



# BASF 2022

*62<sup>nd</sup> Annual Bay Area Science & Engineering Fair Sponsored By:*



**Primary Fluid  
Systems Inc.**

## ***OFFICIAL PROGRAM***

**Diamond Sponsor**  
ArcelorMittal Dofasco

**Platinum Sponsors**  
Enbridge  
The Hamilton Spectator  
McMaster University  
Mohawk College

*Revision: v3.1 (July 16/22)*

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# ***BASEF Values***

## **Land Acknowledgement**

The Bay Area Science & Engineering Fair (BASEF) acknowledges its presence on the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the “Dish with One Spoon” wampum agreement.

The catchment area of BASEF is home to many Indigenous people from across Turtle Island. We respect the longstanding relationships with local Indigenous communities, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River. BASEF recognizes that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers. For more information, visit [www.native-land.ca](http://www.native-land.ca).

## **Our Mission**

BASEF inspires young people to positively impact the world through science, technology, engineering and mathematics. BASEF provides opportunities for students to showcase their innovations and discoveries.

## **Our Vision**

There is engaged participation by all eligible students. Completing a STEM (Science, Technology, Engineering & Mathematics) project is a means to fulfill Ministry curriculum in elementary and secondary schools. Students realize that through STEM literacy, they can make a positive difference in the world. Scientific innovations and discoveries will be considered exciting, and students will make time for science fair projects because they will have opportunities and develop [21<sup>st</sup> Century Competencies](#).

# Chairs' Message

Dana Bee, Dan Bowman and David Reed are your co-chairs for BASEF 2022. We would like to welcome you to the 62<sup>nd</sup> Bay Area Science and Engineering Fair. This is our third year of presenting our fair during a pandemic and because of science, this should be the last time we are virtual. Next year we expect and hope BASEF 2023 to be back in-person.

Congratulations to the 204 student participants, representing 161 projects competing in BASEF 2022. These numbers have substantially increased from last year when we had 161 students representing 133 projects. We at BASEF are thrilled that this many students have shown how committed they are to creating a science fair project during this pandemic period. We also know that the students could not have done this without the support of dedicated teachers and parents. Again this year, BASEF provides an opportunity for students to demonstrate their dedication and tenacity by creating the opportunity for them to showcase their projects, thoughts, and innovations, while on their way to discovering 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; 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. Let us add to the list that in 2020/2021; multiple vaccines were created to inoculate the world's population and shut down the spread of COVID-19 and impact the variants that followed. These vaccines were created and tested in less than a year, while previous vaccines required more than a decade before they were available to the public. This was all possible because of the collaborative efforts of scientists and researchers all over the world working with "mRNA" platforms to be able to deliver these much needed vaccines to the globe. What discoveries will be made in the next 62 years that our students could be a part of? The Big Ideas of some create Infinite Possibilities for other!

Again this year, our students were well prepared to present their projects at the beginning of March. The BASEF organizing committee further enhanced the online registration and judging systems that were put in place for BASEF 2020 and updated for BASEF 2021. Had anyone of us expected that the pandemic would have lasted more than a year back in 2020, our team would have created a much easier "work around" of our data bases. Oh well, we made it through another one. The "on-line" awards ceremony has also been enhanced to better celebrate the hard work of students, showcase their projects, and recognize their efforts through awards and scholarships and the presentation of winners to further compete in the international and Canadian science fairs being offered this year in on-line formats.

We would also like to thank the 160+ merit award and 100+ special award judges who were able to judge online and sift through the project submissions. Did you know that each project was judged at least 4 times and with the addition of the special awards, there were over 1,000 online judging events that took place this year? Judges, thank you for sharing in our student's excitement and ensuring that this opportunity exists for them, especially during these times.

We are grateful for the essential support from our many community sponsors and charitable donors, as well as supporters of special student awards that are designed to promote additional interest and participation in the Fair. BASEF is proud to welcome back our Title sponsor, Primary Fluid Systems Inc. They recognize the



importance of encouraging young people to pursue training and careers in STEM related activities. Our Diamond Level sponsor, ArcelorMittal Dofasco, has sponsored BASEF for many years. They continue to support BASEF financially as well as providing knowledgeable technical judges from their staff. Together with over 45 additional sponsors and charitable donors, and over 42 Special Awards donors, all of our tremendous supporters 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 exceeds \$150,000.

This year, BASEF's Virtual Activity Week features live presentations covering a variety of topics that interest students. We were also able to create a video library of BASEF's alumni in various speaking engagements, and educational material from our various local scientific organizations that support BASEF. This Library is always available on our website for viewing purposes.

BASEF is a volunteer-driven registered charity. We acknowledge, with many thanks, the huge efforts of this year's Organizing Committee members, 35 in total, who have dedicated countless hours toward making BASEF 2022 a success. Our thanks again, to the volunteer Merit and Special Awards Judges. The efforts of all of our volunteers, again in this pandemic year, are exemplary. We, as chairs, wish to extend our special thanks to all involved. We are truly humbled and amazed at the extraordinary efforts our committee of volunteers put forth.

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! Great camera work and technology skills!

Students, make sure you express a great deal of gratitude to your teachers, too, because after your parents, they are your biggest fans. They have invested a lot of their time and passion to instill a love and appreciation for science and technology. Last but not least, students: we want to thank YOU! Thank you for choosing a topic that ignited your inner scientist, mathematician or engineer from within. We 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.

Until next year's fair,

***Dana Bee***



***Dan Bowman***



***David Reed***



# Organizing Committee

## Co-Chairs

Dana Bee, Dan Bowman, David Reed

## Finance

Eleanor O'Flynn, C.P.A., C.A. (Treasurer)

## Legal Secretary

Cathy Hayman

## Registrar

George Geczy

## Judge-In-Chief

Donna Stack-Durward  
Assistant: Dan Bowman

## Scientific Review Committee

Donna Stack-Durward (Judge-In-Chief), Dana Bee (Co-Chair), Dan Bowman (Co-Chair), George Geczy (Co-Chair), Katie Brent, Jasmyn Cunningham

## Special Awards Committee

Katie Brent (Chair), Eleanor O'Flynn

## Fundraising Committee

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

## Outreach & Bursaries

Mark Mindorff (Lead), Ryan LaRue, Ingrid Scully

## Marketing & Publicity

Marc Trotta (Lead), Erik Bercik, Wayne Bowdish

## Photography & Graphics

Wayne Bowdish (Lead), Ryan LaRue

## Digital Program

Ryan LaRue (Lead), Wayne Bowdish, Eleanor O'Flynn, Sue Olynyk

## Activity Week

Janice Pang (Chair), Katie Brent, Erik Bercik, Marc Trotta

## Information Systems:

Gerard Chiasson, George Geczy

## Awards Ceremony

Gerard Chiasson (Lead), Eric Bercik, George Geczy

## Awards Ceremony Emcees

Cathy Hayman, Chris Blackwood

## Champions of BASEF

Katie Brent, Dana Bee, Ingrid Scully

## Alumni Project

Denise Brennan-Rieder, Krish Joshi

## Canada-Wide Science Fair (CWSF) Delegates

Dan Bowman (Lead), George Geczy, Donna Stack-Durward

## International Science & Engineering Fair (ISEF) Delegates

Dana Bee, David Reed

## Volunteer Coordinator

Jasmyn Cunningham (Lead), Dana Bee

## Student Advisors

Neha Gupta, Caroline Huang, Sabrina Mogus

## Members-At-Large

Jim Casey, Roslynne Crawford, Kevin Hunt, Varsha Jayasankar, Jay Subramanian, Lu Wang, Glen Whitwell

## Educator Advisors

Six Nations:	Alex Randall
HWDSB:	Vacancy
HWCDNB:	Evelin Niemiec
HDSB:	Ingrid Scully
HCDSB:	Matt Kovacs
GEDSB:	Charlene Clark
BHNCDSB:	Jasmine Vorkaia
Mohawk College:	Vacancy
Hillfield Strathallan College:	Vacancy
Oakville Christian School:	Beth Wilson

# Program-At-A-Glance

MARCH 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Registration Closes	2	3	4	5
6	7	8	9	10	11	12 Judging Day 1
13 Judging Day 2	14 Judging Day 3	15 Judging Day 4	16	17	18	19
20	21	22	23	24	25	26
<div>Online Activity Week Events (6-8 pm)</div> <div> <div>A Bite of Science</div> <div>Forensic Science Night</div> <div>Game Night Live on Zoom</div> <div>Art Meets Science <b>7 pm Start!</b></div> <div>Post- Secondary Workshop</div> </div>						
27	28	29 Online Awards Ceremony @ 7 pm	30	31		



# ***BASEF 2022 Sponsors & Charitable Donors***

## ***General Funding Sponsors***

Title (\$25,000+)			
Primary Fluid Systems Inc.			
Diamond (\$10,000+)			
ArcelorMittal Dofasco			
Platinum (\$5,000+)			
Enbridge	Hamilton Spectator	McMaster University	Mohawk College
Gold (\$2,500+)			
Silver (\$1,000+)			
Bay Area Health Trust	Burlington Hydro	Halton District School Board	
Hamilton-Wentworth Catholic District School Board	Hamilton-Wentworth District School Board	Hillfield Strathallan College	
NSERC	Ontario Power Generation	Posner	
	Taylor Leibow Accountants & Advisors		
Bronze (\$500+)			
CareGo	Halton Catholic District School Board	Hamilton Amateur Astronomers	
Hamilton Chamber of Commerce	Hamilton CAER	Hamilton Police Retirees' Association	
Rotary Club of Hamilton AM	Society of Tribologists & Lubrication Engineers-Hamilton Chapter	WalterFedy	
Friends (\$250+)			
Electrical Construction Association of Hamilton		Hamilton Association for the Advancement of Literature, Science & the Arts (HAALSA)	
NewAE Technology		TalkIt.ca	

## Charitable Donors

### Banting & Best Level (\$1,000+)

DENM Engineering Ltd.

Mike & Sue McNally

Marvin Cohen &  
Janet McNaught

### Bondar Level (\$500+)

Lanhack Consultants

Paul & Pam Lakin

Mantecon Partners

Peter & Sue Olynyk

### Polanyi Level (\$200+)

Helen Barton

Kathy, Steven & Katie Brent

John & Eleanor O'Flynn

Dr. Nicola Simmons

Norman Young

### McGill Level (\$50+)

Renato & Enza De Tina

Linda Millar

**Notes:** Those donating in-kind services help us provide an exceptional experience for BASEF participants. Key donations included: printing, newspaper advertising, accounting, and web hosting. In addition to those listed above, BASEF also has donors who wish to remain anonymous.



*"I wanted to take this time to recognize all the organizations and individuals that support BASEF. This year your cash and in-kind general funding donations allowed us to continue to provide this event to as many of this region's youth as we have. We are so thankful that over 31 sponsoring organizations and 16 charitable donors have found BASEF a cause worthy of their support. We hope that we will continue to meet your charitable giving objectives. We are one of Canada's biggest and best regional science fairs and this is, in no small part, because of your support. Thank you for helping us to build scientifically literate and technologically competent citizens of the future. We'll all be better off because of it. I'm always willing to talk to more people about possible financial support for the fair. I have been involved in the Organizing Committee of BASEF for the past 23 years. Most recently I have chaired the Fundraising effort. My name is Susan Olynyk and I can be contacted at [fundraising@basef.ca](mailto:fundraising@basef.ca)."*

**- Sue Olynyk, P.Eng. Fundraising Chair**

# BASEF 2022 Activity Week



*“Working alongside the entire BASEF committee, we are incredibly excited to announce a revamped 2022 Activity Week program. Students will have the opportunity to engage in lively scientific discussions with experts in the field, dive into the world of forensic science, interact with other participants in a fun games night and learn about post-secondary possibilities from science fair alumni and undergraduate students. Huge thank you to donors, guest speakers and the BASEF committee for the tremendous support to make Activity Week possible! We look forward to showcasing the STEM opportunities awaiting students in our community.”*

**- Janice Pang, Student Activities Coordinator**

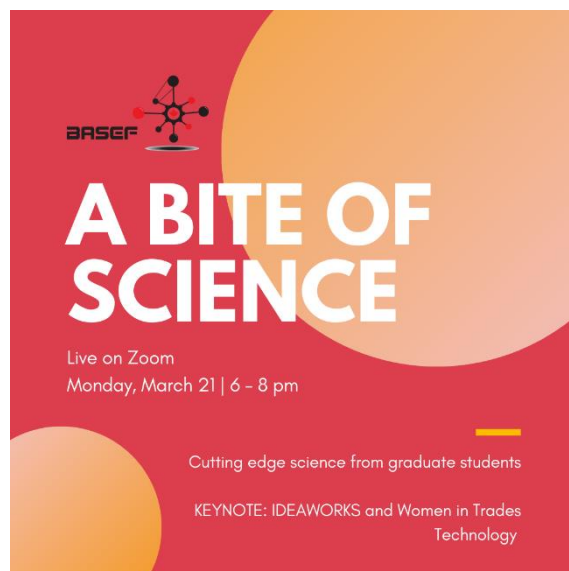
BASEF will be hosting a series of engaging live premiere events held using online platforms. These events will be held March 21<sup>st</sup>–25<sup>th</sup>. All events run from 6-8 pm, except Thursday’s event which runs from 7-8 pm.

- ▷ Learn more about the world of Science and Technology!
- ▷ Connect with other like-minded students!
- ▷ Explore post-secondary education options and careers!

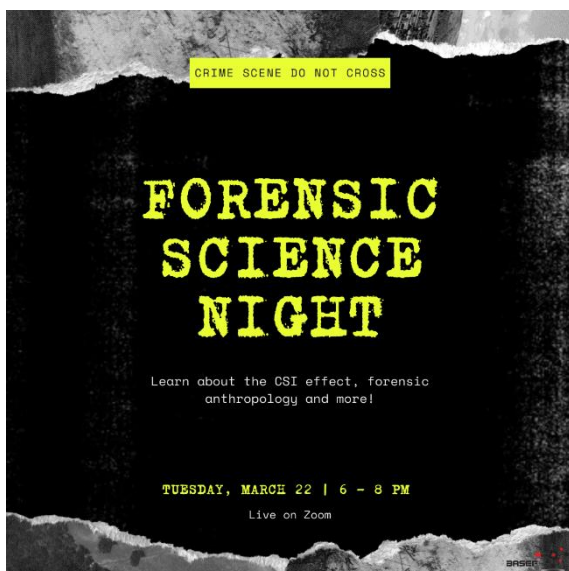
**[Recordings of the events can be found at this link \(click here\).](#)**

## Monday: A Bite of Science

BASEF student activities are back with a week of fun interactive discussions, games, workshops and STEAM! A Bite of Science will kick things off for the week as we come together to learn about the cutting-edge research graduate students are working on. Learn about evolutionary anthropology, sustainable agriculture, primatology and nanomedicine in bite size 5-minute presentations and ask questions in the Q&A session that follows! Stick around for exclusive talks from our keynote speakers from IDEAWORKS and Women in Trades Technology.







## Tuesday: Forensic Science Night

Ever wondered what a forensic scientist does, or how consuming crime media has an effect on real life cases? Want to know how a forensic anthropologist analyzes human skeletal remains? Come out to Forensic Science Night, where you'll learn all this and more from a real professional!

## Wednesday: Game Night Live on Zoom

Join us mid-week for a fun night of games! Meet other BASEF participants and enjoy a game of BINGO. Who is ready to win some awesome prizes?

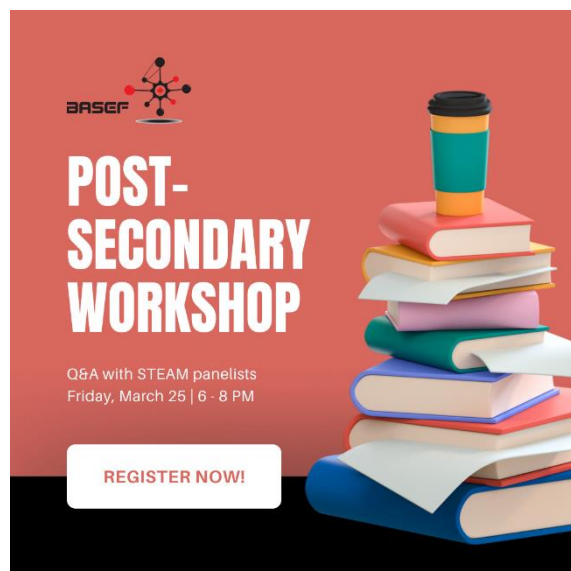


## Thursday: Art Meets Science

Turns out art and science aren't as separate as they seem! Come to this interactive evening to learn about the science of art and colour and how to apply that knowledge to making your own art! Feel free to bring along art supplies to work with, or just come to watch and learn! Note: this event runs from 7-8 pm!

## Friday: Post-Secondary Workshop

Wondering about what you can pursue after science fairs? Come to the post-secondary workshop to hear from undergraduate students about their post-secondary school experience! Join the Q&A session to ask the panelists about university life, advice, career options and more!



# SHOP BASEF

Check out our **NEW** gear store for a great selection of BASEF-branded merch! It makes a great gift for the science- or engineering-lover in your family!

>>> [basef-shop.creator-spring.com](http://basef-shop.creator-spring.com) <<<



# BASEF 2022 Awards

## ArcelorMittal Dofasco Merit Awards

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 160 independent judging volunteers who have come forward from educational institutions, local government organizations, businesses, and industries in our regions. All participants in the Bay Area Science and Engineering Fair are eligible to win Merit Awards. The Awards are given to deserving projects at Junior (7/8), Intermediate (9/10), and Senior (11/12) levels in:



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

Scoring for Merit Awards proceeds as follows:

- ▷ A score  $\geq 90\%$  or higher earns a Gold Medal and a cash award
- ▷ A score  $\geq 80\%$  (but less than 90%) earns a Silver Medal and a cash award
- ▷ A score  $\geq 75\%$  (but less than 80%) earns a Bronze Medal and a cash award

## Grand Awards

### Primary Fluid Systems 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 sent to the winners' schools.



*Best-in-Fair: \$1,000*

*2nd Best-in-Fair: \$800*

*3rd Best-in-Fair: \$500*



### **Drs. Ranjan Sur and Monalisa Sur Award**

- ▷ The best Intermediate (9/10) or Senior (11/12) project at the fair. The winning student's school receives a plaque.



### **Roy Middleton Memorial Award**

- ▷ The best Junior (7/8) project at the fair. The winning student's school receives a plaque.



### **BASEF Committee Trophy**

- ▷ This trophy is awarded to the elementary school accumulating the most points. Points are earned from the number of projects entered from the Junior (7/8) level of each school and the projects earning Gold, Silver, and Bronze Merit Awards.



### **Herb Gildea Memorial Trophy**

- ▷ This trophy is 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.



## Grand Prize Trip Awards

### 2022 Regeneron International Science and Engineering Fair (ISEF)

- Up to five projects (depending on funding level) will be chosen from excellent exhibits at the secondary school (Intermediate & Senior) level to advance to ISEF, which will be held from May 7<sup>th</sup>–13<sup>th</sup>, 2022. Due to the COVID-19 pandemic, the Fair will use a hybrid approach for attendance. BASEF students will participate using the online format this year.



#### Sponsored By:



### Canada-Wide Science Fair (CWSF)

- Up to 17 students (depending on funding level) will be chosen from excellent exhibits to advance to CWSF, which will be hosted by Fredericton, NB from May 16<sup>th</sup>–20<sup>th</sup>, 2022 using an online-only platform. All projects at BASEF 2022 are eligible to advance to CWSF.



#### Sponsored By:





## Special Awards



*“At the risk of sounding cliché, it truly does take a village (or perhaps more aptly a mole’s worth of people) to make an event as large and vibrant as BASEF successful. So much of that success is owed to our Special Awards donors and judges. Their generosity, through both financial support and the gift of time, has inspired and continues to inspire countless youth to consider the STEM fields as exciting and viable career paths. To our donors and judges—whether you have been long-time contributors to the fair, or whether this is your first time with us, please know that you have made a tangible impact on the lives of countless youth whose curiosity and ingenuity will undoubtedly lead our community to places we cannot yet fathom. Thank you  $6.02214076 \times 10^{23}$  times over for your support!”*

**- Katie Brent, Special Awards Coordinator**

Special Awards are given by organizations and groups to recognize deserving projects that deal with topics of interest to the donor.

### ArcelorMittal Dofasco Awards

#### **Central Trades & Services Department Award**

**Prize:** \$100

**Criteria:** A project that best displays the use of scientific principles in applying technology for the betterment of people or machines.

#### **Chemical Testing Award**

**Prize:** \$100

**Criteria:** A project that best uses chemical testing and/or chemical principles to solve a technical problem.

#### **Commercial Department Award**

**Prize:** \$100

**Criteria:** A project that best uses commercial and business planning tools in developing a potentially new or improved commercial product.

#### **Engineering Award**

**Prize:** \$100

**Criteria:** A project that best uses engineering & maintenance technology principles and design to solve a technical problem.

#### **Environment Award**

**Prize:** \$100

**Criteria:** A project that best uses physics, chemistry, or engineering to explore or solve a technical problem associated with environmental issues.

#### **Global R&D Hamilton Award for Outstanding Research**

**Prize:** \$100

**Criteria:** A project that best uses investigative research & scientific principles to explore or solve a technical problem.



## ***Special Awards (Continued)***

### **ArcelorMittal Dofasco Awards (Continued)**

#### ***Global R&D Hamilton Award for Technology Application***

**Prize:** \$100

**Criteria:** A project that best uses the innovative application of materials, products, processes or design principles.

#### ***Hot Mill Award***

**Prize:** \$100

**Criteria:** A project that best uses creative principles and design to solve a manufacturing or process problem.

#### ***Human Resources Training & Development Award***

**Prize:** \$100

**Criteria:** A project that best uses teaching and training techniques in explaining or exploring a technical problem.

#### ***Information Systems Award***

**Prize:** \$100

**Criteria:** A project that best uses information systems and design to solve a technical problem.

#### ***Ironmaking Award***

**Prize:** \$100

**Criteria:** A project that best uses the use of metallurgical or material science principles to solve a technical problem.

#### ***Material Handling & Logistics Department Award***

**Prize:** \$100

**Criteria:** A project that best displays the use of scientific principles in exploring or solving a problem related to material conveyance, transportation or logistics.

#### ***Medical Department Award***

**Prize:** \$100

**Criteria:** A project that best uses scientific principles in exploring or solving a problem related to human health issues.

#### ***Process Automation Award***

**Prize:** \$100

**Criteria:** A project best uses process automation principles and design to solve a technical problem.

#### ***Product Development Business Process Award***

**Prize:** \$100

**Criteria:** A project that best uses product development principles and design in developing a new consumer product with commercial potential.

#### ***Quality Systems Award***

**Prize:** \$100

**Criteria:** A project that best uses quality systems principles and design to solve a technical problem.

#### ***Steelmaking Award***

**Prize:** \$100

**Criteria:** A project that best uses engineering and materials science principles to solve a technical problem.

### ***Special Awards (Continued)***

#### **ArcelorMittal Dofasco Awards (Continued)**

##### ***ArcelorMittal Dofasco Smarter Steels for People and Planet Award***

*Prize:* \$1,000

*Criteria:* A project displaying rigorous scientific or engineering methods that investigates steelmaking processes or steel products.

#### **Artistically Inspired Display Awards**

*Prize:* Two awards of \$50 each

*Criteria:* To the most artistically inspired display.

#### **Association for Iron & Steel Technology Northern Chapter Awards**

*Prize:* Two awards of \$100 each

*Criteria:* For outstanding projects related to one of the following fields: metallurgy, materials science, chemical, electrical, mechanical, industrial, environmental, civil and computer engineering.

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

*Prize:* Two awards of \$100 each

*Criteria:* Outstanding projects relating to mining, metallurgy and petroleum, any level.

#### **Canadian Meteorological and Oceanographic Society Awards**

*Prize:* An award of \$150 plus a one-year free CMOS Membership

*Criteria:* Best project in meteorological and/or oceanographic sciences (weather, air quality, climate, climate changes and/or the oceans).

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

*Prize:* Two awards of \$125 each for intermediate or senior projects and two awards of \$75 each for junior projects.

*Criteria:* Projects relating to nuclear science and engineering, energy research, or climate sciences.

#### **Chairs' Award**

*Prize:* \$100

*Criteria:* A project that exhibits good scientific, engineering or mathematical thought, but did not receive a merit or any special awards.

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

*Prize:* Three awards of \$100 each

*Criteria:* Projects relating to chemistry, chemical engineering, or chemical technology.

#### **Conservation Halton Awards**

*Prize:* Two awards of \$100 each

*Criteria:* Projects that contribute to environmental research, protection, conservation, restoration or awareness by Halton students.

#### **Dillon Consulting Limited**

##### ***Science and Engineering Award***

*Prize:* \$250

*Criteria:* Project showing excellence in science and/or engineering.

### **Special Awards (Continued)**

#### **Dillon Consulting Limited (Continued)**

##### **Biological Sciences Award**

*Prize:* \$250

*Criteria:* Project showing excellence in biological sciences.

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

*Prize:* \$100

*Criteria:* A project demonstrating the best application of chemistry.

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

*Prize:* Two awards of \$100 each

*Criteria:* Best two social science based projects.

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

*Prize:* \$250, a plaque, and a trophy for the winner's school

*Criteria:* Best biology project.

#### **Dr. Nicola Simmons Award in Cognition Studies**

*Prize:* \$100

*Criteria:* An exemplary project in cognition studies.

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

*Prize:* Two awards of \$100 each

*Criteria:* Most innovative and creative technical solutions focused on assisting individuals to overcome or compensate for physical or cognitive disabilities.

#### **Electrical Construction Association of Hamilton Awards**

*Prize:* Two awards of \$250 each

*Criteria:* Projects displaying the best and safest use of electricity in the most creative manner.

#### **Environmental Inspiration Award**

*Prize:* \$250

*Criteria:* The best environmental project that addresses an environmental problem in an inspirational/innovative way.

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

*Prize:* Two awards of \$250 each and a grand award of \$750, which includes a one-hour interview with one of Farncombe's researchers to discuss further education and career opportunities.

*Criteria:* Projects that explore digestive health, related diseases or general family nutrition through experimentation or in-depth literature.

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

##### **Grand Winner**

*Prize:* \$300 and a complimentary consultation with a patent or trademark agent at the Gowling WLG Hamilton office.

*Criteria:* Best project demonstrating potentially patentable subject matter.

##### **Runner Up & Honourable Mention**

*Prizes:* Runner Up: \$200      Honourable Mention: Certificate

*Criteria:* An excellent project demonstrating potentially patentable subject matter.

### ***Special Awards (Continued)***

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

*Prize:* 1<sup>st</sup>: \$250 2<sup>nd</sup>: \$150 3<sup>rd</sup>: \$100

*Criteria:* Intermediate or senior projects related to dentistry in general; to one specific area of dentistry; or related to oral hard & soft tissues specifically; to some aspect of the delivery of dentistry to the general (or specific) population; or an aspect related to prevention of dental disease. Also, any aspect of Personal Protective Equipment related to dentistry.

#### **Hamilton Amateur Astronomers Award**

##### ***James A Winger Award***

*Prize:* Two awards of \$100 each plus a one-year family membership in the HAA and an opportunity to present their project to the HAA membership; one award for Grade 7 to 9 and one for Grade 10 to 12.

*Criteria:* Best projects demonstrating an understanding of a topic related to astronomy, physics, light pollution abatement, or space travel.

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

*Prize:* 1<sup>st</sup>: \$250 2<sup>nd</sup>: \$150 3<sup>rd</sup>: \$100

*Criteria:* The most deserving projects by students from Hamilton with potential commercial applications focused on improving our local environment, communities or quality of life.

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

##### ***Environment and Education Award***

*Prize:* \$50

*Criteria:* Junior project that most effectively educates others about an environmental issue.

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

*Prize:* \$50

*Criteria:* Junior project that most effectively educates others regarding the role of nutrition and/or exercise in maintaining a healthy lifestyle.

##### ***Presentation and Aesthetics Award***

*Prize:* \$50

*Criteria:* Junior project that demonstrates a high level of visual appeal, creativity, and overall quality of presentation.

#### **Harrison Family Chemistry Award**

*Prize:* \$100

*Criteria:* For a project that has significant chemistry content.

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

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

*Prize:* \$100

*Criteria:* Junior project that best displays excellence in life sciences.

##### ***Scientific Process Award***

*Prize:* \$100

*Criteria:* Intermediate project that best demonstrates an understanding of the scientific process.

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

*Prize:* \$100

*Criteria:* Senior project that best displays innovation related to any science or engineering.

### ***Special Awards (Continued)***

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

- Prize:* 1<sup>st</sup>: \$140 2<sup>nd</sup>: \$80 3<sup>rd</sup>: \$80  
*Criteria:* Projects demonstrating the application of established scientific methods to topics relevant to the culture, heritage or issues of the Indigenous peoples of Canada.

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

- Prize:* Two awards of \$100 each  
*Criteria:* Best use of electronics in a science or engineering project.

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

- Prize:* Certificates  
*Criteria:* Deserving intermediate or senior projects related to topics of interest to the following organizations:

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

- Criteria:* 4 awards for creative scientific endeavour in the areas of atmospheric and related oceanic and hydrologic sciences.

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

- Criteria:* 2 awards for projects showing outstanding research in psychological science in the category of behavioural and social sciences or any category related to psychology.

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

- Criteria:* Additional Award: Ribbon for 2 deserving materials engineering projects.

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

- Criteria:* For 2 projects by females exemplifying a high standard of innovation and scientific excellence in the geosciences.

##### ***Mu Alpha Theta***

- Criteria:* For 2 projects with the most challenging, original, thorough and creative investigation of a problem involving mathematics.

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

- Criteria:* For 2 outstanding projects that address issues of environmental responsibility and sustainable development.

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

- Criteria:* For 2 outstanding Grade 11 projects exhibiting in the areas of plant or animal in vitro biology or tissue culture.

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

- Criteria:* For 2 exceptional projects that have the potential to make an impact on addressing international development challenge. Prize includes a Social Network Media Kit.

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

- Criteria:* For 2 outstanding Grade 11 projects in computer science, engineering, physics or chemistry.

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

- Prize:* \$100  
*Criteria:* A project demonstrating innovation in engineering materials, especially concrete.

## ***Special Awards (Continued)***

### **Laurentian Chapter of SETAC Awards**

*Prize:* Two awards of \$100 each

*Criteria:* Best projects and presentations on a topic related to environmental toxicology, chemistry, pollution, contamination, remediation or environmental protection.

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

*Prize:* \$100, certificate and a giant microbe

*Criteria:* 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.

### **McMaster University Awards**

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

*Prize:* \$100

*Criteria:* An outstanding senior or intermediate project connected to chemistry or chemical biology.

#### ***Department of Chemical Engineering Award***

*Prize:* \$250

*Criteria:* An outstanding intermediate or senior project demonstrating aspects of chemical engineering, particularly in the fields of biomaterials, polymer science, process systems design, or water and energy systems.

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

*Prize:* Three awards of \$100, one at each level.

*Criteria:* For projects displaying the best innovative use, design, or testing of materials.

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

##### ***Earth and Environmental Sciences Award***

*Prize:* \$100

*Criteria:* Outstanding project in earth science or environmental science.

##### ***Geography Award***

*Prize:* \$100

*Criteria:* Outstanding project in geography or social science.

#### ***Venture Academy***

*Prize:* Free registration for one week of summer camp for two senior projects.

*Criteria:* Deserving projects by students in Grade 11 or 12.

#### ***Michael G. DeGroote Institute for Infectious Disease Research Internship Award***

*Prize:* Two awards of \$50 each and a grand prize of \$100, which includes a one-hour interview with a senior person at IIDR for the grand prize winner and their families.

*Criteria:* Excellent senior projects in infectious disease, drug discovery or human health.

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

*Prize:* \$250

*Criteria:* Best engineering project at the intermediate or senior level.



## ***Special Awards (Continued)***

### **Mohawk College Awards**

#### ***Building & Construction Sciences Awards***

##### ***Building Sciences Award***

*Prize:* \$50

*Criteria:* Project related to building sciences, building materials, or energy conservation in structures.

##### ***Civil Engineering Award***

*Prize:* \$50

*Criteria:* Project related to the field of civil engineering.

##### ***Transportation Engineering Award***

*Prize:* \$50

*Criteria:* Project related to planning, design, or operation of any transportation mode or facility.

#### ***Computer Science & Information Technology Excellence Awards***

*Prize:* Three awards of \$50 each

*Criteria:* Projects that demonstrate a thorough understanding of computer application and design in today's world.

#### ***Electrical Engineering Technology Awards***

##### ***Computer Engineering Technology Award***

*Prize:* \$50

*Criteria:* A deserving project in computer engineering technology.

##### ***Electrical Engineering Award***

*Prize:* \$50

*Criteria:* A deserving project in electrical engineering studies.

##### ***Energy Systems Award***

*Prize:* \$50

*Criteria:* A deserving project in energy systems.

#### ***Mathematics Awards***

*Prize:* Two awards of \$50 each, one at the Junior and one at the Senior level.

*Criteria:* Deserving projects in the category of mathematics or statistics.

### **Nelson Steel Awards**

*Prize:* Two awards of \$100 each

*Criteria:* Outstanding junior projects related to two of the following fields: steel, environmental or chemistry.

### **New Health Scientist Award**

*Prize:* \$50

*Criteria:* A worthy junior project showing good potential for improving the health of our community.

### **Procor Engineering Awards**

*Prize:* Junior: \$50      Intermediate: \$100      Senior: \$150

*Criteria:* Excellent engineering projects.

### ***Special Awards (Continued)***

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

- Prize:* Two awards of \$100 at the intermediate level, and two awards of \$50 at the junior level
- Criteria:* Outstanding projects that use strong scientific principles in exploring or solving a problem related to human health issues and communicate the results of their project through an effective visual display.

#### **Rotary Club of Hamilton Stoney Creek Awards**

- Prize:* 1<sup>st</sup>: \$250      2<sup>nd</sup>: \$150      3<sup>rd</sup>: \$100
- Criteria:* Best three projects from schools situated in the Hamilton core displaying high academic achievement and striving to excel in science and technology.

#### **Royal Botanical Gardens Award**

- Prize:* \$100 gift certificate from the RBG shop plus a 1 year RBG family membership
- Criteria:* Best project in plant or environmental sciences.

#### **Society of Tribologists & Lubrication Engineers – Hamilton Chapter**

- Prize:* Two awards of \$250 each
- Criteria:* Projects that utilize the principles of tribology, (friction, wear and lubrication), to solve a technical problem.

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

- Prize:* 1<sup>st</sup>: \$100      2<sup>nd</sup>: \$50
- Criteria:* For outstanding projects using computer electronics or software.

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

- Prize:* \$100
- Criteria:* For a project focused on innovative ideas for preserving and/or enhancing Ontario's water environment.

## ***BASEF Inspiration Awards***

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

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

- ▷ Awarded based on merit judging marks to top projects that win \$250 or less in other cash prizes, do not win a Grand Prize Trip Award, and have not previously won a BASEF 500 or a BASEF Inspiration Award. A minimum of ten awards of \$500 each will be given.

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

- ▷ Awarded for teachers of schools which are new\* to BASEF. The teacher must have two or more projects displayed and judged at the Fair. 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. Up to a maximum of nine awards of \$500 (each) will be given.

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

## Scholarships

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

- Prize:* One \$1,500 scholarship, to be redeemed upon acceptance and registration in any undergraduate program at McMaster University. (Pair projects will split the award).
- Criteria:* An outstanding senior project in the Life Sciences category demonstrating scientific excellence.

### **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 2022–2023 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:* Seven \$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.

### **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 recipient's 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 BASEF 2022 Merit Award Medals (Gold, Silver, Bronze) will win this scholarship.

### **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, Science, or Health Sciences at the University of Ottawa. In the case of a pair project, each student will receive a \$1,000 admission scholarship if they register in appropriate undergraduate programs at the University of Ottawa.
- Criteria:* The most deserving Senior project.

# BASEF 2022 Judges



*“Once again, the judging of student projects occurred online—students conducted research and performed experiments, analysed information, developed new devices, submitted reports, and created videos. Judges used a combination of rubrics and marking scales to evaluate student submissions. We had a great response from our call for judges – over 150 individuals registered. With this number of merit judges, all projects were able to be judged a minimum of 4 times. The merit judges represented diverse areas of science which provided valuable perspectives when evaluating student projects. A sincere thank you to each merit judge and category chair for sharing their scientific expertise and supporting all BASEF student participants. Once again, I am impressed by the commitment of these volunteers. I congratulate all the finalists for their outstanding projects, dedication to science fairs and ability to adapt and meet the challenges faced in 2022. You are all winners!”*

**- Donna Stack-Durward, Merit Judge-In-Chief**

## Merit Award Judges

<b>Ahmed, Mohammed</b>	Artificial Intelligence Tech Company	<b>Barras, Pierre</b>	Retired
<b>Andrews, Krysta</b>	McMaster University	<b>Birch, Nigel</b>	Alta Technology Ltd.
<b>Arriaga, Mariano</b>	Mohawk College - Energy & Power Innovation Centre	<b>Bochenski, Boguslaw</b>	Kinectrics Inc.
<b>Arulanandam, Sarah</b>	Self-Employed and Oakville Hydro Board of Directors	<b>Boron, Dominika</b>	McMaster University
<b>Asbury, Sarah</b>	St. Joseph's Healthcare Hamilton	<b>Bortolus, Mark</b>	McMaster University (Ph.D. Student)
<b>Aslett, Matthew</b>	Halton Catholic District School Board, Queen's University, Niagara University	<b>Bowen, Dave</b>	Retired
<b>Aylward, Andrea</b>	Dana Canada Inc.	<b>Bowen, Lynda</b>	Hamilton Police Service (Retired)
<b>Badzioch, Rachel</b>	McMaster University (Student)	<b>Brennan-Rieder, Denise</b>	Cirrolytix
<b>Barbera, Lidia</b>	McMaster University	<b>Chaykowski, Jayson</b>	McMaster University
		<b>Cheung, Tsz Wing</b>	Columbia International College
		<b>Ciancone, Natalie</b>	McMaster University (Student)
		<b>Cleary, Shane</b>	McMaster University

<b>Conn, Bri</b>	<i>McMaster University</i>	<b>Freger, Shay</b>	<i>McMaster University</i>
<b>Critchley, Stuart</b>	<i>Dofasco (Technology Manager), Hatch, and Self-Employed Consultant (Retired)</i>	<b>Garrett, Jim</b>	<i>Retired</i>
<b>Cunningham, Jasmyn</b>	<i>McMaster University</i>	<b>Ghaffari, Ayda</b>	<i>HWDSB</i>
<b>Cupido, Anthony</b>	<i>Mohawk College</i>	<b>Graham, Helen</b>	<i>Consultant (Semi-Retired)</i>
<b>Czebe, Andy</b>	<i>L3Harris Wescam</i>	<b>Grant, Daniel</b>	<i>Harbourside Engineering Consultants</i>
<b>Dave, Mugdha</b>	<i>McMaster University (MSc Student)</i>	<b>Grover, Velma</b>	<i>McMaster University</i>
<b>De Tina, Renato</b>	<i>ArcelorMittal Dofasco (Retired)</i>	<b>Gupta, Shushmita</b>	<i>Hamilton Wentworth District School Board</i>
<b>De Tina, Emilio</b>	<i>ArcelorMittal Dofasco</i>	<b>Hahn, Justin</b>	<i>Hamilton Regional Laboratory Medicine Program</i>
<b>Denham, Sean</b>	<i>VanMar Constructors Inc.</i>	<b>Hanna, Christina</b>	<i>ICSPI (Application Engineer)</i>
<b>Dewan, Neha</b>	<i>Toronto Rehabilitation Institute</i>	<b>Harrison, Eric</b>	<i>Retired</i>
<b>Dhar, Sudeshna</b>	<i>McMaster University (PhD Student)</i>	<b>Hazelden, Linda</b>	<i>Board Member, Catholic Teachers Guild (Toronto), Diverse Ministries</i>
<b>Dittrich, Angela</b>	<i>York University and Osgoode Hall (Student - JD/Master in Environmental Studies)</i>	<b>Hill, Terry</b>	<i>Hamilton Police Service (Retired)</i>
<b>Docherty, William</b>	<i>Mohawk College and the City of Hamilton</i>	<b>Hillman, Daryl</b>	<i>L3Harris Wescam</i>
<b>Donaldson, Bob</b>	<i>ArcelorMittal Dofasco (Retired)</i>	<b>Hol, Adrienne</b>	<i>Avenue Physiotherapy</i>
<b>Durham, Kristina</b>	<i>McMaster University</i>	<b>Horzum, Meliha</b>	<i>University of Toronto (Speech Language Pathology Masters Student)</i>
<b>Ene, Cezara</b>	<i>McMaster University (MD Student)</i>	<b>Howlader, Raiyan</b>	<i>McMaster University</i>
<b>Eng, Mikaela</b>	<i>McMaster University</i>	<b>Hul, Lukasz</b>	<i>L3Harris Wescam</i>
<b>Farronato, Alessia</b>	<i>Cortel Group</i>	<b>Hunt, Kevin</b>	<i>ArcelorMittal Dofasco</i>
<b>Fisher, David</b>	<i>Self-Employed</i>	<b>Iyengar, Yajur</b>	<i>University of Toronto</i>
<b>Foran, Gabrielle</b>	<i>Université de Montréal</i>	<b>Jamkodjian, Cassandra</b>	<i>Alectra Utilities</i>
<b>Forrester, Colin</b>	<i>L3Harris Wescam</i>	<b>Jennings, Peter</b>	<i>Inventor, Entrepreneur (Retired)</i>
<b>Franciscus, Danielle</b>	<i>Hemmera Envirochem Inc.</i>	<b>Jiang, Wei</b>	<i>McMaster University</i>
<b>Freeman, Marcus</b>	<i>Sheridan College</i>	<b>Jing, Anne</b>	<i>University of Toronto</i>
		<b>Johnson, Warren</b>	<i>Retired</i>

<b>Johnson, Stephen</b>	<i>Thermo Fisher Scientific</i>	<b>Perchaluk, Brett</b>	<i>City of Calgary</i>
<b>Johnston, Bill</b>	<i>Semi-Retired</i>	<b>Piitz, Andrea</b>	<i>Tathan Engineering</i>
<b>Joseph, Tanya</b>	<i>Queens University</i>	<b>Prieur, Adam</b>	<i>St Joseph's Healthcare Hamilton</i>
<b>Kelly, Rachel</b>	<i>Centre for Mental Health and Addiction</i>	<b>Puri, Akshita</b>	<i>Michael Smith Health Research BC</i>
<b>Khullar, Rishabh</b>	<i>Thomson Reuters Holdings Inc.</i>	<b>Quinn, Julia</b>	<i>Teacher's College</i>
<b>Kottaras, Steven</b>	<i>Brock University</i>	<b>Rachwalski, Kenneth</b>	<i>McMaster University (PhD Student in Biochemistry/ Microbiology)</i>
<b>Lawlor, Daniel</b>	<i>City of Hamilton</i>	<b>Rashid, Shakeel</b>	<i>Student</i>
<b>Lewis, Justin</b>	<i>AVAR Environmental</i>	<b>Rebalka, Irena</b>	<i>McMaster University</i>
<b>Lomonaco, Joshua</b>	<i>Sun Life Canada</i>	<b>Ruiz Blanco, Nelson</b>	<i>Personal</i>
<b>Lonz, Steve</b>	<i>Momentum Traffic Inc.</i>	<b>S. Merlos, Erick</b>	<i>City of Hamilton</i>
<b>MacAulay, Miranda</b>	<i>Dr. Jacob Optometry</i>	<b>Saenz de Miera, Mirnaly</b>	<i>Natural Resources Canada</i>
<b>Mahut, Caroline</b>	<i>AMPERe Inc.</i>	<b>Safranyos, Sharon</b>	<i>G&amp;L Scientific</i>
<b>Marfisi, Julianna</b>	<i>McMaster University (Occupational Therapy Student)</i>	<b>Saini, Kanika</b>	<i>Canadian Imperial Bank of Commerce</i>
<b>Martin, Paul</b>	<i>Retired</i>	<b>Schaefer, Wayne</b>	<i>Niagara College Instructor</i>
<b>McNally, Mike</b>	<i>Retired</i>	<b>Schaefer, Janet</b>	<i>N/A</i>
<b>Medeiros, Sarah</b>	<i>McMaster University</i>	<b>Schoenhardt, Mary Anne</b>	<i>Queen's University (Student)</i>
<b>Melligy, Amr</b>	<i>Wolseley Canada</i>	<b>Sciullo, Luana</b>	<i>Humber College</i>
<b>Merali Juma, Aadil</b>	<i>McMaster University</i>	<b>Sharma, Rekha</b>	<i>Toronto</i>
<b>MIndorff, Mark</b>	<i>DARTS</i>	<b>Sheils, Glenn</b>	<i>FairSquare.ca</i>
<b>Mogus, Jack</b>	<i>University of Guelph</i>	<b>Shepard, Beverly</b>	<i>McMaster University; Hamilton, Wentworth County, and Hamilton Separate Boards (Retired)</i>
<b>Montague, Coulter</b>	<i>University of Toronto, University Health Network</i>	<b>Shepard, Ben</b>	<i>Self-Employed</i>
<b>Mulla, Daanish</b>	<i>McMaster University (PhD Student and Course Instructor)</i>	<b>Shetty, Sanya</b>	<i>PHAC</i>
<b>Nazal, Hana</b>	<i>McMaster University (Student)</i>	<b>Siam, Ahmad</b>	<i>ArcelorMittal Dofasco</i>
<b>Nazal, Basma</b>	<i>Self-Employed</i>	<b>Simpson, Mark</b>	<i>Retired</i>
<b>Obeid, Ahmad</b>	<i>School</i>		
<b>Pacher, Giusepina</b>	<i>Insilico Medicine</i>		
<b>Pallisco, Daniella</b>	<i>ArcelorMittal Dofasco</i>		



<b>Smith, Rebecca</b>	<i>St. Joseph's</i>	<b>Vidican, David</b>	<i>McMaster University</i>
<b>Soomro, Asfia</b>	<i>Student</i>	<b>Voorberg, Greg</b>	<i>L3Harris Wescam</i>
<b>Steffler, Matt</b>	<i>Habitat For Humanity</i>	<b>Walsh, Steven</b>	<i>Hamilton Public Health Services</i>
<b>Stewart, Mark</b>	<i>McMaster Innovation Park</i>	<b>Wang, Lu</b>	<i>Retired</i>
<b>Summers, Peter</b>	<i>McMaster University</i>	<b>Wehrle, Paul</b>	<i>Retired</i>
<b>Summers, Heather</b>	<i>University of Waterloo (Student)</i>	<b>Wilson, Jennifer</b>	<i>Hamilton Health Sciences</i>
<b>Tarjan, Michael</b>	<i>Dofasco (Retired Environmental Project Engineer)</i>	<b>Wilson, Anne-Marie</b>	<i>HWDSB (Retired)</i>
<b>Themeles, Tom</b>	<i>Startup/Technology AI</i>	<b>Winterburn, Julie</b>	<i>L3Harris Wescam</i>
<b>Theobald, Kim</b>	<i>Self-Employed</i>	<b>Wood, Jane</b>	<i>ArcelorMittal Dofasco</i>
<b>Thompson, Shawna</b>	<i>McMaster University</i>	<b>Wood, David</b>	<i>FCA Canada - Etobicoke Casting Plant</i>
<b>Tieu, Paul</b>	<i>McMaster University</i>	<b>Xu, Fei</b>	<i>McMaster University</i>
<b>Tod, Jeff</b>	<i>Rockwell Automation</i>	<b>Yaguchi, Jessica</b>	<i>HWCDSD (Supply Teacher) and Brock University (Research Assistant)</i>
<b>Todd, Erinn</b>	<i>Ontario Land Trust Alliance</i>	<b>Yang, Noah</b>	<i>Michael G. DeGroote School of Medicine (Student)</i>
<b>Tu, Megan</b>	<i>McMaster University</i>	<b>Young, Norman</b>	<i>WBE (Retired)</i>
<b>Tuinema, Brian</b>	<i>Germiphene Corp.</i>	<b>Zathey, Nicole</b>	<i>Government of BC</i>
<b>Ustrzycki, Tyler</b>	<i>Tesla</i>	<b>Zhang, Ali</b>	<i>McMaster University (PhD Student)</i>
<b>Van Berkel, Ben</b>	<i>Byrne Engineering (Retired)</i>	<b>Zhang, Yifan (Ivan)</b>	<i>McMaster University</i>
<b>van Riemsdijk, Isadora</b>	<i>ArcelorMittal Dofasco</i>	<b>Zhao, Jenny</b>	<i>McMaster University</i>
<b>Vidican, Razvan</b>	<i>Candu Inc., part of SNC Lavalin Nuclear</i>		

## Special Awards Judges

### **ArcelorMittal Dofasco**

▷ Shannon Clark, Hamid Afshar, Adam Aglipay, Scott Anderson, Hammad Ashfaq, Mitchell Bakarich, Gaveen Ekanayake, Tyler French, Jaime Jewer, Anjuli Joachim, Giorgos Kyprianou, Capucine Lardinois, Daniel Odoh, Vince Popovich, John Rhamey, Gabriel Silva, Jonah Szajman, Pedro Tondo, Paul Valvasori

### **Artistically Inspired Display Awards**

▷ Cathy Hamilton, Cathy Hayman

### **Association for Iron & Steel Technology Northern Chapter Awards**

▷ Shannon Clark

### **Bay Area Health Trust Scholarship/Paul Lakin Health Sciences Award**

▷ Paul Lakin

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

▷ Shannon Clark

### **Canadian Meteorological and Oceanographic Society Awards**

▷ Dr. Dominique Brunet

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

▷ James Barron, Peter J. Kriemadis

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

▷ Don Barclay, Tom Sutton, Dragan Vuckovic

### **Dillon Consulting Awards**

▷ Lucia Jara Moreno, Caitlin Vandermeer

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

▷ Dr. Nicola Simmons

### **Dr. Nicola Simmons Award in Cognition Studies**

▷ Dr. Nicola Simmons

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

▷ Jim Casey, Al Nicolls

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

▷ Joe Kurpe

### **Environmental Inspiration Award**

▷ Isabella O'Brien

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

▷ Dr. Michael Surette

### **Gowling WLG Innovation Awards**

▷ Alex Ross

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

▷ Dr. Frank Stechey

### **Harrison Family Chemistry Award**

▷ Maryam Darestanifarahani, Sharonna Greenberg, Jeff Landry, Kay McCallum

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

▷ David Reed

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

▷ Laith Al-Musawi

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

▷ Dana Bee, Joseph Saturnino, Anika Gupta, Jayasankar Subramanian

### **James A. Winger Award, sponsored by the Hamilton Amateur Astronomers**

▷ Mario Carr, Jo Ann Salci, Chris Strejch

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

▷ Dr. Nicola Simmons

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

▷ Carolyn Brown, Shari Dahmer, Sarah Gewurtz, Victoria Restivo

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

▷ Katie Brent, Caroline Mahut

## **McMaster University Awards**

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

▷ Maryam Darestanifarahani,  
Sharonna Greenberg, Jeff Landry,  
Kay McCallum

### **Department of Chemical Engineering Award**

▷ Abhishek Premachandra,  
Ashleigh Warren

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

▷ Beth McNally

### **Faculty of Engineering Entrance Awards**

▷ Alaine Coschi

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

▷ Dr. Luc Bernier

### **Venture Academy at McMaster Awards**

▷ Alaine Coschi

### **Michael G. DeGroote Institute for Infectious Disease Research Award**

▷ Tori Marko, Luke Yaeger

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

▷ Bill Patterson

## **Mohawk College Awards**

### **Building & Construction Sciences Awards**

▷ Sean Nix

## **Mohawk College Awards, Continued**

### **Computer Science & Information Technology Excellence Award**

▷ Brian Minaji, Brian Stefanchuk

### **Electrical Engineering Technology Awards**

▷ Brian Minaji, Brian Stefanchuk

### **Mathematics Awards**

▷ Sean Nix

## **Nelson Steel Awards**

▷ Sophia Blashcke

## **Procor Engineering Awards**

▷ Eziaku Nri, Iona Szczerbowicz

## **Professional Engineers of Ontario – Hamilton/Burlington**

▷ Michelle Chin, Gary Closson, Erika Kadar, Jim Sweetman

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

▷ Gabriella DiSanto, Laura Garrick, Sarah Howe

## **Rotary Club of Hamilton Stoney Creek Awards**

▷ Helen Habinski, James McDonnell

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

▷ Richard Schrama

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

▷ Dean Iamarino, Amr Melligy

# List of Student Exhibitors

## School Boards:

<b>GEDSB</b>	<i>Grand Erie District School Board</i>
<b>HCDSB</b>	<i>Halton Catholic District School Board</i>
<b>HDSB</b>	<i>Halton District School Board</i>
<b>HWCDSD</b>	<i>Hamilton-Wentworth Catholic District School Board</i>
<b>HWDSB</b>	<i>Hamilton-Wentworth District School Board</i>
<b>IND</b>	<i>Independent School</i>

## Junior Level

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Aggarwal, Shrey	Powering A Greener Future	<a href="#">T09</a>	Eng & Comp Sci	W. H. Morden Public School	HDSB
	Ahmed, Nawra Samia	Using the Fibonacci Code to Improve Memory	<a href="#">K08</a>	Health Sciences Human	Forest Trail Public School	HDSB
	Al Baroudi, Rama	Eco-Cleaner Brush	<a href="#">N07</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Alfano, Michaela	Expensive V.S Cheap Shampoos	<a href="#">N05</a>	Phys & Math Sci	Ascension Elementary School	HCDSB
	Ali, Iman	Bauxite Bot: The Saga Continues	<a href="#">E03</a>	Eng & Comp Sci	Chris Hadfield Public School	HDSB
	Ali, Shaiq	Black Holes Demystified	<a href="#">U07</a>	Phys & Math Sci	Hawthorne Village Public School	HDSB
	Ali, Zakariya	Stress Study	<a href="#">L02</a>	Health Sciences Human	Charles R. Beaudoin Public School	HDSB
	Alles , Tianna	Go With Your Gut	<a href="#">G09</a>	Health Sciences Human	Oakville Christian School	IND
	Alles, Audrina	Just Go With the Flow	<a href="#">F07</a>	Earth & Env Sci	Oakville Christian School	IND
	Antolic, Marcus	Countering Covid-19	<a href="#">U05</a>	Eng & Comp Sci	St. Ann (Ancaster)	HWCDSD
	Araya, Zacharaya	Using machine learning to predict the effects of nitrous oxide in relation to hypoxic zones	<a href="#">E02</a>	Eng & Comp Sci	Forest Trail Public School	HDSB

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Arbelaez Nino, Mariaclara	The Full Wolf Moon	<a href="#">C01</a>	Health Sciences Human	St. Scholastica School	HCDSB
	Arthur, Rhea	Does pH Matter?	<a href="#">F01</a>	Life Sciences Non-Human	Oakville Christian School	IND
	Aswani, Dhruv	Mirrors and Electricity? Not Just For Checking Your Reflection!	<a href="#">S08</a>	Eng & Comp Sci	Charles R. Beaudoin Public School	HDSB
	Avison, Macey	What Types of Materials Block Wifi Signals the Best?	<a href="#">S01</a>	Eng & Comp Sci	W. H. Morden Public School	HDSB
	Awobodu, Dabira	For The Better???	<a href="#">E09</a>	Health Sciences Human	Oakville Christian School	IND
	Awobokun, Tiseyi	Working Remotely in relation to Work-Life Balance	<a href="#">F08</a>	Health Sciences Human	Oakville Christian School	IND
	Ayibiowu, Tamilore	Good Night Sleep Time	<a href="#">C06</a>	Eng & Comp Sci	Oakville Christian School	IND
	Bagnall, Amelia	Muffin Mania!	<a href="#">J02</a>	Phys & Math Sci	Ancaster Meadow	HWDSB
	Bagnall, Myles	What really fuels athletes? An examination of popular sports drinks	<a href="#">G06</a>	Phys & Math Sci	Ancaster Meadow	HWDSB
	Barsan, Sebastian	A Terraformation Exploration	<a href="#">Q04</a>	Eng & Comp Sci	W. H. Morden Public School	HDSB
	Beekhoo, Beecher	Goosebumps	<a href="#">F04</a>	Health Sciences Human	Oakville Christian School	IND
	Bianchi, Juliana	Can Astrological Signs Predict your Personality?	<a href="#">Q06</a>	Health Sciences Human	St. Vincent de Paul	HWCDsb
	Britto Silva, Daniela	Card Shuffling	<a href="#">B07</a>	Phys & Math Sci	St. Scholastica School	HCDSB
	Campello, Hannah	How does food affect our mental health?	<a href="#">N06</a>	Health Sciences Human	Ascension Elementary School	HCDSB
	Capinpn, Shekailah	Are Fingerprints Genetic	<a href="#">N03</a>	Health Sciences Human	Ascension Elementary School	HCDSB
	Chan, Christian	Plant Battery	<a href="#">E06</a>	Phys & Math Sci	Oakville Christian School	IND
	Charters, Dalton	Does Reaction Speed Decrease Over Time	<a href="#">H06</a>	Health Sciences Human	Oakville Christian School	IND
	Chen, Aaron	The Adjustaball	<a href="#">R06</a>	Eng & Comp Sci	John William Boich Public School	HDSB

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Coleman, Aurelia	Can Astrological Signs Predict your Personality?	<a href="#">Q06</a>	Health Sciences Human	St. Vincent de Paul	HWCD SB
	Cook, Hailey	Solar Cars: Creating The Future	<a href="#">D02</a>	Eng & Comp Sci	Ancaster Meadow	HWDSB
	Danko, Ella	Just Go With the Flow	<a href="#">F07</a>	Earth & Env Sci	Oakville Christian School	IND
	DesRoches, Sophie	Eco-Cleaner Brush	<a href="#">N07</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Doyle, Alexander	Baseball: A Game of Secret Cheaters	<a href="#">H03</a>	Phys & Math Sci	Oakville Christian School	IND
	Drera, Giulia	Expensive V.S Cheap Shampoos	<a href="#">N05</a>	Phys & Math Sci	Ascension Elementary School	HCDSB
	Easo, Alex	The Importance of Clean Water and Water Filtration	<a href="#">U06</a>	Earth & Env Sci	Balaclava	HWDSB
	Efthimiadis, Anthony	Facial Recognition Door Lock Using Histogram Of Oriented Gradients And Support Vector Machine	<a href="#">Q05</a>	Eng & Comp Sci	W. H. Morden Public School	HDSB
	Fedorovskiy, Maksim	Solar Powered Radio	<a href="#">G05</a>	Eng & Comp Sci	Oakville Christian School	IND
	Feltham, Jacob	The Big Clean	<a href="#">T01</a>	Earth & Env Sci	St. Augustine	HWCD SB
	Gamberg, Maximus	The Effect of Ball Pressure on Soccer Shot Speed	<a href="#">A07</a>	Phys & Math Sci	Ancaster Meadow	HWDSB
	Gannett, Gracie	Go With Your Gut	<a href="#">G09</a>	Health Sciences Human	Oakville Christian School	IND
	Gaston, Edward	Making Biofuel From Renewable Energy Sources	<a href="#">C07</a>	Biotechnology	Ancaster Meadow	HWDSB
	Ghode, Aahan	SterliStation: Using UV Light to Safely Reuse Masks	<a href="#">P05</a>	Biotechnology	W. H. Morden Public School	HDSB
	Goldstein, Sarah	Gluten vs Gluten-free	<a href="#">D06</a>	Health Sciences Human	Oakville Christian School	IND
	Goyal, Jiyaa	Should Governments Accept Cryptocurrency as an Official Form of Money?	<a href="#">H09</a>	Eng & Comp Sci	Bellmoore	HWDSB
	Guagliano, Daniel	Smart Watering System	<a href="#">M04</a>	Eng & Comp Sci	St. Clare of Assisi	HWCD SB

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Guan, Tanya	Red or Green?	<a href="#">U04</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Halim, Samantha	The Hidden Power of Water	<a href="#">D01</a>	Eng & Comp Sci	Oakville Christian School	IND
	Hassan, Saim	Level S Hazmat Suit	<a href="#">N08</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Hingorani, Ruhaan	Is More Always Better?	<a href="#">J01</a>	Phys & Math Sci	Charles R. Beaudoin Public School	HDSB
	Hitchcock, Sierra	Beyond the Baked Good	<a href="#">N04</a>	Phys & Math Sci	Ascension Elementary School	HCDSB
	Hurdowar, Josh	Self-Flipping Pancake Pan	<a href="#">R08</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Isram, Keira	Which Heat Protection Spray Works the Best?	<a href="#">R07</a>	Phys & Math Sci	Ancaster Meadow	HWDSB
	Johnson, William	Quantum Tunnelling Covid infection!	<a href="#">K02</a>	Health Sciences Human	Guy B. Brown	HWDSB
	Jones, Ava	The sleeping jacket	<a href="#">B06</a>	Eng & Comp Sci	Rolling Meadows Public School	HDSB
	Kang, Alex	Solar Powered Car	<a href="#">C02</a>	Eng & Comp Sci	Ancaster Meadow	HWDSB
	Kannan, Akshara	How does biological relation, ethnicity, and gender affect a person's fingerprint?	<a href="#">T05</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Karas, Jasmine	Black Out Bacteria!	<a href="#">E07</a>	Biotechnology	Oakville Christian School	IND
	Katika, Riddhi	Pollution Turtle	<a href="#">L09</a>	Earth & Env Sci	John William Boich Public School	HDSB
	Kelder, James	Mask Wars	<a href="#">F06</a>	Biotechnology	Oakville Christian School	IND
	Klages, Mackenzie	The Ice Water experiment	<a href="#">Q01</a>	Health Sciences Human	C.H. Norton Public School	HDSB
	Lalonde, Julien	The Garbage Code	<a href="#">P06</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Larkin, Zahra	Eye Colour Genetics	<a href="#">E04</a>	Health Sciences Human	Oakville Christian School	IND



Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	LeBlanc, Jacob	Transforming Disposable Mask Waste into Reusable Shipping Packages	<a href="#">A08</a>	Eng & Comp Sci	Pilgrim Wood Public School	HDSB
	Lee, Jeanne	What Types of Materials Block Wifi Signals the Best?	<a href="#">S01</a>	Eng & Comp Sci	W. H. Morden Public School	HDSB
	Lessa Fratini, Sofia	Solar Cars: Creating The Future	<a href="#">D02</a>	Eng & Comp Sci	Ancaster Meadow	HWDSB
	Lopes, Isabella	Cosmic chocolate	<a href="#">A09</a>	Phys & Math Sci	Our Lady of Hope	HWCDSD
	Low, Louis	Refuel Re-energize Recover	<a href="#">S05</a>	Health Sciences Human	St. Clare of Assisi	HCDSB
	Lu, Daniel	Eye-Contact Troubles During Script Reading: Teleprompter	<a href="#">H07</a>	Phys & Math Sci	Charles R. Beaudoin Public School	HDSB
	Luciani, Atticus	What's Happening Up There?! Strategies for Sequestering CO2	<a href="#">U02</a>	Earth & Env Sci	St. Augustine	HWCDSD
	Mao, Teddy	Transparent Wood: A Window to the Future?	<a href="#">F09</a>	Eng & Comp Sci	Oakville Christian School	IND
	Marem, Rohanth	Using Object Detection and Deep Learning Algorithms to Aid the Visually Impaired	<a href="#">T04</a>	Eng & Comp Sci	W. H. Morden Public School	HDSB
	Marriette, Brianna	The Rolling Collapsible Coffee Table	<a href="#">K06</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Marsh, Claire	The EduComm Device	<a href="#">C05</a>	Eng & Comp Sci	Rolling Meadows Public School	HDSB
	Martin, Joanna	Drip, Drip, Drip	<a href="#">L01</a>	Earth & Env Sci	St. Clare of Assisi	HCDSB
	Marttila, Natalie	Bad Habits	<a href="#">R09</a>	Life Sciences Non-Human	W. H. Morden Public School	HDSB
	Mastalerz, Olivia	The Introverted and Extroverted Memory	<a href="#">B08</a>	Health Sciences Human	St. Scholastica School	HCDSB
	Matyjas, Faith	The H2Ocean Saver	<a href="#">R04</a>	Earth & Env Sci	John William Boich Public School	HDSB
	Mauro, Mackenzie	The Rolling Collapsible Coffee Table	<a href="#">K06</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	McKenzie, Rachel	Glasses + Face Mask = Fog. How can we reduce this?	<a href="#">A04</a>	Phys & Math Sci	Charles R. Beaudoin Public School	HDSB
	Mehr, Ariana	Bauxite Bot: The Saga Continues	<a href="#">E03</a>	Eng & Comp Sci	Chris Hadfield Public School	HDSB
	Menon, Madhav	Intelli-Bloom	<a href="#">N01</a>	Eng & Comp Sci	Charles R. Beaudoin Public School	HDSB

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Miller, Logan	Expand on Command?	<a href="#">B09</a>	Eng & Comp Sci	Rolling Meadows Public School	HDSB
	Mrmak, Danica	Underwater Heat	<a href="#">H01</a>	Earth & Env Sci	Ancaster Meadow	HWDSB
	Nah, Emmy	Hold that Flip: Does your Flexibility affect your likelihood of injury?	<a href="#">R03</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Ojei-David, Mitchell	All About Taste	<a href="#">G01</a>	Health Sciences Human	Oakville Christian School	IND
	Oliver, Mia	Pumped up	<a href="#">P07</a>	Health Sciences Human	St. Augustine	HWCDSD
	Oza, Chhaya	Pollution Turtle	<a href="#">L09</a>	Earth & Env Sci	John William Boich Public School	HDSB
	Pacifici, Nicholas	Head On A Swivel 2.0: Brace For Impact	<a href="#">D07</a>	Eng & Comp Sci	St. Bernadette	HWCDSD
	Panicker, Mythili	Intelli-Bloom	<a href="#">N01</a>	Eng & Comp Sci	Charles R. Beaudoin Public School	HDSB
	Patel, Jaanam	How do sugary drinks damage your teeth?	<a href="#">D03</a>	Health Sciences Human	Ancaster Meadow	HWDSB
	Pfeiffer, Zarah	Does pH Matter?	<a href="#">F01</a>	Life Sciences Non-Human	Oakville Christian School	IND
	Pirker, Maksim	Electric Vehicle Attachment (EVA)	<a href="#">N09</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Prelevic, Natasha	Geographic Illiteracy: How Important Is It In Today's World?	<a href="#">H08</a>	Health Sciences Human	Charles R. Beaudoin Public School	HDSB
	Pullakhandam, Mithali	Neutransmitters Correlation to Music	<a href="#">S02</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Qin, Matthew	Analysis of Kahneman's findings on economic judgment and decision making under uncertainty	<a href="#">S04</a>	Health Sciences Human	Charles R. Beaudoin Public School	HDSB
	Quan, Kaylee	The H2Ocean Saver	<a href="#">R04</a>	Earth & Env Sci	John William Boich Public School	HDSB
	Reise, Ella	The SlipSafe Mobility Cane	<a href="#">P09</a>	Eng & Comp Sci	John William Boich Public School	HDSB

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Romano, Ava	Can CAR T-Cell Therapy Cure Alzheimer's Disease	<a href="#">R01</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Rosettani, Mia	Beyond the Baked Good	<a href="#">N04</a>	Phys & Math Sci	Ascension Elementary School	HCDSB
	Saha, Yashita	How Effective is Disinfectant in The Average Public School?	<a href="#">T02</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Saini, Nathan	The Adjustaball	<a href="#">R06</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Salimi, Rida	Comparing Covid Variants and Making Future Predictions	<a href="#">B01</a>	Health Sciences Human	Emily Carr Public School	HDSB
	Sangapallar, Pavani	The Impact of Autonomous Cars on Society and Use	<a href="#">S06</a>	Eng & Comp Sci	Charles R. Beaudoin Public School	HDSB
	Sanghera, Eishmeet	The sleeping jacket	<a href="#">B06</a>	Eng & Comp Sci	Rolling Meadows Public School	HDSB
	Saravanan, Rakshan	The impact of online remote learning on teenagers with social anxiety.	<a href="#">Q09</a>	Health Sciences Human	Ancaster Senior	HWDSB
	Scheben, Rowan	The Big Clean	<a href="#">T01</a>	Earth & Env Sci	St. Augustine	HWCDSD
	Seale, Kiara	Are Fingerprints Genetic	<a href="#">N03</a>	Health Sciences Human	Ascension Elementary School	HCDSB
	Shi, Kenny	What makes ice melt faster?	<a href="#">S07</a>	Phys & Math Sci	Charles R. Beaudoin Public School	HDSB
	Shirani, Shada	Oakville eutrophication study: is Oakville's aquatic ecosystem in danger?	<a href="#">Q08</a>	Earth & Env Sci	W. H. Morden Public School	HDSB
	Sidhu, Dasnoor	TECHA: Thermoelectricity Charged Hearing Aid	<a href="#">K04</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Sienna, Isaiah	The Effects of Plastic Contamination in Plastic Water Bottles Due to Environmental Variables	<a href="#">Q03</a>	Earth & Env Sci	St. Augustine	HWCDSD
	Sinha, Niyati	Can Humans Sense if Someone is Behind Them?	<a href="#">P08</a>	Health Sciences Human	C.H. Norton Public School	HDSB
	Smith, Price	Electric Vehicle Attachment (EVA)	<a href="#">N09</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Son, Joy	Underwater Heat	<a href="#">H01</a>	Earth & Env Sci	Ancaster Meadow	HWDSB

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Sugat, Soha	A bird collar that can translate bird language	<a href="#">M03</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Sulug, Marcus	Smart Watering System	<a href="#">M04</a>	Eng & Comp Sci	St. Clare of Assisi	HWCDsb
	Tereshchenko, Nazar	Chemical Energy In Four Foods	<a href="#">C04</a>	Phys & Math Sci	Ancaster Meadow	HWDSB
	Tessarolo, Amelia	Sugar and Spice	<a href="#">J06</a>	Health Sciences Human	Oakville Christian School	IND
	Thomas, Maisy	Distilling salt water using solar power	<a href="#">U08</a>	Earth & Env Sci	Rockton Elementary	HWDSB
	Turkstra, Elizabeth	How Effective is Disinfectant in The Average Public School?	<a href="#">T02</a>	Health Sciences Human	W. H. Morden Public School	HDSB
	Vanderwal, Violet	Pugs appeal 'is it worth it'	<a href="#">L08</a>	Life Sciences Non-Human	Dundas Central Public	HWDSB
	Vashishtha, Vihaan	Using Stratospheric Aerosol Injection to Combat Climate Change	<a href="#">T03</a>	Phys & Math Sci	W. H. Morden Public School	HDSB
	Vasilescu, Ilinca	Fin-Cam	<a href="#">B03</a>	Eng & Comp Sci	Rolling Meadows Public School	HDSB
	Vijayan, Nichole	Doesn't Sound it Amazing	<a href="#">G07</a>	Health Sciences Human	Oakville Christian School	IND
	Vinoth, Alfred	Future Evolution of Homo Sapiens	<a href="#">A05</a>	Health Sciences Human	Ancaster Meadow	HWDSB
	Vinoth, Alrick	Future Evolution of Homo Sapiens	<a href="#">A05</a>	Health Sciences Human	Ancaster Meadow	HWDSB
	Viveiros, Marina	The Menace of Microplastics	<a href="#">K07</a>	Earth & Env Sci	St. Ann (Ancaster)	HWCDsb
	Walker, Sam	Learning Loss in Lockdown	<a href="#">E08</a>	Health Sciences Human	Oakville Christian School	IND
	Wang, Jessie	Bad Habits	<a href="#">R09</a>	Life Sciences Non-Human	W. H. Morden Public School	HDSB
	William, Marcos	Waste Fish	<a href="#">G03</a>	Eng & Comp Sci	Oakville Christian School	HCDSB
	Williams, Sara	The X-Ray G's	<a href="#">P04</a>	Health Sciences Human	John William Boich Public School	HDSB
	Wilson, Grace	Another One Fights The Dust	<a href="#">F02</a>	Biotechnology	Oakville Christian School	IND

Junior Level (Grades 7/8)	Name	Project Title	Project Number	Division	School	Board
	Xie, Daniel	Revolutionary Physics: The 2 - Slit Experiment Explained	<a href="#">K01</a>	Phys & Math Sci	Charles R. Beaudoin Public School	HDSB
	Yep, Victoria	How Positivity can Change our Lives	<a href="#">L05</a>	Health Sciences Human	Charles R. Beaudoin Public School	HDSB
	Young, Carter	McMaster Children's Hospital Video Game: Kyub Quest	<a href="#">A02</a>	Eng & Comp Sci	Flamborough Centre	HWDSB
	Yuen, Preston	The Garbage Code	<a href="#">P06</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Zanganeh, Daniel	Solar Powered Car	<a href="#">C02</a>	Eng & Comp Sci	Ancaster Meadow	HWDSB
	Zayouna, Sophia	Eye Colour Genetics	<a href="#">E04</a>	Health Sciences Human	Oakville Christian School	IND
	Zhou, Ryan	Level S Hazmat Suit	<a href="#">N08</a>	Eng & Comp Sci	John William Boich Public School	HDSB
	Zuo, Peony	Oakville eutrophication study: is Oakville's aquatic ecosystem in danger?	<a href="#">Q08</a>	Earth & Env Sci	W. H. Morden Public School	HDSB

## Intermediate Level

Intermediate Level (Grades 9/10)	Name	Project Title	Project Number	Division	School	Board
	AtLee, Thomas	Determining the Optimal Wake Up Time using Rmssd Data	<a href="#">T07</a>	Eng & Comp Sci	King's Christian Collegiate	IND
	Bae, Jason (Jaesung)	A device that allows people to have healthy sitting habits during a sedentary lifestyle	<a href="#">T08</a>	Eng & Comp Sci	King's Christian Collegiate	IND
	Bae, Sam (Jaeho)	A device that allows people to have healthy sitting habits during a sedentary lifestyle	<a href="#">T08</a>	Eng & Comp Sci	King's Christian Collegiate	IND
	Balakumar, Subakrish	Chutes and Hoops (Basketball Trash Can)	<a href="#">J07</a>	Eng & Comp Sci	Aldershot High School	HDSB
	Barbera, Katie	Modeling of Hyperbolic Geometry and Investigation of its Underlying Principles and Applications	<a href="#">L03</a>	Phys & Math Sci	Cathedral High School	HWCSDB
	Bianchi, Sophia	Electronic Soil Moisture Sensor to Conserve Water	<a href="#">R02</a>	Life Sciences Non-Human	Bishop Ryan Secondary School	HWCSDB
	Bresnahan, Rachel	Generating Electricity from Kinetic Energy In Order to Break Down the Structure of Bacteria In Waste	<a href="#">M05</a>	Phys & Math Sci	Central Public School	HDSB
	Cuff-Chartrand, Geoffrey	Designing a new stair-climbing robot	<a href="#">P02</a>	Eng & Comp Sci	Ancaster High	HWDSB
	Deng, Kevin	Measuring The Change In Conformity With Shifts of Physical Activeness Among Sinosphere Immigrants	<a href="#">D08</a>	Health Sciences Human	Oakville Trafalgar High School	HDSB
	Fergani, Sarah	The Effectiveness of The Top Selling Probiotic Yogurt Brands on The Market	<a href="#">E01</a>	Life Sciences Non-Human	Hillfield Strathallan College	IND
	Hamoudi, Nouf	The Use of Stem Cells and Levodopa in Parkinson's Disease	<a href="#">J09</a>	Biotechnology	Oakville Trafalgar High School	HDSB
	Jim, Yuba	Electronic Soil Moisture Sensor to Conserve Water	<a href="#">R02</a>	Life Sciences Non-Human	Bishop Ryan Secondary School	HWCSDB
	Johnson, Katelyn	Immortality and Regenerative Medicine: What We Can Learn From the Immortal Jellyfish	<a href="#">Q07</a>	Health Sciences Human	Westdale Secondary School	HWDSB
	LeBlanc, Maya	Carbon Capture Depletion Using Catalyzed Photosynthesis To Promote Crop Growth	<a href="#">A06</a>	Earth & Env Sci	Abbey Park High School	HDSB

Intermediate Level (Grades 9/10)	Name	Project Title	Project Number	Division	School	Board
	Li, Neng	An Eyesight Protection Device built with Time-of-Flight Distance Sensor and Arduino	<a href="#">K09</a>	Eng & Comp Sci	Abbey Park High School	HDSB
	Nagasaki, Kibo	Survival of Indigenous Ancestors	<a href="#">A01</a>	Phys & Math Sci	Other	IND
	O'Dell, Oscar	COVID-19 SIMULATOR	<a href="#">L06</a>	Eng & Comp Sci	King's Christian Collegiate	IND
	O'Mara, Zachary	Determining the Optimal Wake Up Time using Rmssd Data	<a href="#">T07</a>	Eng & Comp Sci	King's Christian Collegiate	IND
	Patel, Prisha	The Use of Stem Cells and Levodopa in Parkinson's Disease	<a href="#">J09</a>	Biotechnology	Oakville Trafalgar High School	HDSB
	Ponnambalam, Kadhira	Effect Of Electrical Field On Tardigrades In A Microfluidic Environment	<a href="#">L04</a>	Life Sciences Non-Human	Hillfield Strathallan College	IND
	Pujari, Neelesh	CarbonLens: A Program to Generate QR Codes for Carbon Footprints	<a href="#">Q02</a>	Eng & Comp Sci	Dundas Valley Secondary School	HWDSB
	Singh Galoni, Ava	Can you Tell The Difference Between and Real and Fake Smile?	<a href="#">D05</a>	Health Sciences Human	Hillfield Strathallan College	IND
	Soni, Ruhan	Can green steel reduce the steel industry carbon footprint?	<a href="#">D09</a>	Eng & Comp Sci	Hillfield Strathallan College	IND
	Szymala, Weronika	Sympathy For The Heart	<a href="#">U03</a>	Health Sciences Human	Bishop Ryan Secondary School	HWDSB
	Wang, Brenton	Decoding Glitter Paths with Simulations	<a href="#">A03</a>	Phys & Math Sci	Oakville Trafalgar High School	HDSB
	Yin, Brian	Emergency Fall Detection & Notification System To Protect Our Seniors	<a href="#">R05</a>	Eng & Comp Sci	Iroquois Ridge High School	HDSB



## Senior Level

Senior Level (Grades 11/12)	Name	Project Title	Project Number	Division	School	Board
	Barbera, Becca	QSAR Model for the Inhibition of A-Beta1-42 Peptide: Molecular Dynamics and Bioinformatics Study	<a href="#">J04</a>	Biotechnology	Cathedral High School	HWCSDB
	Bashir, Isra	Sweet! - Integrating glucose and ketone testing to improve efficiency in the treatment of diabetes	<a href="#">G04</a>	Health Sciences Human	Westdale Secondary School	HWDSB
	Bouganin, Evangeline	Sustainable Production of Biohydrogen from Purple Phototrophic Bacteria	<a href="#">J08</a>	Biotechnology	Oakville Trafalgar High School	HDSB
	Chzhen, Maria	Multiple factor regression analysis of vegetation changes and land degradation in drylands	<a href="#">D04</a>	Earth & Env Sci	Westdale Secondary School	HWDSB
	Ellis, Hunter	Generalized Mental Health Profile (GMHP): An Automated Psychological Risk Assessment Tool	<a href="#">C03</a>	Health Sciences Human	Oakville Trafalgar High School	HDSB
	Gong, Martin	Visual Assist System to Aid Visually Impaired via Announcing Surrounding Objects	<a href="#">M06</a>	Eng & Comp Sci	Oakville Trafalgar High School	HDSB
	Huang, Caroline	Chaos in Cancer: Analyzing Network Morphology to Predict Tumor Angiogenesis using Chaos Theory	<a href="#">U01</a>	Biotechnology	Abbey Park High School	HDSB
	Igwilo, Amah	Optimizing the Extraction of Quinine from Cinchona bark	<a href="#">M01</a>	Phys & Math Sci	King's Christian Collegiate	IND
	Jeong, Lyn	Analyzing Water Bodies and their Microplastic Quantities	<a href="#">B04</a>	Earth & Env Sci	Garth Webb Secondary School	HDSB
	Kaissi, Rayan	ElectronVisualized	<a href="#">S09</a>	Eng & Comp Sci	Garth Webb Secondary School	HDSB
	Kaur, Gurnirmal	EzerBot: Detecting Phrases Indicative of Emotional Distress Within Online Platforms	<a href="#">C08</a>	Eng & Comp Sci	North Park Collegiate and Vocational School	GEDSB
	Kefel, Ali	Quantum Tunneling in DNA	<a href="#">M02</a>	Health Sciences Human	Westdale Secondary School	HWDSB
	Klinck, Jeffrey	MediRecord: a Quasi-Permissioned Blockchain Medical Record Verification System	<a href="#">J03</a>	Eng & Comp Sci	Oakville Trafalgar High School	HDSB

Senior Level (Grades 11/12)	Name	Project Title	Project Number	Division	School	Board
	Kozlowski, William	Small Scale Nuclear Power Generation	<a href="#">H04</a>	Eng & Comp Sci	Oakville Trafalgar High School	HDSB
	Lee, Eryn	The Role of Nurture in Longevity: An Element in Evolutionary Psychology and Lifespans	<a href="#">J05</a>	Health Sciences Human	Oakville Trafalgar High School	HDSB
	Malhotra, Jahnavi	H.A.R.T. - Home Assistance Robotic Transport	<a href="#">C09</a>	Eng & Comp Sci	Milton District High School	HDSB
	Mao, Michael	Visual Assist System to Aid Visually Impaired via Announcing Surrounding Objects	<a href="#">M06</a>	Eng & Comp Sci	Oakville Trafalgar High School	HDSB
	Mastrolonardo, Arianna	Exploring the Antibacterial Effect of Microwave-Assisted Biosynthesized Ag <sub>2</sub> O & CuO NPs on S.aureus	<a href="#">E05</a>	Biotechnology	King's Christian Collegiate	IND
	McRae, Lila	The Emotional Wellbeing and Mental Health of King's Christian Collegiate Post Online Learning	<a href="#">G02</a>	Health Sciences Human	King's Christian Collegiate	IND
	Mokhtari, Sophia	Hydrogen Fuel Cells: The New Source Of Power	<a href="#">G08</a>	Phys & Math Sci	King's Christian Collegiate	IND
	Montemayor, Kaelyn	R <sup>2</sup> (2 R or not 2 R)	<a href="#">K03</a>	Eng & Comp Sci	Brantford Collegiate Institute and Vocational School	GEDSB
	Monter, Lucas	A Novel 'EEG Pillow' Useful for Sleep Apnea Severity Detection and Treatment: A Feasibility Study	<a href="#">L07</a>	Eng & Comp Sci	Corpus Christi Secondary School	HCDSB
	Rechichi, Alex	Investigating Eczema and Various Forms of Treatment	<a href="#">S03</a>	Biotechnology	King's Christian Collegiate	IND
	Reid, Blair	The Emotional Wellbeing and Mental Health of King's Christian Collegiate Post Online Learning	<a href="#">G02</a>	Health Sciences Human	King's Christian Collegiate	IND
	Salimi, Hamna	Analyzing Water Bodies and their Microplastic Quantities	<a href="#">B04</a>	Earth & Env Sci	Garth Webb Secondary School	HDSB
	Saturnino, Anthony	A concrete structure climbing robot that uses deep learning (convolutional neural) to detect cracks.	<a href="#">N02</a>	Eng & Comp Sci	Bishop Ryan Secondary School	HWCDSD
	Seong, John	ElectronVisualized	<a href="#">S09</a>	Eng & Comp Sci	Garth Webb Secondary School	HDSB

Senior Level (Grades 11/12)	Name	Project Title	Project Number	Division	School	Board
	Shvetsov, Evan	Generalized Mental Health Profile (GMHP): An Automated Psychological Risk Assessment Tool	<a href="#">C03</a>	Health Sciences Human	Oakville Trafalgar High School	HDSB
	Skumatova, Lilia	Determining the Most Affordable Water Filtration Method, for Countries in Need	<a href="#">M08</a>	Earth & Env Sci	King's Christian Collegiate	IND
	Smales, Lily	Sustainable Production of Biohydrogen from Purple Phototrophic Bacteria	<a href="#">J08</a>	Biotechnology	Oakville Trafalgar High School	HDSB
	Tsutsui, Ishin	Eco-Friendly Moving House	<a href="#">B05</a>	Eng & Comp Sci	White Oaks Secondary School	HDSB
	Wang, Hannah	The Role of Nurture in Longevity: An Element in Evolutionary Psychology and Lifespans	<a href="#">J05</a>	Health Sciences Human	Oakville Trafalgar High School	HDSB
	Wei, Helen	Impact of Noise on Plant Roots Hydrotropism	<a href="#">H02</a>	Life Sciences Non-Human	Oakville Trafalgar High School	HDSB
	Yao, Kathy	Speech Emotion Recognition Using Deep Convolutional Neural Networks and Machine Learning Algorithms	<a href="#">M07</a>	Eng & Comp Sci	Oakville Trafalgar High School	HDSB
	Yao, Rachel	Improving the carbon dioxide absorption of photosynthesis by CRISPR gene editing	<a href="#">P01</a>	Life Sciences Non-Human	Oakville Trafalgar High School	HDSB
	Zaheer, Neha	H.A.R.T. - Home Assistance Robotic Transport	<a href="#">C09</a>	Eng & Comp Sci	Milton District High School	HDSB
	Zhang, Xinyue	Impact of Noise on Plant Roots Hydrotropism	<a href="#">H02</a>	Life Sciences Non-Human	Oakville Trafalgar High School	HDSB
	Zhao, Emily	Improving the carbon dioxide absorption of photosynthesis by CRISPR gene editing	<a href="#">P01</a>	Life Sciences Non-Human	Oakville Trafalgar High School	HDSB

# BASEF 2022 Award Winners

## BASEF 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.

### Primary Fluid Systems Pinnacle Best in Fair



### Huang, Caroline

[U01](#) *Chaos in Cancer: Analyzing Network Morphology to Predict Tumor Angiogenesis using Chaos Theory*

Senior 11/12, Biotechnology

Abbey Park High School, Halton District School Board

### Primary Fluid Systems Pinnacle Second Best in Fair



### Anthony Saturnino

[N02](#) *A concrete structure climbing robot that uses deep learning (convolutional neural) to detect cracks.*

Senior 11/12, Engineering & Comp Science

Bishop Ryan Secondary School, Hamilton-Wentworth Catholic District School Board

### Primary Fluid Systems Pinnacle Third Best in Fair



### Arianna Mastrodonardo

[E05](#) *Exploring the Antibacterial Effect of Microwave-Assisted Biosynthesized  $Ag_2O$  &  $CuO$  NPs on *S.aureus**

Senior 11/12, Biotechnology

King's Christian Collegiate, Independent Schools

## Regeneron International Science and Engineering Fair

As an affiliated fair, BASEF can select five high school projects to represent our region at the Regeneron International Science and Engineering Fair. This year the Regeneron ISEF Fair will be a virtual fair and BASEF will be sending a full slate of competitors. Congratulations to the BASEF Regeneron ISEF Team.

Name	Project Title	Project Number	School	Board
Bashir, Isra	Sweet! – Integrating glucose and ketone testing to improve efficiency in the treatment of diabetes	<a href="#">G04</a>	Westdale Secondary School	HWDSB
Chzhen, Maria	Multiple factor regression analysis of vegetation changes and land degradation in drylands	<a href="#">D04</a>	Westdale Secondary School	HWDSB
Huang, Caroline	Chaos in Cancer: Analyzing Network Morphology to Predict Tumor Angiogenesis using Chaos Theory	<a href="#">U01</a>	Abbey Park High School	HDSB
Mastrolonardo, Arianna	Exploring the Antibacterial Effect of Microwave-Assisted Biosynthesized Ag <sub>2</sub> O & CuO NPs on S.aureus	<a href="#">E05</a>	King's Christian Collegiate	IND
Saturnino, Anthony	A concrete structure climbing robot that uses deep learning (convolutional neural) to detect cracks	<a href="#">N02</a>	Bishop Ryan Secondary School	HWCD

### School Boards:

<b>GEDSB</b>	Grand Erie District School Board
<b>HCDSB</b>	Halton Catholic District School Board
<b>HDSB</b>	Halton District School Board
<b>HWCDSB</b>	Hamilton-Wentworth Catholic District School Board
<b>HWDSB</b>	Hamilton-Wentworth District School Board
<b>IND</b>	Independent School

## Canada-Wide Science and Engineering Fair

Thanks to generous support of its general sponsors, each year BASEF selects students to represent our region at the Canada-Wide Science and Engineering Fair. This year's event will be a virtual event. Congratulations to the following students who represent BASEF at the CWSF.

Name	Project Title	Project Number	School	Board
Ali, Iman	Bauxite Bot: The Saga Continues	<a href="#">E03</a>	Chris Hadfield Public School	HDSB
Bae, Jason (Jaesung)	A device that allows people to have healthy sitting habits during a sedentary lifestyle	<a href="#">T08</a>	King's Christian Collegiate	IND
Bae, Sam (Jaeho)	A device that allows people to have healthy sitting habits during a sedentary lifestyle	<a href="#">T08</a>	King's Christian Collegiate	IND
Barbera, Becca	QSAR Model for the Inhibition of A-Beta1-42 Peptide: Molecular Dynamics and Bioinformatics Study	<a href="#">J04</a>	Cathedral High School	HWCD
Barbera, Katie	Modeling of Hyperbolic Geometry and Investigation of its Underlying Principles and Applications	<a href="#">L03</a>	Cathedral High School	HWCD
Kaur, Gurnimal	EzerBot: Detecting Phrases Indicative of Emotional Distress Within Online Platforms	<a href="#">C08</a>	North Park Collegiate and Vocational School	GEDSB
Klinck, Jeffrey	MediRecord: a Quasi-Permissioned Blockchain Medical Record Verification System	<a href="#">J03</a>	Oakville Trafalgar High School	HDSB
LeBlanc, Maya	Carbon Capture Depletion Using Catalyzed Photosynthesis To Promote Crop Growth	<a href="#">A06</a>	Abbey Park High School	HDSB
Mao, Teddy	Transparent Wood: A Window to the Future?	<a href="#">F09</a>	Oakville Christian School	IND
Mehr, Ariana	Bauxite Bot: The Saga Continues	<a href="#">E03</a>	Chris Hadfield Public School	HDSB
Mokhtari, Sophia	Hydrogen Fuel Cells: The New Source Of Power	<a href="#">G08</a>	King's Christian Collegiate	IND
Nagasaki, Kibo	Survival of Indigenous Ancestors	<a href="#">A01</a>	Other	IND
Pacifici, Nicholas	Head On A Swivel 2.0: Brace For Impact	<a href="#">D07</a>	St. Bernadette	HWCD
Ponnambalam, Kadhira	Effect Of Electrical Field On Tardigrades In A Microfluidic Environment	<a href="#">L04</a>	Hillfield Strathallan College	IND
Romano, Ava	Can CAR T-Cell Therapy Cure Alzheimer's Disease	<a href="#">R01</a>	W. H. Morden Public School	HDSB
Sienna, Isaiah	The Effects of Plastic Contamination in Plastic Water Bottles Due to Environmental Variables	<a href="#">Q03</a>	St. Augustine	HWCD
Vashishtha, Vihaan	Using Stratospheric Aerosol Injection to Combat Climate Change	<a href="#">T03</a>	W. H. Morden Public School	HDSB

## Merit and Special Awards Winners

Name	Award(s)	Project Number	School	Board
Ahmed, Nawra Samia	Bronze Merit Award	<a href="#">K08</a>	Forest Trail Public School	HDSB
Ali, Iman	Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">E03</a>	Chris Hadfield Public School	HDSB
Ali, Shaiq	James A. Winger Award- Junior; Silver Merit Award	<a href="#">U07</a>	Hawthorne Village Public School	HDSB
Ali, Zakariya	Bronze Merit Award	<a href="#">L02</a>	Charles R. Beaudoin Public School	HDSB
Alles , Tianna	Bronze Merit Award	<a href="#">G09</a>	Oakville Christian School	IND
Alles, Audrina	Chemical Institute of Canada (Hamilton Section) Award; Bronze Merit Award	<a href="#">F07</a>	Oakville Christian School	IND
Araya, Zacharaya	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award; Canadian Meteorological and Oceanographic Society (CMOS) Award – Second; Laurentian Chapter of SETAC Award; Nelson Steel Award; Talkit.ca Computer Engineering Award – First; Silver Merit Award	<a href="#">E02</a>	Forest Trail Public School	HDSB
Aswani, Dhruv	ArcelorMittal Dofasco Central Trades & Services Department Award; Silver Merit Award	<a href="#">S08</a>	Charles R. Beaudoin Public School	HDSB
Awobokun, Tiseyi	Bronze Merit Award	<a href="#">F08</a>	Oakville Christian School	IND
Ayibiowu, Tamilore	Bronze Merit Award	<a href="#">C06</a>	Oakville Christian School	IND
Bae, Jason (Jaesung)	Hamilton Wentworth Occasional Teacher – Healthy Lifestyles Award; Gold Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">T08</a>	King's Christian Collegiate	IND
Bae, Sam (Jaeho)	Hamilton Wentworth Occasional Teacher – Healthy Lifestyles Award; Gold Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">T08</a>	King's Christian Collegiate	IND
Bagnall, Amelia	Bronze Merit Award	<a href="#">J02</a>	Ancaster Meadow	HWDSB
Balakumar, Subakrish	Procor Engineering Award – Intermediate; Bronze Merit Award	<a href="#">J07</a>	Aldershot High School	HDSB
Barbera, Becca	McMaster University Faculty of Engineering Entrance Award; Rotary Club of Hamilton Stoney Creek Award – Third; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">J04</a>	Cathedral High School	HWCD



Name	Award(s)	Project Number	School	Board
Barbera, Katie	MU Alpha Theta Award; Rotary Club of Hamilton Stoney Creek Award – First; Venture Academy Scholarship; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">L03</a>	Cathedral High School	HWCD
Barsan, Sebastian	Artistically Inspired Display Award	<a href="#">Q04</a>	W. H. Morden Public School	HDSB
Bashir, Isra	Michael G. DeGroote Institute for Infectious Disease Research Grand Award; Farncombe Family Digestive Health Research Award; University of Ottawa Admission Scholarship Award; Gold Merit Award; ISEF Trip Award	<a href="#">G04</a>	Westdale Secondary School	HWDSB
Beekhoo, Beecher	Bronze Merit Award	<a href="#">F04</a>	Oakville Christian School	IND
Bianchi, Juliana	Bronze Merit Award	<a href="#">Q06</a>	St. Vincent de Paul	HWCD
Bouganin, Evangeline	American Meteorological Society Award; Bronze Merit Award	<a href="#">J08</a>	Oakville Trafalgar High School	HDSB
Britto Silva, Daniela	Mohawk College Mathematics Awards – Junior	<a href="#">B07</a>	St. Scholastica School	HCDSB
Chan, Christian	Bronze Merit Award	<a href="#">E06</a>	Oakville Christian School	IND
Chzhen, Maria	ArcelorMittal Dofasco Environment Award; Canadian Meteorological and Oceanographic Society (CMOS) Award – First; Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Intermediate or Senior; Dillon Consulting Biological Sciences Award; Association for Women Geoscientists Award; Ricoh USA, Inc. Award; Laurentian Chapter of SETAC Award; Geography Award; Mohawk College Mathematics Awards – Senior; Gold Merit Award; ISEF Trip Award	<a href="#">D04</a>	Westdale Secondary School	HWDSB
Coleman, Aurelia	Bronze Merit Award	<a href="#">Q06</a>	St. Vincent de Paul	HWCD
Cook, Hailey	Bronze Merit Award	<a href="#">D02</a>	Ancaster Meadow	HWDSB
Cuff-Chartrand, Geoffrey	Bronze Merit Award	<a href="#">P02</a>	Ancaster High	HWDSB
Danko, Ella	Chemical Institute of Canada (Hamilton Section) Award; Bronze Merit Award	<a href="#">F07</a>	Oakville Christian School	IND
Deng, Kevin	American Psychological Society Award; The Research Institute of St. Joe's Hamilton, Health Research Intermediate Award; BASEF Inspiration Student Award; Silver Merit Award	<a href="#">D08</a>	Oakville Trafalgar High School	HDSB
Doyle, Alexander	Bronze Merit Award	<a href="#">H03</a>	Oakville Christian School	IND

Name	Award(s)	Project Number	School	Board
Easo, Alex	Chemical Institute of Canada (Hamilton Section) Award	<a href="#">U06</a>	Balaclava	HWDSB
Efthimiadis, Anthony	ArcelorMittal Dofasco Process Automation Award; Talkit.ca Computer Engineering Award – Second; Bronze Merit Award	<a href="#">Q05</a>	W. H. Morden Public School	HDSB
Ellis, Hunter	Farncombe Family Digestive Health Research Institute Grand Award; American Psychological Association Award; Bronze Merit Award	<a href="#">C03</a>	Oakville Trafalgar High School	HDSB
Fedorovskiy, Maksim	Electrical Construction Association of Hamilton Award	<a href="#">G05</a>	Oakville Christian School	IND
Feltham, Jacob	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award; Bronze Merit Award	<a href="#">T01</a>	St. Augustine	HWCD
Gannett, Gracie	Bronze Merit Award	<a href="#">G09</a>	Oakville Christian School	IND
Gaston, Edward	Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Junior; Chemical Institute of Canada (Hamilton Section) Award; Hamilton Chamber of Commerce Innovation Award – Second; STLE Tribology/Friction Reduction Award	<a href="#">C07</a>	Ancaster Meadow	HWDSB
Ghode, Aahan	Hamilton Academy of Dentistry Award – Second; BASEF Inspiration Student Award; Silver Merit Award	<a href="#">P05</a>	W. H. Morden Public School	HDSB
Goldstein, Sarah	Bronze Merit Award	<a href="#">D06</a>	Oakville Christian School	IND
Gong, Martin	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">M06</a>	Oakville Trafalgar High School	HDSB
Guagliano, Daniel	ArcelorMittal Dofasco Quality Systems Award; Hamilton Chamber of Commerce Innovation Award – First; Mohawk College Electrotechnology – Energy Systems Award; Rotary Club of Hamilton Stoney Creek Award – Second; Water Environment Association of Ontario Award; Bronze Merit Award	<a href="#">M04</a>	St. Clare of Assisi	HWCD
Guan, Tanya	Farncombe Family Digestive Health Research Award	<a href="#">U04</a>	W. H. Morden Public School	HDSB
Halim, Samantha	Silver Merit Award	<a href="#">D01</a>	Oakville Christian School	IND
Hingorani, Ruhaan	Harrison Family Chemistry Award	<a href="#">J01</a>	Charles R. Beaudoin Public School	HDSB

Name	Award(s)	Project Number	School	Board
Huang, Caroline	Dr. M. Doyle Biology Award; Mu Theta Alpha Award; Society for In Vitro Biology Award; Ola Lunyk-Child Memorial Health Science Award – Third; Gold Merit Award; Drs. Ranjan Sur and Monalisa Sur Award; Primary Fluid Systems Pinnacle Best in Fair; ISEF Trip Award	<a href="#">U01</a>	Abbey Park High School	HDSB
Igwilo, Amah	U.S. Agency for International Development (USAID) Award; Dr. Colin J.L. Lock Memorial Chemistry Award; McMaster University Department of Chemistry and Chemical Biology Award; Bronze Merit Award	<a href="#">M01</a>	King's Christian Collegiate	IND
Jeong, Lyn	Conservation Halton Environmental Sciences Award; American Meteorological Society Award; Bronze Merit Award	<a href="#">B04</a>	Garth Webb Secondary School	HDSB
Johnson, Katelyn	The Research Institute of St. Joe's Hamilton, Health Research Intermediate Award; BASEF Inspiration Student Awards; Silver Merit Award	<a href="#">Q07</a>	Westdale Secondary School	HWDSB
Johnson, William	Bronze Merit Award	<a href="#">K02</a>	Guy B. Brown	HWDSB
Kang, Alex	Bronze Merit Award	<a href="#">C02</a>	Ancaster Meadow	HWDSB
Karas, Jasmine	Bronze Merit Award	<a href="#">E07</a>	Oakville Christian School	IND
Katika, Riddhi	Conservation Halton Environmental Sciences Award; Nelson Steel Award; Bronze Merit Award	<a href="#">L09</a>	John William Boich Public School	HDSB
Kaur, Gurnirmal	ArcelorMittal Dofasco Medical Department Award; Gowling WLG Innovation Award – Runner-up; Hillfield Strathallan College Awards of Excellence – Innovation Award; U.S. Agency for International Development (USAID) Award; McMaster University Faculty of Engineering Entrance Award; Dr. Nicola Simmons Award in Cognition Studies; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">C08</a>	North Park Collegiate and Vocational School	GEDSB
Kefel, Ali	Bronze Merit Award	<a href="#">M02</a>	Westdale Secondary School	HWDSB
Kelder, James	Hamilton Academy of Dentistry Award – First; Bronze Merit Award	<a href="#">F06</a>	Oakville Christian School	IND
Klinck, Jeffrey	ArcelorMittal Dofasco Product Development Business Process Award; Gowling WLG Innovation Award – Grand Winner; Ola Lunyk-Child Memorial Health Science Award – Second; Mohawk College Computer Science & Information Technology Excellence Award; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">J03</a>	Oakville Trafalgar High School	HDSB

Name	Award(s)	Project Number	School	Board
LeBlanc, Jacob	ArcelorMittal Dofasco Commercial Department Award; Environmental Inspiration Award	<a href="#">A08</a>	Pilgrim Wood Public School	HDSB
LeBlanc, Maya	ArcelorMittal Dofasco Hot Mill Award; Canadian Nuclear Society (Golden Horseshoe Branch) Awards- Intermediate or Senior; Hillfield Strathallan College Awards of Excellence – Scientific Process Award Ricoh USA, Inc. Award; McMaster Department of Chemical Engineering Award; Earth and Environmental Sciences Award; Royal Botanical Gardens Award; Silver Merit Award Canada-Wide Science Fair Trip Award	<a href="#">A06</a>	Abbey Park High School	HDSB
Lee, Eryn	Dr. Laura Blew Social Sciences Award	<a href="#">J05</a>	Oakville Trafalgar High School	HDSB
Lessa Fratini, Sofia	Bronze Merit Award	<a href="#">D02</a>	Ancaster Meadow	HWDSB
Li, Neng	ArcelorMittal Global R&D Hamilton Award for Outstanding Research; Bronze Merit Award	<a href="#">K09</a>	Abbey Park High School	HDSB
Lopes, Isabella	James A. Winger Award – Junior	<a href="#">A09</a>	Our Lady of Hope	HWCD
Low, Louis	Silver Merit Award	<a href="#">S05</a>	St. Clare of Assisi	HCDSB
Lu, Daniel	Silver Merit Award	<a href="#">H07</a>	Charles R. Beaudoin Public School	HDSB
Mao, Michael	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">M06</a>	Oakville Trafalgar High School	HDSB
Mao, Teddy	ArcelorMittal Global R&D Hamilton Award for Technology Application; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">F09</a>	Oakville Christian School	IND
Marem, Rohanth	ArcelorMittal Dofasco Information Systems Award	<a href="#">T04</a>	W. H. Morden Public School	HDSB
Marsh, Claire	Dillon Consulting Science and Engineering Award; Bronze Merit Award	<a href="#">C05</a>	Rolling Meadows Public School	HDSB
Martin, Joanna	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">L01</a>	St. Clare of Assisi	HCDSB
Marttila, Natalie	New Health Scientist Award	<a href="#">R09</a>	W. H. Morden Public School	HDSB
Mastrolonardo, Arianna	Michael G. DeGroote Institute for Infectious Disease Research Award; Society for In Vitro Biology Award Gold Merit Award; Primary Fluid Systems Pinnacle Third Best in Fair; ISEF Trip Award	<a href="#">E05</a>	King's Christian Collegiate	IND

Name	Award(s)	Project Number	School	Board
Matyjas, Faith	Bronze Merit Award	<a href="#">R04</a>	John William Boich Public School	HDSB
McKenzie, Rachel	Hamilton Academy of Dentistry – Third; BASEF Inspiration Student Award; Silver Merit Award	<a href="#">A04</a>	Charles R. Beaudoin Public School	HDSB
McRae, Lila	Silver Merit Award	<a href="#">G02</a>	King's Christian Collegiate	IND
Mehr, Ariana	Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">E03</a>	Chris Hadfield Public School	HDSB
Menon, Madhav	Bronze Merit Award	<a href="#">N01</a>	Charles R. Beaudoin Public School	HDSB
Mokhtari, Sophia	ArcelorMittal Dofasco Material Handling & Logistics Department Award; STLE Tribology/Friction Reduction Award; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">G08</a>	King's Christian Collegiate	IND
Montemayor, Kaelyn	ArcelorMittal Dofasco Steelmaking Award; Materials Science and Engineering Award – Senior; McMaster University Faculty of Engineering Entrance Award; Mechanical Contractors Association; Hamilton Niagara Award; Silver Merit Award	<a href="#">K03</a>	Brantford Collegiate Institute and Vocational School	GEDSB
Monter, Lucas	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">L07</a>	Corpus Christi Secondary School	HCDSB
Nagasaki, Kibo	Gold Merit Award; NSERC Young Innovators; Canada-Wide Science Fair Trip Award	<a href="#">A01</a>	Other	IND
Nah, Emmy	Artistically Inspired Display Award	<a href="#">R03</a>	W. H. Morden Public School	HDSB
O'Dell, Oscar	Venture Academy Scholarship	<a href="#">L06</a>	King's Christian Collegiate	IND
Oliver, Mia	The Research Institute of St. Joe's Hamilton, Health Research Junior Award; BASEF Inspiration Student Award; Silver Merit Award	<a href="#">P07</a>	St. Augustine	HWCD
Oza, Chhaya	Conservation Halton Environmental Sciences Award; Nelson Steel Award; Bronze Merit Award	<a href="#">L09</a>	John William Boich Public School	HDSB
Pacifici, Nicholas	ArcelorMittal Dofasco Ironmaking Award; Hillfield Strathallan College Entrance Scholarship Award; Gold Merit Award; Roy Middleton Memorial Award; Canada-Wide Science Fair Trip Award	<a href="#">D07</a>	St. Bernadette	HWCD
Panicker, Mythili	Bronze Merit Award	<a href="#">N01</a>	Charles R. Beaudoin Public School	HDSB

Name	Award(s)	Project Number	School	Board
Pirker, Maksim	Electrical Construction Association of Hamilton Award	<a href="#">N09</a>	John William Boich Public School	HDSB
Ponnambalam, Kadhira	Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">L04</a>	Hillfield Strathallan College	IND
Prelevic, Natasha	Bronze Merit Award	<a href="#">H08</a>	Charles R. Beaudoin Public School	HDSB
Pullakhandam, Mithali	Bronze Merit Award	<a href="#">S02</a>	W. H. Morden Public School	HDSB
Qin, Matthew	Bronze Merit Award	<a href="#">S04</a>	Charles R. Beaudoin Public School	HDSB
Quan, Kaylee	Bronze Merit Award	<a href="#">R04</a>	John William Boich Public School	HDSB
Rechichi, Alex	Michael G. DeGroote Institute for Infectious Disease Research Award; Bronze Merit Award	<a href="#">S03</a>	King's Christian Collegiate	IND
Reid, Blair	Silver Merit Award	<a href="#">G02</a>	King's Christian Collegiate	IND
Reise, Ella	Bronze Merit Award	<a href="#">P09</a>	John William Boich Public School	HDSB
Romano, Ava	Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">R01</a>	W. H. Morden Public School	HDSB
Saha, Yashita	Hillfield Strathallan College Awards of Excellence – Life Sciences Award; The Research Institute of St. Joe's Hamilton, Health Research Junior Award; Bronze Merit Award	<a href="#">T02</a>	W. H. Morden Public School	HDSB
Salimi, Hamna	Conservation Halton Environmental Sciences Award; American Meteorological Society Award; Bronze Merit Award	<a href="#">B04</a>	Garth Webb Secondary School	HDSB
Salimi, Rida	Chairs' Awards	<a href="#">B01</a>	Emily Carr Public School	HDSB
Sangapallar, Pavani	Mohawk College Building & Construction Sciences Awards – Transportation Engineering	<a href="#">S06</a>	Charles R. Beaudoin Public School	HDSB
Saravanan, Rakshan	Dr. Laura Blew Social Sciences Award; Bronze Merit Award	<a href="#">Q09</a>	Ancaster Senior	HWDSB

Name	Award(s)	Project Number	School	Board
Saturnino, Anthony	ArcelorMittal Dofasco Engineering Award; Association for Iron & Steel Technology Northern Chapter Award; John W. Howard Materials Research Award; IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award; Yale Science & Engineering Association Award; Mohawk College Building & Construction Sciences Awards – Civil Engineering; Mohawk College Electrotechnology – Electrical Engineering Award; Mohawk College Computer Science & Information Technology Excellence Award; Procor Engineering Award – Senior; Gold Merit Award; Primary Fluid Systems Pinnacle Second Best in Fair; ISEF Trip Award	<a href="#">N02</a>	Bishop Ryan Secondary School	HWCD
Scheben, Rowan	Canadian Institute of Mining, Metallurgy and Petroleum (Hamilton Branch) Award; Bronze Merit Award	<a href="#">T01</a>	St. Augustine	HWCD
Shirani, Shada	ArcelorMittal Dofasco Chemical Testing Award; Hamilton Wentworth Occasional Teachers – Environment & Education Award; Bronze Merit Award	<a href="#">Q08</a>	W. H. Morden Public School	HDSB
Shvetsov, Evan	Farncombe Family Digestive Health Research Institute Grand Award; American Psychological Association Award; Bronze Merit Award	<a href="#">C03</a>	Oakville Trafalgar High School	HDSB
Sidhu, Dasnoor	Doris Casey & Gwen Nicolls Disability Solutions Award; Materials Science and Engineering Award – Junior	<a href="#">K04</a>	John William Boich Public School	HDSB
Sienna, Isaiah	Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">Q03</a>	St. Augustine	HWCD
Singh Galoni, Ava	Bronze Merit Award	<a href="#">D05</a>	Hillfield Strathallan College	IND
Skumatova, Lilia	American Meteorological Society Award; Bronze Merit Award	<a href="#">M08</a>	King's Christian Collegiate	IND
Smales, Lily	American Meteorological Society Award; Bronze Merit Award	<a href="#">J08</a>	Oakville Trafalgar High School	HDSB
Smith, Price	Electrical Construction Association of Hamilton Award	<a href="#">N09</a>	John William Boich Public School	HDSB
Soni, Ruhan	ArcelorMittal Dofasco Smarter Steels for People and Planet Award; Association for Iron & Steel Technology Northern Chapter Award; ASM Materials Education Foundation Award; Materials Science and Engineering Award – Intermediate	<a href="#">D09</a>	Hillfield Strathallan College	IND



Name	Award(s)	Project Number	School	Board
Sulug, Marcus	ArcelorMittal Dofasco Quality Systems Award; Hamilton Chamber of Commerce Innovation Award – First; Mohawk College Electrotechnology – Energy Systems Award; Rotary Club of Hamilton Stoney Creek Award – Second; Water Environment Association of Ontario Award; Bronze Merit Award	<a href="#">M04</a>	St. Clare of Assisi	HWCD
Tsutsui, Ishin	ASM Materials Education Foundation Award; Mohawk College Building & Construction Sciences Awards – Building Sciences	<a href="#">B05</a>	White Oaks Secondary School	HDSB
Turkstra, Elizabeth	Hillfield Strathallan College Awards of Excellence – Life Sciences Award; The Research Institute of St. Joe's Hamilton, Health Research Junior Award; Bronze Merit Award	<a href="#">T02</a>	W. H. Morden Public School	HDSB
Vashishtha, Vihaan	Canadian Nuclear Society (Golden Horseshoe Branch) Awards – Junior; Silver Merit Award; Canada-Wide Science Fair Trip Award	<a href="#">T03</a>	W. H. Morden Public School	HDSB
Vasilescu, Ilinca	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">B03</a>	Rolling Meadows Public School	HDSB
Vijayan, Nichole	Hamilton Wentworth Occasional Teacher – Presentation & Aesthetics Award; The Research Institute of St. Joe's Hamilton, Health Research Junior Award; Bronze Merit Award	<a href="#">G07</a>	Oakville Christian School	IND
Vinoth, Alfred	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">A05</a>	Ancaster Meadow	HWDSB
Vinoth, Alrick	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">A05</a>	Ancaster Meadow	HWDSB
Walker, Sam	BASEF Inspiration Student Award; Silver Merit Award	<a href="#">E08</a>	Oakville Christian School	IND
Wang, Brenton	Bronze Merit Award	<a href="#">A03</a>	Oakville Trafalgar High School	HDSB
Wang, Hannah	Dr. Laura Blew Social Sciences Award	<a href="#">J05</a>	Oakville Trafalgar High School	HDSB
Wang, Jessie	New Health Scientist Award	<a href="#">R09</a>	W. H. Morden Public School	HDSB
Wei, Helen	Bronze Merit Award	<a href="#">H02</a>	Oakville Trafalgar High School	HDSB
Wilson, Grace	Bronze Merit Award	<a href="#">F02</a>	Oakville Christian School	IND
Xie, Daniel	Bronze Merit Award	<a href="#">K01</a>	Charles R. Beaudoin Public School	HDSB

Name	Award(s)	Project Number	School	Board
Yao, Kathy	ArcelorMittal Dofasco Human Resources Training & Development Award; Yale Science and Engineering Association Award; Mahut-Brent Award for Women in Science and Engineering	<a href="#">M07</a>	Oakville Trafalgar High School	HDSB
Yao, Rachel	Bay Area Health Trust Scholarship, Paul Lakin Life Sciences Award; Association for Women Geoscientists Award	<a href="#">P01</a>	Oakville Trafalgar High School	HDSB
Yin, Brian	IEEE (Institute of Electrical & Electronic Engineers) Hamilton Section Award; Mohawk College Electrotechnology – Computer Engineering Technology Award; Bronze Merit Award	<a href="#">P01</a>	Iroquois Ridge High School	HDSB
Young, Carter	Gowlings Innovation Award – Honourable Mention; Hamilton Chamber of Commerce Innovation Award – Third; Ola Lunyk-Child Memorial Health Science Award – First; Mohawk College Computer Science & Information Technology Excellence Award; Procor Engineering Award – Junior	<a href="#">A02</a>	Flamborough Centre	HWDSB
Zanganeh, Daniel	Bronze Merit Award	<a href="#">C02</a>	Ancaster Meadow	HWDSB
Zhang, Xinyue	Bronze Merit Award	<a href="#">H02</a>	Oakville Trafalgar High School	HDSB
Zhao, Emily	Bay Area Health Trust Scholarship, Paul Lakin Life Sciences Award; Association for Women Geoscientists Award	<a href="#">P01</a>	Oakville Trafalgar High School	HDSB
Zuo, Peony	ArcelorMittal Dofasco Chemical Testing Award; Hamilton Wentworth Occasional Teachers – Environment & Education Award; Bronze Merit Award	<a href="#">Q08</a>	W. H. Morden Public School	HDSB

## **BASEF 2022 Champion Teacher Awards**

*The Champion Teacher Awards recognize science teachers who display a remarkable ability to empower and excite student interest in science and who actively promote the Bay Area Science & Engineering Fair. The winners are selected by a panel of BASEF organizing committee members from among those nominated on-line by their peers, students and their parents. This year, we chose to recognize two teachers for their enthusiasm for science during the pandemic. The Awards include induction into the BASEF Champion Teacher Hall of Fame, a plaque, and \$500 each for use in the classroom of the winning teacher. Congratulations to this year's recipients!*

### **Luke Breems – King's Christian Collegiate (Independent School)**



*The nominator writes: "I am nominating this teacher for numerous reasons; not only is he an outstanding teacher, but a compassionate and caring person above all. As a teacher, he was understanding and supportive of when things could not go to plan, and when a project needed more time than expected. My project would have not succeeded if it weren't for Mr. Breems. When I ran into difficulties and hit a roadblock, he did his own independent research and helped me problem solve to get my project back on track. Mr. Breems deserves this award and the recognition as he supports and encourages his students to dream big and he does all that he can to help his students thrive and succeed."*

### **Hilary Millington – Flamborough Centre School (Hamilton-Wentworth District School Board)**



*The nominator writes: "I am nominating Ms. Millington for the Champion Teacher Recognition Award because she continues to inspire me, supports my vision, encourages both my academic and emotional growth, and shows that she is always there for me and all of her students. Ms. Millington has been a tremendous support to me throughout my science and technology journeys, always providing positivity, open communication, and unending support. Ms. Millington shared her personal recess and after school time to communicate with me, check in, and learn about my technology, coding, and mental health research journey. For these reasons and many more, I nominate Hilary Millington for the Champion Teacher Award."*

## ***BASEF Infinite Possibilities Teacher Grant***

The BASEF Infinite Possibilities Teacher Grant was created in 2021 to assist teachers who wished to provide enhanced science and technology opportunities for their students inside or outside of the classroom. The grants were open to any Grade 4-12 Science or Technology Teacher from a publicly funded school board in the BASEF catchment. Grants of \$1,000 were awarded to teachers to be used towards experiences, events, materials and/or resources to support experiential science and technology learning activities (e.g. purchasing curriculum materials, purchasing student science project materials, arranging student field trips, etc.). The teachers who received these grants pledged to facilitate their students to participate in BASEF 2022 and/or a school or classroom event.

BASEF would like to congratulate the following teachers for their successful BASEF Infinite Possibilities Teacher Grant applications!

### **2020-2021**

**Dr. Sara Alves, HCDSB**  
**Allison Cannon, HDSB**  
**Michelina Corkin, HCDSB**  
**Marianne Delija, HCDSB**  
**Mike Fabiani, HCDSB**  
**Michaela Kargus, GEDSB**  
**Vince Lepore, HWCDSB**  
**Tara McFarling, GEDSB**  
**Jennifer Nijse, HWDSB**  
**Jennifer O'Shea, HWCDSB**  
**Marylou Ruddy, HWCDSB**  
**Brandon Smith, HCDSB**  
**Stefanie Smits, HCDSB**  
**Lindsay Tarbutt, HCDSB**  
**Stephanie Thompson, HCDSB**  
**Anna Tschirhart, HCDSB**











### **2021-2022**

**Rabia Ballan, HCDSB**  
**Jennifer Kershaw, HWDSB**  
**Khulood Agha Khan, HDSB**  
**Elena O'Brien, HWCDSB**  
**Eric Romero-Sierra, HWDSB**  
**Ingrid Scully, HDSB**  
**Kim Sibley, HDSB**  
**Jacqueline Small, HDSB**  
**Lindsay Tarbutt, HCDSB**  
**Alessandra Travalì, HCDSB**  
**Anna Tschirhart, HCDSB**  
**Sheri Veibl, HCDSB**

### **School Boards:**

<b>GEDSB</b>	<i>Grand Erie District School Board</i>
<b>HCDSB</b>	<i>Halton Catholic District School Board</i>
<b>HDSB</b>	<i>Halton District School Board</i>
<b>HWCDSB</b>	<i>Hamilton-Wentworth Catholic District School Board</i>
<b>HWDSB</b>	<i>Hamilton-Wentworth District School Board</i>

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