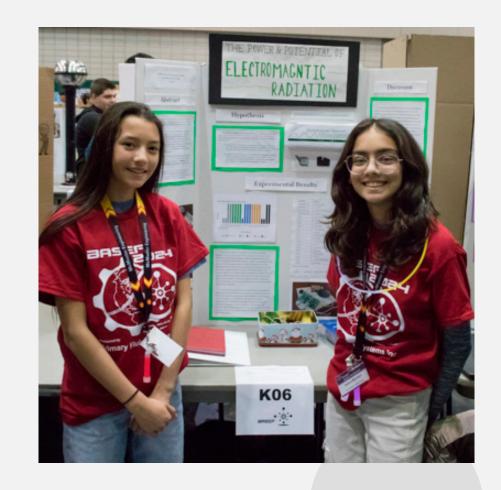


Nikola Tesla Innovation Award -Bronze

Emmalina Abou-Assaleh & Sahana Merchant

K06
The Power and Potential of Electromagnetic Radiation

W. H. Morden Public School Oakville





Nikola Tesla Innovation Award - Silver

Jonathan Vidican

J15 Chaos, break the wave!

St. Mary Elementary School Oakville





Nikola Tesla Innovation Award - Gold

Obaida Abu dagga & Ahmed Saeed

G03 Homemade Tesla Coil

Ancaster Meadow Ancaster





Procor Engineering Awards

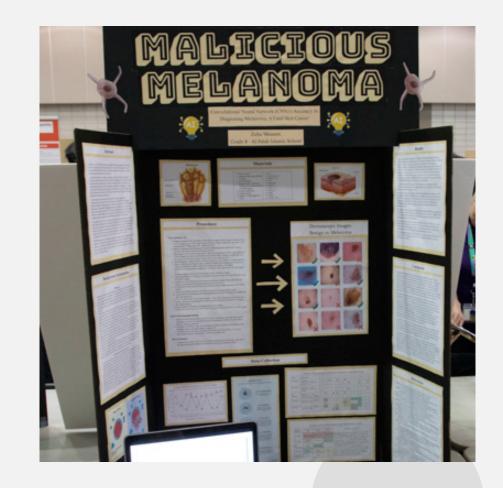


Procor Engineering Award - Junior

Zoha Waseem

K10
Malicious Melanoma: Convolutional Neural Network's
Accuracy in Diagnosing Malignant Melanoma

Al-Falah Islamic School Oakville



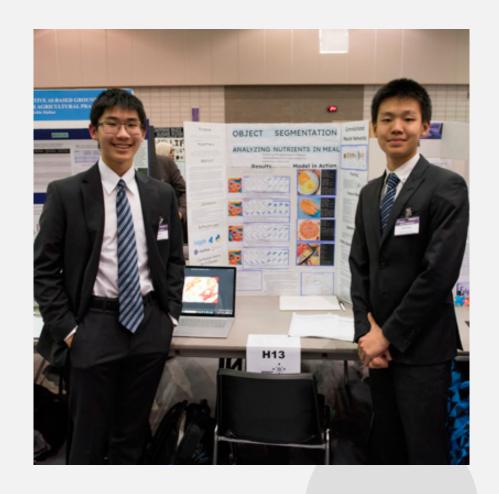


Procor Engineering Award - Intermediate

Daniel Zhu & Cody Zhang

H13
Using Object Segmentation to Analyze Nutrient
Content of Meals

Abbey Park High School Oakville





Procor Engineering Award - Senior

Shangyi Zhang

J13
A Two-Modal Robot for Adaptability in Diverse
Environments With Rolling Locomotion and Walking
Gait

White Oaks Secondary School Oakville





Rotary Club of Hamilton Stoney Creek Awards



Rotary Club of Hamilton Stoney Creek Award - Third

Luca Piccoli & Gabriel Di Nicola

C14
Water Is Not Enough; Maintaining Electrolyte Balance
During Illness

Our Lady of Peace Stoney Creek



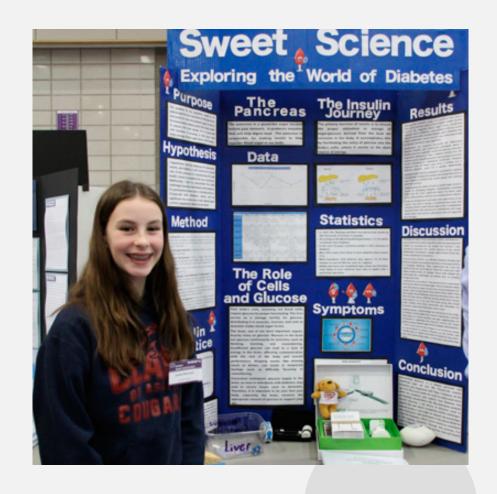


Rotary Club of Hamilton Stoney Creek Award - Second

Lauren Marrazzo

B12 Sweet Science: Exploring the World of Diabetes

> St. Clare of Assisi Stoney Creek





Rotary Club of Hamilton Stoney Creek Award - First

Hailey Betty

L04 Bio Breakdown

Cathy Wever Hamilton





Royal Botanical Gardens Award

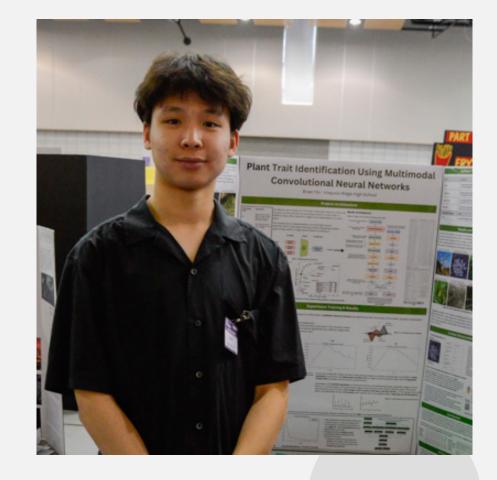


Royal Botanical Gardens Award

Brian Yin

M15
Plant Trait Identification Using Convolutional Neural
Networks

Iroquois Ridge High School Oakville





Sanofi Biogenius Canada Award

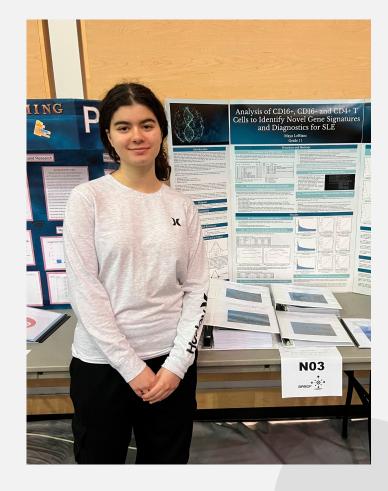


Sanofi Biogenius Canada Award

Maya LeBlanc

N03
Analysis of CD16+, CD16- and CD4+ T Cells to
Identify Novel Gene Signatures and Diagnostics for
SLE

Abbey Park High School Oakville





Dr. Nicola Simmons Award in Cognition Studies

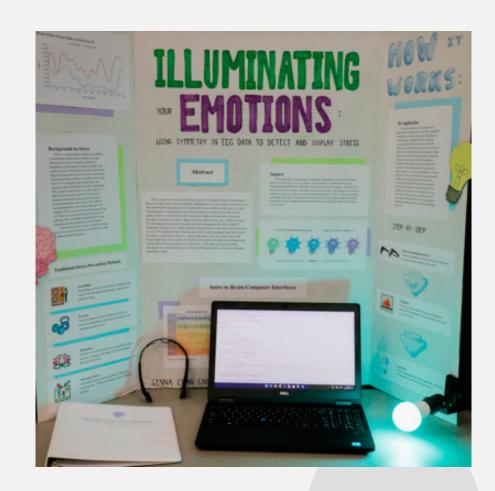


Dr. Nicola Simmons Award in Cognition Studies

Senna Chan Carusone

P15
Illuminating Your Emotions: Using Symmetry in Electroencephalogram Data to Detect and Display Stress Levels

Burlington Central High School Burlington





Society of Tribologists & Lubrication Engineers - Hamilton Section Awards

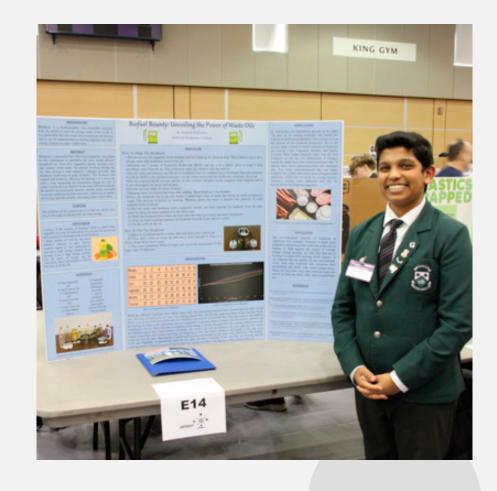


STLE Tribology/Friction Reduction Award

Raahith Rajkumar

E14
Biofuel Bounty: Unveiling the Power of Waste Oils

Hillfield Strathallan College Hamilton





STLE Tribology/Friction Reduction Award

Rayan Mousa

G10 Don't Get Rusty!

Al-Falah Islamic School Oakville





Talkit.ca Computer Engineering Awards



Talkit.ca Computer Engineering Award - Second

Will Thomas

J14 From Concept to Code

> St. Augustine Dundas





Talkit.ca Computer Engineering Award - First

Bonnie Luo

P05 FlameWatch: A Real-Time TensorFlow and Edge TPU Powered Home Defense System

White Oaks Secondary School Oakville





University of Ottawa Admission Scholarship

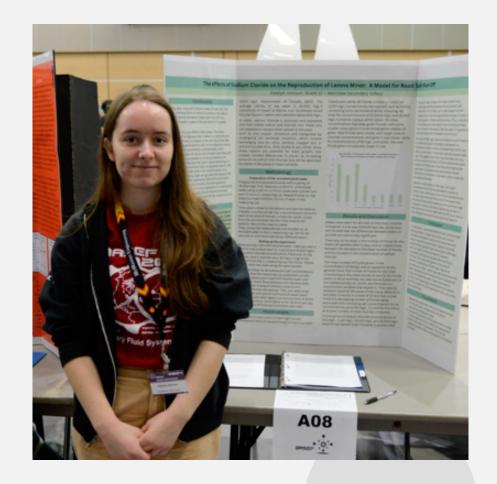


University of Ottawa Admission Scholarship Award

Katelyn Johnson

A08
The Effects of Sodium Chloride on the Reproduction of Lemna Minor: A Model for Road Salt Run-Off

Westdale Secondary School Hamilton





Venture Academy at McMaster University Awards



Venture Academy Scholarship

Alena Morales & Kayla Schubert

B16 Older than Osmosis

Rolling Meadows Public School Burlington





Water Environment Association of Ontario Award

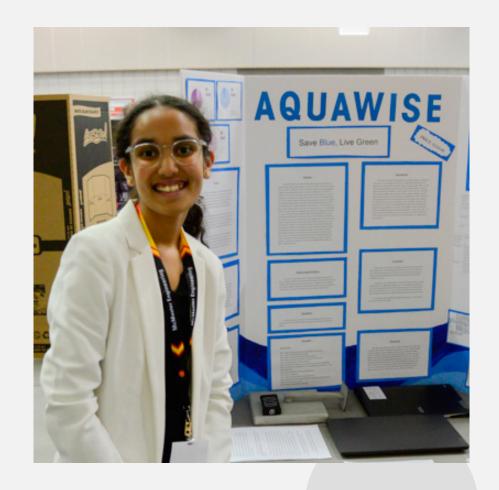


Water Environment Association of Ontario Award

Tiara Jain

M10 AquaWise

John William Boich Public School Burlington



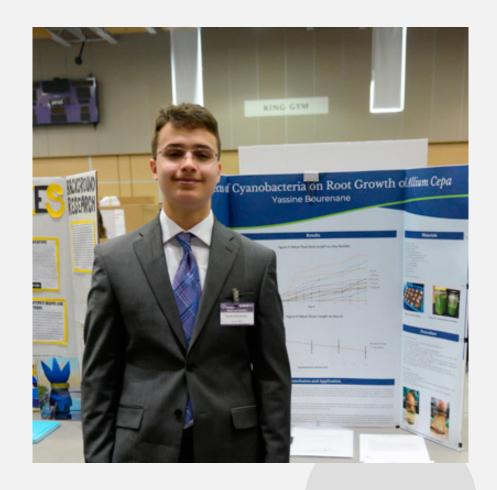




Yassine Bourenane

A03 The Effects of Cyanobacteria on Root Growth of Allium Cepa

> Ancaster High Ancaster

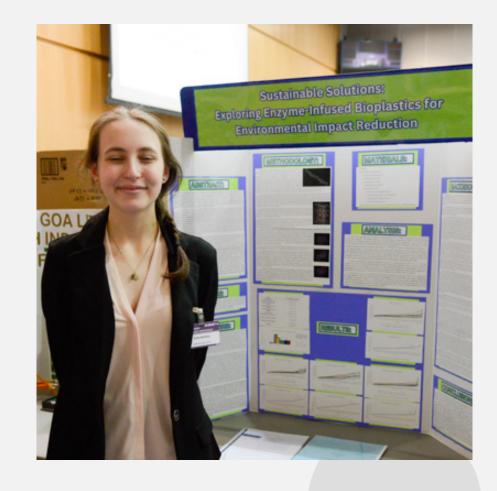




Katie Barbera

M02 Sustainable Solutions: Exploring Enzyme-Infused Bioplastics for Environmental Impact Reduction

> Cathedral High School Hamilton

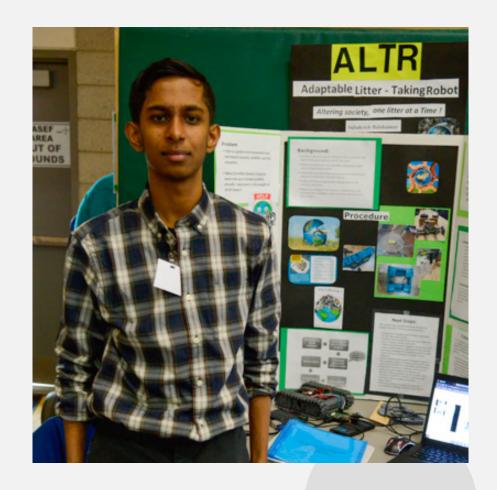




Subakrish Balakumar

P01 A.L.T.R. 'Altering society, one litter at a time'

> Aldershot High School Burlington





Jonathan Vidican

J15 Chaos, break the wave!

St. Mary Elementary School Oakville





Navraj Patial & Mohid Khan

J11 Harnessing the power of Peizoelectricity for Sustainable Energy

Assumption College School Brantford





Sahith Rajkumar

E15
Herbal Heroes: Unveiling the Antibacterial Potential of Ayurvedic Medications Against Staphylococcus

Hillfield Strathallan College Hamilton

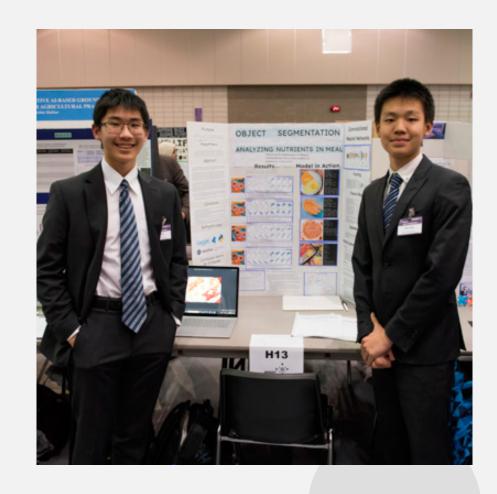




Daniel Zhu & Cody Zhang

H13 Using Object Segmentation to Analyze Nutrient Content of Meals

> Abbey Park High School Oakville





Maria Polyanska

H15
Extending range of VHF/UHF transceivers by improving antenna efficiency for emergency communications

Forest Trail Public School Oakville

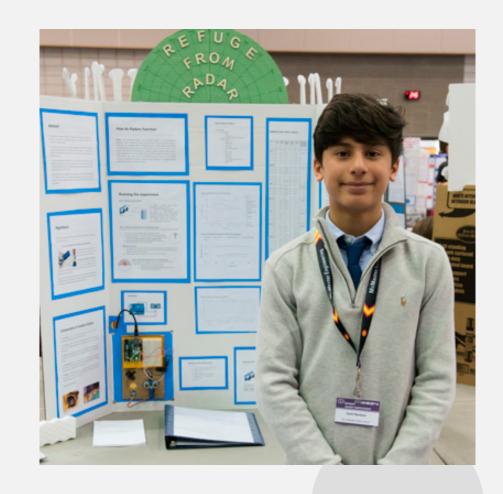




Sami Nastase

H10 Refuge from Radars

W. H. Morden Public School Oakville

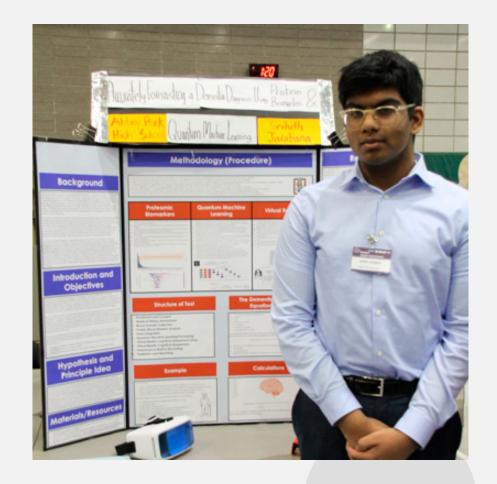




Srihith Jarabana

B13
Accurately Forecasting a Dementia Diagnosis Using
Protein Biomarkers and Quantum Machine Learning

Abbey Park High School Oakville





Ruofei Wu & Jaylan Tayal

N18 GreenHound - Your Personal Litter Tracker For a Greener Future

> John William Boich Public School Burlington





Shambhvi Dua

B14
Decoding Brainwaves: A Machine Learning Approach
to Seizure Prediction

White Oaks Secondary School Oakville



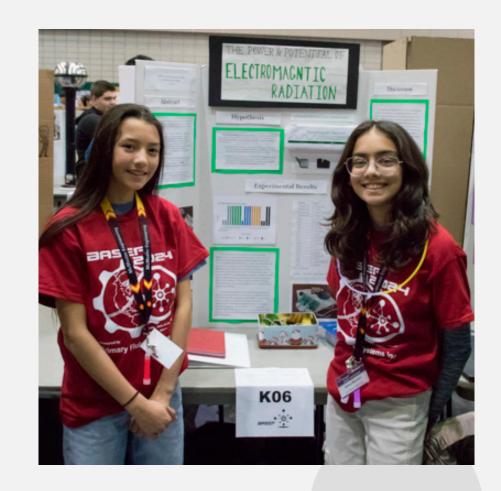


BASEF Inspiration Student Award

Emmalina Abou-Assaleh & Sahana Merchant

K06
The Power and Potential of Electromagnetic Radiation

W. H. Morden Public School Oakville





BASEF Inspiration Student Award

Arya De Souza & Emma Su

A05
Back to the Water - Creating 3D Printed Prosthetics for Painted Turtles

W. H. Morden Public School Oakville





BASEF Inspiration Teacher Awards

Recognizing Teachers New to BASEF

\$500 for use in the teacher's classroom



Ijial Syed Blyth Academy

Lenora Sawyer Delhi District Secondary School (GEDSB)

Paul Cushing Holy Trinity Secondary School (HCDSB)

Gregory Kay Rattlesnake Point Public School (HDSB)









Merit Awards





Merit Awards

Sponsored by:



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Award of Excellence Tuition Scholarships of \$1000



Sheridan Get Creative









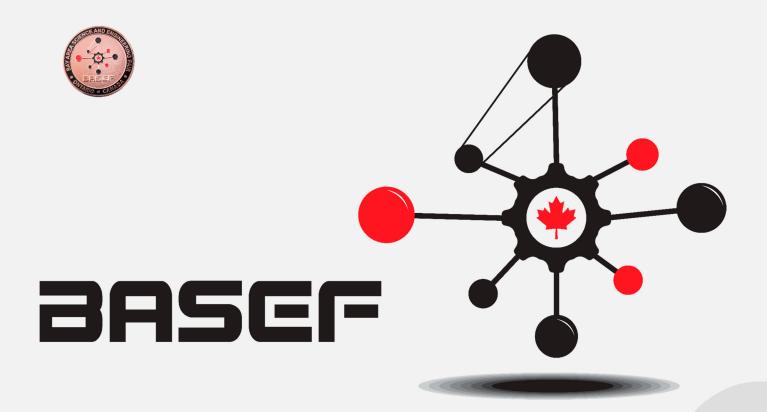


ArcelorMittal





Bronze Merit Awards









Lily Liaghati

A04 Busier Bees: Increasing Productivity in Bees

> Munn's Public School Oakville









Clare Castelli & Simon Castelli

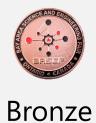
A06 Germs at School

St. Augustine Dundas





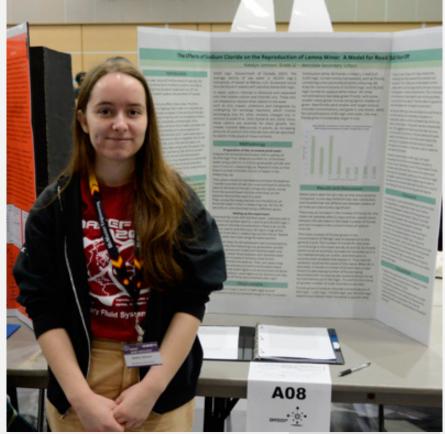




Katelyn Johnson

A08
The Effects of Sodium Chloride on the Reproduction of Lemna Minor: A Model for Road Salt Run-Off

Westdale Secondary School Hamilton









Sofia Mejia Perfiliev & Emily Berger

A10 Mall Bacteria

Charles R. Beaudoin Public School Burlington









Calla Alden

A11 Canine Intelligence

Ancaster Meadow Ancaster









Season Wang

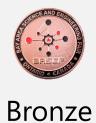
A18
Plants Vs. Zombies: The Extraction of Fisetin from Different Forms of Strawberries

Oakville Trafalgar High School Oakville





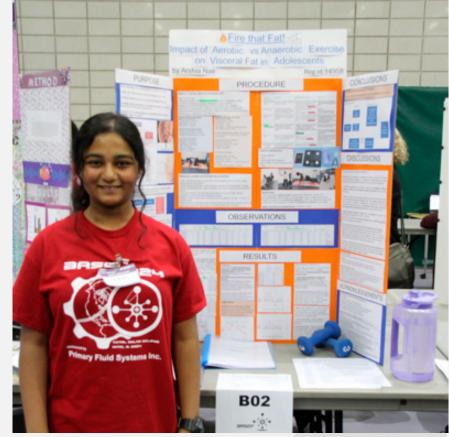




Arshia Nair

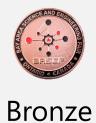
B02
Fire that Fat! : Impact of Aerobic vs Anaerobic Exercise
on Visceral Fat in Adolescents

Tiger Jeet Singh Public School Milton









Claire Marsh

B03
The Gluten Sensor: Detecting Gluten in Food Using
Artificial Intelligence and TinyML

M. M. Robinson High School Burlington





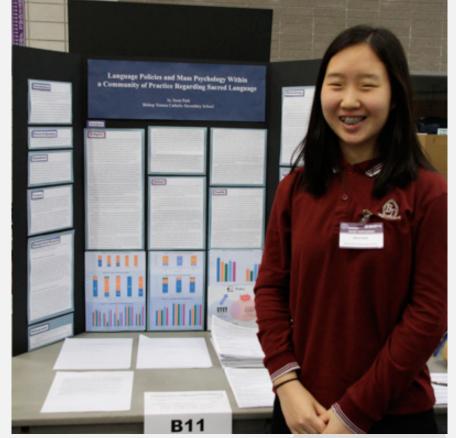




Jieun Park

B11 Language Policies and Mass Psychology Within a Community of Practice Regarding Sacred Language

> Bishop Tonnos Secondary School Ancaster





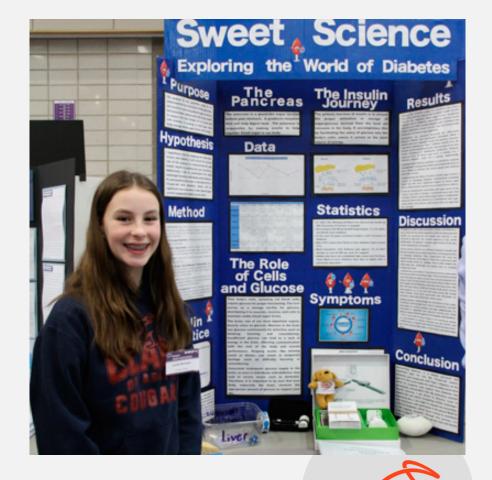




Lauren Marrazzo

B12 Sweet Science: Exploring the World of Diabetes

> St. Clare of Assisi Stoney Creek



ArcelorMittal

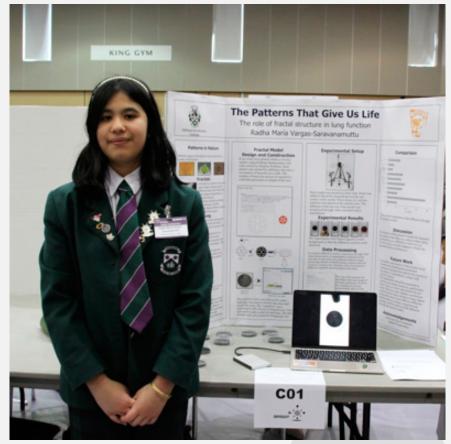




Radha Maria Vargas-Saravanamuttu

C01
The Patterns that Give Us Life: The Role of Fractal
Structure in Lung Function

Hillfield Strathallan College Mount Hope









Luca Piccoli & Gabriel Di Nicola

C14
Water Is Not Enough; Maintaining Electrolyte Balance
During Illness

Our Lady of Peace Stoney Creek





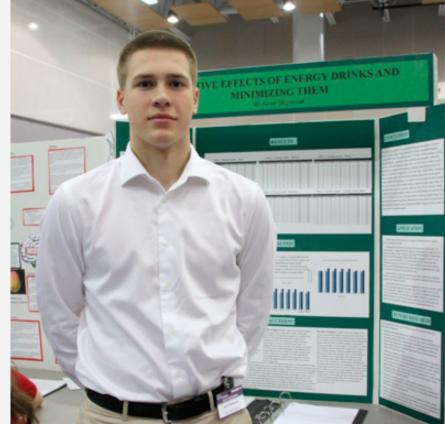




Jacob Olejniczak

C17 Negative Effects of Energy Drinks and Minimizing Them

> King's Christian Collegiate Oakville





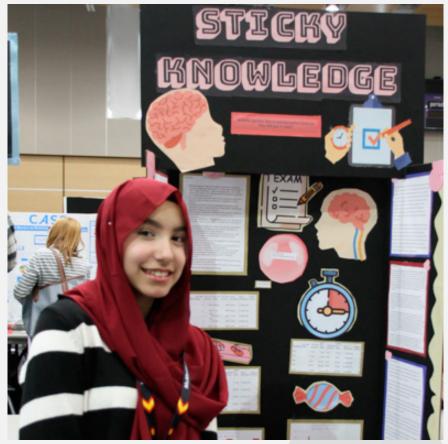




Sofia Bhatti

C19 Sticky Knowledge

Al-Falah Islamic School Oakville





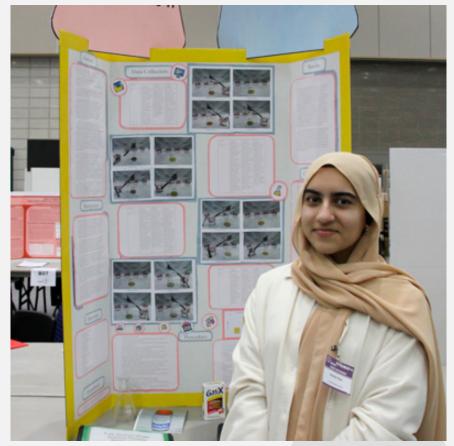




Wardah Khan

D08
Battle of the Stomach: Antacids vs Acid

Al-Falah Islamic School Oakville









Abiha Faisal

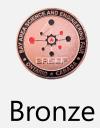
D11 Caffeine Buzz and Sugar Rush: Exploring the Night's Hush

Rattlesnake Point Public School Milton





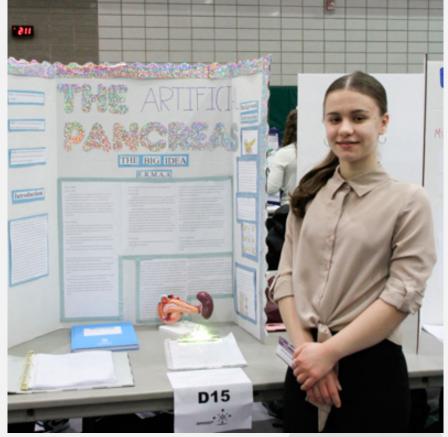




Weronika Szymala

D15
The Artificial Pancreas

Bishop Ryan Secondary School Hamilton





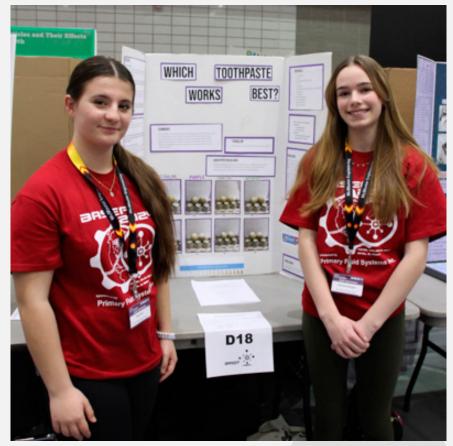




Vlera Cani & Charlotte Burgess

D18 Which toothpaste works best?

W. H. Morden Public School Oakville









Zina Akwiwu

E01
Are Fingerprint Patterns Inherited?

St. Thomas the Apostle (Waterdown) Waterdown





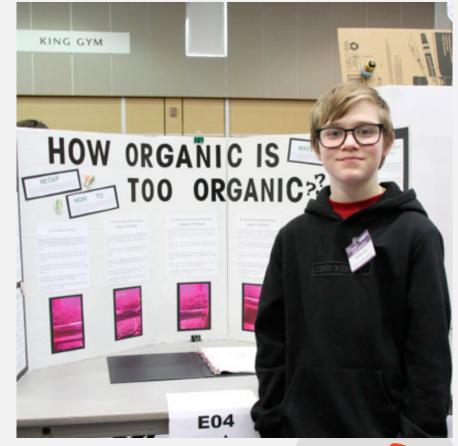




Nicholas Hart

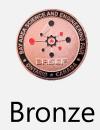
E04
How Organic is Too Organic???

Charles R. Beaudoin Public School Burlington









Andrew Lotfi & Nevin Patel

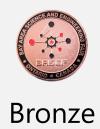
E09 Green Clean

Oakville Christian School Oakville









Prathamesh Perlawar

E10 Green Solutions: Transforming Food Waste into Bioplastic

White Oaks Secondary School Oakville





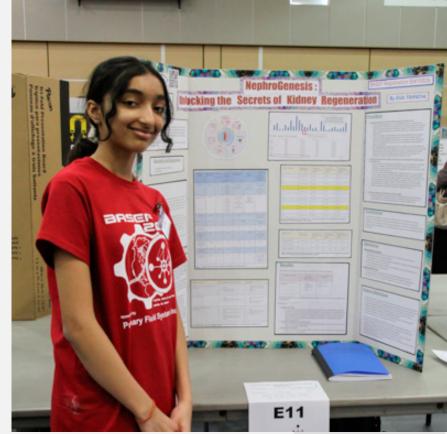




Eva Tripathi

E11 NephroGenesis: Unlocking the Secrets of Kidney Regeneration

> Elsie Macgill Secondary School Milton





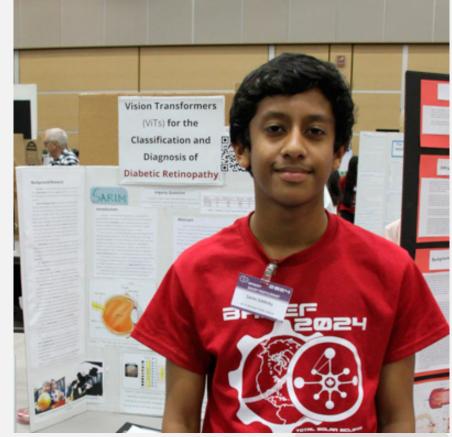




Sarim Siddicky

E18
Vision Transformers (ViTs) for the Diagnosis of Diabetic Retinopathy

W. H. Morden Public School Oakville









Kai Truant

E19
True Blue: A Safer Way to kill Bacteria and Viruses with Light

Ancaster High Ancaster









Brandon Lai

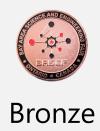
F03 Electrifying Objects

Oakville Christian School Oakville





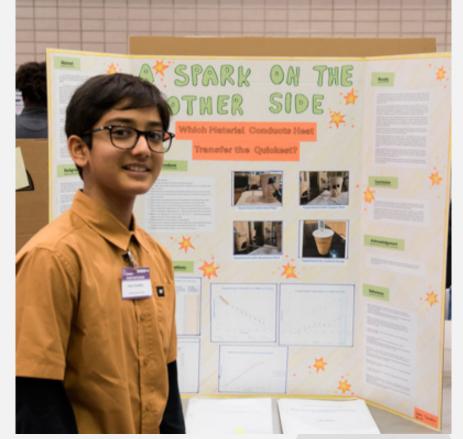




Umar Chaudhry

F05 A SPARK ON THE OTHER SIDE: Which material conducts heat transfer the quickest?

> Al-Falah Islamic School Oakville









Elliot Humphreys

F06 GET A GRIP

Oakville Christian School Oakville









Kiera Mitchell

F09 Modelling Spread and Infection Risk for COVID-19 in Hallway Scenarios

> Delhi District Secondary School Delhi









Nabira Rashid & Maithili Rastogi

F13 Investigating the Effect of Light Color on Solar Cell Voltage Output

White Oaks Secondary School Oakville









Tessa Warren & Aaliyah Fernandes

F17 Sweet as Sugar

Oakville Christian School Oakville





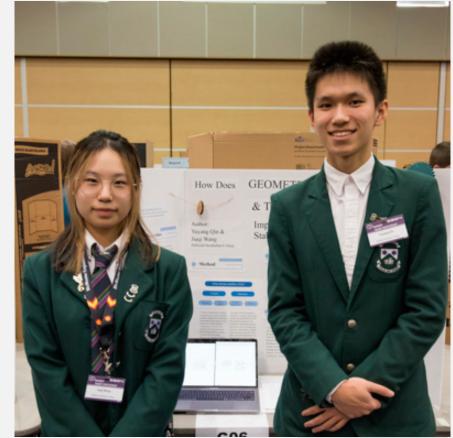




Yuyang Qin & Jiaqi Wang

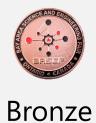
G06 How does the geometry and texture impact the stability of tires under extreme weather conditions

> Hillfield Strathallan College Hamilton





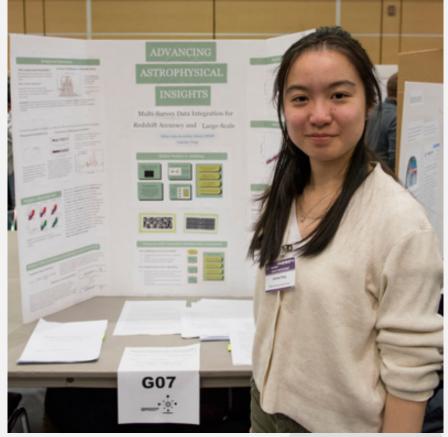




Carmen Teng

G07 Advancing Astrophysical Insight: Multi-Survey Data Integration for Redshift Accuracy and Large-Scale

White Oaks Secondary School Oakville





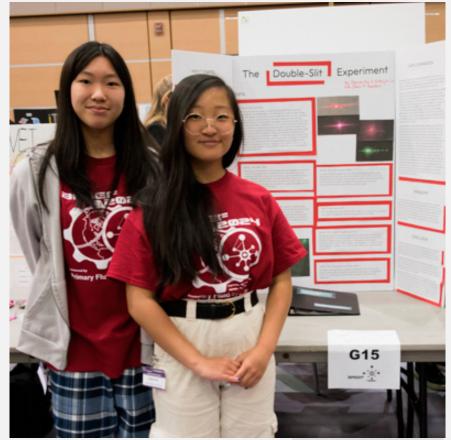




Nayune Kim & Katelynn Liu

G15 The Double-Slit Experiment

Charles R. Beaudoin Public School Burlington









Ben Szecsodi & Grayson Beecroft

H01 Affordable Emergency Housing

Rolling Meadows Public School Burlington









Bronze

Aarunya Gomber

H03 Seeker Bot

W. H. Morden Public School Oakville









Sophia Rosien & Bridgette Sels

H07 AquaTag

Rolling Meadows Public School Burlington





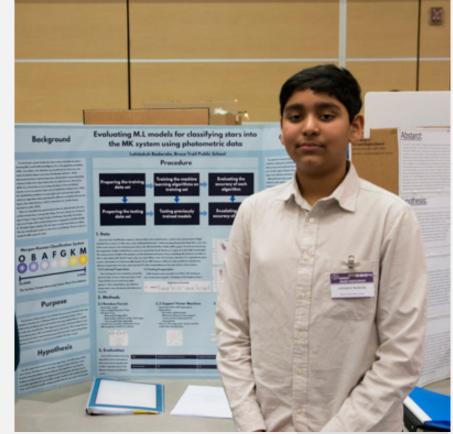




Lohitaksh Badarala

J06 Evaluating machine learning models for classifying stars into the MK system using photometric data.

Bruce Trail Public School Milton





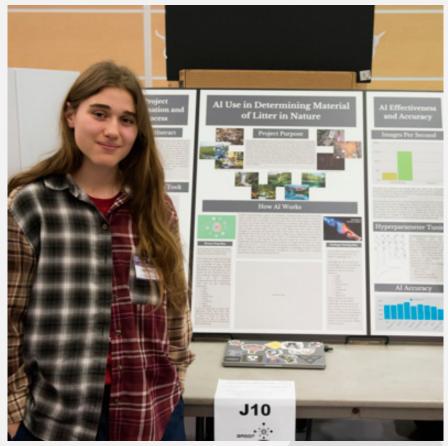




Evelyn Peart

J10 Al Use In Determining Material Of Litter In Nature

> Tiger Jeet Singh Public School Milton







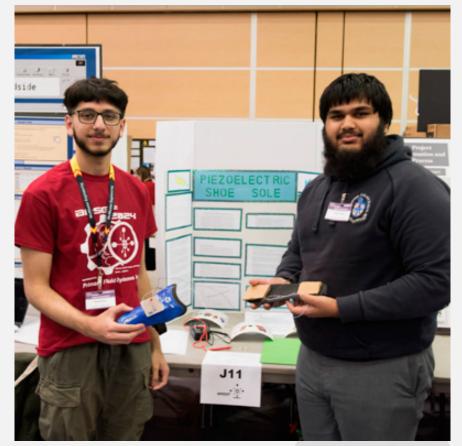


Bronze

Navraj Patial & Mohid Khan

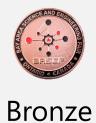
J11 Harnessing the power of Peizoelectricity for Sustainable Energy

Assumption College School Brantford









Heather Dong

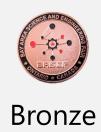
J19 Convolutional Neural Networks: Radiologists of the Future

> W. H. Morden Public School Oakville









Gavin McKerracher

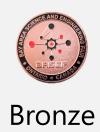
K01 EPIC (Escapement Piezoelectric Impact Converter)

> Rolling Meadows Public School Burlington









Ananya Anand

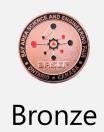
K02 Can I create a device to help in vision assist for dogs?

Hawthorne Village Public School Milton





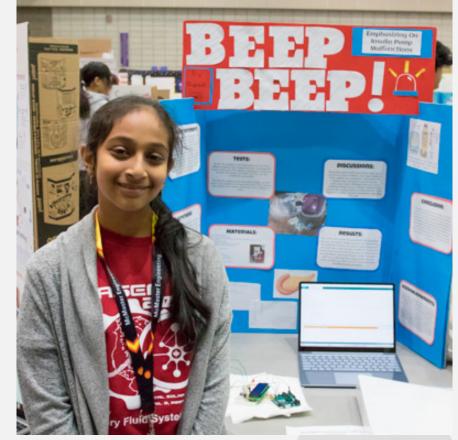




DIYA ALAGUKUMARAN

K03 BEEP BEEP! Emphasizing on insulin pump malfunctions.

> Munn's Public School Oakville









Anabella Kinsella & Joshua Mithun

K07 EZ Dispenser

St. Bernadette Dundas







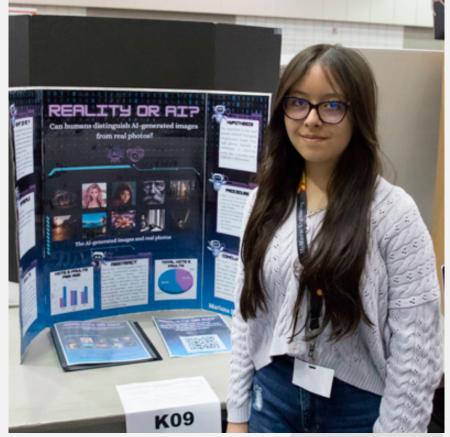


Bronze

Mariana Prias

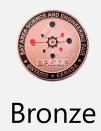
K09 Can humans distinguish AI-generated images from real photos?

> Highview Hamilton









Owen Small & Emma Forrest

K17 SSS - The Street Smart Safety App

> Balaclava Carlisle





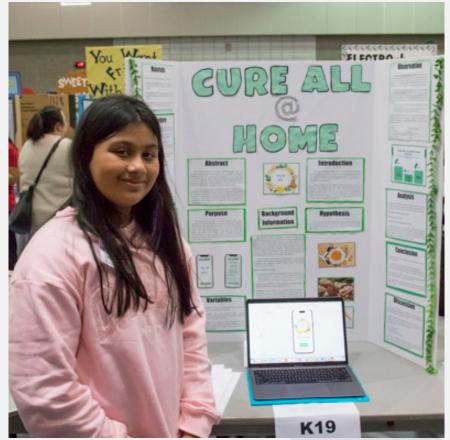




Mrittika Arun

K19 Home Remedy App for Common Illnesses - Cure All @ Home

> John William Boich Public School Burlington









Zoya Waseem

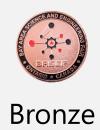
K20 Pneumonia Detective: The Effectiveness of a Pneumonia Detection ML VS. Medical Practitioners

> Al-Falah Islamic School Oakville





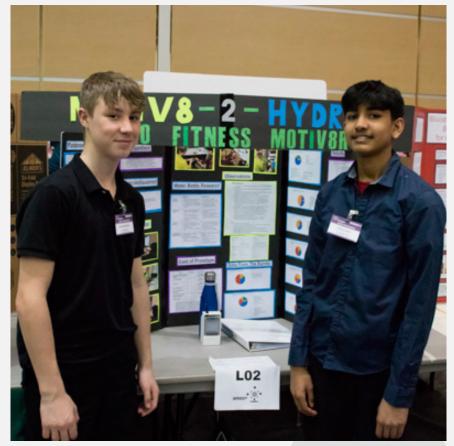




Jameson Gilchrist & Darius Jones

L02 MOTIV8-2-HYDR8: H2O FITNESS MOTIV8R

St. Elizabeth Seton Elementary School Burlington









Bronze

Hailey Betty

L04 Bio Breakdown

Cathy Wever Hamilton



ArcelorMittal

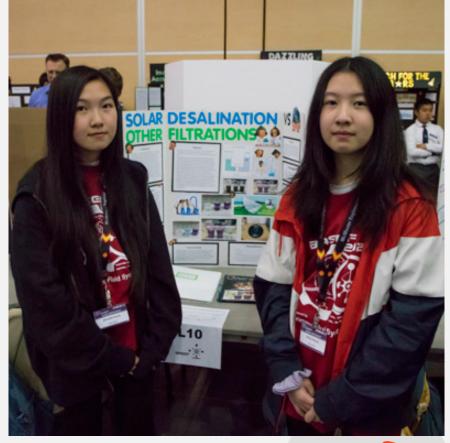




Michelle Huang & Tiffany Huang

L10 Solar Desalination Versus Other Filtration Methods

> Cathy Wever Hamilton





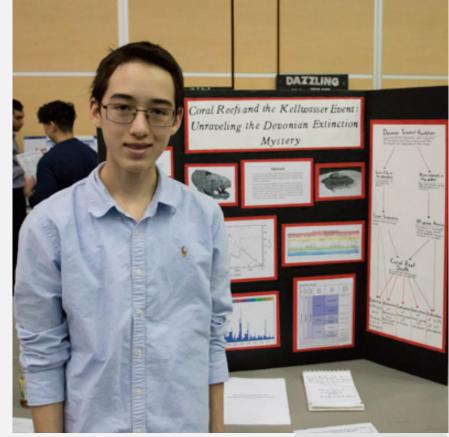




Tristan Barkman

L11
Coral Reefs and the Kellwasser Event: Unraveling the Devonian Extinction Mystery

Home Schooling Brantford







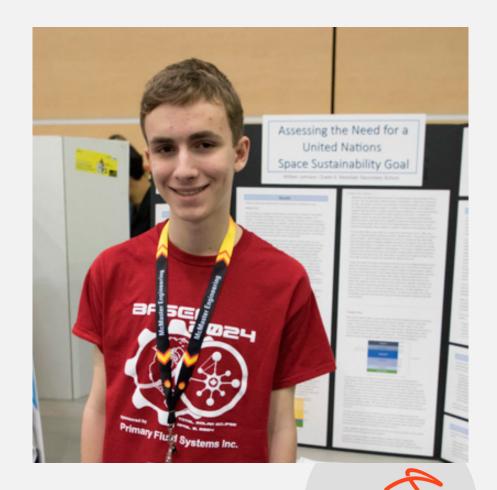


Bronze

William Johnson

L14 Assessing the Need for a United Nations' Space Sustainability Goal





ArcelorMittal



Anaum Farhan & Alishba Fayyaz

L15 Alumify

Rattlesnake Point Public School Milton







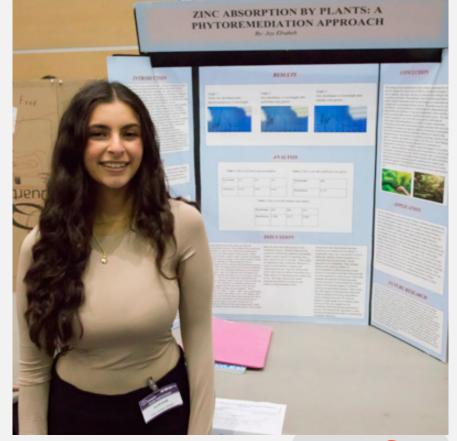


Bronze

Joy Elraheb

L18 Zinc Absorption by Plants: A Phytoremediation Approach

> King's Christian Collegiate Oakville









Filip Veljkovic

L20 SODIS in Canada 2 - Works With Global Warming, too!

> Corpus Christi Secondary School Burlington





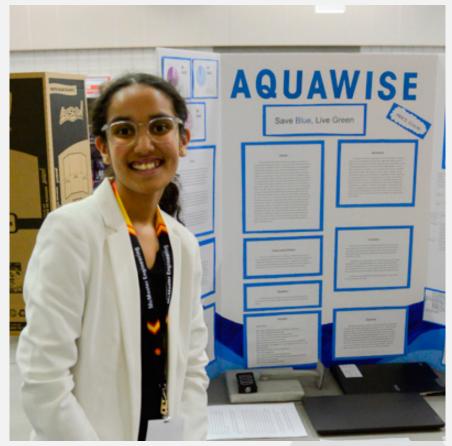




Tiara Jain

M10 AquaWise

John William Boich Public School Burlington





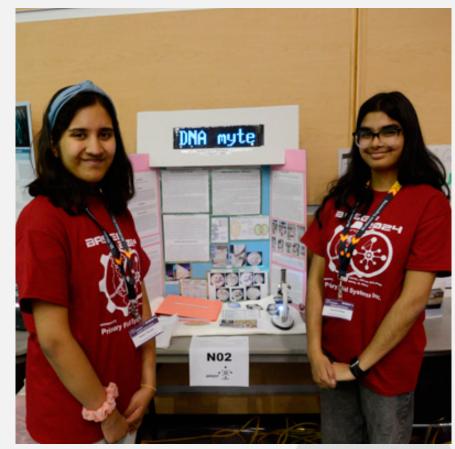




Anika C Rechan & Varnika Kaliga

N02 DNA-myte Party

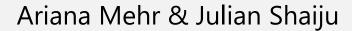
Sunningdale Public School Oakville











N07 Great Minds Think Alike!

Bishop P. F. Reding Secondary School Milton





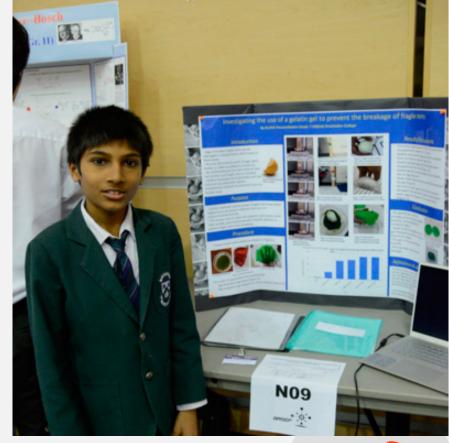




Karthik Ponnambalam

N09 Investigating the use of a gelatin gel to prevent the breakage of fragile items

> Hillfield Strathallan College Hamilton









Bronze

Joshua Halim

N11 Reach for the Stars

Oakville Christian School Oakville









Ana Qureshi

N12
Dazzling in the Distance: How Does Light Intensity
Change With Distance?

Al-Falah Islamic School Oakville



ArcelorMittal





Luke Powell

N21 Flashify: An Innovative Flash Card Alternative

> Aldershot High School Burlington









Jordan LeBlanc

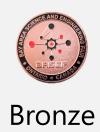
N24
A Novel System for Objective Clinical Assessment of Cold and Influenza Using Infrared Image Analysis

St. Matthew Elementary School Oakville





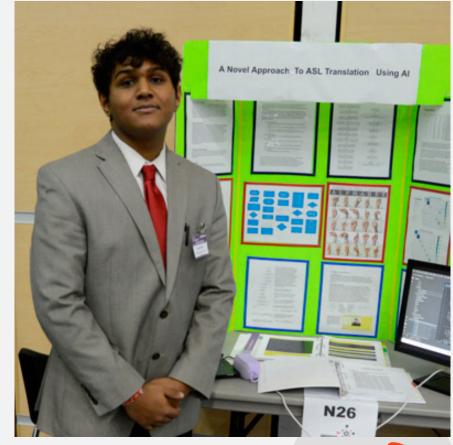




Vedant Sheel

N26 A Novel Approach to ASL Translation Using Al

Waterdown District Secondary School Waterdown









Bronze

Arnnav Kudale

P06
Recreator3D.com - Is recycling filament cheaper than buying spools?

White Oaks Secondary School Oakville









Anish Rathod

P10 Integrating A CNN With An Autonomous Drone To Facilitate Visible Water Pollution Monitoring

> Burlington Central High School Burlington









Hannah Durowoju

P14
Using artificial intelligence to improve observation in child and adolescent mental units

Our Lady of Victory Elementary School Milton







Silver Merit Awards





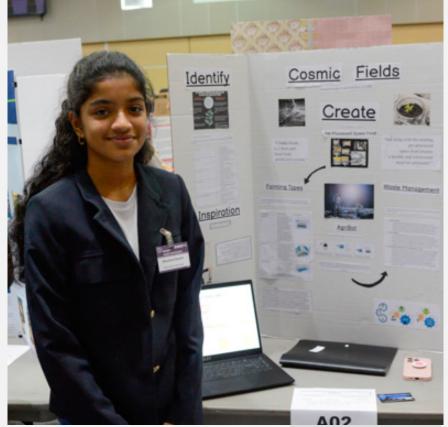




Bhavishyaa Vignesh

A02 Cosmic Fields (Advanced Lunar Food Production System)

> Post's Corners Public School Oakville





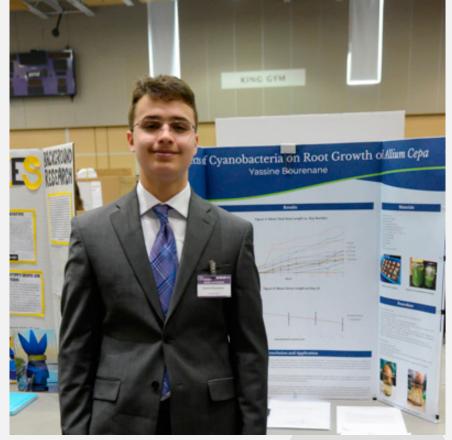




Yassine Bourenane

A03 The Effects of Cyanobacteria on Root Growth of Allium Cepa

> Ancaster High Ancaster









Arya De Souza & Emma Su

A05 Back to the Water - Creating 3D Printed Prosthetics for Painted Turtles

> W. H. Morden Public School Oakville





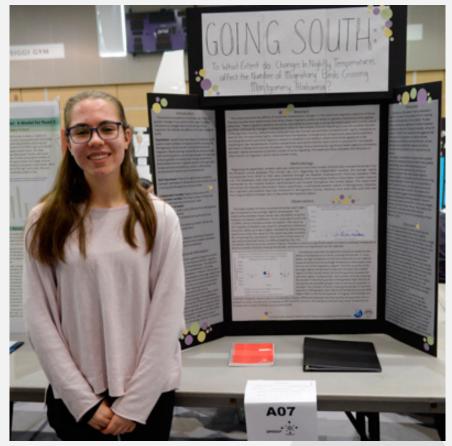




Katherine Lepischak

A07 Going South

Westdale Secondary School Hamilton





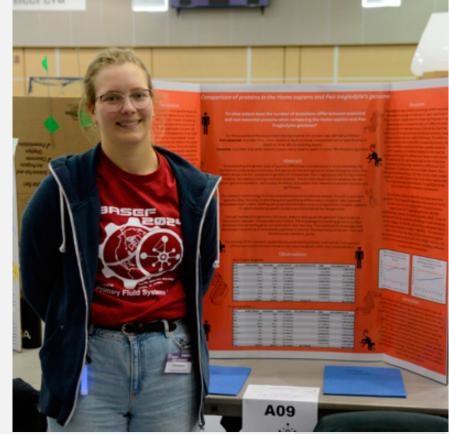




Claire Jackson

A09 Comparison of proteins in the Homo sapiens and Pan troglodyte's genome

Westdale Secondary School Hamilton





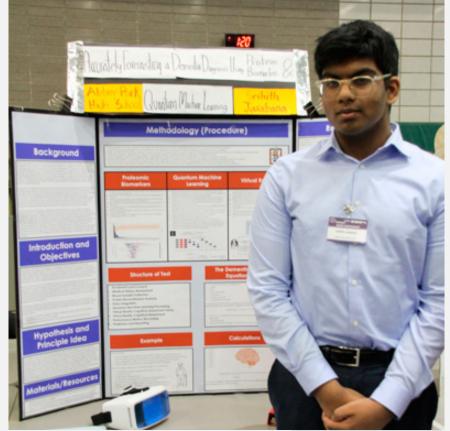




Srihith Jarabana

B13 Accurately Forecasting a Dementia Diagnosis Using Protein Biomarkers and Quantum Machine Learning

> Abbey Park High School Oakville





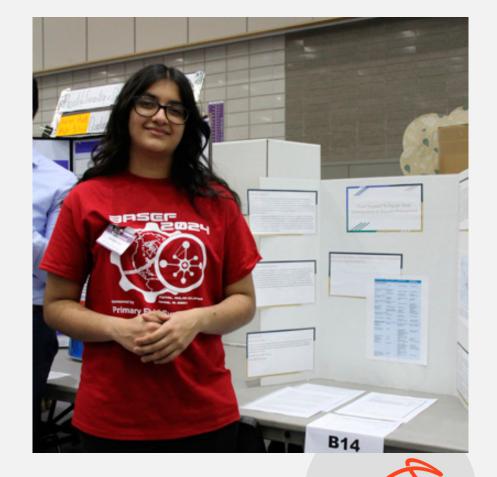




Shambhvi Dua

B14
Decoding Brainwaves: A Machine Learning Approach
to Seizure Prediction

White Oaks Secondary School Oakville



ArcelorMittal

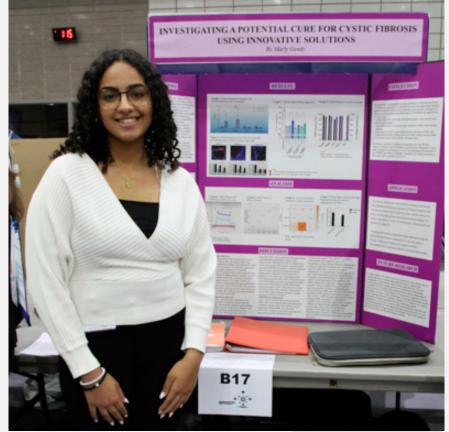




Marly Gendy

B17
Investigating Potential Cure for Cystic Fibrosis Using
Innovative Solutions

King's Christian Collegiate Oakville





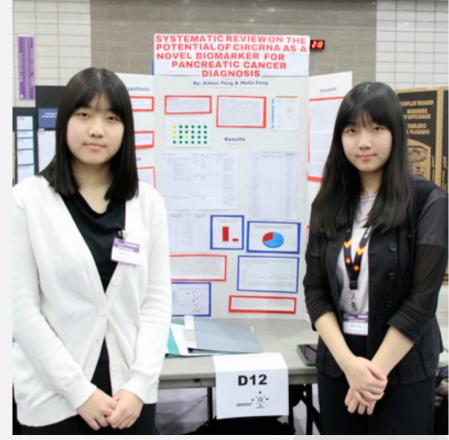




Aileen Feng & Melin Feng

D12 Systematic Review on The Potential of CircRNA as a Novel Biomarker For Pancreatic Cancer Diagnosis

> Oakville Trafalgar High School Oakville





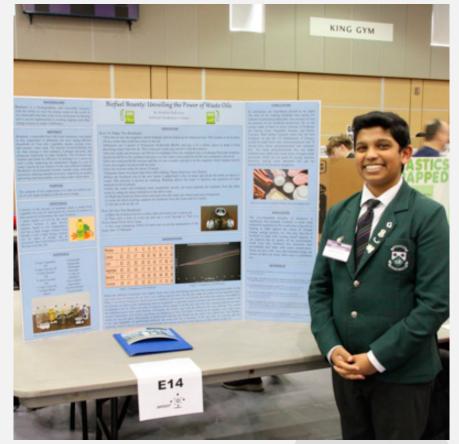




Raahith Rajkumar

E14 Biofuel Bounty: Unveiling the Power of Waste Oils

> Hillfield Strathallan College Hamilton









Sahith Rajkumar

E15
Herbal Heroes: Unveiling the Antibacterial Potential of Ayurvedic Medications Against Staphylococcus

Hillfield Strathallan College Hamilton





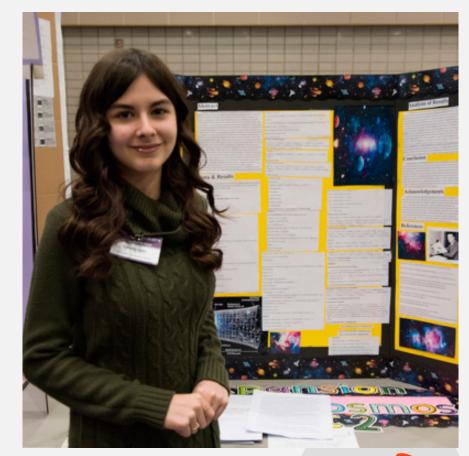




Isabella Lopes

F02 Expansion of the Cosmos part 2

Bishop Ryan Secondary School Hanon





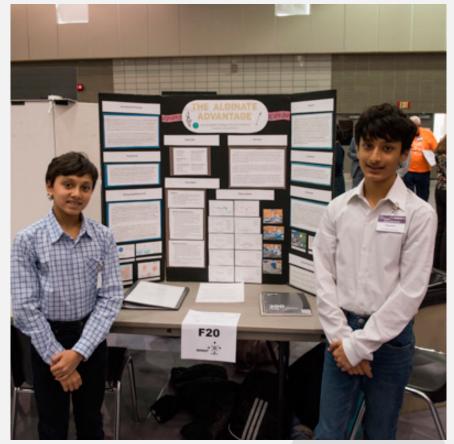




Rahul Rao & Vivaan Kar

F20 The Alginate Advantage

W. H. Morden Public School Oakville





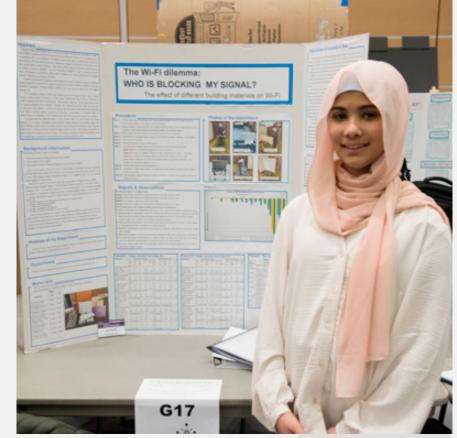




Aya Gharbia

G17
The Wi-Fi dilemma: Who Is Blocking My Signal? The effect of different building materials on Wi-Fi

Al-Falah Islamic School Oakville









Sami Nastase

H10 Refuge from Radars

W. H. Morden Public School Oakville





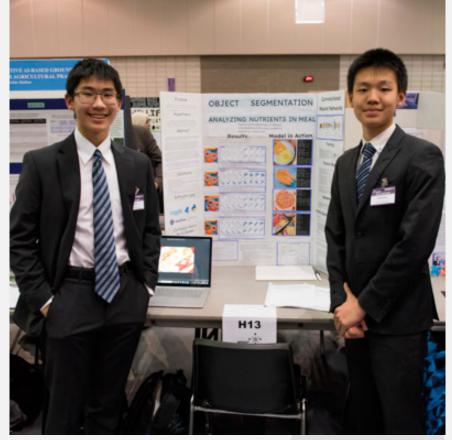




Daniel Zhu & Cody Zhang

H13 Using Object Segmentation to Analyze Nutrient Content of Meals

> Abbey Park High School Oakville









Maria Polyanska

H15 Extending range of VHF/UHF transceivers by improving antenna efficiency for emergency communications

> Forest Trail Public School Oakville





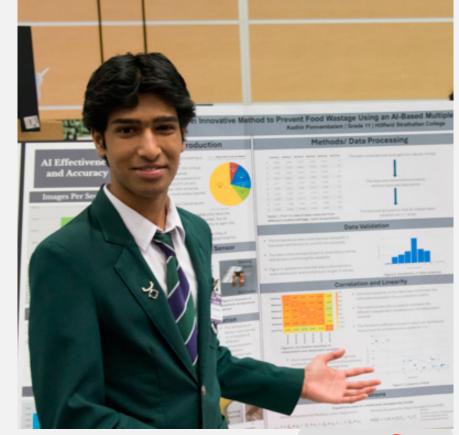




Kadhir Ponnambalam

J09 An Innovative Method to Prevent Food Wastage Using an Al Based Multiple Linear Regression Model

> Hillfield Strathallan College Hamilton









Will Thomas

J14 From Concept to Code

> St. Augustine Dundas









Jonathan Vidican

J15 Chaos, break the wave!

St. Mary Elementary School Oakville









Emmalina Abou-Assaleh & Sahana Merchant

K06
The Power and Potential of Electromagnetic Radiation

W. H. Morden Public School Oakville





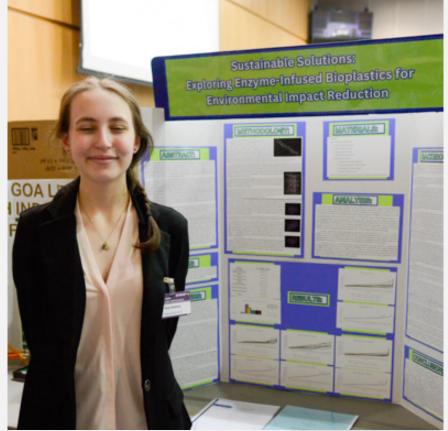




Katie Barbera

M02 Sustainable Solutions: Exploring Enzyme-Infused Bioplastics for Environmental Impact Reduction

> Cathedral High School Hamilton





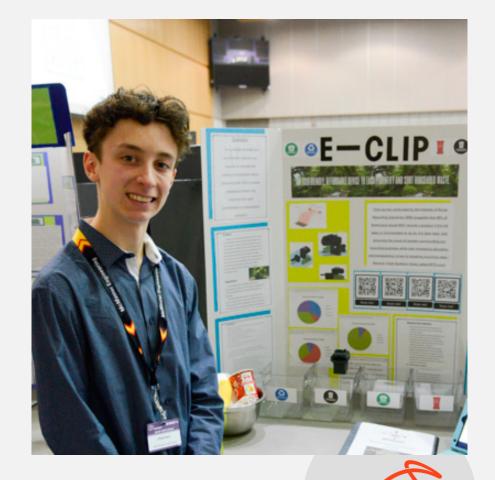




Ethan Horn

M03 E-Clip

Rolling Meadows Public School Burlington



ArcelorMittal

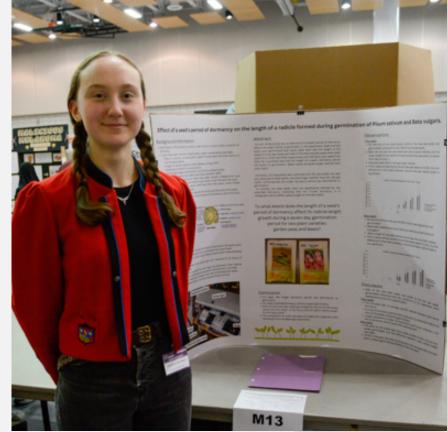




Artemisia Frolic-Smart

M13
Effect of a seed's period of dormancy on the length of a radicle formed during germination

Westdale Secondary School Hamilton





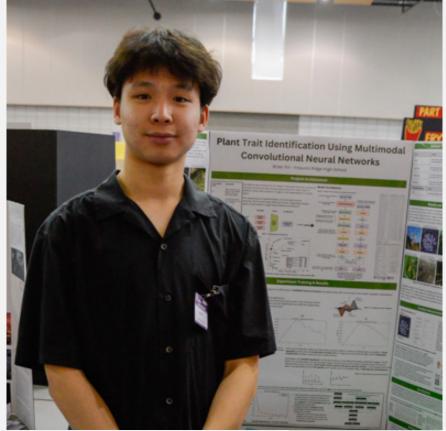




Brian Yin

M15 Plant Trait Identification Using Convolutional Neural Networks

> Iroquois Ridge High School Oakville





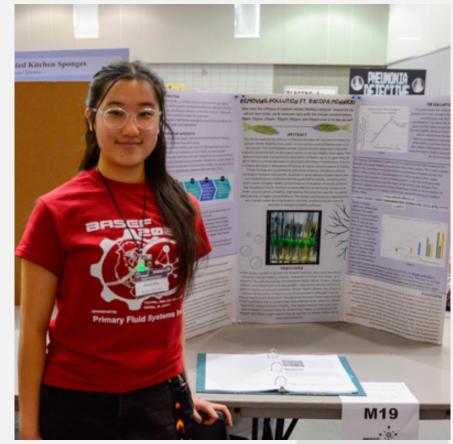




Bohmie Song

M19 Removing Pollution feat. Bacopa monnieri

> Westdale Secondary School Hamilton





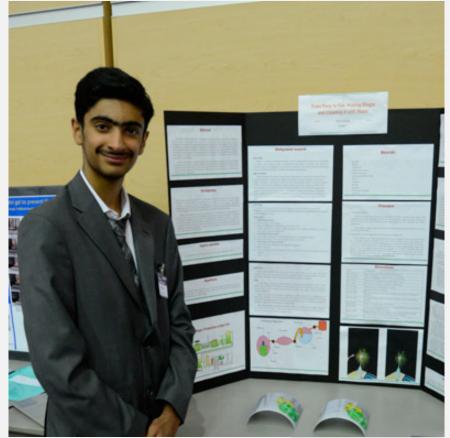




Sahil Danda

N08
From Poop to Gas:Making Biogas and Cleaning it with
Water

W. H. Morden Public School Oakville









Zeyad Nasr

N14 Modelling the Trajectory of an Airborne Object Using Computer Simulation. Application for Basketball

> Dundas Valley Secondary School Dundas









Karthik Chawla

N15
PROJECT DRONE: Disaster Recovery, Outreach for Natural Emergencies

W. H. Morden Public School Oakville









Kieran Blimkie

N16 Orebot Mk 1

Notre Dame Secondary School Burlington









Ruofei Wu & Jaylan Tayal

N18 GreenHound - Your Personal Litter Tracker For a Greener Future

> John William Boich Public School Burlington









Fiza Mehfil

N20 Detecting and Analyzing Exoplanet Atmospheres using K-Nearest-Neighbours Algorithm and OpenCV

Milton District High School Milton





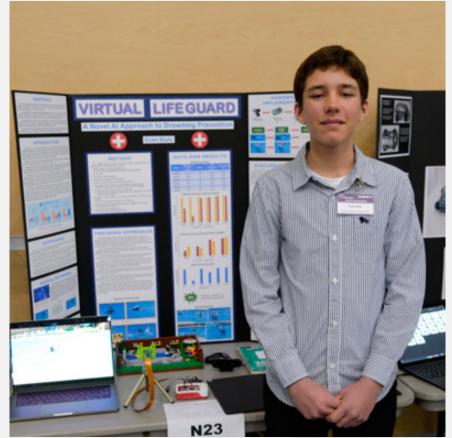




Evan Budz

N23 Virtual Lifeguard: A Novel Al Approach to Drowning Prevention

> Charles R. Beaudoin Public School Burlington





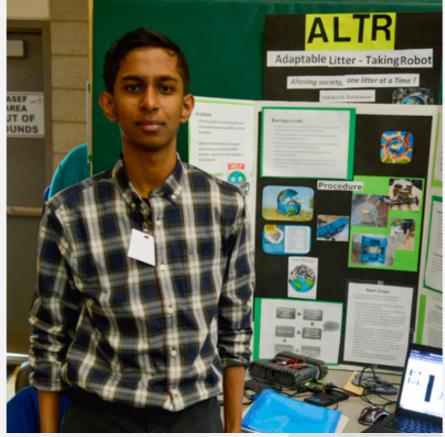




Subakrish Balakumar

P01 A.L.T.R. 'Altering society, one litter at a time'

> Aldershot High School Burlington









Jacob LeBlanc

P02
Development of a Novel Integrated System for Electric
Vehicle Charging During Vehicle Operation

Abbey Park High School Oakville





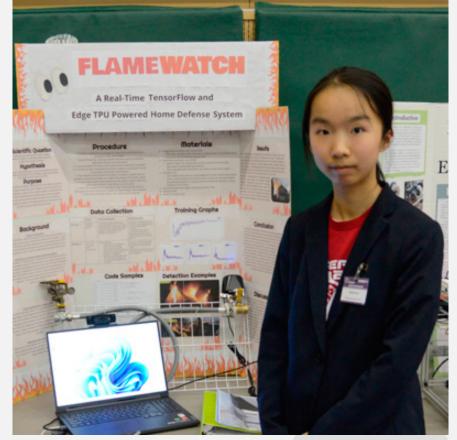




Bonnie Luo

P05 FlameWatch: A Real-Time TensorFlow and Edge TPU Powered Home Defense System

White Oaks Secondary School Oakville





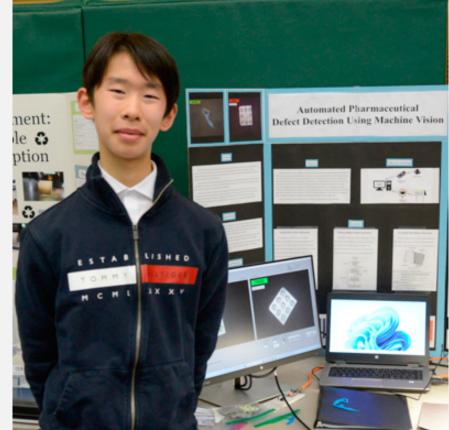




Zhuo Yang

P07 Automated Pharmaceutical Defect Detection Using Machine Vision

> W. H. Morden Public School Oakville





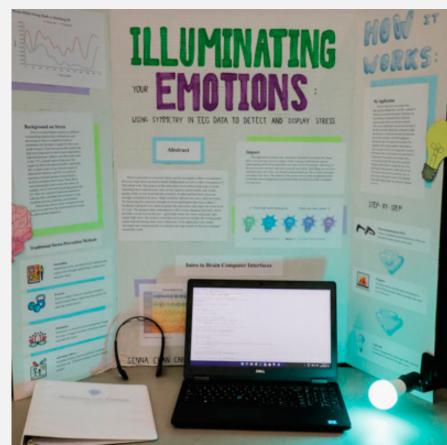




Senna Chan Carusone

P15
Illuminating Your Emotions: Using Symmetry in Electroencephalogram Data to Detect and Display Stress Levels

Burlington Central High School Burlington





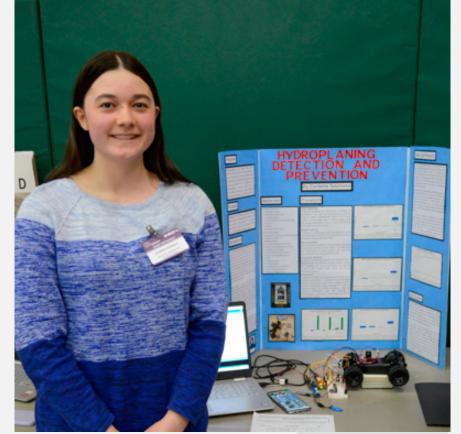




Cordelia Simmons

P17 Hydroplaning Detection and Prevention Using an Al Neural Network

North Park Collegiate and Vocational School Brantford







Gold Merit Awards





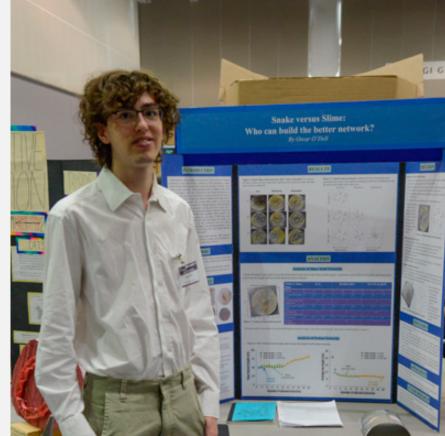




Oscar O'Dell

A19 Snake versus Slime: Who can build the better network?

> King's Christian Collegiate Oakville





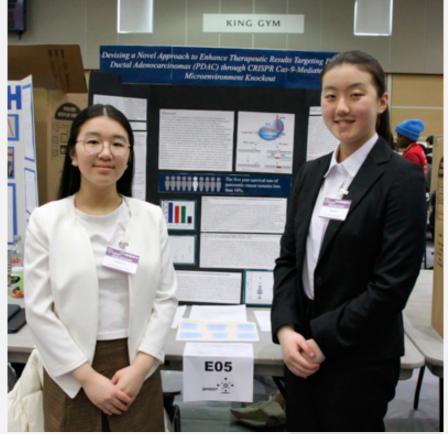




Siqi Tan & Yuewen Li

E05 Improving PDAC Prognosis: Novel Approach Utilising CRISPR-Mediated Gene Knockout for TME Disruption

> W. H. Morden Public School Oakville









Rakshan Saravanan

E07
The electrocorpulgraph: Can AI change auscultation?

Ancaster High Ancaster









Nicholas Pacifici

H08 The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using Al

St. Mary Secondary School Hamilton





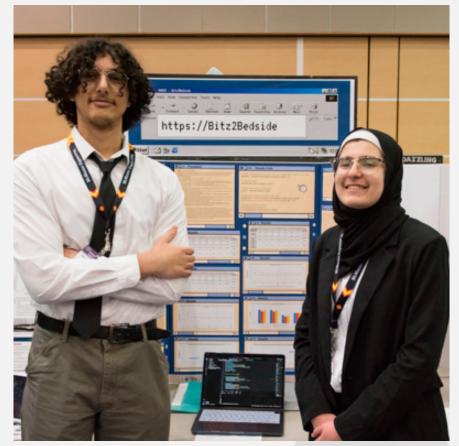




Bahaa Al Deen Alsaadi & Zena Alsaadi

J12
Bits to Bedside: An Ingenious Exploration of Machine
Learning in Triage Assessments

Al-Falah Islamic School Oakville





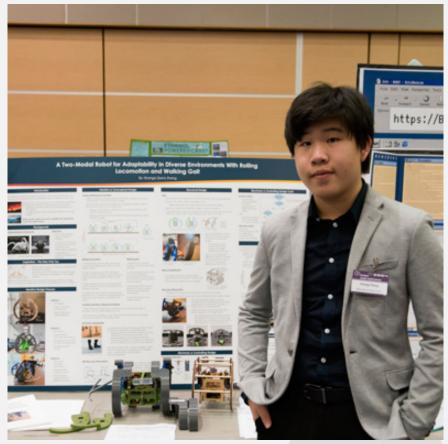




Shangyi Zhang

J13
A Two-Modal Robot for Adaptability in Diverse
Environments With Rolling Locomotion and Walking
Gait

White Oaks Secondary School Oakville







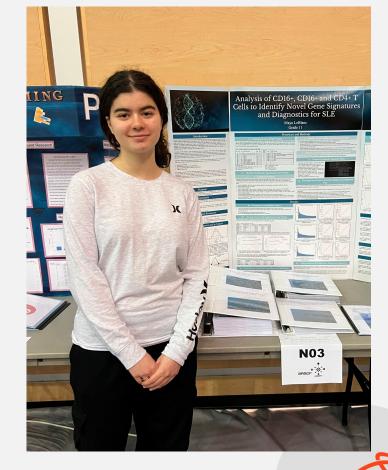


Gold

Maya LeBlanc

N03
Analysis of CD16+, CD16- and CD4+ T Cells to
Identify Novel Gene Signatures and Diagnostics for
SLE

Abbey Park High School Oakville



ArcelorMittal

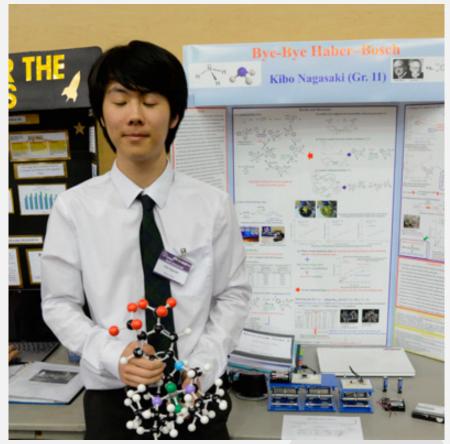




Kibo Nagasaki

N10 Bye-Bye Haber–Bosch

> Mentor College Mississauga









Alia Wahban

P03 Redefining the Landscape of Hydrogen Safety using Innovative Gasochromic Technology

> Hillfield Strathallan College Hamilton









Daniyal Qazi & Zayn Qazi

P08
From Pixels to Predictions: A Deep Learning Method to Detect Pneumonia in Chest X-Ray Images

W. H. Morden Public School Oakville





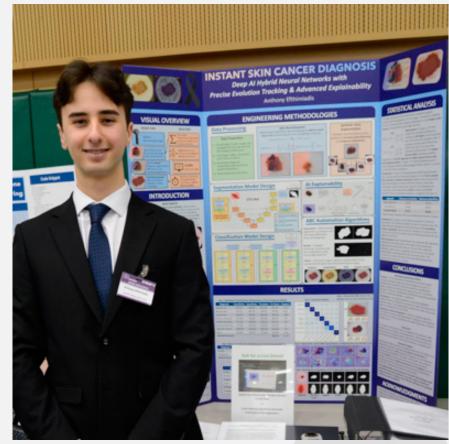




Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville









William Xu

P13
Accessible microscopy! A cellphone microscope for high-resolution, large FOV, and high-speed imaging

Dundas Valley Secondary School Dundas









Lily Song

P16 Talk to the Hand

North Park Collegiate and Vocational School Brantford





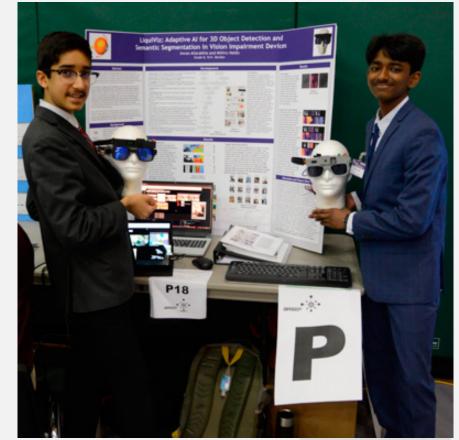




Imran Allarakhia & Mithru Naidu

P18 LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

> W. H. Morden Public School Oakville













Please Congratulate our Merit Winners





Grand Awards





Champion Teacher



Champion Teacher



Allison Janssen

White Oaks Secondary School Halton District School Board





School Awards



BASEF Committee Trophy (Elementary School)





BASEF Committee Trophy



W.H. Morden Public School





Herb Gildea Memorial Trophy (Secondary School)





Herb Gildea Memorial Trophy



White Oaks
Secondary School





Chairs' Award

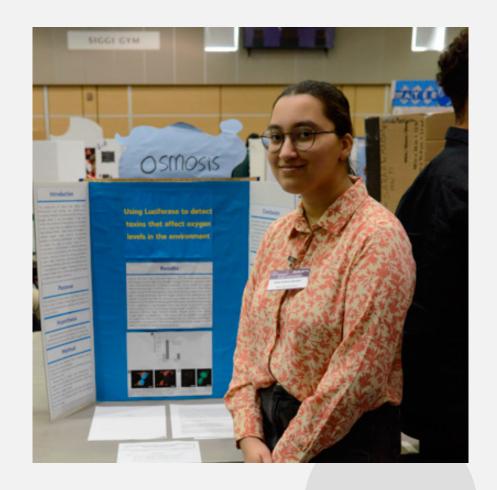


Chairs' Award

Zoha Fatima Quadry

A16
Using Luciferase to detect toxins that affect oxygen levels in the environment

Abbey Park High School Oakville





Roy Middleton Award Best Junior Project BASEF 2024



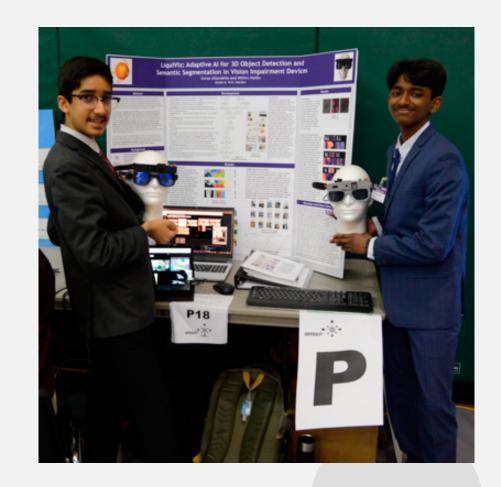


Roy Middleton Memorial Award

Imran Allarakhia & Mithru Naidu

P18 LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

> W. H. Morden Public School Oakville





Drs. Ranjan and Monalisa Sur Award Best High School Project



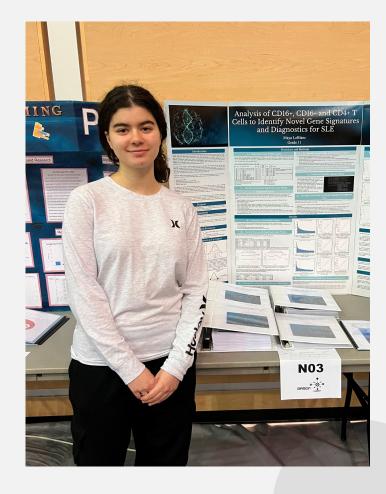


Drs. Ranjan Sur and Monalisa Sur Award

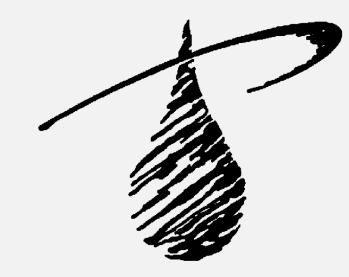
Maya LeBlanc

N03
Analysis of CD16+, CD16- and CD4+ T Cells to Identify Novel Gene Signatures and Diagnostics for SLE

Abbey Park High School Oakville







Primary Fluid Systems Inc.

Pinnacle Awards & Trophies





Pinnacle Award & Trophy Best Overall Project Third Place







Primary Fluid Systems Pinnacle Third Best in Fair

Alia Wahban

P03
Redefining the Landscape of Hydrogen Safety using Innovative Gasochromic Technology

Hillfield Strathallan College Hamilton





Pinnacle Award & Trophy Best Overall Project Second Place





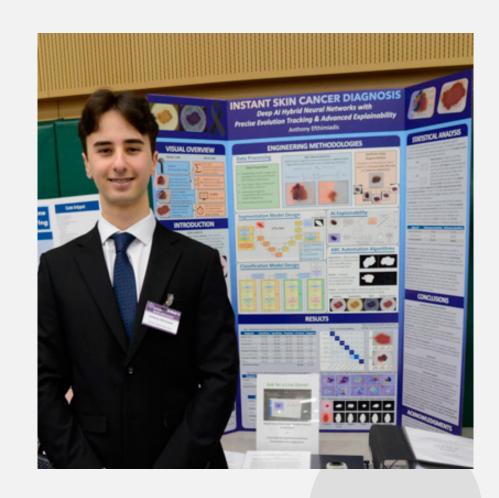


Primary Fluid Systems Pinnacle Second Best in Fair

Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





Pinnacle Award & Trophy Best Overall Project First Place





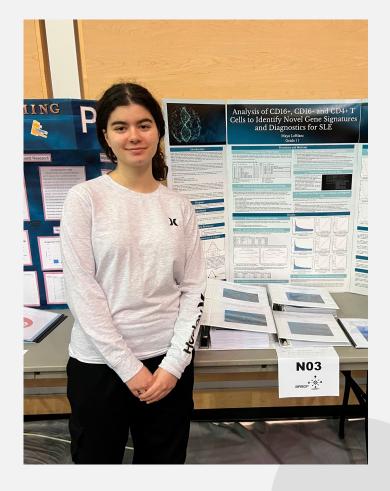


Primary Fluid Systems Pinnacle Best in Fair

Maya LeBlanc

N03
Analysis of CD16+, CD16- and CD4+ T Cells to
Identify Novel Gene Signatures and Diagnostics for
SLE

Abbey Park High School Oakville





Trip Awards









Sponsoring Organizations















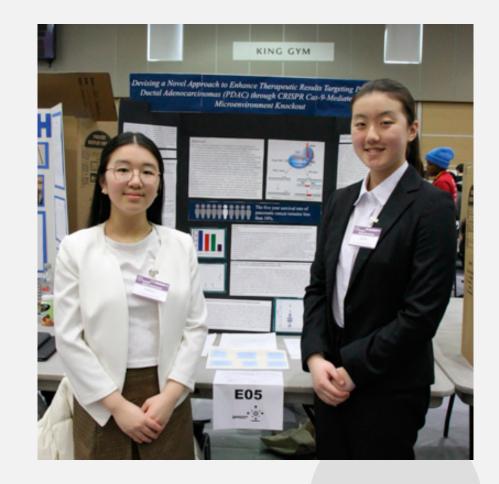




Siqi Tan & Yuewen Li

E05 Improving PDAC Prognosis: Novel Approach Utilising CRISPR-Mediated Gene Knockout for TME Disruption

> W. H. Morden Public School Oakville

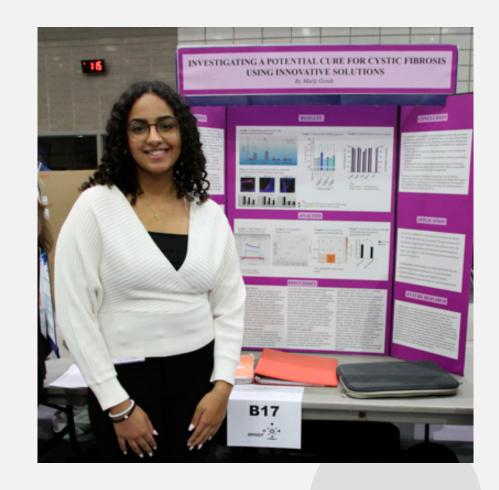




Marly Gendy

B17
Investigating Potential Cure for Cystic Fibrosis Using
Innovative Solutions

King's Christian Collegiate Oakville





Bahaa Al Deen Alsaadi & Zena Alsaadi

J12
Bits to Bedside: An Ingenious Exploration of Machine
Learning in Triage Assessments

Al-Falah Islamic School Oakville

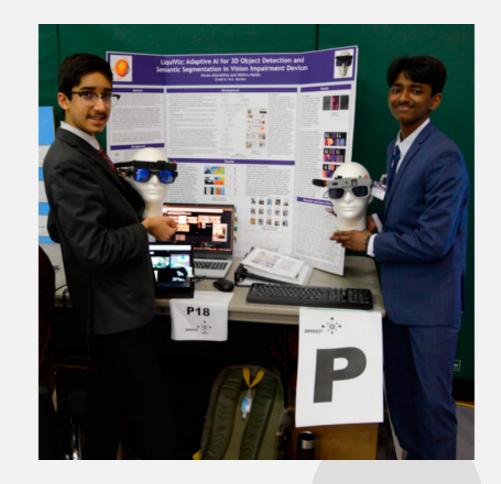




Imran Allarakhia & Mithru Naidu

P18 LiquiViz: Adaptive AI for 3D Object Detection and Semantic Segmentation in Vision Impairment Devices

> W. H. Morden Public School Oakville

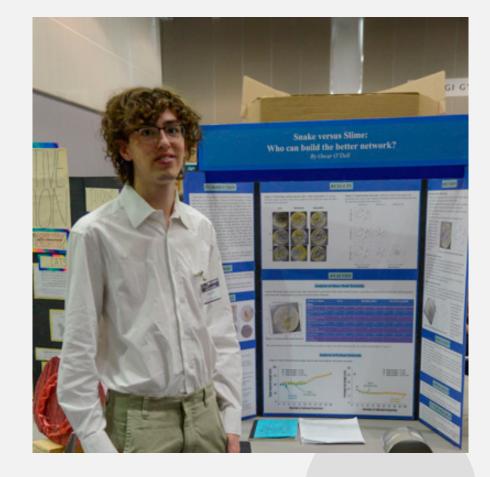




Oscar O'Dell

A19
Snake versus Slime: Who can build the better network?

King's Christian Collegiate Oakville





Nicholas Pacifici

H08 The PrepStep: A Mobile Health Platform to Detect Ventricular Cardiomyopathy in Athletes Using Al

St. Mary Secondary School Hamilton

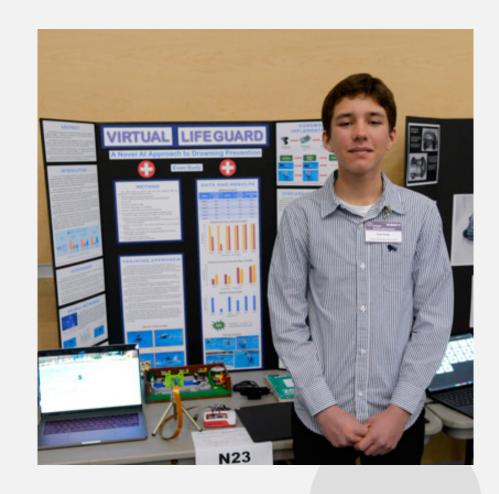




Evan Budz

N23 Virtual Lifeguard: A Novel Al Approach to Drowning Prevention

Charles R. Beaudoin Public School Burlington

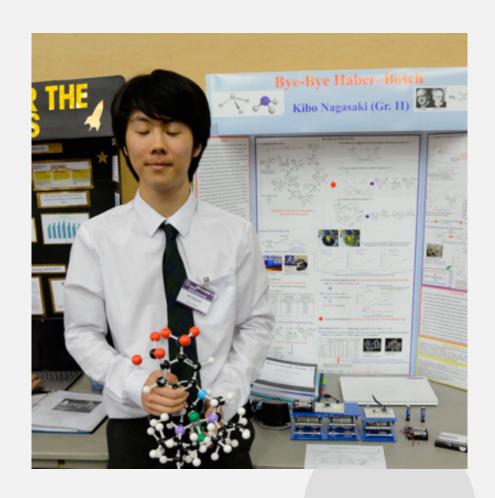




Kibo Nagasaki

N10 Bye-Bye Haber–Bosch

> Mentor College Mississauga





Shangyi Zhang

J13
A Two-Modal Robot for Adaptability in Diverse
Environments With Rolling Locomotion and Walking
Gait

White Oaks Secondary School Oakville

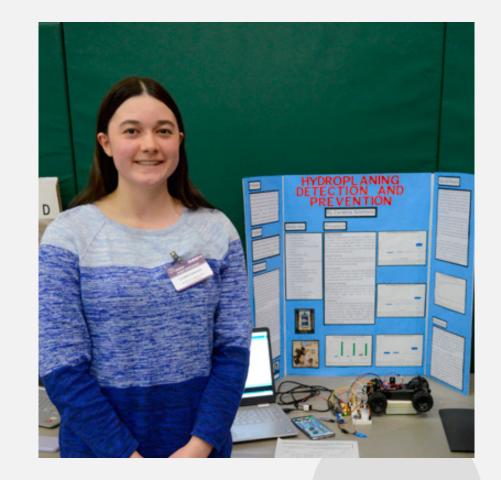




Cordelia Simmons

P17 Hydroplaning Detection and Prevention Using an Al Neural Network

North Park Collegiate and Vocational School Brantford





Daniyal Qazi & Zayn Qazi

P08
From Pixels to Predictions: A Deep Learning Method to Detect Pneumonia in Chest X-Ray Images

W. H. Morden Public School Oakville





Rakshan Saravanan

E07
The electrocorpulgraph: Can AI change auscultation?

Ancaster High Ancaster





Please congratulate our Team!







Regeneron International Science & Engineering Fair Trip Awards







Sponsoring Organizations

















Alia Wahban

P03
Redefining the Landscape of Hydrogen Safety using Innovative Gasochromic Technology

Hillfield Strathallan College Hamilton

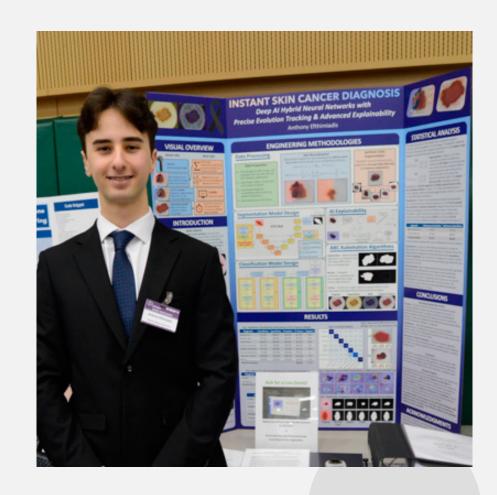




Anthony Efthimiadis

P11
Instant Skin Cancer Diagnosis: Al Hybrid Neural
Networks with Precise Evolution Tracking

Oakville Trafalgar High School Oakville





William Xu

P13
Accessible microscopy! A cellphone microscope for high-resolution, large FOV, and high-speed imaging

Dundas Valley Secondary School Dundas

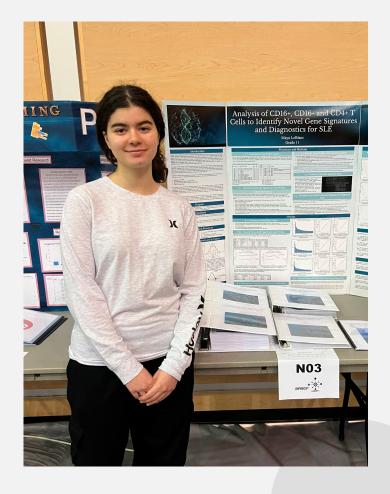




Maya LeBlanc

N03
Analysis of CD16+, CD16- and CD4+ T Cells to Identify Novel Gene Signatures and Diagnostics for SLE

Abbey Park High School Oakville





Lily Song

P16 Talk to the Hand

North Park Collegiate and Vocational School Brantford





Please congratulate our Team!





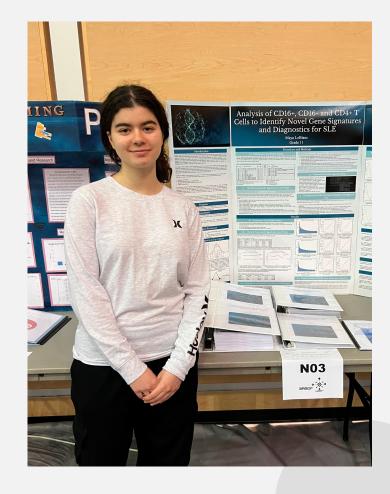


CWSF & ISEF Trip Awards

Maya LeBlanc

N03
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Abbey Park High School Oakville





Congratulations! See you in 2025!







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