

OFFICIAL PROGRAM

# **BASEF 2020**

## **A Virtual Competition**

**60<sup>th</sup> Annual Bay Area  
Science & Engineering Fair  
A Virtual Competition  
April – May, 2020**

**Diamond Sponsors**  
**Mohawk College**  
**Primary Fluid Systems**

**Platinum Sponsors**  
**Enbridge**  
**HAND**  
**The Hamilton Spectator**  
**McMaster University**



**Big ideas.  
Infinite possibilities.**

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Cover image courtesy of NASA, <https://www.nasa.gov/image-feature/parker-solar-probe>

The Parker Solar Probe will travel directly into the Sun's atmosphere about 4 million miles from the star's surface. The primary science goals are to trace how energy and heat move through the solar corona and to explore what accelerates the solar wind as well as solar energetic particles. The mission will revolutionize our understanding of the Sun, where changing conditions can spread out into the solar system, affecting Earth.



## A MESSAGE FROM THE 2020 BASEF CO-CHAIRS



Dana Bee, Ingrid Scully and Dan Bowman are your co-chairs for BASEF 2020. We would like to welcome you to the 60th Bay Area Science and Engineering Fair. Our 60th anniversary is one we will never forget.

Congratulations to all the almost 350 participants representing 220 projects competing in BASEF 2020. This is an opportunity for students to showcase their projects, ideas, dedication and tenacity and to discover themselves as promising scientists and engineers.

What does our motto “Big Ideas... Infinite Possibilities” mean to the students, and to the judges, parents, sponsors, and visitors to our fair? Since BASEF’s inception in 1960, the scientific community has witnessed the moon landing and the discovery of the merger in gravitational waves and electromagnetic radiation; the cloning of Dolly the sheep and the first human face transplant; the invention of the global positioning system and the invention and production of the first all-electric car; the invention of barcode technology; and the first experimental evidence of the Big Bang theory ... just to name a few. What discoveries will be made in the next 60 years that our students could be a part of?

This year, our students were all well prepared to present their projects at the end of March. The BASEF organizing committee had crossed all the “t”s and dotted all the “i”s and they were ready to present a great fair and awards ceremony. Then the pandemic set in and an “in person” fair was no longer an option. The organizing committee quickly mobilized and prepared the necessary infrastructure to allow students to submit their projects electronically and for judges to be able to evaluate these submissions remotely and submit their marks. An “on-line” awards ceremony was presented and all the hard work of students was showcased and recognized through awards, scholarships, internships and the presentation of winners who advanced to teams who, in a non-pandemic year, would have traveled to further competition in the international and Canadian science fairs.

We would also like to thank the 225 resilient judges who were able to jump online and sift through the project submissions. Did you know that each project was judged 4 times and with the addition of the special awards, there were over 1,000 online judging events required? Judges, thank you for sharing in our students’ excitement and ensuring that this opportunity exists for them, especially during these times.



Dana Bee



Dan Bowman



Ingrid Scully

## A MESSAGE FROM THE 2020 BASEF CO-CHAIRS (cont'd)



We are grateful for the essential support from our many community sponsors and benefactors, and supporters of special student awards that are designed to promote additional interest and participation in the Fair.

Our two Diamond Level sponsors are key to the success of this year's Fair:

- Primary Fluid Systems Inc. has sponsored BASEF at the Diamond level for many years. Primary Fluid Systems Merit Award Certificates will be given to all Gold, Silver, and Bronze merit award winners.
- Mohawk College prior to the pandemic had once again committed to hosting BASEF in its state of the art David Braley Athletic and Recreation Centre. On behalf of the Organizing Committee, we extend a special thank you to Mohawk College and its staff and students, who are very generous with their time, resources and enthusiastic support year after year.

Together with over 50 other sponsors and benefactors, and over 60 Special Awards donors, our premier sponsors make it possible for BASEF's students to showcase their innovations and discoveries and inspire young people to change the world through science, technology, engineering and mathematics.

This year the total value of merit awards, special awards, scholarships and trip awards is \$225,000.

BASEF is a volunteer-driven registered charity. We acknowledge with thanks the huge efforts of this year's Organizing Committee members, 35 in total, who have dedicated countless hours toward making BASEF 2020 a success. Our thanks also to the over 225 volunteer Merit and Special Awards Judges and to the more than 100 other volunteers who help run registration, safety, and other fair activities. The efforts of these volunteers in this pandemic year are exemplary and we as chairs wish to extend our special thanks to all involved. We are humbled and amazed at the extraordinary efforts of our committee of volunteers.

We would also like to thank all the parents. Thank you for sticking by your student and supporting every crazy idea that they had. Thank you for buying supplies, for talking them through their ideas, joining them while they collected data and edited their work - thank you for supporting them every step of the way including helping to record their interview this year!

Students, make sure you thank your teachers. Because, after your parents, your teachers are your biggest fans. They have invested a lot of their time and passion to instill a love and appreciation for science and technology. And last but not least, students, I want to thank you. Thank you for choosing a topic that ignited your scientist, mathematician and engineer from within. I know it was difficult and a lot of hard work, but you persisted and showed resiliency by adapting your work to submit online. The completion of this project has helped build skills and habits that will undeniably lead you down the road to success in life.



## ORGANIZING COMMITTEE

### CO-CHAIRS

Dan Bowman, Ingrid Scully and  
Dana Bee

### FINANCE

Treasurer: Eleanor O'Flynn, C.P.A., C.A.  
Susan Olynyk

### REGISTRAR

George Geczy (Chair),  
Marc Trotta, Maria Trotta

### JUDGE IN CHIEF

Donna Stack-Durward (Judge in Chief),  
Assistants: George Geczy

### SCIENTIFIC REVIEW

Donna Stack-Durward (Judge in Chief), Dan  
Bowman (Co-Chair), George Geczy (Co-Chair),  
Dana Bee (Co-Chair), David Reed (Co-Chair),  
Debbie Ciotti-Bowman RN, Dr. Robert Brown,  
Allison Boyd, Marc Trotta

### SPECIAL AWARDS COORDINATION

Roslynne Crawford (Chair),  
Jim Casey, Eleanor O'Flynn

### CANADA-WIDE & INTERNATIONAL CHAPERONES

CWSF: Dan Bowman (Lead),  
George Geczy, Ingrid Scully,  
Donna Stack-Durward  
IISEF: Dana Bee (Lead), David Reed

### BASEF BURSARY PROGRAM

Linda Hazelden (Chair),  
Dan Bowman, George Geczy,  
Ingrid Scully, Eleanor O'Flynn

### SPONSOR REPRESENTATIVE

Sandy Walker

### STUDENT ADVISORS

Sabrina Mogus, Rya Adronov, Lily Smales

### FUNDRAISING

Sue Olynyk (Chair),  
Mike McNally, Renato De Tina

### MARKETING AND PUBLICITY

Roslynne Crawford (Chair),  
Marc Trotta, Mark Mindorff,  
Wayne Bowdish

### CHAMPIONS OF BASEF

Daxon Flynn, Linda Hazelden,  
Ingrid Scully

### OUTREACH

Mark Mindorff (Chair),  
Roslynne Crawford, George Geczy,  
Linda Hazelden

### ALUMNI PROGRAM

Denise Brennan-Rieder

### ACTIVITY DAY

Kevin Hunt

### CATERING & FOOD

Dan Prowse

### DISTRICT SCHOOL BOARD ADVISORS

BHNCDSB: Jasmine Vorkapic  
GEDSB: Valerie Slawich  
HCDSB: Joanne Kenney  
HDSB: Ingrid Scully  
HWCDsb: Judith Eaton  
HWDSB: Sandra Chow  
Six Nations (INAC): Alex Randall

### INFORMATION SYSTEMS

Gerard Chiasson, George Geczy

### MEMBERS AT LARGE

Varsha Jayasankar, Amanda Kako,  
Lu Wang, Glen Whitwell,  
Michelle Lafontaine

### PHOTOGRAPHY & GRAPHICS

Wayne Bowdish



## SPONSORS AND BENEFACTORS

### GENERAL FUNDING SPONSORS

#### DIAMOND \$10,000 +

Mohawk College  
Primary Fluid Systems

#### Platinum \$5,000 +

Enbridge  
Hamilton & District Heavy Construction (HAND)  
Association  
McMaster University  
The Hamilton Spectator

#### Gold \$2,500 +

Interprovincial Corrosion Control  
Taylor Leibow Accountants & Advisors

#### Silver \$1,000 +

Appleby College  
Bay Area Health Trust  
Burlington Hydro  
City of Hamilton Economic Development  
Department  
Distinctive Engineering Inc.  
Halton Catholic DSB  
Halton District School Board  
Hamilton-Wentworth Catholic DSB  
Hamilton-Wentworth DSB  
Hillfield Strathallan College  
John Deere Canada ULC  
King – KPM Industries  
Masters Insurance  
Nikola Tesla Educational Corp.  
Ontario Power Generation  
Posner Metals

#### Bronze \$500 +

A.T. McLaren Limited  
D.E.N.M. Engineering  
Hamilton Amateur Astronomers  
Hamilton Chamber of Commerce  
Hamilton Community Awareness and  
Emergency Response (CAER)  
Hamilton Pakistani Physicians Association

Hamilton Police Retirees Association  
Hamilton Police Senior Officers Association  
Judy Marsales Real Estate  
Lanhack Consultants Inc.  
Optimist Club of Stoney Creek  
Rotary Club of Hamilton AM  
Rotary Club of Waterdown  
Society of Tribologists & Lubrication Engineers  
Vizyia Corp.

#### Friends \$250 +

Conservation Halton  
Electrical Construction Association of Hamilton  
Hamilton Association for the Advancement of  
Literature, Science and the Arts  
NewAE Technology Inc.  
Talkit.ca Inc.

### BENEFACTORS\*

#### Banting & Best Level \$1000 +

Mike and Sue McNally  
Michael Taylor

#### Bondar Level \$500 +

Tom and Roslynne Crawford  
Steve and Cathy Hayman  
Peter and Susan Olynyk

#### Polanyi Level \$200 +

Helen Barton  
Dan and Debbie Bowman  
Steven and Kathy Brent  
Renato and Enza DeTina  
John and Eleanor O'Flynn  
Dr. Nicola Simmons

#### McGill Level \$50 +

Jim Casey  
Dr. Minna Damani  
Michelle Lafontaine  
Linda Millar  
Beverly Shepard  
Norman Young

\* In addition to the donors listed, BASEF also has donors who wish to remain anonymous.

Note: Sponsors donating in-kind services help us provide an exceptional experience for BASEF participants. Key donations included: printing, newspaper advertising, accounting, and web hosting.

## SPECIAL PROJECTS



### *The Bay Area Science and Engineering Fair Endowment Fund*

In June 2012, BASEF established an endowment fund with the Hamilton Community Foundation (HCF) under their Agency Endowment Program. Contributions are invested by HCF and the income earned, net of management fees, is made available for BASEF to support BASEF's mission and goals. As at August 31, 2019, the endowment fund had grown to just over \$42,000. In October 2019, BASEF received a distribution from the fund in the amount of \$1,442.

Please consider the BASEF Endowment Fund as part of your charitable giving. You may send a cheque designated for the BASEF Endowment Fund to BASEF, or send your donation directly to the HCF.

### *BASEF Outreach: Resources Available to Students, Teachers, and Parents*

The Bay Area Science and Engineering Fair offers students the opportunity to explore problems that matter to them using a longer term project-based approach. BASEF offers a wide range of resources to help students conduct their research; from help getting started, to technical considerations such as how to design a project display, or finding answers to ethical and safety questions. We also offer help to parents and teachers working in support of young researchers.

The main portal for this help is our website. If you only have time to explore one resource, a definitive guide called "Science Success" is a good place to start. It is available at [www.basef.ca/outreach](http://www.basef.ca/outreach). "Science Success" consists of 4 parts: a guide for teachers, a student workbook, and two slide presentations useful for groups of students, teachers or parents. The teacher guide and student workbook are available in both English and French.

The page <https://www.basef.ca/project-resources/> contains a large number of links to a range of resources, with detailed descriptions. To see what a typical BASEF project looks like, visit our project archives at <https://www.basef.ca/past-fairs/>.

The following initiatives, first introduced in 2017, are still available for our students

- The TECHSEED program offered a free computer electronics kit to qualifying students who want to explore the use of an Arduino computer in a project. Mentors are available to assist students with the kits and answer questions.
- A PATENT information booklet and workbook was developed in collaboration with Gowling WLG, a long-time special awards sponsor. This booklet transforms the legalese into understandable information for students whose project might benefit from patent protection or intellectual property laws. These are provided to our trip award winners and all high school projects. These booklets are also available on our website.

Students, teachers and parents can access help directly from BASEF by emailing us at [outreach@basef.ca](mailto:outreach@basef.ca). Experienced science fair veterans, professional scientists, engineers and educators are available to provide chalk-talks or workshops. This is particularly valuable for students attending schools not supportive of science fairs in the BASEF catchment area. Mentors can be arranged on request by emailing [outreach@basef.ca](mailto:outreach@basef.ca). The BASEF Outreach program can also help you assemble a team of judges for your school fair, and provide help on how to organize the judging and evaluate the results.

Teacher Activity Day is an all-day seminar for teachers covering everything you wanted to know about science fair projects, including the application process for students entering BASEF, safety, judging, and how to avoid the most common pitfalls encountered during registration. This course can be booked by emailing [outreach@basef.ca](mailto:outreach@basef.ca)

Project-based science, as promoted by science fairs, is one of the best ways to engage young people in a focused initiative where they can explore their own interests, exercise their curiosity, and experience the thrill of discovery. BASEF provides a friendly competition to encourage this in-depth exploration of new ideas. We at BASEF Outreach are here to help you get started with your project. Need help? Email [outreach@basef.ca](mailto:outreach@basef.ca) or visit our website at [www.basef.ca](http://www.basef.ca).

### ***BASEF Outreach and Bursary Programs***

The BASEF Bursary Program was once again offered this year to assist students in grades 7-12 who were in need of financial assistance to complete a science fair project. Based on teacher recommendations, up to 40 students in the BASEF catchment area were eligible for a \$30.00 bursary. The projects could be a classroom activity or be entered into BASEF; we asked only that the students undertake and complete a science project to the satisfaction of their teachers. The goal of the program is to make it easier for students in need to participate in project-based science.

This year the program awarded 22 bursaries to students nominated by teachers.



## BASEF CHAMPION TEACHER



The Organizing Committee of the Bay Area Science and Engineering Fair congratulates:

ERIC ROMERO-SIERRA

Ancaster Meadow Elementary

CONGRATULATIONS TO THE 2020 BASEF CHAMPION TEACHER!

The nominators comments:

“He pushes me to go further in projects and always encourages me and gives good feedback so I can do a better job the next time.”

“He is very supportive, and encourages students to always try their best. He always motivates students to attend BASEF, and helps to prepare them for the fair.”

“Every year Mr. Romero-Sierra encourages his students to join the BASEF science fair. He tells us that we can win if we try and helps us in any way possible. He tells us that if we work hard and put in the effort anything is possible. Mr. Romero-Sierra will always be there for you, no matter what. He helps students by staying in after and before school, and is always there to help.”

“Annually, Mr. Romero-Sierra ensures that all his students are achieving more than they ever knew they would. His passion for science never fails to show and even rubs off on his fellow students.”

“Mr. Romero-Sierra is an inspiration and I will always look up to him.”

“I feel as though this teacher deserves the recognition for all the hard work he puts in each year to ensure the encouragement and commitment of each and every one of his students. His inspiration, commitment and dedication never ceases.”



## MERIT AWARD JUDGES



### *Comments from the Judge-In-Chief*

BASEF was an online fair in 2020. Every effort was made to keep the judging consistent and comparable to previous years. We learned a lot about judging remotely. Judges did not have an opportunity to talk with the finalists, instead they relied on student produced videos and downloaded files.

I want to sincerely thank each of the merit judges and category chairs for their support and willingness to take on the challenges of this judging remotely.

I congratulate all the finalists for their outstanding projects, dedication to science fairs and ability to adapt and meet the challenges faced in 2020. You are all winners!

Donna Stack-Durward

BASEF Judge-In-Chief

Abdel-Kader, Mariam	McMaster University (Student)	Bowen, David	Retired
Abdin, Aatiqiha	Teacher Candidate at Brock University	Bowen, Lynda	Retired
Abraham, Joel	McMaster University	Brennan-Rieder, Denise	Self employed
Adams, Stephen	Mohawk College	Breznik, Jessica	School - Ph.D. studies at McMaster University
Adli, Taranah	Student and working at McMaster University	Breznik, Richard	Retired
Ahmed, Maisha	McMaster University	Bromley, Marianne	Retired teacher
Ainabe, Arielle	School	Brown, David	Retired
Anderson, Harold	Harold Anderson Electronics Limited (My company)	Brunetti, Nathan	McMaster University (Ph.D. student)
Andres, Sara	McMaster University	Buhariwalla, Connor	McMaster University
Armstrong, Marie	McMaster University	Calvert, Laura	McMaster University
Arrabi, Amjad	Currently Unemployed	Cowbrough, Braeden	McMaster University
Badzioch, Rachel	McMaster University (student)	Croteau, Felix	Ph.D. Candidate - Hynes Lab - McMaster University
Beesley, Neil	Retired - Hamilton Water	de Haan, Bob	Retired
Bhardwaj, Lata	Realtor	De Tina, Renato	Retired - ArcelorMittal Dofasco
Binch, Rosie	Retired	DeJong, Erica	McMaster University - Medical Sciences Graduate Program
Binch, Stephen	Retired from the Hamilton Police Department	Desnoyers, Robert	Safety Power Inc.
Birch, Nigel	Alta Technology	Dhawan, Tushar	McMaster University
Bortolus, Mark	McMaster - Inorganic Chemist University (Ph.D. Student)	DiValentino, Evan	Mohawk College
		Dyer, Benjamin	University of Guelph (Masters Student)



## MERIT AWARD JUDGES continued

Dyer, Charles	Sovereign Asset Management	Johnson, Warren	Retired
Emun, Yoel	McMaster University	Johnston, Bill	Semi-Retired
Eshafi, Sarah	McMaster University (student)	Jose, Tamina Angel	McMaster University
Fantauzzi, Matt	McMaster University	Kaspersetz, James	Ontario Environmental
Fisher, David	Self Employed Consultant	Kelly, Michael	Retired. Halton Cath Distr Schol Board
Forbes, James	Retired	Kesavan, Sreedevi	McMaster University
Forrest, Fraser	Retired	Khaloo, Nalini	McMaster University - Second Year Life Sciences
Galicia, Melissa	York University	Killip, Shannon	McMaster
Garrett, Jim	retired	Lasowski, Frances	McMaster University
Haque, Bushra	McMaster University	Lawlor, Daniel	City of Hamilton
Harris, Laura	Brock University (student)	Leanage, Ramani	Retired
HARRISON, Eric	Retired	Li, Harry	McMaster University
Hazelden, Linda	Previous Employment: Archdiocese of Toronto	Lonz, Steve	Momentum Traffic Inc.
Hazelden, Mark	Brookfield Institute for Innovation + Entrepreneurship (Ryerson University)	Lukic, Jelena	Hamilton Health Sciences, Niagara College, Brock University, Sheridan College
Hewson, Dr John R	Retired. Professor Emeritus, Dept of Anaesthesia, McMaster University	Lusterio, Adrien	McMaster University
Hill, Terry	Retired Hamilton Police Service	MacAulay, Miranda	Medical office Assistant
Hol, Adrienne	Avenue Physiotherapy	Mahalec, Dr Jila	My own consulting
Hollick, Marilyn	Retired	Mahut, Caroline	McMaster University (student 3rd year Mechanical Engineering)
Horzum, Meliha	McMaster University	Maklad, Ahmed	McMaster University
Howlader, Raiyan	School	Martin, Paul	Retired Dofasco
Hundal, Harbir	Kumon Math and Reading Centre (part-time); Attending Teachers College in Fall 20	Marzok, Art	McMaster University
Ibrahim, Quazi Rafid	McMaster University (Technical Assistant)	McCrary, Mitchell	University of Waterloo
Inglis, Julie	school	McNamee, Simon	McMaster
Jacob, Ashwin	McMaster University	McNeill, Kestrel	McMaster University, Master's Student and Teaching Assistant in the Faculty of H
Jamkodjian, Cassandra	Alectra Utilities	Medeiros, Sarah	McMaster University
Jennings, Peter	Self Employed Inventor	Merali Juma, Aadil	McMaster University
Jeyanathan, Vidhiya	McMaster University	Metz, Edu	Qualcomm
Jilek, Jana	Retired	Mindorff, Mark	Darts
Jobity, Christopher	school	Moayad, Lana	McMaster University
		Morin, Shane	Retired, Xerox
		Muhammed, Lateef	McMaster University



## MERIT AWARD JUDGES continued

Mulholland, Emma	McMaster University	Sciullo, Luana	Humber College
Nair, Gayatri	McMaster University	Shaikh, Wardah	School
Nazal, Hana	McMaster University	Sharma, Neha	McMaster University (Graduate student)
Newcombe, Peter	CANMET Materials (materials research lab operating under Natural Resources Canada)	Sheils, Glenn	Purplebricks
Niazi, Humaira	McMaster University	Shenwang, Diana	Queen's University
Pa, Sidney	McMaster University	Shepard, Beverly	Retired. Worked in pharmacology lab, biochemistry lab; after a break for childr
Patel, Vidhi	School		
Pfeiffer, Leanna	Hamilton Health Sciences, Juravinski site	Simmons, Ben	Retired, Risk Management Banking
Place, Dave	Retired - Hamilton Police Service	Simpson, Mark	Retired, Brantford Power Inc., VP of Engineering and Operations
Pollinzi, Angela	McMaster University	Singh, Jasrita	McMaster University
Putman, Scott	IT Force	Sloboda, Deborah	McMaster University
Rachwalski, Kenneth	McMaster University	Smith, Margot	Self employed
Ragulojan, Malavan	McMaster University, Micheal DeGroote School of Medicine	Smith, Rebecca	ReproLabels
		Sparring, Taylor	McMaster University (Ph.D. student)
Reid, Carolynn	City of Hamilton - Economic Development	Speicher, David	McMaster University
Rekas, Adrianna	McMaster University	Spence, Tanya	Mohawk College (student Electrical Engineering Technology)
Rikic, Ray	Retired Staff Sergeant in charge of Forensic Services of Hamilton Police Service		
Rivera-Madrinan, Felipe	McMaster (student 4th year integrated science)	Stacey, Hannah	McMaster University
Ruiz Blanco, Nelson	Independent	Steffler, Matt	University of Guelph
Rutherford, Megan	McMaster University (graduate student)	Stewart, Mark	McMaster Innovation Park
Sadayappan, Kumar	Canmet MATERIALS, NRCAN	Sullivan, Tina	Ontario Equestrian
Saddik, Wessam	Brock University	Szczurek, Carolina	Occasional Teacher for the Halton Catholic District Schoolboard, Niagara Distric
Saini, Kanika	CIBC and Megamind Tutoring	Tai, Janice	McMaster University
Salami, Zainab	Student	Tarjan, Michael	Tarjan Management Inc.
Salemi, Louisa	Canadian Cancer Research Alliance, Canadian Partnership Against Cancer	Taylor, Shane	Graduate student
		Themeles, Tom	Government
Salgado-Merlos, Erick	City of Hamilton	Thompson, Shawna	McMaster University
Sangueza, Julia	Brock University	Thompson, Stephanie	Halton Catholic District School Board
Schoenhardt, Mary Anne	Student	Timakova, Elena	McMaster University
		Todd, Erinn	Green Venture
		Tran, Veronica	McMaster University





## MERIT AWARD JUDGES continued

Tuinema, Billie	Hamilton Health Sciences	Wilson, Anne-Marie	Retired, high school science and math teacher with HWDSB at Westdale SS
Tywonek, Kasia	McMaster University		
Vidican, Razvan	Candu Energy Inc	Wilson, John	Retired, Professor of Civil Engineering, McMaster University
Wang, Ethan	Maple Leaf Foods		
Wang, Lu	Retired from McMaster University	Wolfsgruber, Richard	Metrolinx
Wang, Peiyao	McMaster University	Wood, David	FCA Canada - Etobicoke Casting Plant
Wehrle, Paul	Retired	Wood, Jane	ArcelorMittal Dofasco

## SPECIAL AWARD JUDGES



### **Artistically Inspired Display Awards**

Cathy Hamilton, Cathy Hayman

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

Shannon Clark

### **Canadian Nuclear Society (Golden Horseshoe Branch) Awards**

Elizabeth MacConnachie, Garik Patterson

### **Chemical Institute of Canada - Hamilton Section Awards**

Don Barclay, Tom Sutton, Dragan Vuckovic

### **Damani Award for Women in Biomedical Engineering**

Dr. Minna Damani

### **Environmental Inspiration Award**

Isabella O'Brien

### **Gowling WLG Innovation Awards**

Emily Dies, Alex Ross

### **Hamilton Amateur Astronomers Award**

Mario Carr, Chris Strejch, Bernie Venasse

### **Hamilton Pakistani Physicians Association**

Tariq Aziz, Afia Aziz, Saba Iram, Naveeda Yasmeen

### **John W. Howard Materials Research Award**

Dr. Nicola Simmons

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

Boguslaw Bochenski, Leyden Martinez Fonte

### **Laurentian Chapter of SETAC Award**

Wilson Lau, Elise Millar, Victoria Restivo

### **Mahut-Brent Award for Women in Science and Engineering**

Katie Brent, Caroline Mahut

### **McMaster University Dept. of Chemical Engineering & Chemical Engineering Club**

Ryan LaRue, Graham Van Every

### **McMaster University School of Geography and Earth Sciences Awards**

Dr. Luc Bernier, Rebecca Moublow,  
Dr. Maureen Padden, Nicholas Randazzo

### **Mechanical Contractors Association Hamilton Niagara Award**

Bill Patterson

### **Oakville Green Conservation Association Award for the Environment**

Karen Brock

### **Procor Engineering Awards**

Eziaku Nri

### **Professional Engineers Ontario - Oakville Chapter Awards**

Viet Le-The

### **Society of Tribologists & Lubrication Engineers - Hamilton Section Awards**

Richard Schrama, Mr. Navdeep Swach



## STUDENT EXHIBITORS

### Abbas, Tia

*Let's Talk About Cochlear Implants*  
Junior 7/8 Biotechnology  
Alexander's Public School, HDSB

### Agarwal, Om

*Doc-Typ – Standardizing & Augmenting  
Clinical Psychiatric Diagnostics through  
Deep Learning & NLP*  
Senior 11/12 Eng & Comp Sci  
Home Schooling, IND

### Agro, Rachel

*Zodiac Relatability*  
Junior 7/8 Health Sciences Human  
St. Augustine, HWCD

### Ahmed, Omer

*The Greenhouse Effect*  
Junior 7/8 Earth & Env Sci  
Al-Falah Islamic School, IND

### Al- Rammahi, Zainab

*Computational Exploration of Protein  
Functions in Parkinson's Disease*  
Intermediate 9/10 Health Sciences Human  
Ancaster High, HWDSB

### Alam, Javairia

*Flame retardant*  
Junior 7/8 Phys & Math Sci  
Al-Falah Islamic School, IND

### Alfred, Ariella

*Making Biofuel More Efficient*  
Senior 11/12 Eng & Comp Sci  
King's Christian Collegiate, IND

### Alidina, Sophie

*The Rescue Bot*  
Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB

### Arellano, Gabrielle

*Magnets Vs Temperature*  
Junior 7/8 Phys & Math Sci  
Corpus Christi, HWCD

### Artinian, Garo

*Hallucinations and Illusions*  
Junior 7/8 Health Sciences Human  
St. Andrew Elementary School, HCDSB

### Babineau, Claire

*Body Heat - Watt's Up?*  
Junior 7/8 Eng & Comp Sci  
St. Joachim, HWCD

### Baillie, Keira

*Stop distracted driving with car phone  
cage/cpc*  
Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB

### Baker, Sabrina

*The Stroop Effect*  
Junior 7/8 Health Sciences Human  
Maple Grove Public School, HDSB

### Balgun, Bella

*The Other Side of Things*  
Junior 7/8 Health Sciences Human  
Oakville Christian School, IND

### Barlis, Cristoff

*Lemon Power*  
Junior 7/8 Phys & Math Sci  
St. Luke, HWCD

### Bashta, Monique

*The Proof is in the Prints!*  
Junior 7/8 Biotechnology  
Oakville Christian School, IND

### Beltrame, Brianna

*Made to Degrade*  
Junior 7/8 Phys & Math Sci  
Corpus Christi, HWCD

### Blagaj, Chloe

*Teenly*  
Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB



## STUDENT EXHIBITORS (continued)

### Bourgeois, Lilian

#### *Harm Alarm*

Junior 7/8 Eng & Comp Sci  
Rolling Meadows Public School, HDSB

### Bresnahan, Rachel

#### *Eat for excellence: How your performance, blood glucose and carb intake are related*

Junior 7/8 Health Sciences Human  
Aldershot Elementary, HDSB

### Brunt, Jordynn

#### *Production and Testing of Coral Reef Safe Sunscreens*

Senior 11/12 Earth & Env Sci  
King's Christian Collegiate, IND

### Bucur, Christina

#### *Sugar Buzz*

Junior 7/8 Health Sciences Human  
St. Andrew Elementary School, HCDSB

### Cafiso, Jessica

#### *Which Animals Can See Infrared?*

Junior 7/8 Life Sciences Non-Human  
St. Augustine, HWCD

### Cai, Cailyn

#### *Physics Of A Gauss Rifle*

Junior 7/8 Phys & Math Sci  
Ancaster Meadow, HWDSB

### Chamseddin, Bilal

#### *Connection Error...*

Junior 7/8 Phys & Math Sci  
Al-Falah Islamic School, IND

### Chan, Ryder

#### *Converting 2D Object Tracking to 3D Object Tracking*

Junior 7/8 Eng & Comp Sci  
W. H. Morden Public School, HDSB

### Chaudhry, Aydin

#### *Seeing through Vibrations*

Junior 7/8 Eng & Comp Sci  
W. H. Morden Public School, HDSB

### Chorney, Ciara

#### *Shining The Light On Bacteria*

Junior 7/8 Life Sciences Non-Human  
Blessed Sacrament, HWCD

### Clapperton, Maya

#### *Reducing Barriers to Hydrokinetic Energy - An Autonomous Turbine Installation and Retrieval System*

Senior 11/12 Eng & Comp Sci  
Westdale Secondary School, HWDSB

### Colatosti, Jacob

#### *Unmasking the Mask*

Intermediate 9/10 Health Sciences Human  
Bishop Ryan Secondary School, HWCD

### Conen, Paul

#### *Magnet Attraction: Hot Versus Cold*

Junior 7/8 Phys & Math Sci  
Ancaster Senior, HWDSB

### Cooke, Alexander

#### *Magnet Attraction: Hot Versus Cold*

Junior 7/8 Phys & Math Sci  
Ancaster Senior, HWDSB

### Damad, Amytis

#### *How Technology Can Optimize Human Health*

Junior 7/8 Biotechnology  
St. Andrew Elementary School, HCDSB

### Davis, Chase

#### *Harm Alarm*

Junior 7/8 Eng & Comp Sci  
Rolling Meadows Public School, HDSB

### Di Carlo, London

#### *The Other Side of Things*

Junior 7/8 Health Sciences Human  
Oakville Christian School, IND

### Dias, Rachel

#### *Sweet as Sugar*

Junior 7/8 Health Sciences Human  
Oakville Christian School, IND





## STUDENT EXHIBITORS (continued)

### Dimian, Steven

*Snow Energy System*

Junior 7/8 Eng & Comp Sci

St. Andrew Elementary School, HCDSB

### Dookeran, Sonia

*Screen Spy*

Junior 7/8 Eng & Comp Sci

John William Boich Public School, HDSB

### Elgirbi, Mohamed

*Solar Bank*

Junior 7/8 Eng & Comp Sci

Ancaster Meadow, HWDSB

### Ellis, Peyton

*SmartTouch Puzzles; Puzzles and Games for  
the Visually Impaired*

Junior 7/8 Eng & Comp Sci

Alexander's Public School, HDSB

### Feltham, Josh

*NO-SHOW*

Junior 7/8 Phys & Math Sci

St. Augustine, HWCD

### Field, Felicity

*Modelling Electrophoresis Chamber*

Junior 7/8 Eng & Comp Sci

Hamilton Academy of Performing Arts, IND

### Gamble, Julia

*Plastic You: Are Micro-plastics in your water?*

Junior 7/8 Earth & Env Sci

St. Clare of Assisi, HWCD

### Gatto, GianLuca

*A Solution to Water Scarcity*

Junior 7/8 Earth & Env Sci

Hillfield Strathallan College, IND

### Giannou, Vanessa

*The Relationship Between Taste and Smell*

Junior 7/8 Health Sciences Human

Ancaster Meadow, HWDSB

### Gohir, Omaila

*Which Rust Remover is Most Efficient?*

Junior 7/8 Phys & Math Sci

Al-Falah Islamic School, IND

### Gower, Julia

*Colorful Thinking*

Junior 7/8 Health Sciences Human

Regina Mundi, HWCD

### Graham, Abigail

*Fabric Filters: A Massive Micro Menace*

Junior 7/8 Earth & Env Sci

John William Boich Public School, HDSB

### Gupta, Neha

*Use of Microfluidics to Provide Rapid  
Diagnosis of Bacterial Illnesses in  
Resource-Poor Settings*

Intermediate 9/10 Biotechnology

Westdale Secondary School, HWDSB

### Halasz, Bianca

*How Acid Rain Is Causing Our Earth Pain*

Junior 7/8 Earth & Env Sci

St. Andrew Elementary School, HCDSB

### Hanna, Christina

*Treatment of Heavy Metal Contaminated  
Water using Reverse Osmosis Membranes*

Senior 11/12 Earth & Env Sci

King's Christian Collegiate, IND

### Hannaford, Torie

*Teenly*

Junior 7/8 Eng & Comp Sci

John William Boich Public School, HDSB

### He, Chloe

*Separating Pigments in Inks: Paper  
Chromatography*

Junior 7/8 Phys & Math Sci

Ancaster Meadow, HWDSB

### Hegde, Pratha

*Ozone as an oxidant for BOD reduction in  
wastewater system*

Junior 7/8 Earth & Env Sci

James W. Hill Public School, HDSB



## STUDENT EXHIBITORS (continued)

### Higgins, Steven

*The 'Future' of Education*

Junior 7/8 Health Sciences Human  
St. Augustine, HWCD

### Hoang, Faith

*Tomato's Vitamin C and Antioxidant properties*

Senior 11/12 Life Sciences Non-Human  
King's Christian Collegiate, IND

### Howard, Ryan

*Plastic to Perfection*

Junior 7/8 Eng & Comp Sci  
Maple Grove Public School, HDSB

### Huang, Caroline

*Computing Neuroregeneration: Simulating Cognitive Function with Physarum AI*

Intermediate 9/10 Biotechnology  
Abbey Park High School, HDSB

### Hubers, Enya

*Writing Wizard: An Assistive Writing Device for Patients with Hand Dystonia*

Intermediate 9/10 Eng & Comp Sci  
Aldershot High School, HDSB

### Hussain, Shifa

*Project Ali*

Junior 7/8 Eng & Comp Sci  
Al-Falah Islamic School, IND

### Isaac-Huff, Jana

*What are microplastics doing to our environment*

Junior 7/8 Life Sciences Non-Human  
St. Andrew Elementary School, HCDSB

### Jarvis, Scarlett

*Fabric Filters: A Massive Micro Menace*

Junior 7/8 Earth & Env Sci  
John William Boich Public School, HDSB

### Jeneway, Will

*Recovery Wars*

Junior 7/8 Health Sciences Human  
Oakville Christian School, IND

### Jun, Grace

*The Power Of Packaging*

Junior 7/8 Health Sciences Human  
St. Augustine, HWCD

### Karachok-Savitzky, Sofia

*The Benefits and Ways to Manipulate Stimuli for Innovation.*

Junior 7/8 Health Sciences Human  
St. Andrew Elementary School, HCDSB

### Karpuzlular, Lilia

*Modelling Electrophoresis Chamber*

Junior 7/8 Eng & Comp Sci  
Hamilton Academy of Performing Arts, IND

### Kaspersetz, Natasha

*Turning Saltwater into Drinking water*

Junior 7/8 Earth & Env Sci  
Hamilton Academy of Performing Arts, IND

### Kaul, Ruby

*Road to The Future*

Junior 7/8 Eng & Comp Sci  
Aldershot High School, HDSB

### Kelder, Andrew

*Are You Nuts?!*

Junior 7/8 Health Sciences Human  
Oakville Christian School, IND

### Khondker, Munia

*How Effective Is The Influenza Vaccine?*

Junior 7/8 Health Sciences Human  
Ancaster Meadow, HWDSB

### Kirouac, Ethan

*Collision Avoidance Robot*

Junior 7/8 Eng & Comp Sci  
Guy B. Brown, HWDSB

### Kozyra, Gladys

*Do No Harm: An Investigation Into the Use of Bioplastics for Medical Purposes*

Junior 7/8 Biotechnology  
St. Joseph, HWCD



## STUDENT EXHIBITORS (continued)

### Lawrence, Evan

*Wormified: For Better or For Worse?*  
Junior 7/8 Earth & Env Sci  
Burlington Christian Academy, IND

### Lee, Hannah

*Are we safe from air?*  
Junior 7/8 Earth & Env Sci  
Oakville Christian School, IND

### Lee, YoungJae

*Control of mould breeding with peel of fruits  
and vegetables*  
Intermediate 9/10 Life Sciences Non-Human  
Ancaster High, HWDSB

### Leonard, Jerome

*Can you Filter Water using Natural Materials?*  
Junior 7/8 Eng & Comp Sci  
St. Andrew Elementary School, HCDSB

### Li, Jovita

*Water on the Go*  
Junior 7/8 Earth & Env Sci  
Alexander's Public School, HDSB

### Lima, Gabriela

*Problem Solving Pudelpointers*  
Junior 7/8 Life Sciences Non-Human  
Hamilton Academy of Performing Arts, IND

### Liu, Chloe

*The Effects of Music on Our Bodies*  
Junior 7/8 Health Sciences Human  
St. Andrew Elementary School, HCDSB

### Ma, Bolin (Johnny)

*Can homemade batteries be powerful?*  
Intermediate 9/10 Phys & Math Sci  
Westdale Secondary School, HWDSB

### Maccarrone, Zara

*Let's Get Crackin'*  
Junior 7/8 Life Sciences Non-Human  
Oakville Christian School, IND

### Mahmoud, Mazen

*I.A.W.S. (Indoor Automatic Watering System)*  
Junior 7/8 Eng & Comp Sci  
Alexander's Public School, HDSB

### Mahut, Stefanie

*Jet Ahead*  
Intermediate 9/10 Eng & Comp Sci  
M. M. Robinson High School, HDSB

### Maizen, Ashley

*Grasp*  
Junior 7/8 Eng & Comp Sci  
W. H. Morden Public School, HDSB

### Maletic, Kristijan

*Radars (Radio Detection and Ranging)*  
Junior 7/8 Phys & Math Sci  
St. Andrew Elementary School, HCDSB

### Maqsood, Mohammad

*The effect of DC 9V on radish seeds*  
Junior 7/8 Earth & Env Sci  
Al-Falah Islamic School, IND

### Martines, Marinna

*What a sunny day*  
Junior 7/8 Phys & Math Sci  
St. Luke, HWCD

### Mastrolonardo, Arianna

*Colorimetric Analysis of Manganese and  
Nickel in Carbon and Galvanized Steel*  
Intermediate 9/10 Phys & Math Sci  
King's Christian Collegiate, IND

### Matharu, Simran

*The Application of Photons in Linear Optical  
Quantum Computing*  
Intermediate 9/10 Phys & Math Sci  
Ancaster High, HWDSB

### Mckenzie, Heather

*Super Solar Spinner*  
Junior 7/8 Eng & Comp Sci  
Charles R. Beaudoin Public School, HDSB



## STUDENT EXHIBITORS (continued)

### McManus, Karsyn

*Western Medicine vs Natural Remedies*  
Junior 7/8 Health Sciences Human  
St. Michael, HWCD

### Mehta, Kavan

*The Effects of Vitamin D on Mental and Physical Fatigue*  
Senior 11/12 Life Sciences Non-Human  
King's Christian Collegiate, IND

### Middleton, Joshua

*Elucidating Dyslexia Spectacles (The E. D. S. Project)*  
Junior 7/8 Eng & Comp Sci  
Alexander's Public School, HDSB

### Misa, Michael

*Hard Rock and Green Tech*  
Junior 7/8 Eng & Comp Sci  
E. J. James Public School, HDSB

### Mogus, Mark

*Space GEMS: Graphene Enriched Mycelium Structures for Martian Habitat*  
Junior 7/8 Earth & Env Sci  
St. John Paul II Elementary School, HCDSB

### Mok, Joshua

*More Efficient Electrolysis*  
Junior 7/8 Phys & Math Sci  
Ancaster Meadow, HWDSB

### Montesano, Morgan

*EcoKid-Educating Students About Our Environment*  
Junior 7/8 Earth & Env Sci  
St. Vincent de Paul, HWCD

### Morcos, Maya

*Using C elegans as a Model Organism to Discover Factors that Influence Neurodegeneration*  
Senior 11/12 Health Sciences Human  
King's Christian Collegiate, IND

### Mostacci, Elyse

*Hey! Over Hear!*  
Junior 7/8 Health Sciences Human  
St. John Paul II, HWCD

### Naganobu, Aiko

*Eco Concrete*  
Junior 7/8 Eng & Comp Sci  
Alexander's Public School, HDSB

### Naik, Jaya

*Reclaiming Household Waste Heat With a Thermoelectric Generator*  
Junior 7/8 Eng & Comp Sci  
W. H. Morden Public School, HDSB

### Noormohamed, Naila

*AirQ™*  
Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB

### Olawunmi, Demilade

*Rise Up! - (A study of how different airfoil shapes affect lift and airflow in a wind tunnel)*  
Junior 7/8 Phys & Math Sci  
Oakville Christian School, IND

### Oyelade, Dara

*Perfect Little Lies*  
Junior 7/8 Health Sciences Human  
W. H. Morden Public School, HDSB

### Panicker, Eileen

*Body Heat - Watt's Up?*  
Junior 7/8 Eng & Comp Sci  
St. Joachim, HWCD

### Park, Seonyoung (Annie)

*What color of t-shirt absorbs the most heat?*  
Junior 7/8 Phys & Math Sci  
Ascension Elementary School, HCDSB

### Payne, Kalli

*Stop distracted driving with car phone cage/cpc*  
Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB





## STUDENT EXHIBITORS (continued)

### Perri, Maddy

*Icy-Hot Hydrowires*

Junior 7/8 Phys & Math Sci

St. Joachim, HWCD

### Piech, Nicole

*The Dog Treadmill*

Junior 7/8 Eng & Comp Sci

Alexander's Public School, HDSB

### Powell, Samantha

*The Super Salvager - Repurposing Plastic One Bottle at a Time*

Junior 7/8 Earth & Env Sci

John William Boich Public School, HDSB

### Pylnow, Michal

*Snow Energy System*

Junior 7/8 Eng & Comp Sci

St. Andrew Elementary School, HCDSB

### Qing, Chen

*PELT (Personal Emergency Locator*

*Transceiver): Locating victims with personal cellular devices*

Intermediate 9/10 Eng & Comp Sci

Hillfield Strathallan College, IND

### Rabia, Camila

*La plus grande tension=plus grande action?*

Junior 7/8 Projets français

École secondaire Georges-P.-Vanier, CSV

### Raposo Smallhorn, Makayla

*Les Effets Négatifs du Colorant Alimentaire*

*Artificiel Sur Les Organismes Vivants*

Junior 7/8 Projets français

St. Mary Elementary School, HCDSB

### Reizoff, Benjamin

*How Well Does Toothpaste Protect Our*

*Teeth? Does it Matter Which Brand?*

Junior 7/8 Health Sciences Human

St. Bernadette, HWCD

### Rodionova, Elizaveta

*The Effects of Probiotics on the Microbial*

*Growth of Staphylococcus Aureus Bacteria*

Senior 11/12 Life Sciences Non-Human

King's Christian Collegiate, IND

### Romano, Matteo

*User Discretion is Advised: The Effectiveness of a User Advisory Message on the Use of Social Media*

Junior 7/8 Health Sciences Human

W. H. Morden Public School, HDSB

### Rumman, Rumman

*Plants and pH; the effects of pH on the growth of Pisum sativum var. macrocarpon*

Junior 7/8 Earth & Env Sci

W. H. Morden Public School, HDSB

### Sandal, Dahlia

*Elephant Toothpaste*

Junior 7/8 Phys & Math Sci

St. Luke, HWCD

### Sanni, Misimi

*The Painting Robot*

Junior 7/8 Eng & Comp Sci

Oakville Christian School, IND

### Sassanelli, Ava

*Brun,ew,Noire,eh,Maroon,yum*

Junior 7/8 Projets français

École secondaire Georges-P.-Vanier, CSV

### Saturnino, Joseph

*ISO-PAN MRK 8: An Advanced A.I*

*Medical/Social Isolation Robot*

Senior 11/12 Eng & Comp Sci

Bishop Ryan Secondary School, HWCD

### Schooley, Jacob

*The A.R.T.S - Arduino Robotic Travelling Servant*

Junior 7/8 Eng & Comp Sci

Alexander's Public School, HDSB



## STUDENT EXHIBITORS (continued)

### Settimi, Isabella

*Play it to Perfection*

Junior 7/8 Health Sciences Human  
St. Augustine, HWCD

### Shah, Evanka

*The Rescue Bot*

Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB

### Shankar, Shenali

*Take a ride on the green side*

Junior 7/8 Life Sciences Non-Human  
St. Therese of Lisieux, HWCD

### Short, Reese

*Effects of smoking on your lungs*

Junior 7/8 Health Sciences Human  
St. Therese of Lisieux, HWCD

### Sienna, Elizabeth

*Pitch... Can You Hear it?*

Junior 7/8 Health Sciences Human  
St. Augustine, HWCD

### Singh, Harsimranjeet

*SpeakOut: A mobile app designed to assist the  
social communication of individuals with ASD*

Senior 11/12 Eng & Comp Sci  
North Park Collegiate and Vocational School,  
GEDSB

### Smales, Lily

*Using Machine Learning to Determine the  
Composition of New Vaccines for Novel  
Viruses*

Intermediate 9/10 Eng & Comp Sci  
Oakville Trafalgar High School, HDSB

### Soni, Ruhan

*Usage of Waste Plastics in Steel Making*

Junior 7/8 Earth & Env Sci  
Hillfield Strathallan College, IND

### Stephan, Oceana

*Let's Get Crackin'*

Junior 7/8 Life Sciences Non-Human  
Oakville Christian School, IND

### Stoisor, Ashley

*The Blank\_it*

Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB

### Su, Sienna

*Grasp*

Junior 7/8 Eng & Comp Sci  
W. H. Morden Public School, HDSB

### Sun, Cynthia

*Physics Of A Gauss Rifle*

Junior 7/8 Phys & Math Sci  
Ancaster Meadow, HWDSB

### Syed, Fatema

*The Effects Of PRP*

Junior 7/8 Health Sciences Human  
Ancaster Meadow, HWDSB

### Syed, Zainab

*Lead Out, Lithium In!*

Junior 7/8 Phys & Math Sci  
Ancaster Meadow, HWDSB

### Szymala, Weronika

*What a sunny day*

Junior 7/8 Phys & Math Sci  
St. Luke, HWCD

### Tiong, Ethan

*The 5G Network. The Future of The World*

Junior 7/8 Eng & Comp Sci  
Hillfield Strathallan College, IND

### Venn, Kennedy

*The Dog Treadmill*

Junior 7/8 Eng & Comp Sci  
Alexander's Public School, HDSB

### Wang, Brenton

*Hallucinations and Illusions*

Junior 7/8 Health Sciences Human  
St. Andrew Elementary School, HCDSB

### Wellwood, April

*Eat for excellence: How your performance,  
blood glucose and carb intake are related*

Junior 7/8 Health Sciences Human  
Aldershot Elementary, HDSB



## STUDENT EXHIBITORS (continued)

### Whelan, Finnley

*Technology vs. Sleep*

Junior 7/8 Health Sciences Human  
Ancaster Senior, HWDSB

### Widyalankara, Sadisha

*Smart Bike - Collision Warning System*

Junior 7/8 Eng & Comp Sci  
Anne J. MacArthur Public School, HDSB

### Willson, Olivia

*Let's Talk About Cochlear Implants*

Junior 7/8 Biotechnology  
Alexander's Public School, HDSB

### Wong, Joshua

*Think Twice to Melt Ice*

Junior 7/8 Phys & Math Sci  
St. Joachim, HWCD

### Xu, Julia

*An Innovative Solution to the Plastic Problem*

Intermediate 9/10 Phys & Math Sci  
White Oaks Secondary School, HDSB

### Xu, Michael

*Smart Steps Into The Future*

Junior 7/8 Eng & Comp Sci  
W. H. Morden Public School, HDSB

### Yao, Kathy

*Using Applied Machine Learning with Weka to  
Predict Diabetes*

Intermediate 9/10 Eng & Comp Sci  
Oakville Trafalgar High School, HDSB

### Yin, Dian

*Birth Order On Personality*

Junior 7/8 Health Sciences Human  
Maple Grove Public School, HDSB

### Yoo, Ryan

*RB-Pro Tiles*

Junior 7/8 Eng & Comp Sci  
John William Boich Public School, HDSB

### Zhang, Kaylee

*Dreamy Cream*

Intermediate 9/10 Eng & Comp Sci  
Westdale Secondary School, HWDSB



## SPECIAL AWARDS

Special Awards are donated by families, individuals, companies, organizations and groups to recognize deserving projects that deal with topics of interest to the donor.

### *Artistically Inspired Display Awards*

Two awards for \$50 for projects with the most artistically inspired display

Association for Iron & Steel Technology Northern Chapter Awards

Two awards of \$100 for outstanding projects related to metallurgy, materials science, or engineering

### *Dr. Laura Blew Social Sciences Awards*

Two awards of \$50 for the best two Social Science based Projects

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

Two awards of \$100 for outstanding projects relating to mining, metallurgy and petroleum

### *Canadian Meteorological and Oceanographic Society*

An award of \$150 for the best project at any level in Meteorological and/or Oceanographic Sciences. This includes projects in weather, air quality, climate, climate changes and/or the oceans.

Canadian Nuclear Society (Golden Horseshoe Branch) Awards

Two awards of \$125 for intermediate or senior projects and two awards of \$75 for junior projects relating to nuclear science and engineering, energy research or climate sciences

### *Chairman's Award*

An award of \$100 plus a plaque for a project that exhibits good scientific, engineering or mathematical thought, but did not receive a merit award or any special awards.

### *Chemical Institute of Canada- Hamilton Section Awards*

Three awards of \$100 for the best projects related to chemistry, chemical engineering, or chemical technology

### *Conservation Halton Awards*

Two awards of \$100 to projects that contribute to environmental research, protection, conservation, restoration or awareness by Halton students

### *Damani Award for Women in Biomedical Engineering*

One award of \$100 for a female student that demonstrates an excellent application of knowledge in engineering, biology and medicine for healthcare. Also the creative integration of a variety of engineering disciplines with the biomedical sciences for healthcare. Example disciplines may include material science, mechanical engineering, electrical engineering, computer engineering, biotechnology, cellular and tissue engineering, and/or genetic engineering, etc.





## **SPECIAL AWARDS (continued)**

### ***Doris Casey and Gwen Nicolls Disability Solutions Awards***

Two awards of \$100 for projects showing the most innovative and creative technical solution focused on assisting individuals to overcome physical or cognitive disabilities

### ***Dr. M. Doyle Biology Award***

\$250, plus a plaque and a trophy to the winner's school for the best Biology project

### ***Electrical Construction Association of Hamilton Award***

Two awards of \$250 for projects displaying the best and safest use of electricity in the most creative manner

### ***Environmental Inspiration Award***

One award of \$250 for the best environmental project that addresses an environmental problem in an inspirational/innovative way.

### ***Farncombe Family Digestive Health Research Institute***

For projects that explore digestive health, related disease, general nutrition or the human microbiome in health or disease through experimentation or in depth literature will be eligible

#### ***Farncombe Family Digestive Health Research Institute Grand Award***

One award of \$750 plus a 4-week summer internship in a research lab in the Farncombe Institute at McMaster University, Hamilton, ON. The winner(s) will select from a summary of potential projects provided by the Farncombe research groups (although the winner(s) may propose a project in consultation with a research lab). Pair projects will be eligible and it is expected that they would do the internship together and split the monetary award (\$375 each).

#### ***Farncombe Family Digestive Health Research Awards***

Two Awards of \$250 each

### ***Gowling WLG Innovation Awards***

#### ***Runner-up***

An award of \$200 for the runner-up for an excellent project demonstrating potentially patentable subject matter

#### ***Grand Winner***

An award of \$300 and a complimentary one-hour consultation with a patent or trademark agent at the Gowling WLG Hamilton Office for the best project demonstrating potentially patentable subject matter

### ***Hamilton Academy of Dentistry Awards***

Three awards of \$250 (first), \$150 (second) and \$100 (third) for Intermediate or Senior projects related to dentistry or the delivery of dentistry

### ***Hamilton Chamber of Commerce Innovation Awards***

Three awards of \$250 (first), \$150 (second) and \$100 (third) for the most deserving projects by students from Hamilton with potential commercial applications focused on improving our local environment, communities or quality of life

### ***Hamilton Pakistani Physicians Association Awards***

Three awards of \$250 (First), \$150 (Second), and \$100 (Third) for projects (any level) that demonstrate personal initiative and present an innovative solution.

### ***Hamilton Wentworth Occasional Teacher Awards***

#### ***Environment & Education Award***

One award of \$50 for a Junior project that most effectively educates others about an environmental issue

#### ***Healthy Lifestyles Award***

One award of \$50 for a Junior project that most effectively educates others regarding the role of nutrition and/or exercise in maintaining a healthy lifestyle

#### ***Presentation & Aesthetics Award***

One award of \$50 for a Junior project that demonstrates a high level of visual appeal, creativity, and overall quality of presentation

### ***Hillfield Strathallan College Awards of Excellence***

#### ***Life Sciences Award***

One award of \$100 for a junior project that best displays excellence in life sciences

#### ***Physical Sciences Award***

One award of \$100 for an intermediate project that best demonstrates an understanding of the scientific process in the physical sciences

#### ***Innovation Award***

One award of \$100 for a senior project that best displays innovation related to environmental sciences or biotechnology

### ***John W. Howard Materials Research Award***

One award of \$100 for a project demonstrating innovation in engineering materials

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

Two awards of \$100 for projects showing the best use of Electronics in a Science or Engineering project

### ***Indigenous Peoples of Canada Scientific Study Awards***

Three awards of \$140 (first), \$80 (second) and \$80 (third) for projects that demonstrate the application of established scientific methods to topics relevant to the culture, heritage or issues of the indigenous peoples of Canada

### ***International Science & Engineering Affiliated Fair Awards***

Prize: Certificates &, letters

#### ***American Meteorological Society***

For 2 projects in the areas of atmospheric, and related oceanic and hydrologic sciences



## **SPECIAL AWARDS (continued)**

### ***International Science & Engineering Affiliated Fair Awards (cont'd)***

#### ***American Psychological Association***

Creative scientific endeavour in the areas of atmospheric and related oceanic and hydrologic sciences

#### ***ASM Materials Education Foundation Award***

The best materials engineering project

#### ***Association for Women Geoscientists***

A project by a female(s) exemplifying high standards of innovation and scientific excellence in the geosciences

#### ***Intel Excellence in Computer Science***

US\$200 for the best intermediate or senior project in computer science

#### ***MU Alpha Theta***

Most challenging, original, thorough and creative investigation of a problem involving mathematics

#### ***Ricoh USA, Inc.***

Outstanding project that addresses issues of environmental responsibility and sustainable development

#### ***Society for In Vitro Biology***

An Outstanding Grade 11 project in the areas of in vitro biology or tissue culture

#### ***U.S. Agency for International Development (USAID)***

Science Champion Award: The most outstanding project to solve an important global development challenge. Prize also includes a Social Media Kit

#### ***Yale Science & Engineering Association***

An Outstanding Grade 11 project in Computer Science, Engineering, Physics or Chemistry. Prize includes a medallion & a certificate

#### ***Laurentian Chapter of SETAC Award***

Two awards of \$100 for the best projects and presentations on a topic related to environmental toxicology, chemistry, pollution, contamination, remediation or environmental protection

#### ***Dr. Colin J.L. Lock Memorial Chemistry Award***

One award of \$100 for a project demonstrating the best application of chemistry

#### ***Mahut-Brent Award for Women in Science and Engineering***

Awarded for an outstanding project by a female student that demonstrates an excellent application of scientific thought and creativity towards a subject matter that the participant is passionate about. Prize is \$100, a giant microbe and a certificate.



## SPECIAL AWARDS (continued)

### *McMaster University Awards*

#### *Department of Chemistry and Chemical Biology Award*

One award for \$100 for an outstanding senior or intermediate project connected to chemistry or chemical biology

#### *Department of Chemical Engineering & Chemical Engineering Club*

One award of \$250 for an outstanding intermediate or senior project demonstrating aspects of chemical engineering

#### *Department of Materials Science and Engineering*

Three awards of \$100 and a trophy, one at each level, to projects displaying the best innovative use, design, or testing of materials.

### *School of Geography and Earth Sciences Awards*

#### *Earth or Environmental Science Award*

An Award of \$ 100, for an outstanding project in earth or environmental science

#### *Geography or Social Science Award*

An Award of \$ 100, for an outstanding project in geography or social science

### *Mechanical Contractors Association of Hamilton Award*

One award of \$250 for the best engineering project, intermediate or senior level

### *Michael G. DeGroote Institute for Infectious Disease Research (IIDR) Awards*

#### *Grand Award*

\$100 for the best senior student project in infectious disease, drug discovery or human health. This award also includes a one hour consultation with Dr. Dawn Bowdish, of IIDR to discuss with the winner(s) and their families about science/university/careers. Also, an article about the winners and their projects will be published in the IIDR newsletter.

#### *Research awards*

Two awards of \$50 for excellent student projects in infectious disease, drug discovery or human health.

### *Nelson Steel Awards*

Two awards of \$100 for outstanding junior projects related to two of the following fields: Steel, Environmental or Chemistry

### *New Health Scientist Awards*

One award of \$50 for a worthy project at the Junior level showing good potential for improving the health of our community



## **SPECIAL AWARDS (continued)**

### ***Nikola Tesla Innovation Awards***

Projects which best display the most innovative application of the body of knowledge associated with Nikola Tesla's work, and/or acknowledgement in the display of Nikola Tesla's contribution by way of his work and inventions.

#### ***Nikola Tesla Innovation Awards***

One award each for Gold (\$250), Silver (\$150), & Bronze (\$100)

#### ***Nikola Tesla Honourable Mention Awards***

Twenty (20) Honourable Mention Awards at \$50 each for projects with electricity as a key element

### ***Oakvillegreen Conservation Association Award for the Environment***

An award of \$100 for the project that best promotes understanding and stewardship of the environment.

### ***Primary Fluid Systems Awards***

Twenty Awards of \$100 to outstanding projects in Earth and Environmental, Engineering or Physical Sciences categories

### ***Procor Engineering Awards***

Three awards of \$150 (senior), \$100 (Intermediate) and \$50 (Junior) for an excellent Engineering project at each level

### ***Professional Engineers of Ontario-Hamilton/Burlington Chapter Awards***

Three awards of \$250 (first), \$150 (second) and \$100 (third) for deserving, exceptional, outstanding projects in Engineering at any level

### ***Professional Engineers Ontario – Oakville Chapter Awards***

Three awards of \$200 for deserving engineering projects, one at each level

### ***Rotary Club of Hamilton-East Wentworth Awards***

Three awards of \$250 (first), \$150 (second) and \$100 (third) for the best three projects from schools situated in the Hamilton core and/or Red Zone areas displaying high academic achievement and striving to excel in science and technology

### ***Society of Tribologists & Lubrication Engineers – Hamilton Section Awards***

Two awards of \$250 for projects that utilize the principles of tribology (friction, wear and lubrication) to solve a technical problem

### ***SPIE – The International Society for Optics & Photonics Awards***

Three awards of US\$250 (first), US\$150 (second) and US\$100 (third) for projects in optics or photonics where students apply optics or photonics technology, techniques or principles to their projects. To be requested by the winners after the fair

### ***Talkit.ca Computer Engineering Awards***

One award of \$100 (first) and one award of \$50 (second) for outstanding projects using computer electronics or software



## **SPECIAL AWARDS (continued)**

### ***Ted Rogers Innovation Award – Rogers Communications Inc.***

One award of \$100, a T-Shirt and a certificate for a project that best demonstrates commercial potential.

### ***The Research Institute at St. Joe's Hamilton, Health Research Awards***

Two awards of \$100 at the intermediate level and two \$50 awards at the junior level for outstanding projects that use strong scientific principles in exploring or solving a problem related to human health issues and communicates the results of their project through an effective visual display

### ***Water Environment Association of Ontario Award***

An award of \$100 for a project focused on innovative ideas for preserving and/or enhancing Ontario's water environment.





## SCHOLARSHIPS

### *Bay Area Health Trust Award*

The Paul Lakin/Bay Area Health Trust, Life Sciences Award

A \$1500 McMaster Scholarship awarded to a senior (grade 11 or 12) student (for a pair project, split between 2 students) for an outstanding project demonstrating innovation and scientific excellence in the Life Sciences. Award to be redeemed upon acceptance and registration into any undergraduate program at McMaster University, Hamilton, ON.

### *Hillfield Strathallan College Entrance Scholarship Award*

Prize: One \$5,000 entrance scholarship toward tuition fees, to be redeemed upon acceptance as a full-time senior school student entering Hillfield Strathallan College in any of grades 9 to 11 for the 2019-21 academic year. (Will be awarded to both students in a pair project – maximum \$10,000 value).

Criteria: The best project demonstrating excellence in scientific learning with joy and purpose.

### *McMaster University Faculty of Engineering Entrance Awards*

Prize: Five \$1,000 tuition awards, to be redeemed upon acceptance of admission to the Faculty of Engineering. (Pair projects will split the award).

Criteria: Projects demonstrating excellence in Science, Technology, Engineering or Math.

### *McMaster University Women in Engineering Entrance Awards*

Prize: Two \$1,000 tuition awards, to be redeemed upon acceptance of admission to the Faculty of Engineering. (Pair projects will split the award).

Criteria: Projects led by female students that demonstrate excellence in Science, Technology, Engineering or Math.

### *The Paul Lakin/Bay Area Health Trust, Life Sciences Award*

A \$1500 McMaster Scholarship awarded to a senior (grade 11 or 12) student (or for a pairs project, split between 2 students) for a project demonstrating innovation in the Life Sciences. Award to be redeemed upon acceptance and registration into any undergraduate program at McMaster University, Hamilton, ON.

### *University of Ottawa Entrance Scholarship*

Prize: One \$1,000 entrance scholarship applied to tuition fees upon being accepted into and registered in an undergraduate program in the Faculties of Engineering or Science at the University of Ottawa. (Pair projects will split the award).

Criteria: The most deserving senior project.

## SCHOLARSHIPS continued



### ***Mohawk College and Sheridan College – Award of Excellence Tuition Scholarships***

Prize: Mohawk College and Sheridan College will provide a \$1,000 entrance award. The scholarship may be used toward first year tuition upon the recipients' acceptance and registration in any full-time program at either Mohawk College or Sheridan College. If multiple scholarships are accumulated over more than one year, only one of these scholarships may be used.

Criteria: All students earning Merit Award Medals (Gold, Silver, Bronze) will win this scholarship.



## BASEF INSPIRATION AWARDS

The “BASEF Inspiration Awards” generate interest and encourage participation in the Fair for both teachers and students.

### ***BASEF Inspiration Student Awards***

A minimum of 10 awards of \$500 each for top projects based on merit judging marks that win \$250 or less in other prizes and have not previously won a BASEF 500 or BASEF Inspiration award.

### ***BASEF Inspiration Teacher Awards***

Up to a maximum of 9 awards of \$500 each for teachers of schools new\* to BASEF. The teacher must have two or more projects displayed and judged at BASEF. The award is to be used in the classroom at the winning teacher’s discretion. The cheque will be sent to the teacher after the BASEF Award ceremony.

\* Schools that have not had projects in BASEF for at least 5 years.

## MERIT AWARDS



## MERIT AWARDS

**Sponsored by Primary Fluid Systems Inc.**

Merit Awards recognize the tremendous amount of thought and effort that has gone into the projects entered in the Bay Area Science and Engineering Fair. They are the result of an extensive judging process undertaken by over 175 independent judging volunteers who have come forward from educational institutions, local government organizations, business and industry in our regions. All participants in the Bay Area Science and Engineering Fair are eligible to win Merit Awards.



**The Awards are issued to projects that meet the following criteria:**

**For Junior, Intermediate and Senior levels in:**

- Health Sciences (Human)
- Life Sciences (Non-Human)
- Physical and Mathematical Sciences
- Biotechnology
- Engineering and Computing Sciences
- Earth & Environmental Sciences

**Scoring:**





- over 90%    earns Gold medal & cash award
- over 80%    earns Silver medal & cash award
- over 75%    earns Bronze medal & cash award



## Grand Prize AWARDS

Winners of Grand Awards have designed, researched and presented excellent projects.

PINNACLE AWARDS		
BASEF's Pinnacle Awards are presented to each of the top three projects in the fair. These awards are based on the project's Merit Award score. Each winner receives an engraved plaque; trophies are awarded to the winner's schools.		
Best-in-Fair \$1,000	2 <sup>nd</sup> Best-in-Fair \$800	3 <sup>rd</sup> Best-in-Fair \$500
		

<b>DRS. RANJAN SUR AND MONALISA SUR AWARD</b>		<b>ROY MIDDLETON MEMORIAL AWARD</b>	
Best Intermediate or Senior project at the fair, a plaque to the winner's school.		Best Junior project at the fair, a plaque to the winner's school.	
<b>HERB GILDEA MEMORIAL TROPHY</b>		<b>BASEF COMMITTEE TROPHY</b>	
Awarded to the secondary school accumulating the most points. Points are earned from the number of projects entered from the Intermediate and Senior levels of each school and those projects earning Gold, Silver, and Bronze Merit Awards.		Awarded to the elementary school accumulating the most points. Points are earned from the number of projects entered from the Junior level of each school and those projects earning Gold, Silver, and Bronze Merit Awards.	

## **GRAND PRIZE TRIP AWARDS**

### **INTEL INTERNATIONAL SCIENCE & ENGINEERING FAIR TRIP AWARDS**



Advancement to the 2020 Regeneron International Science & Engineering Fair, to be held in Phoenix, Arizona from May 12 to 17, 2019. All trip expenses paid.

Up to 4 projects (depending on funding level) will be chosen from excellent exhibits at the secondary school (Int & Sr) level.

Winners will be chosen from those high school entrants that declared they were able to travel into the USA (Canadian citizenship or landed immigrant status, with valid passport in-hand) as part of the BASEF registration process.

### **CANADA WIDE SCIENCE FAIR TRIP AWARDS**



Regina 2017

Advancement to the 2019 Canada Wide Science Fair (all trip expenses paid), to be held in Fredericton, New Brunswick from May 11 to 17, 2019.

Up to 17 students who have presented excellent projects will be chosen (dependent on funding level).

All projects entered in BASEF2019 are eligible.



## Merit and Special Awards Winners

### School Board Names

GEDSB	Grand Erie District School Board	HWCD	Hamilton-Wentworth Catholic District School Board
SNS	Six Nations Schools	HWDSB	Hamilton-Wentworth District School Board
HCDSB	Halton Catholic District School Board	IND	Independent School (includes Home Schooling)
HDSB	Halton District School Board		

Student	Award	Board	School
Abbas, Tia	Bronze Merit Award	HDSB	Alexander's Public School
Adronov, Rya	Hillfield Strathallan College Entrance Scholarship Award	HWDSB	Westdale Secondary School
Adronov, Rya	U.S. Agency for International Development (USAID) Award	HWDSB	Westdale Secondary School
Adronov, Rya	Dr. Colin J.L. Lock Memorial Chemistry Award	HWDSB	Westdale Secondary School
Adronov, Rya	Primary Fluid Systems Award	HWDSB	Westdale Secondary School
Adronov, Rya	Gold Merit Award	HWDSB	Westdale Secondary School
Adronov, Rya	Drs. Ranjan Sur and Monalisa Sur Award	HWDSB	Westdale Secondary School
Adronov, Rya	BASEF 60th Anniversary Pinnacle Best in Fair	HWDSB	Westdale Secondary School
Adronov, Rya	ISEF Trip Award	HWDSB	Westdale Secondary School
Agarwal, Om	American Psychological Association Award	HDSB	
Agarwal, Om	Dr. Nicola Simmons Award in Cognition Studies	HDSB	
Agarwal, Om	University of Ottawa Admission Scholarship Award	HDSB	
Agarwal, Om	Silver Merit Award	HDSB	
Agarwal, Om	Canada-Wide Science Fair Trip Award	HDSB	
Ahmed, Omer	Bronze Merit Award	IND	Al-Falah Islamic School
Al- Rammahi, Zainab	The Research Institute at St. Joe's Hamilton, Health Research Intermediate Award	HWDSB	Ancaster High
Al- Rammahi, Zainab	Silver Merit Award	HWDSB	Ancaster High
Alexander, Emily	Artistically Inspired Display Award	HDSB	Rolling Meadows Public School
Alfred, Ariella	STLE Tribology/Friction Reduction Award	IND	King's Christian Collegiate
Alfred, Ariella	Silver Merit Award	IND	King's Christian Collegiate



Allarakhia, Raisa	Professional Engineers of Ontario – Oakville Chapter Engineering Award – Intermedia	HDSB	Abbey Park High School
Al-Shekly, Eahia	Nikola Tesla Honourable Mention Award	HDSB	E. C. Drury High School
Al-Shekly, Eahia	Bronze Merit Award	HDSB	E. C. Drury High School
Arellano, Gabrielle	Silver Merit Award	HWCD	Corpus Christi
Arora, Vikram	Bronze Merit Award	IND	Hillfield Strathallan College
Babineau, Claire	Bronze Merit Award	HWCD	St. Joachim
Bae, Gyu Tae	IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award	HDSB	White Oaks Secondary School
Bae, Gyu Tae	MU Alpha Theta Award	HDSB	White Oaks Secondary School
Bae, Gyu Tae	Nikola Tesla Innovation Award – Bronze	HDSB	White Oaks Secondary School
Bae, Gyu Tae	Silver Merit Award	HDSB	White Oaks Secondary School
Baker, Devin	Doris Casey & Gwen Nicolls Disability Solutions Award	HDSB	Aldershot High School
Baker, Devin	Damani Award for Women in Biomedical Engineering	HDSB	Aldershot High School
Baker, Devin	Hamilton Pakistani Physicians Association – Third	HDSB	Aldershot High School
Baker, Devin	Silver Merit Award	HDSB	Aldershot High School
Baker, Sabrina	Bronze Merit Award	HDSB	Maple Grove Public School
Balakumar, Subakrish	Water Environment Association of Ontario Award	HDSB	Charles R. Beaudoin Public School
Balgun, Bella	Silver Merit Award	IND	Oakville Christian School
Barileva, Vesa	Silver Merit Award	HDSB	Abbey Park High School
Barileva, Vesa	Canada-Wide Science Fair Trip Award	HDSB	Abbey Park High School
Bartolo, Gabriella	Bronze Merit Award	HCDSB	St. Mary Elementary School
Bashta, Monique	Bronze Merit Award	IND	Oakville Christian School
Belchetz, Taylor	BASEF Inspiration Student Award	HDSB	Maple Grove Public School
Belchetz, Taylor	Silver Merit Award	HDSB	Maple Grove Public School
Beltrame, Brianna	Primary Fluid Systems Award	HWCD	Corpus Christi
Beltrame, Brianna	Silver Merit Award	HWCD	Corpus Christi
Bourenane, Yassine	Silver Merit Award	HWDSB	Ancaster Senior
Bresnahan, Rachel	Hamilton Wentworth Occasional Teacher – Healthy Lifestyles Award	HDSB	Aldershot Elementary
Bresnahan, Rachel	Silver Merit Award	HDSB	Aldershot Elementary
Brunt, Jordynn	Silver Merit Award	IND	King’s Christian Collegiate
Buckley, Gabrielle	Michael G. DeGroote Institute for Infectious Disease Research Award	IND	King’s Christian Collegiate
Buckley, Gabrielle	Hamilton Academy of Dentistry Award – Second	IND	King’s Christian Collegiate
Buckley, Gabrielle	Silver Merit Award	IND	King’s Christian Collegiate
Burjaw, Rebekah	Bronze Merit Award	HDSB	Alexander’s Public School
Cagas, William Gabriel	Silver Merit Award	HWCD	St. Vincent de Paul
Cai, Cailyn	Primary Fluid Systems Award	HWDSB	Ancaster Meadow
Cai, Cailyn	Bronze Merit Award	HWDSB	Ancaster Meadow
Chacalos, Sarah	Bronze Merit Award	HCDSB	St. Mary Elementary School
Chan, Charlene	Silver Merit Award	HDSB	Alexander’s Public School
Chan, Ryder	Talkit.ca Computer Engineering Award – Second	HDSB	W. H. Morden Public School
Chaubey, Aashi	Bronze Merit Award	HDSB	W. H. Morden Public School

Chaudhry, Aydin	Primary Fluid Systems Award	HDSB	W. H. Morden Public School
Chorney, Ciara	Gold Merit Award	HWCD	Blessed Sacrament
Chorney, Ciara	Canada-Wide Science Fair Trip Award	HWCD	Blessed Sacrament
Chzhen, Maria	Electrical Construction Association of Hamilton Award	HWDSB	Westdale Secondary School
Clapperton, Maya	Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Intermediate or Senior	HWDSB	Westdale Secondary School
Clapperton, Maya	Hamilton Chamber of Commerce Innovation Award – First	HWDSB	Westdale Secondary School
Clapperton, Maya	Hillfield Strathallan College Awards of Excellence – Innovation Award	HWDSB	Westdale Secondary School
Clapperton, Maya	Ricoh USA, Inc. Award	HWDSB	Westdale Secondary School
Clapperton, Maya	Mechanical Contractors Association Hamilton Niagara Award	HWDSB	Westdale Secondary School
Clapperton, Maya	Nikola Tesla Honourable Mention Award	HWDSB	Westdale Secondary School
Clapperton, Maya	Professional Engineers of Ontario – Oakville Chapter Engineering Award – Senior	HWDSB	Westdale Secondary School
Clapperton, Maya	Gold Merit Award	HWDSB	Westdale Secondary School
Clapperton, Maya	BASEF 60th Anniversary Pinnacle Second Best in Fair	HWDSB	Westdale Secondary School
Clapperton, Maya	ISEF Trip Award	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Intermediate or Senior	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Hamilton Chamber of Commerce Innovation Award – First	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Hillfield Strathallan College Awards of Excellence – Innovation Award	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Ricoh USA, Inc. Award	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Mechanical Contractors Association Hamilton Niagara Award	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Nikola Tesla Honourable Mention Award	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Professional Engineers of Ontario – Oakville Chapter Engineering Award – Senior	HWDSB	Westdale Secondary School
Clapperton, Mitchell	Gold Merit Award	HWDSB	Westdale Secondary School
Clapperton, Mitchell	BASEF 60th Anniversary Pinnacle Second Best in Fair	HWDSB	Westdale Secondary School
Clapperton, Mitchell	ISEF Trip Award	HWDSB	Westdale Secondary School
Colatosti, Jacob	The Research Institute at St. Joe's Hamilton, Health Research Intermediate Award	HWCD	Bishop Ryan Secondary School
Colatosti, Larissa	Bronze Merit Award	HWCD	St. Luke
Conen, Paul	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award	HWDSB	Ancaster Senior
Conway, Matt	Silver Merit Award	HDSB	Forest Trail Public School
Cooke, Alexander	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award	HWDSB	Ancaster Senior
Czekaj, Capri	Bronze Merit Award	HWCD	St. Joachim
Damad, Amytis	Silver Merit Award	HCDSB	St. Andrew Elementary School

Davey, Madison	Indigenous Peoples of Canada Scientific Study Award – First	SNS	Oliver M. Smith Kawennio:io
Davey, Madison	Bronze Merit Award	SNS	Oliver M. Smith Kawennio:io
Di Carlo, London	Silver Merit Award	IND	Oakville Christian School
Di Felice, Cristina	BASEF Inspiration Student Award	HWCD	Corpus Christi
Di Felice, Cristina	Silver Merit Award	HWCD	Corpus Christi
Dias, Rachel	Hamilton Wentworth Occasional Teacher – Presentation & Aesthetics Award	IND	Oakville Christian School
Dias, Rachel	Silver Merit Award	IND	Oakville Christian School
DiLauro, Madelyn	Hamilton Wentworth Occasional Teacher – Presentation & Aesthetics Award	IND	Oakville Christian School
DiLauro, Madelyn	Silver Merit Award	IND	Oakville Christian School
Donohoe, Rylan	Bay Area Health Trust Scholarship, Paul Lakin Life Sciences Award	HCDSB	St. Ignatius of Loyola Secondary School
Donohoe, Rylan	BASEF Inspiration Student Award	HCDSB	St. Ignatius of Loyola Secondary School
Donohoe, Rylan	Silver Merit Award	HCDSB	St. Ignatius of Loyola Secondary School
Drabik, Martez	Chemical Institute of Canada (Hamilton Section) Award	IND	King’s Christian Collegiate
Drabik, Martez	American Meteorological Society Award	IND	King’s Christian Collegiate
Drabik, Martez	Laurentian Chapter of SETAC Award	IND	King’s Christian Collegiate
Drabik, Martez	Silver Merit Award	IND	King’s Christian Collegiate
Ellis, Darian	Bronze Merit Award	IND	Hillfield Strathallan College
Ellis, Peyton	Bronze Merit Award	HDSB	Alexander’s Public School
Feltmate, Adam	Silver Merit Award	HDSB	Maple Grove Public School
Field, Felicity	Bronze Merit Award	IND	Hamilton Academy of Performing Arts
Gamble, Julia	Nelson Steel Award	HWCD	St. Clare of Assisi
Gamble, Julia	Bronze Merit Award	HWCD	St. Clare of Assisi
Garcia-Otero, Silvana	Bronze Merit Award	HCDSB	St. Mary Elementary School
Germana, Julia	BASEF Inspiration Student Award	HWCD	Corpus Christi
Germana, Julia	Silver Merit Award	HWCD	Corpus Christi
Giannou, Vanessa	Silver Merit Award	HWDSB	Ancaster Meadow
Gohir, Omaina	Nelson Steel Award	IND	Al-Falah Islamic School
Gomez, Maria	Bronze Merit Award	HDSB	Maple Grove Public School
Gower, Julia	Silver Merit Award	HWCD	Regina Mundi
Graham, Abigail	Laurentian Chapter of SETAC Award	HDSB	John William Boich Public School
Guerrero, Alayna	Bronze Merit Award	HCDSB	St. Mary Elementary School
Gupta, Neha	Michael G. DeGroote Institute for Infectious Disease Research Award	HWDSB	Westdale Secondary School
Gupta, Neha	Hamilton Chamber of Commerce Innovation Award – Third	HWDSB	Westdale Secondary School
Gupta, Neha	Silver Merit Award	HWDSB	Westdale Secondary School
Guy, Therand	Primary Fluid Systems Award	HWCD	St. Clare of Assisi
Hall, Keira	Hamilton Wentworth Occasional Teachers – Environment & Education Award	HDSB	Alexander’s Public School
Hall, Keira	Bronze Merit Award	HDSB	Alexander’s Public School
Hanna, Christina	Conservation Halton Environmental Sciences Award	IND	King’s Christian Collegiate
Hanna, Christina	McMaster University Faculty of Engineering Entrance Award	IND	King’s Christian Collegiate

Hanna, Christina	McMaster University Women in Engineering Entrance Award	IND	King's Christian Collegiate
Hanna, Christina	Silver Merit Award	IND	King's Christian Collegiate
Hanna, Christina	Canada-Wide Science Fair Trip Award	IND	King's Christian Collegiate
Hanna, Monica	Bronze Merit Award	IND	Oakville Christian School
Hegde, Pratha	Chemical Institute of Canada (Hamilton Section) Award	HDSB	James W. Hill Public School
Hegde, Pratha	Silver Merit Award	HDSB	James W. Hill Public School
Henderson, Kieran	Silver Merit Award	HDSB	
Higgins, Steven	Bronze Merit Award	HWCD	St. Augustine
Hill, Emma	Gowling WLG Innovation Award – Runner-up	HDSB	Rolling Meadows Public School
Hill, Emma	Bronze Merit Award	HDSB	Rolling Meadows Public School
Hoang, Faith	Gold Merit Award	IND	King's Christian Collegiate
Hoang, Faith	ISEF Trip Award	IND	King's Christian Collegiate
Hossain, Adam	Bronze Merit Award	HDSB	White Oaks Secondary School
Howard, Ryan	Silver Merit Award	HDSB	Maple Grove Public School
Howell, Madeleine	Bronze Merit Award	HDSB	Aldershot High School
Huang, Caroline	Dr. M. Doyle Biology Award	HDSB	Abbey Park High School
Huang, Caroline	Gold Merit Award	HDSB	Abbey Park High School
Huang, Caroline	BASEF 60th Anniversary Pinnacle Third Best in Fair	HDSB	Abbey Park High School
Huang, Caroline	ISEF Trip Award	HDSB	Abbey Park High School
Huang, Lucie	Silver Merit Award	HDSB	Maple Grove Public School
Hubers, Enya	Doris Casey & Gwen Nicolls Disability Solutions Award	HDSB	Aldershot High School
Hubers, Enya	Damani Award for Women in Biomedical Engineering	HDSB	Aldershot High School
Hubers, Enya	Hamilton Pakistani Physicians Association – Third	HDSB	Aldershot High School
Hubers, Enya	Silver Merit Award	HDSB	Aldershot High School
Husain, Leenah	Bronze Merit Award	HWCD	St. Augustine
Hussain, Shifa	Gowlings Innovation Award – Honourable Mention	IND	Al-Falah Islamic School
Hussain, Shifa	Professional Engineers of Ontario-Hamilton/Burlington Chapter Award – Second	IND	Al-Falah Islamic School
Hussain, Shifa	Professional Engineers of Ontario – Oakville Chapter Engineering Award – Junior	IND	Al-Falah Islamic School
Hussain, Shifa	Silver Merit Award	IND	Al-Falah Islamic School
Hutchinson, Amy	BASEF Inspiration Student Award	GEDSB	Paris District High School
Hutchinson, Amy	Silver Merit Award	GEDSB	Paris District High School
Jarvis, Scarlett	Laurentian Chapter of SETAC Award	HDSB	John William Boich Public School
Jayaratna, Senoli	BASEF Inspiration Student Award	HDSB	Pilgrim Wood Public School
Jayaratna, Senoli	Silver Merit Award	HDSB	Pilgrim Wood Public School
Jeneway, Will	Bronze Merit Award	IND	Oakville Christian School
Jun, Grace	Bronze Merit Award	HWCD	St. Augustine
Kandel, Dorus	BASEF Inspiration Student Award	HWDSB	Sir William Osler
Kandel, Dorus	Silver Merit Award	HWDSB	Sir William Osler
Karadza, Sienna	Bronze Merit Award	HCDSB	St. Andrew Elementary School

Karpuzlular, Lilia	Bronze Merit Award	IND	Hamilton Academy of Performing Arts
Kasikova, Nicol	Bronze Merit Award	IND	Hamilton Academy of Performing Arts
Kasprzyk, Maya	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award	HWCD	St. Joachim
Kasprzyk, Maya	Silver Merit Award	HWCD	St. Joachim
Kaul, Ruby	Bronze Merit Award	HDSB	Aldershot High School
Kaur, Gurnimal	Primary Fluid Systems Award	GEDSB	North Park Collegiate and Vocational School
Kaur, Gurnimal	Silver Merit Award	GEDSB	North Park Collegiate and Vocational School
Kaur, Gurnimal	Canada-Wide Science Fair Trip Award	GEDSB	North Park Collegiate and Vocational School
Kelder, Andrew	The Research Institute at St. Joe's Hamilton, Health Research Junior Award	IND	Oakville Christian School
Kelder, Andrew	Bronze Merit Award	IND	Oakville Christian School
Kharboutly, Radwa	Primary Fluid Systems Award	HCDSB	
Khondker, Munia	Bronze Merit Award	HWDSB	Ancaster Meadow
Kirouac, Ethan	Nikola Tesla Honourable Mention Award	HWDSB	Guy B. Brown
Klinck, Jeffrey	Canadian Nuclear Society (Golden Horseshoe Branch) Awards- Intermediate or Senior	HDSB	Oakville Trafalgar High School
Klinck, Jeffrey	Bronze Merit Award	HDSB	Oakville Trafalgar High School
Kozyra, Gladys	Rotary Club of Hamilton-East Wentworth Award – Second	HWCD	St. Joseph
Kozyra, Gladys	BASEF Inspiration Student Award	HWCD	St. Joseph
Kozyra, Gladys	Silver Merit Award	HWCD	St. Joseph
Lalli, Raquel	Bronze Merit Award	HWCD	Corpus Christi
Lawrence, Evan	Bronze Merit Award	IND	Burlington Christian Academy
LeBlanc, Maya	Nikola Tesla Honourable Mention Award	IND	Oakville Christian School
Lee, Hannah	BASEF Inspiration Student Award	IND	Oakville Christian School
Lee, Hannah	Silver Merit Award	IND	Oakville Christian School
Lee, Paul (Kyum)	Nikola Tesla Honourable Mention Award	HWDSB	Westdale Secondary School
Lee, Paul (Kyum)	Silver Merit Award	HWDSB	Westdale Secondary School
Lee, YoungJae	Farncombe Family Digestive Health Research Award	HWDSB	Ancaster High
Lei, Laurie	Rotary Club of Hamilton-East Wentworth Award – First	HWDSB	Cathy Wever
Lei, Laurie	Silver Merit Award	HWDSB	Cathy Wever
Li, Neng	Canadian Meteorological and Oceanographic Society (CMOS) Award	HCDSB	St. Andrew Elementary School
Li, Neng	Primary Fluid Systems Award	HCDSB	St. Andrew Elementary School
Li, Neng	Bronze Merit Award	HCDSB	St. Andrew Elementary School
Lima, Gabriela	Bronze Merit Award	IND	Hamilton Academy of Performing Arts
Liu, Chloe	Bronze Merit Award	HCDSB	St. Andrew Elementary School
Lombo, Edward	Bronze Merit Award	HCDSB	St. Thomas Aquinas Secondary School
Ma, Bolin (Johnny)	Electrical Construction Association of Hamilton Award	HWDSB	Westdale Secondary School
Maccarrone, Max	Gold Merit Award	IND	Oakville Christian School

Maccarrone, Max	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Maccarrone, Zara	Farncombe Family Digestive Health Research Award	IND	Oakville Christian School
Maccarrone, Zara	Gold Merit Award	IND	Oakville Christian School
Maccarrone, Zara	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Mahanujam, Arabi	Silver Merit Award	HDSB	Robert Bateman High School
Mahmoud, Mazen	Silver Merit Award	HDSB	Alexander's Public School
Mahut, Monica	McMaster University Faculty of Engineering Entrance Award	HDSB	M. M. Robinson High School
Mahut, Monica	McMaster University Women in Engineering Entrance Award	HDSB	M. M. Robinson High School
Mahut, Monica	Silver Merit Award	HDSB	M. M. Robinson High School
Mahut, Stefanie	Nikola Tesla Innovation Award – Bronze (2)	HDSB	M. M. Robinson High School
Mahut, Stefanie	Silver Merit Award	HDSB	M. M. Robinson High School
Maizen, Ashley	Primary Fluid Systems Award	HDSB	W. H. Morden Public School
Maizen, Ashley	Bronze Merit Award	HDSB	W. H. Morden Public School
Malarczuk, Katie	Bronze Merit Award	HWCD	Corpus Christi
Maletic, Kristijan	Nikola Tesla Honourable Mention Award	HCDSB	St. Andrew Elementary School
Maletic, Kristijan	Bronze Merit Award	HCDSB	St. Andrew Elementary School
Mancini, Claire	Nelson Steel Award	HWCD	St. Clare of Assisi
Mancini, Claire	Bronze Merit Award	HWCD	St. Clare of Assisi
Marrin, Julia	Bronze Merit Award	HWCD	St. Joachim
Mashchenko, Zoe	Nikola Tesla Honourable Mention Award	HWCD	Our Lady of Lourdes
Mashchenko, Zoe	Silver Merit Award	HWCD	Our Lady of Lourdes
Mastrolonardo, Arianna	Association for Iron & Steel Technology Northern Chapter Award	IND	King's Christian Collegiate
Mastrolonardo, Arianna	Chemical Institute of Canada (Hamilton Section) Award	IND	King's Christian Collegiate
Mastrolonardo, Arianna	Indigenous Peoples of Canada Scientific Study Award – Second	IND	King's Christian Collegiate
Mastrolonardo, Arianna	McMaster University Department of Chemistry and Chemical Biology Award	IND	King's Christian Collegiate
Mastrolonardo, Arianna	Bronze Merit Award	IND	King's Christian Collegiate
Matharu, Simran	SPIE Optics & Photonics Science Fair Award – Third	HWDSB	Ancaster High
Matharu, Simran	Bronze Merit Award	HWDSB	Ancaster High
McCourt, Morgan	Conservation Halton Environmental Sciences Award	IND	Oakville Christian School
McCourt, Morgan	Environmental Inspiration Award	IND	Oakville Christian School
McCourt, Morgan	New Health Scientist Award	IND	Oakville Christian School
McCourt, Morgan	Gold Merit Award	IND	Oakville Christian School
McCourt, Morgan	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Mehta, Kavan	Farncombe Family Digestive Health Research Institute Grand Award	IND	King's Christian Collegiate
Mehta, Kavan	Silver Merit Award	IND	King's Christian Collegiate
Middleton, Joshua	Primary Fluid Systems Award	HDSB	Alexander's Public School
Middleton, Joshua	SPIE Optics & Photonics Science Fair Award – First	HDSB	Alexander's Public School
Middleton, Joshua	Silver Merit Award	HDSB	Alexander's Public School
Misa, Michael	Bronze Merit Award	IND	
Mogus, Mark	Gowling WLG Innovation Award – Grand Winner	HCDSB	St. John Paul II Elementary School



Mogus, Mark	John W. Howard Materials Research Award	HCDSB	St. John Paul II Elementary School
Mogus, Mark	Primary Fluid Systems Award	HCDSB	St. John Paul II Elementary School
Mogus, Mark	Silver Merit Award	HCDSB	St. John Paul II Elementary School
Mogus, Sabrina	Association for Women Geoscientists Award	HDSB	Garth Webb Secondary School
Mogus, Sabrina	McMaster Chemical Engineering Award	HDSB	Garth Webb Secondary School
Mogus, Sabrina	Earth and Environmental Sciences Award	HDSB	Garth Webb Secondary School
Mogus, Sabrina	Primary Fluid Systems Award	HDSB	Garth Webb Secondary School
Mogus, Sabrina	Silver Merit Award	HDSB	Garth Webb Secondary School
Montemayor, Kaelyn	Bronze Merit Award	GEDSB	Brantford Collegiate Institute and Vocational School
Moore, Jessica	Bronze Merit Award	HWCD	St. Joachim
Morcos, Maya	Silver Merit Award	IND	King's Christian Collegiate
Morden, Ethan	The Research Institute at St. Joe s Hamilton, Health Research Junior Award	HWCD	Our Lady of Lourdes
Morden, Ethan	Gold Merit Award	HWCD	Our Lady of Lourdes
Morden, Ethan	Canada-Wide Science Fair Trip Award	HWCD	Our Lady of Lourdes
Mostacci, Elyse	Bronze Merit Award	HWCD	St. John Paul II
Naganobu, Aiko	Silver Merit Award	HDSB	Alexander's Public School
Nagasaki, Kibo	Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Junior	IND	Oakville Christian School
Nagasaki, Kibo	SPIE Optics & Photonics Science Fair Award – Second	IND	Oakville Christian School
Nagasaki, Kibo	Gold Merit Award	IND	Oakville Christian School
Nagasaki, Kibo	Roy Middleton Memorial Award	IND	Oakville Christian School
Nagasaki, Kibo	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Naik, Jaya	Electrical Construction Association of Hamilton Award	HDSB	W. H. Morden Public School
Naik, Jaya	Nikola Tesla Honourable Mention Award	HDSB	W. H. Morden Public School
Naik, Jaya	Primary Fluid Systems Award	HDSB	W. H. Morden Public School
Naik, Jaya	Silver Merit Award	HDSB	W. H. Morden Public School
Ninos, Daria	Silver Merit Award	HDSB	Maple Grove Public School
Noormohamed, Naila	Nikola Tesla Honourable Mention Award	HDSB	John William Boich Public School
Noormohamed, Naila	Primary Fluid Systems Award	HDSB	John William Boich Public School
Noormohamed, Naila	Procor Engineering Award – Junior	HDSB	John William Boich Public School
Noormohamed, Naila	Bronze Merit Award	HDSB	John William Boich Public School
O'Connell, Ryan	Bronze Merit Award	HDSB	W. H. Morden Public School
Olawunmi, Demilade	Gold Merit Award	IND	Oakville Christian School
Olawunmi, Demilade	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Painter, Aedan	Artistically Inspired Display Award	HDSB	Rolling Meadows Public School
Panicker, Eileen	Bronze Merit Award	HWCD	St. Joachim
Parvinchi, Adelia	Dr. Laura Blew Social Sciences Award	IND	Oakville Christian School
Parvinchi, Adelia	Silver Merit Award	IND	Oakville Christian School
Pearson, Josie	Gowling WLG Innovation Award – Runner-up	HDSB	Rolling Meadows Public School
Pearson, Josie	Bronze Merit Award	HDSB	Rolling Meadows Public School
Perri, Maddy	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award	HWCD	St. Joachim
Perri, Maddy	Silver Merit Award	HWCD	St. Joachim
Ponnamabalam, Kadhira	Bronze Merit Award	IND	Hillfield Strathallan College
Qing, Chen	Nikola Tesla Honourable Mention Award	IND	Hillfield Strathallan College
Quon, Sierra	Bronze Merit Award	HDSB	Maple Grove Public School

Ran, Charles	Primary Fluid Systems Award	HDSB	Maple Grove Public School
Raposo Smallhorn, Makayla	Bronze Merit Award	HCDSB	St. Mary Elementary School
Rebelo, Ava	Silver Merit Award	HWCD	Corpus Christi
Reizoff, Benjamin	Hamilton Academy of Dentistry Award – First	HWCD	St. Bernadette
Reizoff, Benjamin	Silver Merit Award	HWCD	St. Bernadette
Robinson, Ethan	The Research Institute at St. Joe s Hamilton, Health Research Junior Award	HWCD	Our Lady of Lourdes
Robinson, Ethan	Gold Merit Award	HWCD	Our Lady of Lourdes
Robinson, Ethan	Canada-Wide Science Fair Trip Award	HWCD	Our Lady of Lourdes
Rodionova, Elizaveta	Michael G. DeGroote Institute for Infectious Disease Research Grand Award	IND	King’s Christian Collegiate
Rodionova, Elizaveta	Society for In Vitro Biology Award	IND	King’s Christian Collegiate
Rodionova, Elizaveta	BASEF Inspiration Student Award	IND	King’s Christian Collegiate
Rodionova, Elizaveta	Silver Merit Award	IND	King’s Christian Collegiate
Romano, Matteo	Bronze Merit Award	HDSB	W. H. Morden Public School
Salimi, Hamna	Canadian Meteorological and Oceanographic Society (CMOS) Award	HDSB	Garth Webb Secondary School
Salimi, Hamna	American Meteorological Society Award	HDSB	Garth Webb Secondary School
Salimi, Hamna	Bronze Merit Award	HDSB	Garth Webb Secondary School
Sandal, Dahlia	Rotary Club of Hamilton-East Wentworth Award – Third	HWCD	St. Luke
Sanni, Misimi	Nikola Tesla Innovation Award – Silver	IND	Oakville Christian School
Sanni, Misimi	Gold Merit Award	IND	Oakville Christian School
Sanni, Misimi	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Sarkar, Nidhi	STLE Tribology/Friction Reduction Award	HWDSB	Dundas Valley Secondary School
Sarkar, Nidhi	Silver Merit Award	HWDSB	Dundas Valley Secondary School
Saturnino, Anthony	IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award	HWCD	Bishop Ryan Secondary School
Saturnino, Anthony	Yale Science & Engineering Association Award	HWCD	Bishop Ryan Secondary School
Saturnino, Anthony	Nikola Tesla Innovation Award – Gold	HWCD	Bishop Ryan Secondary School
Saturnino, Anthony	Professional Engineers of Ontario-Hamilton/Burlington Chapter Award – First	HWCD	Bishop Ryan Secondary School
Saturnino, Anthony	Silver Merit Award	HWCD	Bishop Ryan Secondary School
Saturnino, Anthony	Canada-Wide Science Fair Trip Award	HWCD	Bishop Ryan Secondary School
Saturnino, Joseph	IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award	HWCD	Bishop Ryan Secondary School
Saturnino, Joseph	Yale Science & Engineering Association Award	HWCD	Bishop Ryan Secondary School
Saturnino, Joseph	Nikola Tesla Innovation Award – Gold	HWCD	Bishop Ryan Secondary School
Saturnino, Joseph	Professional Engineers of Ontario-Hamilton/Burlington Chapter Award – First	HWCD	Bishop Ryan Secondary School
Saturnino, Joseph	Silver Merit Award	HWCD	Bishop Ryan Secondary School
Saturnino, Joseph	Canada-Wide Science Fair Trip Award	HWCD	Bishop Ryan Secondary School
Scheben, Aiden	Bronze Merit Award	HWCD	St. Augustine
Schooley, Jacob	Primary Fluid Systems Award	HDSB	Alexander’s Public School
Schooley, Jacob	Silver Merit Award	HDSB	Alexander’s Public School
Sebatian, Abby	Bronze Merit Award	HCDSB	St. Mary Elementary School
Settimi, Isabella	Bronze Merit Award	HWCD	St. Augustine

Seymour, Julia	Bay Area Health Trust Scholarship, Paul Lakin Life Sciences Award	HCDSB	St. Ignatius of Loyola Secondary School
Seymour, Julia	BASEF Inspiration Student Award	HCDSB	St. Ignatius of Loyola Secondary School
Seymour, Julia	Silver Merit Award	HCDSB	St. Ignatius of Loyola Secondary School
Shankar, Shenali	Oakvillegreen Conservation Association Award for the Environment	HWCD	St. Therese of Lisieux
Shankar, Shenali	Bronze Merit Award	HWCD	St. Therese of Lisieux
Sherbino, Caleb	Bronze Merit Award	HWDSB	Ancaster Senior
Sibley, Claire	Hillfield Strathallan College Awards of Excellence – Life Sciences Award	HCDSB	St. Bernadette Elementary School
Sibley, Claire	Silver Merit Award	HCDSB	St. Bernadette Elementary School
Sienna, Elizabeth	Silver Merit Award	HWCD	St. Augustine
Sigi, Tessa	Gold Merit Award	HWCD	Blessed Sacrament
Sigi, Tessa	Canada-Wide Science Fair Trip Award	HWCD	Blessed Sacrament
Singh, Harsimranjeet	Doris Casey & Gwen Nicolls Disability Solutions Award	GEDSB	North Park Collegiate and Vocational School
Singh, Harsimranjeet	McMaster University Faculty of Engineering Entrance Award	GEDSB	North Park Collegiate and Vocational School
Singh, Harsimranjeet	McMaster University Faculty of Engineering Entrance Award	GEDSB	North Park Collegiate and Vocational School
Singh, Harsimranjeet	McMaster University Faculty of Engineering Entrance Award	GEDSB	North Park Collegiate and Vocational School
Singh, Harsimranjeet	Procor Engineering Award – Senior	GEDSB	North Park Collegiate and Vocational School
Singh, Harsimranjeet	Silver Merit Award	GEDSB	North Park Collegiate and Vocational School
Singh, Satyam	Hamilton Pakistani Physicians Association – Second	IND	King’s Christian Collegiate
Singh, Satyam	Professional Engineers of Ontario-Hamilton/Burlington Chapter Award – Third	IND	King’s Christian Collegiate
Singh, Satyam	Silver Merit Award	IND	King’s Christian Collegiate
Smales, Lily	Procor Engineering Award – Intermediate	HDSB	Oakville Trafalgar High School
Smales, Lily	Talkit.ca Computer Engineering Award – First	HDSB	Oakville Trafalgar High School
Smales, Lily	Ted Rogers Innovation Award	HDSB	Oakville Trafalgar High School
Smales, Lily	Gold Merit Award	HDSB	Oakville Trafalgar High School
Smales, Lily	ISEF Trip Award	HDSB	Oakville Trafalgar High School
Smith, Rowyn	Bronze Merit Award	IND	Burlington Christian Academy
Soni, Ruhan	Association for Iron & Steel Technology Northern Chapter Award	IND	Hillfield Strathallan College
Soni, Ruhan	Silver Merit Award	IND	Hillfield Strathallan College
Stephan, Oceana	Farncombe Family Digestive Health Research Award	IND	Oakville Christian School
Stephan, Oceana	Gold Merit Award	IND	Oakville Christian School
Stephan, Oceana	Canada-Wide Science Fair Trip Award	IND	Oakville Christian School
Stoisor, Andrea	Bronze Merit Award	HDSB	John William Boich Public School
Stoisor, Ashley	Bronze Merit Award	HDSB	John William Boich Public School
Stojanovic, Sabrina	Hamilton Chamber of Commerce Innovation Award – Second	HWDSB	Orchard Park Secondary School

Stojanovic, Sabrina	Mahut-Brent Award for Women in Science and Engineering	HWDSB	Orchard Park Secondary School
Stojanovic, Sabrina	Silver Merit Award	HWDSB	Orchard Park Secondary School
Su, Sienna	Primary Fluid Systems Award	HDSB	W. H. Morden Public School
Su, Sienna	Bronze Merit Award	HDSB	W. H. Morden Public School
Sun, Cynthia	Primary Fluid Systems Award	HWDSB	Ancaster Meadow
Sun, Cynthia	Bronze Merit Award	HWDSB	Ancaster Meadow
Suriano, Kathleen	Artistically Inspired Display Award	HDSB	Rolling Meadows Public School
Vlasics, Edwin	Talkit.ca Computer Engineering Award – Second	HDSB	W. H. Morden Public School
Wang, Yicheng	Water Environment Association of Ontario Award	HDSB	Charles R. Beaudoin Public School
Wellwood, April	Hamilton Wentworth Occasional Teacher – Healthy Lifestyles Award	HDSB	Aldershot Elementary
Wellwood, April	Silver Merit Award	HDSB	Aldershot Elementary
Wesolowsky, Lesya	Bronze Merit Award	HWCD	St. Joachim
Whelan, Finnley	Bronze Merit Award	HWDSB	Ancaster Senior
Whitehead, Cameron	Silver Merit Award	HDSB	Maple Grove Public School
Widyalankara, Sadisha	Geography Award	HDSB	Anne J. MacArthur Public School
Widyalankara, Sadisha	Primary Fluid Systems Award	HDSB	Anne J. MacArthur Public School
Widyalankara, Sadisha	Silver Merit Award	HDSB	Anne J. MacArthur Public School
Willson, Olivia	Bronze Merit Award	HDSB	Alexander’s Public School
Wong, Caitlyn	Bronze Merit Award	IND	Oakville Christian School
Wong, Joshua	Primary Fluid Systems Award	HWCD	St. Joachim
Wood, Amelia	Rotary Club of Hamilton-East Wentworth Award – First	HWDSB	Cathy Weaver
Wood, Amelia	Silver Merit Award	HWDSB	Cathy Weaver
Xu, Julia	Hillfield Strathallan College Awards of Excellence – Physical Sciences Award	HDSB	White Oaks Secondary School
Xu, Julia	ASM Materials Education Foundation Award	HDSB	White Oaks Secondary School
Xu, Julia	BASEF Inspiration Student Award	HDSB	White Oaks Secondary School
Xu, Julia	Silver Merit Award	HDSB	White Oaks Secondary School
Xu, Raphael	Chairman’s Award	HDSB	Oakville Trafalgar High School
Yao, Kathy	Primary Fluid Systems Award	HDSB	Oakville Trafalgar High School
Yin, Brian	Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Junior	HCDSB	St. Andrew Elementary School
Yin, Brian	James A Winger Award	HCDSB	St. Andrew Elementary School
Yin, Brian	Nikola Tesla Honourable Mention Award	HCDSB	St. Andrew Elementary School
Yin, Brian	Primary Fluid Systems Award	HCDSB	St. Andrew Elementary School
Yin, Brian	Silver Merit Award	HCDSB	St. Andrew Elementary School
Yin, Dian	Dr. Laura Blew Social Sciences Award	HDSB	Maple Grove Public School
Yin, Dian	Bronze Merit Award	HDSB	Maple Grove Public School
Yong, Andrew	Primary Fluid Systems Award	HDSB	Maple Grove Public School
Zhang, Kaylee	Hamilton Pakistani Physicians Association – First	HWDSB	Westdale Secondary School
Zhang, Kaylee	Bronze Merit Award	HWDSB	Westdale Secondary School

## BASEF 2020 TRIP AWARD WINNERS



### Canada Wide Science Fair (CWSF)



Thanks to the generous support of its general sponsors, each year BASEF selects students to represent our region at the Canada-Wide Science and Engineering Fair. Unfortunately, this year's event was cancelled. Despite this, there were many excellent projects that deserved this recognition. Congratulations to the following students who were announced as the BASEF 2020 CWSF Team. Each student will receive recognition as a CWSF Team Alumni.

Chorney, Ciara and Sigi, Tessa	Shining The Light On Bacteria	HWCD	Blessed Sacrament
Maccarrone, Zara and Stephan, Oceana	Let's Get Crackin'	IND	Oakville Christian School
Robinson, Ethan and Morden, Ethan	What can Humans hear... And does it last forever?	HWCD	Our Lady of Lourdes
Nagasaki, Kibo	Underwater Communication With Blue Light	IND	Oakville Christian School
Maccarrone, Max and Olawunmi, Demilade	Rise Up! – (A study of how different airfoil shapes affect lift and airflow in a wind tunnel)	IND	Oakville Christian School
Sanni, Misimi	The Painting Robot	IND	Oakville Christian School
Kaur, Gurnirmal	The RLX-Glove: A Tool for Managing Stress	GEDSB	North Park Collegiate & Vocational School
Barileva, Vesa	Transforming industrial food waste into biodegradable food packaging films	HDSB	Abbey Park High School
Saturnino, Joseph and Saturnino, Anthony	ISO-PAN MRK 8: An Advanced A.I Medical/Social Isolation Robot	HWCD	Bishop Ryan Secondary School
Agarwal, Om	Doc-Typ “ Standardizing & Augmenting Clinical Psychiatric Diagnostics through Deep Learning & NLP	IND	Home Schooling
McCourt, Morgan	Pooch Power	IND	Oakville Christian School
Hanna, Christina	Treatment of Heavy Metal Contaminated Water using Reverse Osmosis Membranes	IND	King's Christian Collegiate

## BASEF 2020 TRIP AWARD WINNERS



### *Regeneron International Science & Engineering Fair (ISEF)*



As an affiliated fair, BASEF is able to select five high school projects to represent our region at the Regeneron International Science and Engineering Fair. This year the ISEF Fair was also cancelled. However, there were many exceptional projects that deserved this prestigious recognition. Congratulations to the following students who were announced as the BASEF 2020 Regeneron ISEF Team. Each Team member will receive recognition as a BASEF International Fair Award Alumni.

Hoang, Faith	Tomato's Vitamin C and Antioxidant properties	IND	King's Christian Collegiate
Huang, Caroline	Computing Neuroregeneration: Simulating Cognitive Function with Physarum AI	HDSB	Abbey Park High School
Adronov, Rya	Optimizing the Depolymerization of PET Fleece Microplastics through Microwave Irradiation	HWDSB	Westdale Secondary School
Smales, Lily	Using Machine Learning to Determine the Composition of New Vaccines for Novel Viruses	HDSB	Oakville Trafalgar High School
Clapperton, Maya and Clapperton, Mitchell	Reducing Barriers to Hydrokinetic Energy – An Autonomous Turbine Installation and Retrieval System		