BASEF 2015

Sponsored by

ArcelorMittal DOFASCO | HAMILTON

55th Annual Bay Area Science & Engineering Fair @Mohawk College
March 25 – March 31, 2015

Diamond Sponsors
Mohawk College
Primary Fluid Systems

Platinum Sponsors
The Hamilton Spectator
McMaster University

Big ideas...
Infinite possibilities.
As a college with a reputation for academic excellence in health and technology, we are proud to once again host one of Canada’s largest and longest-running science and engineering fairs.

Congratulations to all the students who have logged many hours on your research projects. Judging by the calibre of the projects submitted every year, our future is in very capable hands. Many students who’ve competed in BASEF have gone on to win national and international competitions and have gone on to make their mark at colleges and universities.

I also want to commend the sponsors, judges, volunteers, parents and teachers who make BASEF such a resounding success and showcase for remarkable young talent. Your support and mentorship encourages students to dream bigger, aim higher and exceed all expectations.

Congratulations again to all of the students participating in this year’s BASEF. You have represented your schools well and you should be very proud of what you’ve accomplished.

Good luck!

Ron J. McKerlie
President, Mohawk College
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message from BASEF Co-Chairs</td>
<td>2</td>
</tr>
<tr>
<td>Organizing Committee</td>
<td>3</td>
</tr>
<tr>
<td>Message from Honourary Chair</td>
<td>4</td>
</tr>
<tr>
<td>Sponsors and Benefactors</td>
<td>5</td>
</tr>
<tr>
<td>Schedule of Events</td>
<td>6</td>
</tr>
<tr>
<td>Emergency Evacuation and Security Procedures</td>
<td>7</td>
</tr>
<tr>
<td>Map of Mohawk</td>
<td>8</td>
</tr>
<tr>
<td>Parent Pages</td>
<td>9-11</td>
</tr>
<tr>
<td>BASEF Outreach and the YES Mentorship</td>
<td>13</td>
</tr>
<tr>
<td>BASEF Champion Teacher</td>
<td>14</td>
</tr>
<tr>
<td>Activity Morning</td>
<td>15</td>
</tr>
<tr>
<td>Volunteers</td>
<td>16</td>
</tr>
<tr>
<td>Merit Award Judges</td>
<td>17-18</td>
</tr>
<tr>
<td>Special Award Judges</td>
<td>19</td>
</tr>
<tr>
<td>Exhibitor Index</td>
<td>20-27</td>
</tr>
<tr>
<td>Floor Layout</td>
<td>21</td>
</tr>
<tr>
<td>Project Listing</td>
<td>28-45</td>
</tr>
<tr>
<td>Special Awards</td>
<td>46-58</td>
</tr>
<tr>
<td>Scholarships</td>
<td>59</td>
</tr>
<tr>
<td>Merit Awards</td>
<td>61</td>
</tr>
<tr>
<td>Grand Prize &amp; Trip Awards</td>
<td>63-64</td>
</tr>
</tbody>
</table>

Cover image: A scanning electron micrograph of an inflammatory macrophage magnified 8000 times, courtesy of Kyle Novakowski, PhD Candidate, Bowdish lab, McMaster University

BASEF 2015 Official Program printed courtesy of ArcelorMittal Dofasco Inc.

Funding for BASEF 2015 sponsored by ArcelorMittal Dofasco is provided by ArcelorMittal Dofasco’s Corporate Community Investment Fund. The views and opinions expressed in this publication do not necessarily reflect those of ArcelorMittal Dofasco Inc.
A MESSAGE FROM THE 2015 BASEF CO-CHAIRS

Congratulations to all the participants competing at the 2015 Bay Area Science and Engineering Fair! As BASEF enters its 55th year of operation we reflect upon our motto: “Big Ideas... Infinite Possibilities” and what this means to the students, judges, parents, sponsors and the many visitors to our fair. This is an opportunity for students to not only showcase their projects, ideas, dedication and tenacity, but also to discover themselves as promising scientists and engineers.

Since BASEF’s inception in the 1960s, the scientific community has witnessed the cracking of the DNA code; heart transplants; the moon landing; the creation of the internet; medical scanners; nanotechnology; cloning; decoding of the human genome; the realignment of planets; discovery of water on the moon; landing of Curiosity; and the discovery of the Higgs boson … just to name a few. What discoveries will be made in the next 55 years that our students could be a part of?

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

ArcelorMittal Dofasco has returned as BASEF’s title sponsor for the ninth year. We are thankful for the very generous funding provided by ArcelorMittal Dofasco’s Corporate Community Investment Fund to all aspects of the Fair. BASEF 2015 would not be possible without this.

Primary Fluid Systems continues to invest in BASEF’s students - our leaders of tomorrow. They have sponsored the Fair at the Diamond Level for several years. Recipients of Gold, Silver, and Bronze Merit Awards will recognize the Primary Fluid Systems name on their Merit Award certificates for years to come.

Mohawk College, also a Diamond sponsor, is hosting BASEF in its state of the art David Braley Athletic and Recreation Centre (DBARC) for the second time. On behalf of the BASEF 2015 Organizing Committee we extend a special thank you to Mohawk College and its staff, who are very generous with their time, energy and resources, and enthusiastic in their support.

Together with over 30 other sponsors and benefactors, as well as over 40 Special Awards donors, our premier sponsors make it possible for BASEF’s students to excel in science and engineering and ‘to encourage young people in science and engineering’, as is our mission statement.

This year the total value of merit awards, special awards, scholarships and trip awards is expected to top $175,000.

BASEF is a volunteer-driven registered charity. We acknowledge with thanks the huge efforts of this year’s Organizing Committee members who have dedicated countless hours toward making BASEF 2015 a success. Our thanks also to the over 250 volunteer Merit and Special Awards Judges and to the more than 100 other volunteers who help run registration, safety and other fair activities.

Be sure to attend the BASEF awards ceremony on Tuesday March 31st at 7:00 pm in the McIntyre Performing Arts Centre at Mohawk College to celebrate our students’ successes.

We hope this year’s student exhibitors meet new friends, enjoy their experience, and capture the science fair passion that leads to new research and the discoveries of tomorrow. We congratulate the participants on a job well done and wish them the best of luck in their future endeavours.

Helen Barton
Co-Chair BASEF 2015

Ingrid Munson
Co-Chair BASEF 2015
BASEF 2015 ORGANIZING COMMITTEE

MOHAWK COLLEGE, BASEF 2015 HOST
Ron McKerlie, President
Christine Bradaric-Baus, V.P. Academic

CO-CHAIRS
Helen Barton and Ingrid Munson

PAST CHAIR
Ray Kranayk

TREASURER
Eleanor O’Flynn, C.P.A., C.A.

REGISTRAR
George Geczy; Ass’t: Rob Lenjosek

JUDGE IN CHIEF
Neil Manmohan; Ass’t: George Geczy

SCIENTIFIC REVIEW
Cathy Hayman (Co-Chair), Dan Bowman (Co-Chair),
George Geczy (Chair), Neil Manmohan (Judge in Chief),
Allison Boyd, Dr. Robert Brown, Rob Lenjosek,
Donna Stack-Durward

SPECIAL AWARDS COORDINATION
Jim Casey, Adrianne Kolich, Eleanor O’Flynn, David Reed

SAFETY
Neil Manmohan

FUNDRAISING
Sue Olynyk (Chair), Peter Child, George Geczy,
Helen Martin, Mike McNally

STUDENT ACTIVITIES
Kevin Hunt

CANADA-WIDE & INTERNATIONAL CHAPERONES
CWSF: Dan Bowman (lead), Dana Bee,
George Geczy, Ingrid Munson
IISEF: Cathy Hayman (Fair Director), Ming Chong

INFORMATION SYSTEMS
George Geczy, Gerard Chiasson, Ken Moyle

MARKETING AND PUBLICITY
Helen Barton (Chair), Wayne Bowdish, Roslynne Crawford,
George Geczy, Glen Whitwell

MOHAWK COLLEGE REPRESENTATIVES
Dusty Noble, Peter Olynyk

MOHAWK STUDENT ASSOCIATION
Jessica Hummel

SPONSOR REPRESENTATIVE
Sandy Walker

FACILITIES
Dan Bowman; Ass’t: David Reed, Dana Bee

“CHAMPIONS OF BASEF”
Ola Lunyk Child (Chair), Linda Hazelden, Ruth Mullin

OUTREACH
Allison Boyd, Ryan Buist, Peter Child, Ming Chong,
George Geczy, Linda Hazelden, Vanessa Scanga,
Glen Whitwell

SPECIAL PROJECTS & YES INITIATIVE
Vanessa Scanga, Ryan Buist

VOLUNTEER RECRUITMENT AND COORDINATION
Dana Bee, Glen Whitwell

PHOTOGRAPHY & GRAPHICS
Wayne Bowdish

OFFICIAL FAIR PROGRAM
Lisa Camara

FOOD PLANNING
Dan Prowse

DISTRICT SCHOOL BOARD ADVISORS
HCDSB: Lorraine Boulos, Shari Typer
HDSB: Ron Ballentine, Ingrid Munson, Tanya Williamson
HWCDSD: Morris Hucal, Rob Lenjosek
HWDSB: Teresa Thompson
Six Nations (INAC): Alex Randall

COMMITTEE MEMBERS AT LARGE
Stephanie Fazzari, Antonella Giancarlo, Julianna Giancarlo,
Jim Monkelbaan

STUDENT ADVISORS
Catharine Bowman, Jack Mogus

Bay Area Science and Engineering Fair
c/o Mohawk College
135 Fennell Ave West, Room F175
Hamilton, Ontario L8N 3T2

e-mail: basef@basef.ca
web site: www.basef.ca

Registered Charity: BN 11895 1565 RR0001
© Copyright 2015 Bay Area Science and Engineering Fair

BASEF OFFICE PHONE NUMBER
(905) 575-1212 ext 3750
Noon March 25 to 1:00pm March 28
ONLY
A MESSAGE FROM HONOURARY CHAIR, ZACH DOUGLAS

It is my pleasure as Honourary Chairperson to once again welcome you to the annual Bay Area Science and Engineering Fair (BASEF).

I know from my own experience how important events like this can be in awakening a love of science and engineering in young people. Through participation in BASEF students are exposed to science, engineering and technology in a very important manner. The hands-on, project-based approach to the practice of these disciplines leads directly to thinking innovatively. Ultimately, innovation leads to new solutions to the challenges we face and to new opportunities for growth, both personally and as a society. Quality science, critical thinking and rational approaches to problem solving are perhaps more important today than ever. Events such as BASEF play a very important role in fostering these approaches.

The success of an event like this depends on the hard work of teachers, parents, and event organizers. I would like to acknowledge this and thank them for their commitment and efforts.

Finally, to all the students who are participating in the fair, I want to recognize your hard work and dedication. Congratulations and all the best in the future.

Zach Douglas,
President & CEO
McMaster Innovation Park

Mr. Douglas is the President of McMaster Innovation Park (MIP), an entity affiliated with McMaster University, which has a mandate to redevelop a 37 acre brown field industrial site and transform it into an internationally recognized, world class research and development park.

Since its inception, MIP has completed three buildings and has another under construction. As of the end of 2014 there are more than forty tenants employing approximately 500 people on-site with the expectation that the numbers will grow to more than 600 once the Fraunhofer BEAM Centre is completed. Details of MIP’s development are available at www.mcmasterinnovationpark.ca.

Mr. Douglas has held leadership positions with Crown Investment Corporation of Saskatchewan and Saskatchewan Opportunities Corporation. Over the past 30 years, he has established relationships with the business, financial and economic development communities across Canada, and has worked closely with stakeholder groups to encourage collaborative approaches to economic development financing and business development.

Mr. Douglas holds a Bachelor of Law degree from the University of Saskatchewan.
Through personal donations, individuals support the BASEF. BASEF Benefactor Levels celebrate famous Canadian scientists and engineers. [* Indicates donations made to the BASEF Endowment Fund *]

**Banting and Best Benefactors ($1000+)**

Sir Frederick Banting and Dr. Charles Best were the co-discoverers of insulin used in the treatment of diabetes. In 1923, Dr. Banting was awarded the Nobel Prize in Medicine

Mike McNally  
Ranjan and Monalisa Sur*  
David Walker*

**Bondar Benefactors ($500+)**

Dr. Roberta Bondar was the first Canadian woman to have flown in space as an international astronaut on board the Space Shuttle Discovery. Dr. Bondar is a trained physician, scientist, astronaut and photographer.

George Geczy  
Steve & Cathy Hayman  
Peter & Susan Olynyk  
Mimi Van den Broeck

**Polanyi Benefactors ($200+)**

John Charles Polanyi won the 1986 Nobel prize for chemistry for using chemiluminescence of molecules to explain energy relationships in chemical reactions.

Dan & Debbie Bowman  
John & Eleanor O’Flynn

**McGill Benefactors ($50+)**

Elsie McGill was Canada’s first woman graduate in electrical engineering. She also held a master’s degree in aeronautical engineering. She is considered the first woman to be a designer of airplanes; During World War II her primary responsibility was the production of the Hawker Hurricane fighter aircraft.

Jim Casey  
Cathy Hamilton  
Nicola Simmons  
Jodi Younger

**Smith Benefactors (<$50)**

Dr. Michael Smith won the 1993 Nobel Prize in Chemistry for discovering site-directed mutagenesis: how to make a genetic mutation precisely at a spot in a DNA molecule

---

**BASEF’S ENDOWMENT FUND: THE BAY AREA SCIENCE AND ENGINEERING FAIR FUND**

In June 2012, BASEF established an endowment fund with the Hamilton Community Foundation (HCF) under their Agency Endowment Program. Contributions are invested by HCF and the income earned, net of management fees, made available for BASEF to support BASEF’s mission and goals. The endowment fund has grown to just over $23,000. It will become operational in support of BASEF’s long term sustainability when the amount in the fund reaches $25,000.

Please consider the BASEF Endowment Fund as part of your charitable giving. You may send a cheque designated for the BASEF Endowment Fund to BASEF, or send your donation directly to the HCF.
## BASEF 2015 SCHEDULE OF EVENTS

**All at Mohawk College Fennell Campus**

*Gymnasium* - David Braley Athletic Centre (DBARC)

*Theatre* – McIntyre Performing Arts Centre

### Wednesday, March 25 – On-Site Project Setup/Safety Check

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00 – 8:00 pm</td>
<td>Registration, set-up and safety checks</td>
<td>Gymnasium</td>
</tr>
</tbody>
</table>

### Thursday, March 26 - Student Activity Morning & Judging of Projects

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 9:00 am</td>
<td>BASEF students arrive for Morning Activity</td>
<td>Theatre</td>
</tr>
<tr>
<td></td>
<td>(Theatre Doors Open at 8:30 am)</td>
<td></td>
</tr>
<tr>
<td>9:00 – 9:05 am</td>
<td>Introduction – Sponsor Comments</td>
<td>Theatre</td>
</tr>
<tr>
<td>9:05 – 9:30 am</td>
<td>SkySMART - by SWHEEB</td>
<td>Theatre</td>
</tr>
<tr>
<td></td>
<td>Robert Laurence and Stephen Bieda</td>
<td></td>
</tr>
<tr>
<td>9:30 – 10:20 am</td>
<td>Keynote Speaker- Canadian Warplane Heritage Travels of VeRA the Lancaster Across the Pond - Craig Brookhouse or Leon Evans</td>
<td>Theatre</td>
</tr>
<tr>
<td>11:10 am – noon</td>
<td>McMaster University Chemistry Presentation</td>
<td>Theatre</td>
</tr>
<tr>
<td></td>
<td>Professors Randy Dumont and Paul Harrison</td>
<td></td>
</tr>
<tr>
<td>12:00 – 1:00 pm</td>
<td>BASEF students to bring their own bagged lunches. Students are not permitted to go elsewhere for lunch and must remain at their projects in the gym.</td>
<td>Gymnasium</td>
</tr>
<tr>
<td>1:00 – 4:00 pm</td>
<td>Judging interviews for BASEF students (BASEF participants must remain at their projects during judging)</td>
<td>Gymnasium</td>
</tr>
</tbody>
</table>

### Friday, March 27 – *Fair not open to the public or students*

### Saturday, March 28 - Public Viewing

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am - 12:00 noon</td>
<td>Public Viewing - Projects are to remain in place until end of Public Viewing</td>
<td>Gymnasium</td>
</tr>
<tr>
<td>12:00 – 12:15 pm</td>
<td>Project take-down. All projects must be removed by 12:15 pm</td>
<td>Gymnasium</td>
</tr>
</tbody>
</table>

### Tuesday, March 31 - Awards Ceremony

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:15 – 6:30 pm</td>
<td>Champions of BASEF Dinner</td>
<td>By Invitation Mohawk</td>
</tr>
<tr>
<td>6:30 pm</td>
<td>Awards Ceremony seating opens</td>
<td>Theatre</td>
</tr>
<tr>
<td>7:00 - 9:30 pm</td>
<td>Awards Ceremony</td>
<td>Theatre</td>
</tr>
<tr>
<td>9:30 - 10:00 pm</td>
<td>Meeting with chaperones for trip winners and their parents</td>
<td>Theatre</td>
</tr>
</tbody>
</table>
The following emergency procedures apply to Mohawk College’s Fennell Campus. Please review and familiarize
yourself with them so you know how to respond quickly and appropriately in the event of an emergency.

EMERGENCY EVACUATION AND FIRE ALARMS

1) At the sound of the alarm, go immediately to the nearest exit and leave the building.
2) Take a position away from the building. Remain outside until an “ALL CLEAR” has been given.
3) EXTENDED EVACUATION – You will be directed by Security and/or Fire Wardens to a sheltered location.
   If instructed, please move quickly and calmly to the designated location.

PERSONAL SAFETY

If you require immediate assistance for First Aid, Medical or Security reasons, contact Security Services by any
of the following methods:

1) Dial Extension 55 on any College phone.
2) Emergency intercoms are located in the hallways throughout the College. Press the round button to speak
directly to a Security Officer.
3) Bell pay phones have an emergency button identified by a yellow label. A sign above the phones identifies
   your location. Press the Emergency button and give your location to the Security Officer.
4) Outside Emergency Intercoms. These are recognizable by a blue light. Press the red button to speak
directly to a Security Officer.

Emergency Situations:

Main Security Desk          Dial 55 on College phones or press the Emergency button
Police/Fire/Ambulance        on Bell pay phones, or press the button on the intercom

Non-Emergency Situations:

Main Security Desk          Dial 2003 on College phones
                          Dial 905-575-2003 or 905-575-2316 on other phones

LOCKDOWN AND HOLD AND SECURE

1) If you hear a recorded announcement of a lockdown, immediately cease all activity.
2) REMAIN CALM. If you are able to do so, safely exit the building immediately.
3) If you are in a hallway, move to a room or other place of safety immediately.
4) If you are in a classroom or office, secure the doors, if possible, turn out lights, cover windows or pull
   shades. Remain quiet and out of sight, staying away from windows or doors.
5) Silence cell phones or other sound devices, stay quiet and await instructions. DO NOT open the door
   under any circumstances.
6) If you are in an open area, such as Cafeteria, Library or Gymnasium, follow the same steps as above.
   If there are no doors, take shelter under desks, tables, chairs or behind bookcases or other furniture or
   equipment.
7) END OF LOCKDOWN: a recorded announcement will be given by Security advising that the emergency
   situation outside the college has ended.
BASEF 2015
March 25 - March 31, 2015
Mohawk Fennell Campus

Wednesday March 25
Project setup in the Gym
4:00 pm to 8:00 pm
Student drop off at lot P10

Thursday March 26
Activity morning in the Theatre
Students arrive 7:45 am to 8:30 am
Bus dropoff/pickup at North end of DBARC
Student car drop off at Main Entrance
Project judging 1:00 pm to 4:00 pm in the Gym.
Parking in lot P10

Friday March 27 - No BASEF students on site - Committee Members only

Saturday March 28
Public viewing in the Gym
9:00 am to 12:00 noon
Project takedown 12:00 noon
Parking in lot P10

Tuesday March 31
Awarcs Ceremony in the Theatre
7:00 pm to 9:30 pm
Doors open at 6:30 pm
Parking in lot P10
Congratulations on your decision to support your child’s participation in BASEF 2015!

For many students, BASEF 2015 is the first time they are rewarded for their academic endeavours. All BASEF student participants are rewarded with an enriching experience. Students get to participate both in Activity Morning and Judging. Along with a certificate of participation, students will come away with the experience of meeting new people - both judges and other top students - and with the official BASEF “goody” bag.

Many students and parents view science fair projects as a dreaded, compulsory school assignment and have no idea of the rewards available to successful science fair participants. BASEF awards cash prizes, awards and scholarships. The top winners have the chance to win an expense paid trip to either the national or international science fair.

Location of Events: Mohawk College

Note: Science Fair projects will be located in the David Braley Athletic and Recreation Centre (DBARC). Activity Morning and the BASEF awards ceremony will be in the McIntyre Performing Arts Centre.

Any changes or revisions to the plan will be posted on the BASEF website and will be announced at the fair.

Parking for Registration and Project Setup: There will be signs directing you to the Science Fair as you enter the College from the Fennell Avenue or West 5th Street entrance. Parents are instructed to please park in Lot P10 and walk to the DBARC gymnasium with your projects. Parking is free during project setup – but remember, only Lot P10 will be free. The traffic circle at the entrance to DBARC is a main thoroughfare and a fire route so project drop-offs will not be allowed at the DBARC entrance.

Parking for Activity Day, Public Viewing and the Awards Ceremony: There will be signs directing you to the event locations as you enter the College from the Fennell Avenue or West 5th Street entrance. Parents are instructed to please park in Lot P10. Volunteers, parking attendants and Security staff will be able to guide you to the events.

Regular parking fees apply during Activity Day, Public Viewing and the Awards Ceremony: Parking is $5.50 at all Pay and Display machines. Pay-and-Display machines accept exact cash only (please note they do not give change). Credit Cards are accepted only at the two Pay-and-Display machines closest to the DBARC.

There is a campus map included on the previous page of this program.

Miscellaneous Information

Dress code: We suggest neat and casual, with the emphasis on neat.

Food Allergies and Medical Issues: We ask that you remind the BASEF folks at the Registration Desk and throughout the fair of any food allergies or special medical issues that pertain to your children. BASEF should be considered a public facility regarding food allergies.
The Parent Pages (or how to survive Science Fair!)

Day by Day - Parent Responsibilities

Day 1 – Registration and Set-up

Project set up for the fair occurs ONLY on Wednesday, March 25, 2015 from 4:00 – 8:00 pm at Mohawk College DBARC Athletic Centre. Parking in Lot P10 is free. Park, then carry your project into the Gym. Projects not set up by 8:00 pm will be deemed as "no shows" and deleted from the judging process. Your child will visit a registration desk and find out their assigned display area in the gym. They will have their photograph taken for an ID badge and receive their goody bag. After the project is set up, one of our many safety inspectors will ensure that the project meets all safety guidelines. Students cannot leave until their project has been safety checked and passed. The registration process and project set up usually takes less than an hour. Be sure all of the safety rules and regulations regarding project size, display materials and ethical guidelines with respect to human and animal testing have been followed. Complete details are available on the official website: basef.ca/

Day 2 - Student Activity Morning, Thursday, March 26, 2015 @ 8:30 am – 12:00 noon

Students will be welcomed by volunteers at the McIntyre Performing Arts Centre beginning at 8:30 am. The Activity Morning Event starts at 9:00 am. Program details can be found on the BASEF website at: basef.ca/activities

Day 2 - Lunch - Thursday, March 26, 2015 @ 12:00 noon - 12:45 pm

BASEF student exhibitors will be escorted from the McIntyre Theatre to the DBARC Athletic Centre. Students must bring their own lunch and eat in the gym. There are no cafeteria facilities available to the students.

Day 2 – Afternoon Judging, Thursday, March 26, 2015 @ 12:45 – 4:00 pm

Students are required to be at their projects for judging between 1:00 – 4:00 pm. Teachers and parents are not permitted on the Gym floor after 12:45 pm in preparation for judging, which starts promptly at 1:00 pm. Typically, each student will be interviewed by at least four judges. Regular parking rates apply.

When picking students up after Judging at 4 pm, parents may park free in lot P10 for 1 hour. Other parking lots will have parking enforcement present. Do not wait along the roadway at the DBARC Athletic Centre entrance; this is a fire route.

Day 3 - Friday, March 27, 2015

The Fair is NOT open to students or the public on this day. The Fair Committee will be busy compiling results, writing cheques, engraving trophies and preparing for the awards ceremony.

Day 4 - Public Viewing, Saturday, March 28, 2015 9:00 am – Noon

Park in Lot P10. Regular parking fees apply - $5.50 from the machines. See details on previous page.

We ask that your children be at their projects in the gymnasium for Public Viewing from 9:00 am - 12:00 noon. At noon the students will be asked to remove their projects. Students may not remove their projects until after the Public Viewing.
The Parent Pages (or how to survive Science Fair!)

We strongly recommend that you attend the public viewing with your child. It will give you an opportunity to view all of the great projects on display, and to see your own child doing presentations for visitors.

Tours of Mohawk's new facilities are available throughout the morning. Sign up for a tour at the Mohawk College table in the Gym.

Tours will feature:
- 3D Printing Lab (Additive Manufacturing Centre)
- Robotics Lab
- MEDIC lab
- Massage Therapy Lab
- the School of Justice and Wellness labs, gym, mock courtroom and tactical training areas.

*The Awards Ceremony – Tuesday, March 31, 2015 7:00 – 9:30 pm*

Park in Lot P10. Regular parking fees apply - $5.50 from the machines. See details on previous page.

The award ceremony is the culmination of the Fair and where the hard work of the students is recognized. The awards ceremony will begin at 7:00 pm sharp but it is recommended to come early, as seating is limited. Doors will open to the theatre at 6:30 pm. If the theater reaches capacity, alternate seating or viewing opportunities will be provided. Details will be announced in the lobby if necessary.

**Note:** Our trip award winners and a parent are required to attend an information meeting immediately after the Awards Ceremony (approximately one hour).

There! Wasn’t that easy? Congratulations to you and your young scientists and engineers! Be sure to visit the BASEF website (basef.ca) throughout the year. You’ll find project pictures and abstracts from last year’s fair, resource materials and important information about the next fair. Also follow the BASEF winners at basef.ca as they compete at the national and international science fairs. Their progress can be found in “Team BASEF”, with links to Facebook and Twitter.
BASEF thanks its 2015 sponsors

- ArcelorMittal
- Mohawk College
- Primary Fluid Systems Inc.
- McMaster University
- The Hamilton Spectator
- Hamilton District School Board
- Hamilton-Wentworth District School Board
- Hamilton Economic Development
- Masters Insurance
- Life Touch Canada
- Mc MASTER Innovation Park
- Union Gas
- Lifetouch
- Taylor Leibow Accountants and Advisors
- Canadian Linen & Uniform Service
- ECAH - Electrical Construction Association Hamilton
- D.E.N.M - Engineering
- BioGenius Canada
- NewAE
- SanPh
- Nikola Tesla
- Optimist Club of Stoney Creek
- IEEE Hamilton Section
- Conservation Halton
- Friends of the Fair
The YES Mentorship

The YES (Youth Engaging in Science) Mentorship pairs at-risk youth with mentors in science and engineering at the university, college and in-school levels. Founded by BASEF Organizing Committee members Vanessa Scanga and Ryan Buist, the YES Mentorship recognizes the needs of elementary and secondary school students and provides them with the opportunity of engaged learning by lending mentorship and guidance toward participating in the regional BASEF. If you are interested in participating in YES and wish to learn more about its opportunities, please email youthengaginginscience@gmail.com

BASEF has been instrumental in supporting the YES Mentorship and has created a Special Projects Committee to foster this initiative.
The Organizing Committee of the Bay Area Science and Engineering Fair congratulates:

Sonja Greene & Lenora Maracle

J.C. Hill Elementary
Six Nations

“….for the past three years [these teachers] have taken on the responsibility for having all students attending JC Hill Elementary School complete science fair projects using BASEF guidelines.”

“….October to January [these two teachers] use part of their class time each week to usher the students through the pitfalls of preparing a science/culture project”

“….these teachers have brought over 30 student...projects to BASEF”

CONGRATULATIONS TO THE 2015 BASEF CHAMPION TEACHERS!

The Champion Teacher Recognition Award for 2015 includes induction into the BASEF Champion Teacher Hall of Fame, a plaque and $250 for use in the classroom of each winning teacher. The cash awards are funded by the BASEF 500 Awards Program. A panel of BASEF Organizing Committee members selects the Champion Teacher Recognition Award winners from among those nominated online by their peers, parents and students.

This award recognizes a science teacher who displays a remarkable ability to empower and excite student interest in science and who actively promotes the Bay Area Science and Engineering Fair.
BASEF ACTIVITY MORNING 2015

Presentation Schedule
March 26, 2015
9am – Noon
McIntyre Theatre, Mohawk College

8:30 am – 9:00 am
BASEF Student Drop Off
Proceed to Main Auditorium

9:00 am – 9:05 am
Introduction – Kevin Hunt
Greetings from Mohawk College – Ron McKerlie

9:05 am – 9:30 am
SkySMART by SWHEEB – Robert Laurence and Stephen Bieda

9:30 am – 10:20 am
Canadian Warplane Heritage – Travel of VeRA the Lancaster Across the Pond
Keynote Speaker – Craig Brookhouse or Leon Evans

10:20 am – 11:10am

11:10 am – Noon
McMaster Chemistry – Chemistry Professors Presentation
Professors: Randy Dumont and Paul Harrison

Noon – Theatre Exit

Note: Classes of Grade 7-8 Students will be arriving by bus up until 9:30 am.
THANKS TO BASEF 2015 VOLUNTEERS!

**Volunteers**

Flavio Alfico  
Melissa Almeida-Huegel  
Denise Brennan-Rieder  
Gail Britton  
Larry Brodie  
Johnny Chaushin  
Lyndsey Dunn  
Trixxie Ellithorn  
Thomas Flaxman  
Ed Gillis  
Mary Helen Gillis  
Jodi Hanlon  
Trevor Hayhurst  
Carlos Hernandez  
Daniel Hoeksema  
Margaret Jenkins  
Michele Joch  
Linda Kennedy  
Lorna Krauss  
Mohammed Arib  
Nurul Alam

**Volunteers**

Darlynton Okpara  
Denise Prebul  
Calvin Rieder  
Julia Rinaldi  
Robert Sbrocchi  
Doug Scott  
Deniz Selcuk  
Brenda Sloane  
Noah Smith  
Taylor Smith  
Cosmos Suah  
Norman Young  
Ruth Mullen  
Ahmed Shahzeb  
Xin Guan  
Bailey MacLean  
Tomislav Brkić  
Pardeep Kaur  
Anthony Hanlon  
Samantha Hanlon  
Abel Maswa

**Safety Inspectors**

Richard Aranha  
Paul Armstrong  
Hannah Bosley  
Peter Child  
Karin Dunn  
C. Fraser Forrest  
Peter Frame  
Jim Garrett  
Bradley Glin  
Susan Hearst  
Jaclyn Hurley  
Chenwei Ji  
Joseph Lasowski  
Daniel Lawlor  
Justin Lewis  
Miranda MacAulay  
Paul Martin

**Safety Inspectors**

Mike McNally  
Bradley Michell  
Linda Millar  
Shane Morin  
Carolynn Reid  
George Roberts  
Nelson Ruiz  
Blanco  
Joydeep Sengupta  
Rebecca Smith  
Susie Son  
Mark Stewart  
Steven Walsh  
Paul Wehrle  
Norman P. Young  
Bruce Young

**Photo Team**

Alan Bates  
Ryan Bowdish  
John Novak  
Jane Ann Smith  
Chris Stearns  
Rosemary Stearns

**Registration Team**

Rob Lenjosek  
Jordan Lenjosek  
Kevin MacIsaac  
Nancy Carter

---

*We are proud to sponsor the Bay Area Science & Engineering Fair*

Union Gas is proud of our commitment to the communities we serve. Together, we’re helping to make a positive difference.
MERIT AWARD JUDGES

ArcelorMittal Dofasco
Erika Bellhouse
Maureen Crane
Stephanie Drywood
Daniel Hoeksema
Paul Martin
Joydeep Sengupta
Gavin Sheppard
David Starr
Isadora van Riemsdijk
Jane Wood

AVAR Environmental
Justin Lewis

Ballagh & Edward LLP
Valerie Edward

Byrne Engineering
L.H. Ben Van Berkel

Canadian Memorial Chiropractic College
Tracy Chew

Canadian Red Cross
Nelson Ruiz Blanco

City of Hamilton
Daniel Lawlor
Erick Merlos
Carolyln Reid
Megan Lynch

DARTS
Mark Mindorff

Every1Games Professional Services Inc.
Sarah Drew

Future Stars Sports Photography
Rebecca Smith

gotoClassroom
Henry Quach

Halton District School Board
Karin Dunn
Ingrid Munson

Hamilton Health Sciences
Beverly Barbato
Billie Genier
Linda Millar
Dianne Norman

Hamilton Public Health
Rachel Curry
Steven Walsh

Hamilton-Wentworth Catholic District School Board
Donna Stack-Durward
Stefan Sarabura

Hamilton-Wentworth District School Board
Soula Kritikos
Ramani Leanage

Hillfield Strathallan College
John Hannah

Htds Chemicals
Monika Malig

IBI Group
Scott McLaren

IESO
Mississauga (Co-op)
Vilhar Champaneri

Keeprite Refrigeration
Peter Frame

LifeLabs
Karin Groen

McMaster Innovation Park
Mark Stewart

McMaster University
Rebecca Eisen
Nickolas Goncharenko
Dhanyasri Maddiboina
Shawna Thompson
Karl Zimmermann
Yaser Al-Saad
Konstantinos Apostolou
Justin Balsor
Bryan Bayao
Simon Beshara
Jan Boer
Dalton Budhram
Nancy Carter
Kriti Chandra
Greg Chen
Doublas Chung
Sara Cormier
Chloe Darling
Neha Dewan
Bhargavi Duvvuri
Saravanana Esakki
Yasamin Fazli
Jim Garrett
Sophie Gervais
Andrea Gonzalez
Sameh Helmy
Alexander Hume
Bushra Ilyas
Isaac Jackiw
Pranay Jindal
Peter Jonasson
Aadil Juma
Jessica Kafka
Wen Kang
Roksana Khalid
Sara Kilmury
Adrian Kital
Ryan LaRue

McMaster University (continued)
Yujin Li
Min Liu
Nikola Lukenda
Vladimir Mahalec
Sohail Mahmood
Sydney McQueen
Supriya Modi
Aisha Mustafa
Zainab Naimpoor
Amir Nakhuda
Anjali Narayanan
Stephanie Neufeld
Nia Nijjati
Giusepina Pacher
Andrew Parashis
Athanasios Paschos
Mawleshan Pathmarajah
Martin Pham
Sean Rasmussen
Cory Richman
Mitchell Robson
Elyse Rosa
Christopher Rowley
Tarek Sadek
Yasser Salama
Luana Sciuullo
Roma Sehmi
Mathangi Selvamanen
Susie Son
Ammarah Soofy
Mary Sourial
Jennifer Stearns
Netusha Thevaranjan
Chris Thomsen
Aisha Tousif
Lucia Myongwon Lee
Gillian England-Mason
Danish Bhatti
Sara Dizzell
Irena Rebalka
Fereshteh Tabatabaei
Varsha Jayasankar
Siddharth Nath
Jane Foster
Christine Mangubat
Neng Wang
Stephen Adams

Mohawk College
Paul Armstrong
Gregory Ashandobe
Robert Balaam
MERIT AWARD JUDGES (Continued)

Mohawk College (continued)
Christine Bradaric-Baus
Gabriela Covaci
Jennifer Curry Jahnke
Alicia Di Carlo
Lisa Fitzpatrick
Michael Foster
Peggy French
John Holloway
Nicole Howe
Andjela Janosević
Jana Jilek
Nancy Kovacs
Miranda MacAulay
Brian Minaji
Erlinde Mulumba
Breanna Orgar
Megan Pratt
Leigh Richmond
Neilkesh Sharma
Amy Sloan-Forderer
Brian Stefanchuk
Natasha Turner
Jim Vanderveken
Valerie Webber
Shantal Woolsey
Shayne Yeaman
Cynthia Williamson
Diana Kurbanova

Newman Hattersley Ltd.
Bradley Michell

Niagara University
Melissa Tambasco

On Sabbatical
Mile (Mike) Popovic

Ontario Power Generation
Gordon Jeung

Orbital Studios Inc.
Jenny Belanger
Nick Tomkin
Lindsay Kelly

Precept Benchmark
Stephen Bieda

Region of Peel
Steve Lonz

Retired
Ian David Brown
Michael Denford
Carl Easton
Fraser Forrest
Helen Graham
Patel Hansa
Ross K. Johnson
Warren Johnson
Jennine Kafka
Eric McNair
Mike McNally
Beverly Shepard

Retired (continued)
Donald Stevens
Michael Tarjan
Paul Wehrle
Norman P. Young
Otto Zander

Securitas Canada
Susan Hearst

Self Employed
Paul-Benoit Latour
Don Bodnar
Eric Harrison
Tawisf Hossain
Jila Mahalec
Michelle Melone

Sheridan College
Graham Stratford

Stephen Walters Prof. Corp
Trace Molson

Student
Sabine Andrisevich
Cheryl Chow
Jonah Halili
Rachel Kelly
Megan Leeming
Gabriella Mattina
Ian MacMillan
Chantel Markle

Student (continued)
Krishan Newman
Aditya (Dave) Nidumolu
Angelico Obille
Monica Piastun
Margot Smith
Alex Sferra-Za
Aamir Shaikh
Muhammad Shaib
Saipriya Vajorvelu

TimePlan Education Group
Laura Pellizzari

UC Berkeley Graduate Student
Hannah Bosley

University of Guelph
Nicole Kelly

University of Waterloo
Jaclyn Hurley

Wellness for the Body
Jennifer Lickver

Xerox
Shane Morin

Zinje Computing
Jerome Miecznikowski

Unaffiliated
Teala Tyson
Beth McNally
Denyse Wahlgren
SPECIAL AWARD JUDGES

ArcelorMittal Dofasco Awards
Adam Aglipay, Derek Brisson, Mike Gulas, Lesley Harschitz, Craig McGinlay, Christopher McNeish, Haneet Randhawa, Jim Smith, Graham Stephen, Mansoor Tavassoly, Carm Velasco

Artistically Inspired Display Awards
Cathy Hamilton, Cathy Hayman

Association for Iron & Steel Technology Northern Chapter Award
Shannon Clark

Dr Laura Blew Social Sciences Award
Sarah Flaherty

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

Canadian Nuclear Society (Golden Horseshoe Branch) Awards
David Girard, Frank Labonte

Cancer Assistance Program Awards
Derek Bishop, Bobby Jo Smith

Chemical Institute of Canada-Hamilton Section Awards
Don Barclay, Jose Moran-Mirabal, Barry Smallbone, Tom Sutton, Dragan Vuckovic

DeGroote Institute for Infectious Disease Research Internship
Dawn Bowdish, Karen Mossman

Doris Casey Disability Solutions Award
Jim Casey

Dillon Consulting Limited
Dean Woolley

Electrical Construction Association of Hamilton Award
Joe Kurpe

Farncombe Family Digestive Health Research Award
Lina Chen, Jan D. Huizinga, Janice Kim

Gowlings Innovation Award
Harleen Khanijoun

Hamilton Academy of Dentistry Awards
Dr. Frank Stechey

Hamilton Amateur Astronomers Awards
Matthew Mannering, Jim Wamsley

Hamilton Association for the Advancement of Literature, Science & the Arts
Michael Jefferson, Tony Petric, Ludvik Prevec

Hamilton Chamber of Commerce Awards
Curtis Ingleton, Paul Lakin

Hamilton Wentworth Occasional Teacher Awards
Amrinder Bedi, Nguyen Trang

Hillfield Strathallan College Awards of Excellence
Marc Edgar

Hillfield Strathallan College Entrance Scholarship Award
Lara De Lazzari, Marc Edgar

Horizon Utilities Corporation Award
Andrew Paesano, Greg Vande Kuyt

John W. Howard Materials Research Award
Dr. Nicola Simmons

Indigenous Peoples of Canada Scientific Study Award
David Reed

Institute of Electrical and Electronic Engineers Hamilton Section
Blair MacCuish

International Science & Engineering Affiliated Fair Awards
Sarah Flaherty, Cathy Hayman, Varsha Jayasankar, Tyler Collins, Calvin Rieder

Laurentian Chapter of SETAC
Eve Gilroy, Oana Birceanu, Joel Nichols, Ryan Prosser

Dr. Colin J.L. Lock Memorial Chemistry Award
Dr. Nicola Simmons

McMaster University Department of Chemistry and Chemical Biology Award
Jose Moran-Mirabal

McMaster University Faculties of Science and Engineering Entrance Awards
Arlene Fajutrao Dosen, Mridula Kumar

McMaster - LEAP Award of Innovation
Brandon Smit, Rebecca Weatherall

McMaster - Venture Engineering Science Award of Innovation
Brandon Smit, Rebecca Weatherall

McMaster University Women in Engineering Entrance Awards
Arlene Fajutrao Dosen, Mridula Kumar

Mechanical Contractors Association of Hamilton Award
Anthony DeChellis

Mohawk College Building & Construction Sciences Awards
Dan Havercroft, Sean Nix

Mohawk College Electrotechnology Department Engineering Technology Awards
Mohy Bayat, Richard Ma, Brian Stefanchuk, John Van Loon

Mohawk College Mathematics Awards
Helen Dakin, John Kezys, Tom Sutton

Mohawk College Computer Science & Information Tech - Computer Excellence Award
Vic Djurdjevic, Thomas Gale, George Trojanovic

Primary Fluid Systems
Sandy Walker

Professional Engineers of Ontario-Hamilton/Burlington Chapter Awards
Michelle Chin, Gary Closson, David Dean, Erika Kadar, Jim Sweetman

The Research Institute at St. Joes Hamilton, Health Research Award
Jenna Boyd, Jodi Younger

Rotary Club of Hamilton-East Wentworth Award
Paul Crossman, Wayne Ingell

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

SPIE—The International Society for Optics & Photonics Awards
David Tozer
EXHIBITOR INDEX

Abdullah, Sana G17
Acierio, Gabriel M16
Acosta, Andrea E11
Adam, Andrei Q16
Ademidun, Tife N15
Adnan, Haroon B09
Agro, Ben D01
Ahilan, Akshayan G21
Ahmad, Mahnoor B07
Ahmed, Habeba S05
Aiaydeh, Ahmed P18
Allain, Deanna K20
Amir, Arooba H18
Amis, Ashley H12
An, Yang Xi (Jenny) C04
Anderson, Jordan C12
Anderson, Myah M06
Anderson, Zahir R16
Antoun, Zahir E14
Askari, Hiva T23
Aslam, Numair B13
Atalla, Marina E18
Aziz, Hamza N16
Aziz, Samna K21
Azzopardi, Larissa M08
Babin, Nolan K11
Bahnam, Maryam E13
Bahra, Abinaci J02
Bakht, Tabassum S14
Baldeon, Valeria R08
Baldwin, Teagan N21
Barbato, Sophie Q05
Barileva, Nart N06
Barltrap, Chloe F09
Barzetti, Vincent M05
Becke, Wilson T18
Bednarowski, Alexandra J05
Belanger, Aimee C10
Bell, Madeline J10
Bennett, Willow P03
Bergeron, Sean L14
Bhamare, Yash R04
Bhimani, Afif T09
Bhinder, Abdul-kareem B10
Biancucci, Olivia L11
Bisutti, Sam T16
Blackbird, Julianne A19
Blondin, Emily L05
Boccalon, David S14
Bomber, Angelina B16
Boulanger, Maxwell T22
Bowman, Catharine S16
Boyd, Jenna L16
Brar, Gurleen Q07
Breckon, Thomas E20
Brenninkmeijer, Lucas Q14
Brent, Katie T07
Britnell, Aidan F18
Brooks, Josh S13
Brown, Nicole R05
Brown, Sarah S18
Bruce, Rachel R06
Buggeln, Jackson T02
Bureau, Megan E21
Burley, Leina G10
Butler, Molly F15
Butts, Alyssa G18
Cain, Giulia J14
Cameron, Emma G13
Cameron, Ewen S07
Cameron, Kayla N15
Campanella, Dante N04
Cao, Federico J20
Chaklader, Navil H09
Chan, Lauren P03
Chang, Howard N08
Chaudhry, Maha A02
Chen, Annie C03
Chen, Cynthia P07
Chisholm, Zoe J09
Chuprakova, Anastasia C14
Cino, Marissa N02
Clarke, Kira C21
Clapiz, Jason S17
Clarke, Hayden J16
Clinton, Joseph M03
Cole, Alice D20
Collerman, Aidan G15
Angelina Bomberry, Chairman’s Award Winner 2014
# Bay Area Science & Engineering Fair

## Project Floor Layout

**David Brayley Athletic Centre**  
Mohawk College, Hamilton, ON  
March 25 to 31, 2015

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>S</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>K</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

---

21
<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
<th>Name</th>
<th>Code</th>
<th>Name</th>
<th>Code</th>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conway, Xander</td>
<td>N19</td>
<td>Farrel, Isabelle</td>
<td>N03</td>
<td>Henderson, Kirsten</td>
<td>D11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooper, Madison</td>
<td>G13</td>
<td>Flatt, Bridget</td>
<td>M12</td>
<td>Hill, Alanea</td>
<td>A17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrado, Nico</td>
<td>D16</td>
<td>Fowler, Lucas</td>
<td>J19</td>
<td>Hill, Bailey</td>
<td>A13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corry, Kayla</td>
<td>R07</td>
<td>Fram, Alexandra</td>
<td>K15</td>
<td>Hill, Cara</td>
<td>A16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotter, Jessica</td>
<td>K05</td>
<td>Fraser, Samantha</td>
<td>M19</td>
<td>Hill, Jason</td>
<td>B15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crawford, Riley</td>
<td>T22</td>
<td>Furtado, Rianna</td>
<td>R11</td>
<td>Hill, Jaylin</td>
<td>A14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crichton, Jacquelyn</td>
<td>L03</td>
<td>Fusch, Christoph</td>
<td>G11</td>
<td>Hill, Kendra</td>
<td>Q10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Da Re, Alexander</td>
<td>N20</td>
<td>Gallant, Olivia</td>
<td>L12</td>
<td>Hill-Skye, Mya</td>
<td>A15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalgetty, Evan</td>
<td>K03</td>
<td>Gallina, Meagan</td>
<td>H13</td>
<td>Hines, Ryan</td>
<td>K13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daly, Colin</td>
<td>S10</td>
<td>Gambhir, Ria</td>
<td>R21</td>
<td>Hogan, Rachel</td>
<td>P14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daniels, Eli</td>
<td>K04</td>
<td>Gandhi, Anissa</td>
<td>N08</td>
<td>Hollinsrake, Sam</td>
<td>Q13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davies, Michelle</td>
<td>K12</td>
<td>Gannage, Kalya</td>
<td>K08</td>
<td>Holmes, Viv</td>
<td>J12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daxner, Matthew</td>
<td>C02</td>
<td>Gaspar, Maddy</td>
<td>G20</td>
<td>Hopkins, Karen</td>
<td>R07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>De Tullio, Matthew</td>
<td>M02</td>
<td>Génier, Eric</td>
<td>Q09</td>
<td>Houldsworth, David</td>
<td>F17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dekker, Jessica</td>
<td>M10</td>
<td>Geoffrey, Mark</td>
<td>E08</td>
<td>Hua, Steven</td>
<td>S21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dell, Sofia</td>
<td>P04</td>
<td>Gilani, Eliza</td>
<td>S20</td>
<td>Huma, Alessia</td>
<td>P15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delry, Matthew</td>
<td>G12</td>
<td>Gill, Rebecca</td>
<td>L13</td>
<td>Hunt, Anthony</td>
<td>M04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demopolis, Erin</td>
<td>A10</td>
<td>Gobran, Mark</td>
<td>F20</td>
<td>Hunter, Claire</td>
<td>K02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DeNardis, Hannah</td>
<td>N01</td>
<td>Gohir, Hanana</td>
<td>B05</td>
<td>Hye, Ruby</td>
<td>H16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denys-Varghese, Jared</td>
<td>T14</td>
<td>Gohir, Usba</td>
<td>B04</td>
<td>Hynes, Cole</td>
<td>E02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desousa, Marina</td>
<td>C21</td>
<td>Gomes, Aaron</td>
<td>S01</td>
<td>Iantomasi, Michael</td>
<td>S15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dhami, Tejas</td>
<td>C06</td>
<td>Goombs, Esther</td>
<td>H06</td>
<td>Ibrahim, Ahmed</td>
<td>H14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dhillon, Devaun</td>
<td>T14</td>
<td>Gough, Ellie</td>
<td>Q19</td>
<td>Ibrahim, Marielle</td>
<td>C09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dias, Christopher</td>
<td>N04</td>
<td>Gould, Hailey</td>
<td>T25</td>
<td>Irwin, Avery</td>
<td>J03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiDanieli, Emily</td>
<td>T06</td>
<td>Grace, Matthew</td>
<td>D09</td>
<td>Irwin, Murdoch</td>
<td>S24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietrich, Cecelia</td>
<td>R17</td>
<td>Green, Erika</td>
<td>C19</td>
<td>Iyengar, Varun</td>
<td>H20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ding, Kevin</td>
<td>C01</td>
<td>Greenberg, Henry</td>
<td>S22</td>
<td>Iyengar, Yajur</td>
<td>S09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiVittorio, Felicia</td>
<td>K10</td>
<td>Gresova, Viktoriya</td>
<td>C18</td>
<td>Iyer, Shivaani</td>
<td>Q17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DiVittorio, Matthew</td>
<td>K10</td>
<td>Greyvenstein, Dominique</td>
<td>F21</td>
<td>Jackson, Joanne</td>
<td>N09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dobrovolskis, Julia</td>
<td>A05</td>
<td>Groot, Claire</td>
<td>F05</td>
<td>Jah, Hashir</td>
<td>B06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dolson, Kate</td>
<td>L04</td>
<td>Guerrero, Silvia</td>
<td>R08</td>
<td>Jahan, Usama</td>
<td>N13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donnelly-Lowe, James</td>
<td>S25</td>
<td>Guilbeault, Samuel</td>
<td>D05</td>
<td>Jain, Rakshita</td>
<td>H18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donovan, Zachary</td>
<td>L14</td>
<td>Gunasekara, Ramindu</td>
<td>T16</td>
<td>Janssen, Abby</td>
<td>J03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dotzlaw, Emily</td>
<td>E07</td>
<td>Gupta, Anika</td>
<td>J08</td>
<td>Jenkins, Caitlin</td>
<td>K07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dowdle, Madison</td>
<td>G14</td>
<td>Habicht, Thomas</td>
<td>A12</td>
<td>Jess, Sierra</td>
<td>P19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drakos, Anastasia</td>
<td>D13</td>
<td>Hadi, Abdullah</td>
<td>T18</td>
<td>Johnson, Laura</td>
<td>T06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duong, Nhi</td>
<td>H11</td>
<td>Hadi, Omar</td>
<td>Q06</td>
<td>Jones, Miakun</td>
<td>B17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easby, Kimberly</td>
<td>C11</td>
<td>Haider, Abuzar</td>
<td>H08</td>
<td>Kallah, Amritpal</td>
<td>T19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egan, Emily</td>
<td>J15</td>
<td>Han, Samuel</td>
<td>N05</td>
<td>Karim, Tahsin</td>
<td>J04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eisenkoelbl, Mia</td>
<td>R15</td>
<td>Harding, Zachary</td>
<td>R21</td>
<td>Kemper, Sara</td>
<td>D13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Siddig, Tasneem</td>
<td>H04</td>
<td>He, Amanda</td>
<td>P07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ellis, Jace</td>
<td>D07</td>
<td>Heidary, Faith</td>
<td>D08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entwistle, Abby</td>
<td>C13</td>
<td>Heinzl, Carson</td>
<td>T13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faber, Hannah</td>
<td>G01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falconer, Kendall</td>
<td>S06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
we want you to be it

Being it means you make a difference in a child's life.

You're the key to making it happen.

The Hamilton Spectator supports our Community's Children.
www.thespec.com
<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerkhof, Jacob</td>
<td>F06</td>
</tr>
<tr>
<td>Ketelaars, Paige</td>
<td>F01</td>
</tr>
<tr>
<td>Khaja, Yusuf</td>
<td>B03</td>
</tr>
<tr>
<td>Khan, Tuba</td>
<td>S18</td>
</tr>
<tr>
<td>Khondker, Adree</td>
<td>S08</td>
</tr>
<tr>
<td>Kim, William</td>
<td>N07</td>
</tr>
<tr>
<td>King, Aidan</td>
<td>M09</td>
</tr>
<tr>
<td>King, Amber</td>
<td>F09</td>
</tr>
<tr>
<td>Klahr, Juan</td>
<td>S24</td>
</tr>
<tr>
<td>Knight, Kiernan</td>
<td>G10</td>
</tr>
<tr>
<td>Koch, Lauren</td>
<td>L21</td>
</tr>
<tr>
<td>Kolios, Alexandra</td>
<td>D08</td>
</tr>
<tr>
<td>Korol, Ben</td>
<td>S02</td>
</tr>
<tr>
<td>Kottaras, Steven</td>
<td>S15</td>
</tr>
<tr>
<td>Kouroukis, Alexa</td>
<td>H01</td>
</tr>
<tr>
<td>Kouroukis, Larissa</td>
<td>J01</td>
</tr>
<tr>
<td>Kroes, Ashlynn</td>
<td>H13</td>
</tr>
<tr>
<td>Krywiak, Onjoli</td>
<td>Q12</td>
</tr>
<tr>
<td>Krzewski, Nicole</td>
<td>E12</td>
</tr>
<tr>
<td>Kuhn, Daniel</td>
<td>D14</td>
</tr>
<tr>
<td>Kunej, Noah</td>
<td>R04</td>
</tr>
<tr>
<td>Kunzli, Abbey</td>
<td>P16</td>
</tr>
<tr>
<td>Kuyper, Ethan</td>
<td>Q04</td>
</tr>
<tr>
<td>Laing, Emily</td>
<td>R12</td>
</tr>
<tr>
<td>Lakhanpal, Taiya</td>
<td>J10</td>
</tr>
<tr>
<td>Langley, Madison</td>
<td>P21</td>
</tr>
<tr>
<td>Larrazabal, Mateo</td>
<td>D05</td>
</tr>
<tr>
<td>Lauinger, Timothy</td>
<td>H17</td>
</tr>
<tr>
<td>Lavalle, Sophia</td>
<td>R11</td>
</tr>
<tr>
<td>Law, Ainslie</td>
<td>P17</td>
</tr>
<tr>
<td>Lee, Harrison</td>
<td>D16</td>
</tr>
<tr>
<td>Lehal, Aidan</td>
<td>T12</td>
</tr>
<tr>
<td>Leon, Nicole</td>
<td>E17</td>
</tr>
<tr>
<td>Lezon, Alicia</td>
<td>C11</td>
</tr>
<tr>
<td>Lindsay, Reagan</td>
<td>F14</td>
</tr>
<tr>
<td>Little, Gavin</td>
<td>E19</td>
</tr>
<tr>
<td>Liu, Daniel</td>
<td>J21</td>
</tr>
<tr>
<td>Loft, Shelby</td>
<td>L19</td>
</tr>
<tr>
<td>Lombardi, Aniello</td>
<td>K13</td>
</tr>
<tr>
<td>Luke, John Tyler</td>
<td>L17</td>
</tr>
<tr>
<td>Luo, Linna</td>
<td>T17</td>
</tr>
<tr>
<td>Ly, Irene</td>
<td>H10</td>
</tr>
<tr>
<td>Lynch, Jaidia</td>
<td>H06</td>
</tr>
<tr>
<td>MacDonald, Abby</td>
<td>M07</td>
</tr>
<tr>
<td>Mackesy, Myles</td>
<td>C15</td>
</tr>
<tr>
<td>Mackinnon, Emma</td>
<td>E17</td>
</tr>
<tr>
<td>MacLeod, Kyren</td>
<td>G14</td>
</tr>
<tr>
<td>Macpherson, Christine</td>
<td>F10</td>
</tr>
<tr>
<td>Madalena, Jacob</td>
<td>S13</td>
</tr>
<tr>
<td>Madentzidis, Kiveli</td>
<td>C09</td>
</tr>
<tr>
<td>Madronic, Madeleine</td>
<td>M14</td>
</tr>
<tr>
<td>Magliaro, Ava</td>
<td>K17</td>
</tr>
<tr>
<td>Maharaj, Lexi</td>
<td>P06</td>
</tr>
<tr>
<td>Mahdavi, Lexi</td>
<td>D17</td>
</tr>
<tr>
<td>Mahmood, Esha</td>
<td>N11</td>
</tr>
<tr>
<td>Mahmood, Leena</td>
<td>Q07</td>
</tr>
<tr>
<td>Mahsam, Muhammad</td>
<td>N14</td>
</tr>
<tr>
<td>Mahut, Caroline</td>
<td>T24</td>
</tr>
<tr>
<td>Mahut, Monica</td>
<td>T20</td>
</tr>
<tr>
<td>Main, Samantha</td>
<td>P17</td>
</tr>
<tr>
<td>Maione, Hannah</td>
<td>K06</td>
</tr>
<tr>
<td>Maitinsky, Marcell</td>
<td>C16</td>
</tr>
<tr>
<td>Malatesta, Isabella</td>
<td>L12</td>
</tr>
<tr>
<td>Maleschuk, Mason</td>
<td>J16</td>
</tr>
<tr>
<td>Malpass, Lachlan</td>
<td>M16</td>
</tr>
<tr>
<td>Mancini, Devon</td>
<td>H08</td>
</tr>
<tr>
<td>Mancini, Nick</td>
<td>H05</td>
</tr>
<tr>
<td>Mann, Gareth</td>
<td>Q21</td>
</tr>
<tr>
<td>Mao, Randi</td>
<td>T09</td>
</tr>
<tr>
<td>Marcolin, Emma</td>
<td>K06</td>
</tr>
<tr>
<td>Maretzki, Zachary</td>
<td>A03</td>
</tr>
<tr>
<td>Marras, Tessa</td>
<td>M19</td>
</tr>
<tr>
<td>Martin, Luke</td>
<td>A15</td>
</tr>
<tr>
<td>Martin, Mia</td>
<td>A18</td>
</tr>
<tr>
<td>Martin, Zachary</td>
<td>B19</td>
</tr>
<tr>
<td>Masengi, Anna</td>
<td>G04</td>
</tr>
<tr>
<td>Mastrolonardo, Alexander</td>
<td>E09</td>
</tr>
<tr>
<td>McAleese, Nicholas</td>
<td>C05</td>
</tr>
<tr>
<td>McBain, Jack</td>
<td>P09</td>
</tr>
<tr>
<td>McBride, Brady</td>
<td>P11</td>
</tr>
<tr>
<td>McCourtie, Hannah</td>
<td>H03</td>
</tr>
<tr>
<td>McGuire, Grace</td>
<td>J06</td>
</tr>
<tr>
<td>McGuire, Matthew</td>
<td>G09</td>
</tr>
<tr>
<td>McInally, Kyla</td>
<td>P13</td>
</tr>
<tr>
<td>McIsaac, Olivia</td>
<td>P20</td>
</tr>
<tr>
<td>McLean, Adam</td>
<td>M17</td>
</tr>
<tr>
<td>Mcmullin, Sophie</td>
<td>G20</td>
</tr>
<tr>
<td>McPherson, Naomi</td>
<td>R01</td>
</tr>
<tr>
<td>McRae, Cameron</td>
<td>D04</td>
</tr>
<tr>
<td>Medeiros, Dante</td>
<td>L01</td>
</tr>
<tr>
<td>Mehta, Jay</td>
<td>N17</td>
</tr>
<tr>
<td>Meikle, Kendra</td>
<td>R10</td>
</tr>
<tr>
<td>Merla, Michaela</td>
<td>N02</td>
</tr>
<tr>
<td>Merrick, Christopher</td>
<td>P09</td>
</tr>
<tr>
<td>Mertin, Nicholas</td>
<td>A07</td>
</tr>
<tr>
<td>Middleton, Sarah</td>
<td>L09</td>
</tr>
<tr>
<td>Millard, Quin</td>
<td>N07</td>
</tr>
<tr>
<td>Miller, MacKenzie</td>
<td>A18</td>
</tr>
<tr>
<td>Miller-Boothe, Alison</td>
<td>D11</td>
</tr>
<tr>
<td>Mitchell, Ally</td>
<td>A06</td>
</tr>
<tr>
<td>Name</td>
<td>Booth</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Mitchell, Cailin</td>
<td>P05</td>
</tr>
<tr>
<td>Mitchell, Meghan</td>
<td>D10</td>
</tr>
<tr>
<td>Mogus, Jack</td>
<td>T08</td>
</tr>
<tr>
<td>Mohammed, Maryam</td>
<td>N18</td>
</tr>
<tr>
<td>Mondal, Tuneer</td>
<td>K19</td>
</tr>
<tr>
<td>Moody, Chad</td>
<td>H05</td>
</tr>
<tr>
<td>Moon, Slader</td>
<td>Q08</td>
</tr>
<tr>
<td>Moraes Rae, Gabriella</td>
<td>F13</td>
</tr>
<tr>
<td>Moreno, Felipe</td>
<td>R13</td>
</tr>
<tr>
<td>Moreton, Amanda</td>
<td>J07</td>
</tr>
<tr>
<td>Moro, Ashvin</td>
<td>E04</td>
</tr>
<tr>
<td>Morrison, Ainsley</td>
<td>Q02</td>
</tr>
<tr>
<td>Muhammad, Zain</td>
<td>B08</td>
</tr>
<tr>
<td>Murphy, Natalie</td>
<td>K04</td>
</tr>
<tr>
<td>Murphy-Scott, Rylee</td>
<td>H07</td>
</tr>
<tr>
<td>Murray, Alissa</td>
<td>G19</td>
</tr>
<tr>
<td>Musa, Mawahib</td>
<td>B01</td>
</tr>
<tr>
<td>Nantsa, Alexa</td>
<td>N12</td>
</tr>
<tr>
<td>Nantsa, Tanya</td>
<td>N11</td>
</tr>
<tr>
<td>Nargis, Shadia</td>
<td>S04</td>
</tr>
<tr>
<td>Naylor, Hayley</td>
<td>T17</td>
</tr>
<tr>
<td>Neibert, Christopher</td>
<td>D12</td>
</tr>
<tr>
<td>Ngo, Alexandra</td>
<td>D19</td>
</tr>
<tr>
<td>Nikitin, Sophia</td>
<td>D21</td>
</tr>
<tr>
<td>Novakov, Adrian</td>
<td>R13</td>
</tr>
<tr>
<td>O' Connor, Tatum</td>
<td>L03</td>
</tr>
<tr>
<td>O'sullivan, Molly</td>
<td>S03</td>
</tr>
<tr>
<td>Oeun, Christina</td>
<td>H10</td>
</tr>
<tr>
<td>Oh, Hannah</td>
<td>E06</td>
</tr>
<tr>
<td>Oliver, Dillen</td>
<td>Q01</td>
</tr>
<tr>
<td>Oliver, Stella</td>
<td>L06</td>
</tr>
<tr>
<td>Orfei, Victoria</td>
<td>K16</td>
</tr>
<tr>
<td>Orzechowski, Amelia</td>
<td>T23</td>
</tr>
<tr>
<td>Osoba, Beulah</td>
<td>S19</td>
</tr>
<tr>
<td>Oster, Maya</td>
<td>A10</td>
</tr>
<tr>
<td>Ott, Holly</td>
<td>L04</td>
</tr>
<tr>
<td>Paatz, Nikita</td>
<td>F04</td>
</tr>
<tr>
<td>Pacini, Giovanni</td>
<td>M13</td>
</tr>
<tr>
<td>Panju, Zahra</td>
<td>D06</td>
</tr>
<tr>
<td>Paravinja, Nikola</td>
<td>P10</td>
</tr>
<tr>
<td>Pashkja, Claudia</td>
<td>K14</td>
</tr>
<tr>
<td>Pashkja, George</td>
<td>M18</td>
</tr>
<tr>
<td>Pathak, Ria</td>
<td>J12</td>
</tr>
<tr>
<td>Patiakas, Lauren</td>
<td>H02</td>
</tr>
<tr>
<td>Patrick, Dylan</td>
<td>J17</td>
</tr>
<tr>
<td>EXHIBITOR INDEX (Continued)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>Paul, Autumn</td>
<td>Sahi, Ayush</td>
</tr>
<tr>
<td>Peetsma, Emily</td>
<td>Saini, Taranjit</td>
</tr>
<tr>
<td>Peros, Jack</td>
<td>Sampson, Brooke</td>
</tr>
<tr>
<td>Peros, Kaya</td>
<td>Salama, Veronica</td>
</tr>
<tr>
<td>Petiteville, Cyprien</td>
<td>Sandhu, Malaysia</td>
</tr>
<tr>
<td>Phillips, Jaden</td>
<td>Sarabura, Paul</td>
</tr>
<tr>
<td>Piliouras, Billy</td>
<td>Sauer, Erik</td>
</tr>
<tr>
<td>Piliouras, Eleni</td>
<td>Saunders, Matthew</td>
</tr>
<tr>
<td>Pomfret, Tierney</td>
<td>Scarcelli, Vanessa</td>
</tr>
<tr>
<td>Pope, Theadora</td>
<td>Schenk, David</td>
</tr>
<tr>
<td>Powlless, Hailey</td>
<td>Schick, Henry</td>
</tr>
<tr>
<td>Pugh Martin, Noah</td>
<td>Schoolman, Jeffrey</td>
</tr>
<tr>
<td>Pujari, Paras</td>
<td>Schwarz, Elise</td>
</tr>
<tr>
<td>Qureshi, Moeyyad</td>
<td>Schwichtenberg, Jennifer</td>
</tr>
<tr>
<td>Qureshi, Ridha</td>
<td>Scime, Katelyn</td>
</tr>
<tr>
<td>Qureshi, Saim</td>
<td>Scullo, Jake</td>
</tr>
<tr>
<td>Radix, Will</td>
<td>Sehri, Mina</td>
</tr>
<tr>
<td>Rahman, Fardeen</td>
<td>Semelhago, Justin</td>
</tr>
<tr>
<td>Raja, Zainab</td>
<td>Sennah, Hosam</td>
</tr>
<tr>
<td>Rajkumar, Lakshmi</td>
<td>Senthilkumaran, Maya</td>
</tr>
<tr>
<td>Rakulann, Sneha</td>
<td>Shaheen, Natalie</td>
</tr>
<tr>
<td>Ramacieri, Ethan</td>
<td>Shea, Emily</td>
</tr>
<tr>
<td>Ramelli, Luca</td>
<td>Sheikh, Ameera</td>
</tr>
<tr>
<td>Ratevosian, Inessa</td>
<td>Sheth, Urmia</td>
</tr>
<tr>
<td>Raynor, Elizabeth</td>
<td>Siddiqui, Azza</td>
</tr>
<tr>
<td>Ready, Taylor</td>
<td>Sidhu, Rabbea</td>
</tr>
<tr>
<td>Reeves, Lauren</td>
<td>Silliker, Amelia</td>
</tr>
<tr>
<td>Reid, Kirsten</td>
<td>Silwanes, Jonathan</td>
</tr>
<tr>
<td>Rennie, Austin</td>
<td>Simone, Bianca</td>
</tr>
<tr>
<td>Rexdiemer, Chloe</td>
<td>Sinclair, Jenna</td>
</tr>
<tr>
<td>Richards, Tristan</td>
<td>Slattery, Summer</td>
</tr>
<tr>
<td>Richardson, Sophia</td>
<td>Smith, Amelia</td>
</tr>
<tr>
<td>Rilling, Marcus</td>
<td>Smith, Ethan</td>
</tr>
<tr>
<td>Rivas-Gonzalez, Frank</td>
<td>Smouter, Jared</td>
</tr>
<tr>
<td>Rohac, Mark</td>
<td>Sommerville, Rachael</td>
</tr>
<tr>
<td>Rothgerber, Evelyn</td>
<td>Sorrenti, Marco</td>
</tr>
<tr>
<td>Roy, Pierre</td>
<td>Spadafora, Ryan</td>
</tr>
<tr>
<td>Rudic, Alexandra</td>
<td>Sparling, Lauren</td>
</tr>
<tr>
<td>Ruggiero, Chloe</td>
<td>Spence, Aaron</td>
</tr>
<tr>
<td>Ruhland, Joel</td>
<td>Spence, Matthew</td>
</tr>
<tr>
<td>Rutledge, Davis</td>
<td>Spence, Ryan</td>
</tr>
<tr>
<td>Ryan, James</td>
<td>Spencer, Anna</td>
</tr>
<tr>
<td>Sadai, Madeline</td>
<td>Spooner, Josh</td>
</tr>
<tr>
<td>Saeed, Zainab</td>
<td></td>
</tr>
<tr>
<td>Sagotra, Jaskeen</td>
<td></td>
</tr>
</tbody>
</table>

26
<table>
<thead>
<tr>
<th>Name</th>
<th>Initial</th>
<th>Name</th>
<th>Initial</th>
<th>Name</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wei, Ruhan</td>
<td>A08</td>
<td>Williams, Maggie</td>
<td>G08</td>
<td>Woodiwiss, Isobel</td>
<td>P06</td>
</tr>
<tr>
<td>Weinstein, Katelyn</td>
<td>G05</td>
<td>Willis, Laura</td>
<td>D18</td>
<td>Woodworth, Amy</td>
<td>J06</td>
</tr>
<tr>
<td>Wereha, Alyssa</td>
<td>K16</td>
<td>Wilson, Sophia</td>
<td>J05</td>
<td>Xagoraris, Alethea</td>
<td>J13</td>
</tr>
<tr>
<td>Westwater, Brooke</td>
<td>Q02</td>
<td>Wimsatt, Brendan</td>
<td>Q11</td>
<td>Xie, Andy</td>
<td>R18</td>
</tr>
<tr>
<td>Westwater, Noah</td>
<td>Q03</td>
<td>Winslow, Nicholas</td>
<td>P01</td>
<td>Xu, Emily</td>
<td>A06</td>
</tr>
<tr>
<td>Wettlaufer, Rachel</td>
<td>P12</td>
<td>Winslow, Sebastian</td>
<td>P01</td>
<td>Xu, Eric</td>
<td>S25</td>
</tr>
<tr>
<td>Whelan, Amanda</td>
<td>H07</td>
<td>Winters, Rayven</td>
<td>S20</td>
<td>Yoell, Liam</td>
<td>H21</td>
</tr>
<tr>
<td>Wicklund, Jade</td>
<td>S03</td>
<td>Wirasinghe, Noah</td>
<td>R06</td>
<td>Young, Natasha</td>
<td>L05</td>
</tr>
<tr>
<td>Wighardt, Madeline</td>
<td>E05</td>
<td>Wolfe, Michael</td>
<td>G03</td>
<td>Zadorozny, Grant</td>
<td>Q18</td>
</tr>
<tr>
<td>Wilkinson, Natalie</td>
<td>L10</td>
<td>Won, Taehyoan (David)</td>
<td>S09</td>
<td>Zanguna, David</td>
<td>T03</td>
</tr>
<tr>
<td>Williams, Dion</td>
<td>A14</td>
<td>Wong, Matthew</td>
<td>M20</td>
<td>Zerrouk, Hanna</td>
<td>B11</td>
</tr>
</tbody>
</table>

Stay Connected

- [facebook.com/teambasef](https://facebook.com/teambasef)
- [flickr.com/team-basef](https://flickr.com/team-basef)
- [instagram.com/basef](https://instagram.com/basef)
- [twitter.com/basef](https://twitter.com/basef)
- [youtube.com/TeamBASEF](https://youtube.com/TeamBASEF)
A01  The Effect of Temperature on a Magnet’s Strength  
Sara Tufaha  
Junior 7/8 Eng & Comp Sci  
Al-Falah Islamic School, IND

A02  The effect of building materials on Wi-Fi signals  
Maha Chaudhry  
Junior 7/8 Eng & Comp Sci  
Al-Falah Islamic School, IND

A03  Do Boys or Girls Wash Hands More?  
Zachary Maretzki  
Junior 7/8 Health Sciences Human  
Calvin Christian School (Hamilton), IND

A04  MIND Controller - How Video Gaming Affects the Long-Term Memory  
Jonathan Vella  
Junior 7/8 Health Sciences Human  
Calvin Christian School (Hamilton), IND

A05  STICKY SITUATION - A Qualitative and Quantitative Analysis Of Heavy Metal Contamination of Honey  
Julia Dobrovolskis  
Intermediate 9/10 Health Sciences Human  
Hillfield Strathallan College, IND

A06  Planticide: The Effect That Vinegar Has On Plants  
Aly Mitchell, Emily Xu  
Intermediate 9/10 Earth & Env Sci  
Hillfield Strathallan College, IND

A07  How Private are your Private Conversations?  
Nicholas Mertin  
Intermediate 9/10 Eng & Comp Sci  
Hillfield Strathallan College, IND

A08  Mathematical Modeling of Biological Oscillators  
Ruihan Wei  
Intermediate 9/10 Health Sciences Human  
Hillfield Strathallan College, IND

A09  Germ Busters: The Effect of Psychology on Microbiological Outcomes  
Alexandra Todd  
Intermediate 9/10 Health Sciences Human  
Hillfield Strathallan College, IND

A10  Behind the Peel  
Erin Demopolis, Maya Oster  
Junior 7/8 Health Sciences Human  
Hillfield Strathallan College, IND

A11  Insulating Thermal Curtain  
Owen Treleaven  
Junior 7/8 Earth & Env Sci  
Hillfield Strathallan College, IND

A12  Resource Management with Arduino  
Thomas Habicht  
Intermediate 9/10 Eng & Comp Sci  
Home Schooling, IND

A13  Comparing Hockey Sticks  
Brenon Lickers, Bailey Hill  
Junior 7/8 Eng & Comp Sci  
J. C. Hill Elementary, SNS

A14  Beyond the Car  
Jaylin Hill, Dion Williams  
Junior 7/8 Eng & Comp Sci  
J. C. Hill Elementary, SNS

A15  Worldly Worms  
Mya Hill-Skye, Luke Martin  
Junior 7/8 Earth & Env Sci  
J. C. Hill Elementary, SNS

A16  Plants Favourite Jam  
Jalen Thomas, Cara Hill  
Junior 7/8 Earth & Env Sci  
J. C. Hill Elementary, SNS

A17  Hodihnhisoni Thinking  
Hailey Powless, Alanea Hill  
Junior 7/8 Health Sciences Human  
J. C. Hill Elementary, SNS

A18  How do Different Types of Liquids Effect Plant Growth?  
MacKenzie Miller, Mia Martin  
Junior 7/8 Earth & Env Sci  
J. C. Hill Elementary, SNS

A19  Acid Thirst  
Julianne Blackbird  
Junior 7/8 Earth & Env Sci  
J. C. Hill Elementary, SNS

B01  The Effect of Different Substances on the Rate of Metal Corrosion  
Mahsa Gohir  
Junior 7/8 Phys & Math Sci  
Al-Falah Islamic School, IND

B02  SSNS SPEECH: What’s New in Autism  
Azza Siddiqui  
Junior 7/8 Health Sciences Human  
Al-Falah Islamic School, IND

B03  The Effect Of Different Materials On Cell Phone Reception  
Yusuf Khaja  
Junior 7/8 Eng & Comp Sci  
Al-Falah Islamic School, IND

B04  The Effect of Hydrochloric Acid on Different Types of Metals  
Usba Gohir  
Junior 7/8 Phys & Math Sci  
Al-Falah Islamic School, IND

B05  Which Rust Remover is Most Efficient  
Hanana Gohir  
Junior 7/8 Eng & Comp Sci  
Al-Falah Islamic School, IND

B06  How To Measure Calories Of Different Foods By Using Homemade Calorimeter  
Hashir Jah  
Junior 7/8 Health Sciences Human  
Al-Falah Islamic School, IND

B07  The effect of humidity on metals  
Mahnnoor Ahmad  
Junior 7/8 Phys & Math Sci  
Al-Falah Islamic School, IND
CAER is... a community-based volunteer organization whose members represent local industry, service-related businesses and municipal Emergency Response Management and Services and has been in existence since 1980.

Working together, the members of CAER plan, practice and coordinate their activities to enhance safe daily workplace operating practices through risk management, greatly reducing the risk of emergency situations that could threaten the Hamilton Community.
<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Description</th>
<th>Authors</th>
<th>School</th>
<th>City, State</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C07 Fear</strong></td>
<td>Kaitlyn Tomas</td>
<td>Junior 7/8 Health Sciences Human Appleby College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C08 Will it Grow?</strong></td>
<td>Jared Smouter, Henry Schick</td>
<td>Junior 7/8 Earth &amp; Env Sci Burlington Christian Academy, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C09 Testing the Relationship Between Eye Colour and Eyesight</strong></td>
<td>Marielle Ibrahim, Kiveli Madentzidis</td>
<td>Junior 7/8 Health Sciences Human Burlington Christian Academy, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C10 What laundry detergent gets a coffee stain out of a t-shirt the best?</strong></td>
<td>Aimee Belanger</td>
<td>Junior 7/8 Earth &amp; Env Sci Burlington Christian Academy, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C11 Beans Under Radiation</strong></td>
<td>Alicia Lezon, Kimberly Easby</td>
<td>Junior 7/8 Life Sciences Non-Human Ancaster Senior, HWDSB</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C12 The Effect of Music Genres on Plant Growth</strong></td>
<td>Jordan Anderson</td>
<td>Junior 7/8 Life Sciences Non-Human Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C13 The Effect of types of paper on how a paper air plane flys.</strong></td>
<td>Abby Entwistle</td>
<td>Junior 7/8 Eng &amp; Comp Sci Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C14 The age of your eggs</strong></td>
<td>Anastasia Chuprakova</td>
<td>Junior 7/8 Biotechnology Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C15 Candy Chromatography</strong></td>
<td>Myles Mackesy</td>
<td>Junior 7/8 Biotechnology Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C16 Going Up?</strong></td>
<td>Marcell Maitinsky</td>
<td>Junior 7/8 Phys &amp; Math Sci Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C17 Landslides: Why do rocks slide down slopes?</strong></td>
<td>Inessa Ratevosian</td>
<td>Junior 7/8 Earth &amp; Env Sci Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C18 Smile</strong></td>
<td>Viktoryia Gresova</td>
<td>Junior 7/8 Health Sciences Human Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C19 The Yeast Uprising</strong></td>
<td>Erika Green</td>
<td>Junior 7/8 Biotechnology Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C20 The effect of temperature on magnets</strong></td>
<td>Alexander Sychikov</td>
<td>Junior 7/8 Eng &amp; Comp Sci Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C21 Reach out and meet someone: The power of Allport’s contact hypothesis</strong></td>
<td>Kira Clairke, Marina Desousa</td>
<td>Junior 7/8 Health Sciences Human Hamilton Academy of Performing Arts, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D01 Self Repairing Materials</strong></td>
<td>Ben Agro</td>
<td>Junior 7/8 Eng &amp; Comp Sci Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D02 Park Green</strong></td>
<td>Anna Spencer</td>
<td>Junior 7/8 Earth &amp; Env Sci Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D03 The Effectiveness of Antibacterial and Non-antibacterial Hand Products</strong></td>
<td>Lukas Faulkner</td>
<td>Intermediate 9/10 Health Sciences Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D04 All About That Post</strong></td>
<td>Michael Timmer, Cameron McRae</td>
<td>Junior 7/8 Eng &amp; Comp Sci Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D05 Air, Asthma, and Athletics</strong></td>
<td>Mateo Larrazabal, Samuel Guilbeaut</td>
<td>Junior 7/8 Health Sciences Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D06 Tackling Obesity One Coffee At A Time</strong></td>
<td>Zahra Panju</td>
<td>Junior 7/8 Health Sciences Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D07 What is the ideal cricket species to keep as a feeder pet?</strong></td>
<td>Jace Ellis</td>
<td>Junior 7/8 Life Sciences Non-Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D08 What's the Scoop on your Stroop?</strong></td>
<td>Faith Heidary, Alexandra Kolios</td>
<td>Junior 7/8 Health Sciences Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D09 There's Mushroom For Improvement</strong></td>
<td>Justin Semelhago, Matthew Grace</td>
<td>Junior 7/8 Life Sciences Non-Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D10 Pineapple perfection</strong></td>
<td>Meghan Mitchell, Sophia Richardson</td>
<td>Junior 7/8 Earth &amp; Env Sci Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D11 Scent o’ Mental Memories</strong></td>
<td>Alison Miller-Boothe, Kirsten Henderson</td>
<td>Junior 7/8 Health Sciences Human Hillfield Strathallan College, IND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D12  Unbrickable
Christopher Neibert
Intermediate 9/10 Eng & Comp Sci
Hillfield Strathallan College, IND

D13  Photoprotection: The Effectiveness of Automotive Glass Options in Reducing Ultraviolet Radiation
Sara Kemper, Anastasia Drakos
Intermediate 9/10 Health Sciences Human
Hillfield Strathallan College, IND

D14  Cleaning Green
Daniel Kuhn
Intermediate 9/10 Earth & Env Sci
Hillfield Strathallan College, IND

D15  Bacteria on your Clothes
Pierre Roy
Intermediate 9/10 Earth & Env Sci
Hillfield Strathallan College, IND

D16  ‘Say Cheese!’
Harrison Lee, Nico Corrado
Intermediate 9/10 Health Sciences Human
Hillfield Strathallan College, IND

D17  A Carbon Footprint Application
Darius Mahdavi
Intermediate 9/10 Earth & Env Sci
Hillfield Strathallan College, IND

D18  The Effects of Music on Horses
Laura Willis
Intermediate 9/10 Life Sciences Non-Human
Hillfield Strathallan College, IND

D19  Caffeine Beans: The Effects of Recycled Coffee Grounds on The Propagation Growth Rates of Nutrient Based Vegetation
Veronica Bolis, Alexandra Nemy
Intermediate 9/10 Earth & Env Sci
Hillfield Strathallan College, IND

D20  Multitasking: Efficient or Brain-Drain
Maria Filimonova, Alice Cole
Junior 7/8 Health Sciences Human
Hamilton Academy of Performing Arts, IND

D21  Singing Strings
Sophia Nikitin
Junior 7/8 Phys & Math Sci
Hamilton Academy of Performing Arts, IND

E01  How a Distraction Affects Your Reaction Time
Brooke Sampson
Intermediate 9/10 Biotechnology
Hillfield Strathallan College, IND

E02  The Water Challenge
Cole Hynes
Junior 7/8 Health Sciences Human
Hillfield Strathallan College, IND

E03  Memory vs Time
Natalie Shaheen
Junior 7/8 Health Sciences Human
Hillfield Strathallan College, IND

E04  Don’t Be Fuelish
Ashvin Moro
Junior 7/8 Earth & Env Sci
Hillfield Strathallan College, IND

E05  Feel the Vibrations
Madeline Wighardt, Bianca Simone
Junior 7/8 Biotechnology
Hillfield Strathallan College, IND

"Science without religion is lame; religion without science is blind."
~ Albert Einstein

Congratulations to BASEF on 55 years of Science Success!

Thank you to all the participants & volunteers who make it happen.

Patrick J. Daly, Chairperson of the Board
David Hansen, Director of Education
www.hwcdsb.ca
E06   How much fluoride are we drinking?  
Hannah Oh  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E07   Recombinant Polyclonal Antibody Ebola Vaccine  
Emily Dotlaw  
Senior 11/12 Biotechnology  
King’s Christian Collegiate, IND

E08   Effects of Energy Drinks on Mental and Physical Stimulation  
Mark Georgy  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E09   Using Mass to Determine the Effects of Soda on Bone Structure  
Alexander Mastrolonardo  
Senior 11/12 Life Sciences Non-Human  
King’s Christian Collegiate, IND

E10   Environment Friendly Ways of Decomposing Styrofoam  
Veronica Salama  
Senior 11/12 Earth & Env Sci  
King’s Christian Collegiate, IND

E11   The natural effects of Biotin on humans  
Andrea Acosta  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E12   Discovering the future of biodegradable plastics  
Nicole Krzewski  
Senior 11/12 Earth & Env Sci  
King’s Christian Collegiate, IND

E13   Acid Etching in Dentistry  
Maryam Bahnam  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E14   Biobutanol: Driving Our World Forward  
Andrew Antoun, Akaash Viswanathan  
Senior 11/12 Earth & Env Sci  
King’s Christian Collegiate, IND

E15   Effectiveness and Efficiency of Medications  
Kirsten Reid  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E16   Pharmaceuticals - Pain Killers  
Jonathan Silwanes  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E17   Seaweed as a Natural Salt Substitute in Foods  
Nicole Leon, Emma Mackinnon  
Senior 11/12 Health Sciences Human  
King’s Christian Collegiate, IND

E18   Microwave Assisted Extraction of Iodine From Seaweed  
Marina Atalla  
Senior 11/12 Life Sciences Non-Human  
King’s Christian Collegiate, IND

E19   The Effectiveness of the Natural Yeast on Pineapple in the Fermentation Process  
Gavin Little  
Senior 11/12 Biotechnology  
King’s Christian Collegiate, IND

E20   Do Cell Phones Inhibit Growth?  
Lucas Brenninkmeijer  
Junior 7/8 Biotechnology  
Oakville Christian School, IND

E21   Polar Bears in Miami  
Megan Bureau  
Junior 7/8 Earth & Env Sci  
Oakville Christian School, IND

F01   Solar Science  
Paige Ketelaars  
Junior 7/8 Life Sciences Non-Human  
Trinity Christian School, IND

F02   Aerodynamics  
Jeffrey Scholman  
Junior 7/8 Eng & Comp Sci  
Trinity Christian School, IND

F03   The Font Effect: Can Fonts Improve Memory?  
Emma Van Hoffen  
Junior 7/8 Health Sciences Human  
Trinity Christian School, IND

F04   Electric Fear Factor  
Nikita Paatz  
Junior 7/8 Health Sciences Human  
Trinity Christian School, IND

F05   Pop Colours  
Claire Groot  
Junior 7/8 Health Sciences Human  
Trinity Christian School, IND

F06   Bad Beef  
Jacob Kerkhof  
Junior 7/8 Biotechnology  
Trinity Christian School, IND

F07   Typoglycemia: Raednig Gibberish  
Jocelyn Stel  
Junior 7/8 Health Sciences Human  
Trinity Christian School, IND

F08   The Electrolyte Fight  
Jaidyn Vanderlaan  
Junior 7/8 Life Sciences Non-Human  
Rotherglen School (Oakville), IND

F09   Which is the juiCest?  
Amber King, Chloe Barltrop  
Junior 7/8 Life Sciences Non-Human  
Rotherglen School (Oakville), IND

F10   FertiFertilizer Footprint (The Effect of Reactive Nitrogen on Marine Life)  
Christine Macpherson  
Junior 7/8 Earth & Env Sci  
Rotherglen School (Oakville), IND

F11   Salty Solution  
Marco Sorrenti, Jaden Phillips  
Junior 7/8 Earth & Env Sci  
Rotherglen School (Oakville), IND

F12   The Polar Busters  
Amelia Smith  
Junior 7/8 Eng & Comp Sci  
Oakville Christian School, IND
PROJECT LISTING (Continued)

F13 Afterthoughts on Afterimages
Gabriella Moraes Rae
Junior 7/8 Health Sciences Human
Oakville Christian School, IND

F14 Is My Lizard a Leftie?
Reagan Lindsay
Junior 7/8 Life Sciences Non-Human
Oakville Christian School, IND

Molly Butler
Junior 7/8 Earth & Env Sci
Oakville Christian School, IND

F16 Elixir of Life
Jennifer Schwichtenberg
Junior 7/8 Health Sciences Human
Oakville Christian School, IND

F17 Sugar & Bacteria, Frenemies?
David Houldsworth
Junior 7/8 Life Sciences Non-Human
Oakville Christian School, IND

F18 Flying the Friendly Skies: Efficient Air Traffic Management in Canada
Aidan Britnell
Junior 7/8 Eng & Comp Sci
Oakville Christian School, IND

F19 Coke...Cleaner or Beverage?
Kaya Peros
Junior 7/8 Phys & Math Sci
Oakville Christian School, IND

F20 EyeBot
Mark Gobran
Junior 7/8 Eng & Comp Sci
Oakville Christian School, IND

F21 Left vs. Right
Dominique Greyenstein
Junior 7/8 Health Sciences Human
Oakville Christian School, IND

G01 Is Green the New Clean?
Hannah Faber
Junior 7/8 Life Sciences Non-Human
Trinity Christian School, IND

G02 Manure Matters
Justin Vos
Junior 7/8 Earth & Env Sci
Trinity Christian School, IND

G03 Wi-Tricity
Michael Wolfe
Junior 7/8 Eng & Comp Sci
Trinity Christian School, IND

G04 Do You Know Your Numbers?
Anna Masengi
Junior 7/8 Health Sciences Human
Trinity Christian School, IND
G05  LIAR LIAR!
Katelyn Weinstein
Junior 7/8 Health Sciences Human
Trinity Christian School, IND

G06  Mixed Messages
Elise Schwarz
Junior 7/8 Health Sciences Human
Trinity Christian School, IND

G07  Ice Cold Distraction
David Schenk
Junior 7/8 Health Sciences Human
Trinity Christian School, IND

G08  Filtering Estrogenic Substances from Liquid Waste at the Household Level
Maggie Williams
Intermediate 9/10 Earth & Env Sci
Ancaster High, HWDSB

G09  Optimizing a Hybrid Rocket Engine
Matthew McGuire
Senior 11/12 Eng & Comp Sci
Ancaster High, HWDSB

G10  'Think Fast!'
Kiernan Knight, Leina Burley
Junior 7/8 Health Sciences Human
Ancaster Senior, HWDSB

G11  Water Purification with Bio Waste
Christoph Fusch
Junior 7/8 Earth & Env Sci
Ancaster Senior, HWDSB

G12  How Temperature Affects A Hockey Puck
Matthew Delry, Jake Sciullo
Junior 7/8 Phys & Math Sci
Bellmoore, HWDSB

G13  Affects Of Gender On Visual Illusions
Madison Cooper, Emma Cameron
Junior 7/8 Health Sciences Human
Bellmoore, HWDSB

G14  Jello vs Fruit
Kyren MacLeod, Madison Dowdle
Junior 7/8 Phys & Math Sci
Bellmoore, HWDSB

G15  Penetration Experiment
Austin Rennie, Aidan Colleran
Junior 7/8 Phys & Math Sci
Bellmoore, HWDSB

G16  Which Water Filter Filters Water The Best?
Carter Thomson, Colin St.Aubin
Junior 7/8 Earth & Env Sci
Bellmoore, HWDSB

G17  Acid Attack
Sana Abdullah
Junior 7/8 Phys & Math Sci
Bellmoore, HWDSB

G18  How Does Sugar Effect Us?
Madeline Sadai, Alyssa Butts
Junior 7/8 Health Sciences Human
Bellmoore, HWDSB

G19  Fruit and Veggie Power
Alissa Murray
Junior 7/8 Phys & Math Sci
Bellmoore, HWDSB

G20  The Cooling Effect
Sophie McMullin, Maddy Gaspar
Junior 7/8 Earth & Env Sci
Bellmoore, HWDSB

G21  Can I Eat That Bacon
Akhshay Ahilan
Junior 7/8 Biotechnology
Dalewood, HWDSB

H01  Vaccines
Alexa Kouroukis
Junior 7/8 Health Sciences Human
Norwood Park, HWDSB

H02  Reactive Reflexes
Claire Sutherland-Case, Lauren Patiakas
Junior 7/8 Health Sciences Human
Norwood Park, HWDSB

H03  The Disney Effect
Hannah McCourtie
Junior 7/8 Health Sciences Human
Norwood Park, HWDSB

H04  You have to ‘C’ it to believe it!
Tasneem El Siddig, Zainab Saeed
Junior 7/8 Biotechnology
Hillcrest, HWDSB

H05  This doesn’t add up
Chad Moody, Nick Mancini
Junior 7/8 Earth & Env Sci
Hillcrest, HWDSB

H06  GENDERalization
Jaidia Lynch, Esther Goombs
Junior 7/8 Health Sciences Human
Hillcrest, HWDSB

H07  Disinfect To Protect
Rylee Murphy-Scott, Amanda Whelan
Junior 7/8 Life Sciences Non-Human
Hillcrest, HWDSB

H08  Germination Extermination
Abuzar Haider, Devon Mancini
Junior 7/8 Biotechnology
Hillcrest, HWDSB

H09  Alcohol & Prosthetics
Kevin Ngo, Navil Chaklader
Junior 7/8 Biotechnology
Hess Street, HWDSB

H10  Zombie Metal vs Plants : Does decayed metal affect plant growth?
Irene Ly, Christina Oeun
Junior 7/8 Earth & Env Sci
Hess Street, HWDSB

H11  E-Lemonator
Mimi Wang, Nhi Duong
Junior 7/8 Biotechnology
Hess Street, HWDSB

H12  Growing plants using liquids
Ashley Amis, Taylor Ready
Junior 7/8 Life Sciences Non-Human
Guy B. Brown, HWDSB

H13  Why can’t we find the answer to evolution?
Ashlynn Kros, Meagan Gallina
Junior 7/8 Health Sciences Human
Guy B. Brown, HWDSB

H14  Virus Molecule Tracker
Ahmed Ibrahim
Intermediate 9/10 Biotechnology
Glendale, HWDSB
PROJECT LISTING (Continued)

H15  Stay Focused: How Distractions Affect Assessment Results
Noah Pugh Martin, Tristan Richards
Junior 7/8 Phys & Math Sci
Dundas Central Public, HWDSB

H16  Mix and Match
Pamela Wang, Ruby Hye
Junior 7/8 Life Sciences Non-Human
Dalewood, HWDSB

H17  Battle of the Batteries
Timothy Lauinger, Paras Pujari
Junior 7/8 Earth & Env Sci
Dalewood, HWDSB

H18  Mnemonic Memory
Arooba Amir, Rakshita Jain
Junior 7/8 Health Sciences Human
Dalewood, HWDSB

H19  Dangers Of Cell Phone Radiation
Syed Amman Waheed
Junior 7/8 Health Sciences Human
Dalewood, HWDSB

H20  The Effect of Nutrition on Fly Behaviour
Varun Iyengar
Junior 7/8 Life Sciences Non-Human
Dalewood, HWDSB

H21  The Cooking Effect
Liam Yoell
Junior 7/8 Life Sciences Non-Human
Dalewood, HWDSB

J01  Is typoglycaemia faster to read?
Tierney Pomfret, Larissa Kouroukis
Junior 7/8 Health Sciences Human
Norwood Park, HWDSB

J02  Fruits and vegetables high in volts?
Abinaci Bahra
Junior 7/8 Phys & Math Sci
Norwood Park, HWDSB

J03  Tidal Effect
Abby Janssen, Avery Irwin
Junior 7/8 Earth & Env Sci
Norwood Park, HWDSB

J04  Restoring the Environment Using Plants
Tahsin Karim, Fardeen Rahman
Junior 7/8 Earth & Env Sci
Queen Victoria, HWDSB

J05  Can You Smell The Difference?
Sophia Wilson, Alexandra Bednarowski
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J06  Organic vs. Non-Organic Fruits and Vegetables
Grace McGuire, Amy Woodworth
Junior 7/8 Life Sciences Non-Human
Sir William Osler, HWDSB

J07  Growing Solutions
Amanda Moreton, Lauren Reeves
Junior 7/8 Life Sciences Non-Human
Sir William Osler, HWDSB

J08  Effects of Pesticides on the Brain and Relationship with Neurodegenerative Diseases
Anika Gupta
Junior 7/8 Life Sciences Non-Human
Sir William Osler, HWDSB

The Halton District School Board
would like to congratulate
all participating students in the 2015 Bay Area Science and Engineering Fair.

Best wishes for continued success!

Rich in Tradition, Progressive in Practice,
Building our Future Together

The Halton District School Board
would like to congratulate
all participating students in the 2015 Bay Area Science and Engineering Fair.

Best wishes for continued success!

Rich in Tradition, Progressive in Practice,
Building our Future Together

Halton District School Board

J.W. Singleton Education Centre • 2050 Guelph Line, PO Box 5005 • Burlington, Ontario L7R 3Z2
Phone (905) 335-3663 • (905) 842-3014 • (905) 878-8451 • Fax: (905) 335-9802
www.hdsb.ca

35
PROJECT LISTING (Continued)

J09  Does the cold affect your blood pressure?
Zoe Chisholm
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J10  Heads Not Meds
Madeline Bell, Taiya Lakhanpal
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J11  Synesthesia
Keegan Tournay
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J12  Pollution
Viv Holmes, Ria Pathak
Junior 7/8 Earth & Env Sci
Sir William Osler, HWDSB

J13  Sugar or Sweetener which is better for Diabetics
Alethea Xagoraris
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J14  Does physical activity reduce stress?
Giulia Cain, Chloe Rexdiemer
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J15  Clean Ur Car!
Emily Egan
Junior 7/8 Life Sciences Non-Human
Sir William Osler, HWDSB

J16  Solving World Hunger and Minimizing Environmental Impacts
Hayden Clarke, Mason Maleschuk
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J17  Swish: The Science of Shooting Hoops
Dylan Patrick, Josh Spooner
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J18  Goldfish: Does Color Affect Age?
Brian Feng
Junior 7/8 Life Sciences Non-Human
Sir William Osler, HWDSB

J19  Breathe
Lucas Fowler
Junior 7/8 Health Sciences Human
Sir William Osler, HWDSB

J20  A Mathematical Model: The Effects of Changing an Astronomical Object’s Size on Orbital Motion
Federico Cao
Senior 11/12 Phys & Math Sci
Westdale, HWDSB

J21  Is Diabetes Favoured by Natural Selection?
Andy Zhang, Daniel Liu
Senior 11/12 Health Sciences Human
Westdale, HWDSB

K01  Arching Ball Chain
Laura Stremble
Junior 7/8 Phys & Math Sci
St. Augustine, HWDSB

K02  Silent Music: A Novel Approach to Anxiety Reduction Using Tactile Sound
Claire Hunter
Junior 7/8 Health Sciences Human
St. Augustine, HWDSB

K03  The Impact of Cold Air on Breathing
Marcus Rilling, Evan Dalgetty
Junior 7/8 Health Sciences Human
St. Augustine, HWDSB

K04  Does Chess Make You Smarter?
Natalie Murphy, Eli Daniels
Junior 7/8 Health Sciences Human
St. Augustine, HWCD

K05  A Salty Situation
Jessica Cotter
Junior 7/8 Earth & Env Sci
St. Augustine, HWCD

K06  Multitasking: Brain Drain Or Boost In Efficiency
Hannah Maione, Emma Marcolin
Junior 7/8 Health Sciences Human
St. Augustine, HWCD

K07  Does Smell Affect Memory?
Caitlin Jenkins
Junior 7/8 Health Sciences Human
St. Augustine, HWCD

K08  Musical Instruments and Math?
Kalya Gannage
Junior 7/8 Phys & Math Sci
St. Augustine, HWCD

K09  Don’t Judge A Person By Their Cover
Katrina Webb
Junior 7/8 Health Sciences Human
St. Agnes, HWCD

K10  Does Classical Music affect Memory?
Matthew DiVittorio, Felicia DiVittorio
Junior 7/8 Health Sciences Human
St. Agnes, HWCD

K11  Is A Dam Worth It?
Nolan Babin
Junior 7/8 Earth & Env Sci
Sacred Heart of Jesus, HWCD

K12  Student Safety: Do we take it for granted?
Michelle Davies
Junior 7/8 Health Sciences Human
Regina Mundi, HWCD

K13  Green Energy From Brown Water
Aniello Lombardi, Ryan Hines
Junior 7/8 Earth & Env Sci
Regina Mundi, HWCD

K14  Are You Immune? A Study of the Frequency and Duration of URTI’s
Claudia Pashkja
Junior 7/8 Health Sciences Human
Regina Mundi, HWCD

K15  Antacid Potency
Alexandra Fram
Junior 7/8 Life Sciences Non-Human
Regina Mundi, HWCD

K16  MUSICAL MINDS
Victoria Orfei, Alyssa Wereha
Junior 7/8 Health Sciences Human
Blessed Teresa, HWCD
K17  Star Personality
Ava Magliaro
Junior 7/8 Health Sciences Human
Blessed Sacrament, HWCD

K18  The Big Picture on Myopia
Tomas Stojanovic
Junior 7/8 Health Sciences Human
Winona, HWDSB

K19  The Effects of Atmospheric CFC-11, CFC-12, CFC-113, CCl4, and SF6 on the Incident Rates of Lung and Bronchus Cancer
Moeyyad Qureshi, Tuneer Mondal
Senior 11/12 Health Sciences Human
Westmount, HWDSB

K20  Autism’s Paw-fect Therapy
Deanna Allain
Intermediate 9/10 Health Sciences Human
Westmount, HWDSB

K21  Acrylic or Ceramic?- Investigating the Properties of Calcium Phosphate Cements as Bone-Replacing Material
Samna Aziz
Senior 11/12 Eng & Comp Sci
Westmount, HWDSB

L01  Bacteria Hysteria
Dante Medeiros
Junior 7/8 Life Sciences Non-Human
St. Augustine, HWCD

L02  The Cheapest Killer
Michael Carter Tan
Junior 7/8 Health Sciences Human
St. Augustine, HWCD

L03  Is Physical Appearance Everything?
Jacquelyn Crichton, Tatum O’Connor
Junior 7/8 Phys & Math Sci
St. Augustine, HWCD

L04  Do Canines Have A Mental and Physical Effect on Humans
Kate Dolson, Holly Ott
Junior 7/8 Health Sciences Human
St. Augustine, HWCD

L05  EMF: TO BEAN OR NOT TO BEAN
Natasha Young, Emily Blondin
Junior 7/8 Earth & Env Sci
St. Augustine, HWCD

L06  What Stresses You?
Stella Oliver
Junior 7/8 Health Sciences Human
St. Augustine, HWCD

L07  Crudely Corrosive: Comparing the Effect of Light and Heavy Crude Oils on Steel Pipeline Corrosion
Jessica Bohm
Junior 7/8 Phys & Math Sci
St. Augustine, HWCD

L08  Leaky Clues: How does Reservoir Height Affect Hydroelectricity Produced By A Dam
Katelyn Scime
Junior 7/8 Eng & Comp Sci
St. Bernadette, HWCD
PROJECT LISTING (Continued)

L09  The Strength of A Magnet & How It Varies With Temperature
Sarah Middleton
Junior 7/8 Phys & Math Sci
St. Bernadette, HWCD

L10  Ultraviolet Radiation May Cause Cancer
Natalie Wilkinson
Junior 7/8 Health Sciences Human
St. David, HWCD

L11  Control Your Cholesterol
Kaitlyn Tran, Olivia Biancucci
Junior 7/8 Health Sciences Human
St. David, HWCD

L12  Pixels vs Ink
Olivia Gallant, Isabella Malatesta
Junior 7/8 Health Sciences Human
St. Eugene, HWCD

L13  Indoor plants, indeed a health booster
Rebecca Gill
Intermediate 9/10 Health Sciences Human
St. Jean de Brebeuf, HWCD

L14  Anger Management
Zachary Donovan, Sean Bergeron
Junior 7/8 Health Sciences Human
St. Joachim, HWCD

L15  Berry Fresh
Summer Slattery, Malaysia Sandhu
Junior 7/8 Biotechnology
St. Joachim, HWCD

L16  The Pill That Will
Jenna Boyd
Junior 7/8 Health Sciences Human
St. Joachim, HWCD

L17  Appealing Apples
Mark Rohac, John Tyler Luke
Junior 7/8 Earth & Env Sci
St. Joachim, HWCD

L18  Magnetic Linear Accelerator
Ryan Spadafora
Junior 7/8 Phys & Math Sci
St. Joachim, HWCD

L19  Glucose Levels
Shelby Loft
Junior 7/8 Health Sciences Human
St. Joachim, HWCD

L20  Telegraph
Trevor Stephenson
Junior 7/8 Eng & Comp Sci
St. Joachim, HWCD

L21  Eco-Friendly cleaners vs Non-Ecofriendly cleaners
Lauren Koch, Lauren Cappelli
Junior 7/8 Earth & Env Sci
St. Joachim, HWCD

M01  BIKE GENERATORS: On the road to a healthier future
Madeline Webb
Junior 7/8 Phys & Math Sci
St. Michael, HWCD

M02  The Proof is in the Plate
Matthew De Tullio
Junior 7/8 Health Sciences Human
St. Martin of Tours, HWCD

M03  Electrical Conductivity
Joseph Clinton
Junior 7/8 Phys & Math Sci
St. Marguerite d'Youville, HWCD

M04  Can Pigment Perfect Paint Help Us Be Green?
Anthony Hunt
Junior 7/8 Earth & Env Sci
St. Margaret Mary, HWCD

M05  Carbonated Explosion
Vincent Barzetti
Junior 7/8 Life Sciences Non-Human
St. Luke, HWCD

CONGRATULATIONS
To all BASEF2015 participants and
BEST WISHES
For your continued success in all your endeavours!

From the Halton Catholic District School Board
- committed to developing inquiring minds,
which will create solutions to tomorrow's challenges
M06  The Solar Oven  
Myah Anderson, Natalia Feria-Tovar  
Junior 7/8 Earth & Env Sci  
St. Joseph, HWCD

M07  The Drying Solution  
Abby MacDonald  
Junior 7/8 Health Sciences Human  
St. Joseph, HWCD

M08  Replacing Fibonacci?  
Larissa Azzopardi  
Junior 7/8 Life Sciences Non-Human  
St. Joseph, HWCD

M09  Drinklamp  
Aidan King  
Junior 7/8 Eng & Comp Sci  
St. Joseph, HWCD

M10  Smarter Than A Child-Proof Container  
Jessica Dekker  
Junior 7/8 Health Sciences Human  
St. Joseph, HWCD

M11  Child Obesity  
Alex Tran, Ethan Ramacieri  
Junior 7/8 Health Sciences Human  
St. Joseph, HWCD

M12  Yum bread  
Bridget Flatt  
Junior 7/8 Biotechnology  
St. Joseph, HWCD

M13  Storms and Natural Disasters  
Giovanni Pacini  
Junior 7/8 Earth & Env Sci  
St. Joseph, HWCD

M14  Double Dipping  
Madeleine Madronich, Autumn Paul  
Junior 7/8 Biotechnology  
St. Joseph, HWCD

M15  I’VE FALLEN AND I CAN’T GET UP  
Frank Rivas-Gonzalez  
Junior 7/8 Health Sciences Human  
St. John Paul II, HWCD

M16  Bridges and their Loads  
Gabriel Acierio, Lachlan Malpass  
Junior 7/8 Eng & Comp Sci  
St. Joachim, HWCD

M17  A Magnetic Linear Accelerator  
Adam McLean  
Junior 7/8 Eng & Comp Sci  
St. Joachim, HWCD

M18  Fun With Coil Guns  
Paul Sarabura, George Pashkja  
Junior 7/8 Phys & Math Sci  
St. Joachim, HWCD

M19  Shriveling Small or Sprout Tall  
Samantha Fraser, Tessa Marras  
Junior 7/8 Life Sciences Non-Human  
St. Joachim, HWCD

M20  Lets Protect From the Liquid Effect  
Matthew Wong  
Junior 7/8 Health Sciences Human  
St. Joachim, HWCD

M21  Shopping For Bacteria  
Emily Shea  
Junior 7/8 Life Sciences Non-Human  
St. Joachim, HWCD
PROJECT LISTING (Continued)

N14 The Invisible Air Force- Is it really possible?  
Muhammad Mahsam, Rabi Syed  
Junior 7/8 Eng & Comp Sci  
Escarpment View Public School, HDSB

N15 The sugar coating Method  
Tife Ademidun, Kayla Cameron  
Junior 7/8 Phys & Math Sci  
Escarpment View Public School, HDSB

N16 What is the most flammable material  
Hamza Aziz  
Junior 7/8 Health Sciences Human  
Escarpment View Public School, HDSB

N17 The Electrolysis of Water  
Jay Mehta  
Junior 7/8 Earth & Env Sci  
Escarpment View Public School, HDSB

N18 What does Your Appearance Say?  
Jaskeen Sagotra, Maryam Mohammed  
Junior 7/8 Phys & Math Sci  
Escarpment View Public School, HDSB

N19 Hyraulic Arm  
Xander Conway  
Junior 7/8 Phys & Math Sci  
Forest Trail Public School, HDSB

N20 Water as a combustible fuel  
Alexander Da Re  
Junior 7/8 Phys & Math Sci  
Forest Trail Public School, HDSB

N21 Mussa teeth whitening  
Teagan Baldwin  
Junior 7/8 Health Sciences Human  
John William Boich, HDSB

P01 Thermoelectric Gloves  
Sebastian Winslow, Nicholas Winslow  
Junior 7/8 Eng & Comp Sci  
Maple Grove Public School, HDSB

P02 Hidden sugars  
Theadora Pope  
Junior 7/8 Health Sciences Human  
Maple Grove Public School, HDSB

P03 Typoglycemia  
Willow Bennett, Lauren Chan  
Junior 7/8 Health Sciences Human  
Maple Grove Public School, HDSB

P04 Colour vs. Comprehension  
Sofia Dell  
Junior 7/8 Health Sciences Human  
Maple Grove Public School, HDSB

P05 The Cheerio Effect  
Cailin Mitchell, Evelyn Rothgerber  
Junior 7/8 Phys & Math Sci  
Maple Grove Public School, HDSB

P06 How Colour Affects Academic Performance  
Lexi Maharaj, Isobel Woodiwiss  
Junior 7/8 Health Sciences Human  
Maple Grove Public School, HDSB

P07 Orange Juice = 100% Vitamin C?  
Amanda He, Cynthia Chen  
Junior 7/8 Biotechnology  
Maple Grove Public School, HDSB

Congratulations to all Science Fair participants  
In the 55th Annual  
Bay Area Science & Engineering Fair

www.investinhamilton.ca

Hamilton's Economic Development Office is the central point of contact for business assistance. Its services are geared to serve new start-up companies, corporate relocations, and the expansion and retention of existing business.  
Hamilton Economic Development Office  
71 Main Street West, 7th Floor  
Hamilton, Ontario L8P 4Y5 Canada  
Phone: 905-546-4222  
Toll-free: 1-800-868-1329  
Fax: 905 546-4107  
Email: economicdevelopment@hamilton.ca
P08 Taste And Trickery
Ethan Smith
Junior 7/8 Health Sciences Human
Maple Grove Public School, HDSB

P09 Does H2O Affect Your Performance
Matthew Saunders, Christopher Merrick
Junior 7/8 Health Sciences Human
Maple Grove Public School, HDSB

P10 Wireless Electricity
Nikola Paravinja
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

P11 The Touchless Tub
Brady McBride, Jeremy Tica
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

P12 The Caffeine Affect
Milla Tesic, Rachel Wettlaufer
Junior 7/8 Health Sciences Human
John William Boich, HDSB

P13 The Rulazer
Rachael Sommerville, Kyla McNally
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

P14 The Effects of Synesthesia
Jenna Sinclair, Rachel Hogan
Junior 7/8 Health Sciences Human
John William Boich, HDSB

P15 The Drowning Detector
Alessia Huma, Emily Peetsma
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

P16 Homemade BioFuel
Abbey Kunzli
Junior 7/8 Earth & Env Sci
John William Boich, HDSB

P17 The Phone Shield
Samantha Main, Ainslie Law
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

P18 How Students React To Paradoxes
Ahmed Aiaydeh, Taranjit Saini
Junior 7/8 Health Sciences Human
John William Boich, HDSB

P19 Canadian Citizenship
Investigating the CRTC’s regulations
Sierra Jess
Junior 7/8 Health Sciences Human
John William Boich, HDSB

P20 Cool Blue May Give Us A Clue;
The Impact of Soda
Olivia McIsaac, Miranda Stanbury
Junior 7/8 Health Sciences Human
John William Boich, HDSB

P21 ECMS (emergency calcification monitoring system)
Ameera Sheikh, Madison Langley
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

Q01 LD Wheelchair Master 1.2
Lauren Sparling, Dillen Oliver
Junior 7/8 Eng & Comp Sci
Maple Grove Public School, HDSB

Q02 The Oil Eater
Brooke Westwater, Ainsley Morrison
Junior 7/8 Eng & Comp Sci
Maple Grove Public School, HDSB

Q03 Snow Tires Vs. Four Season Tires
Noah Westwater
Junior 7/8 Phys & Math Sci
Maple Grove Public School, HDSB

Q04 A Frozen Project
Antoine Vilain, Ethan Kuyper
Junior 7/8 Phys & Math Sci
Maple Grove Public School, HDSB

Q05 Memory Dash
Sophie Barbato, Elizabeth Raynor
Junior 7/8 Health Sciences Human
Rolling Meadows Public School, HDSB

Q06 Exposition of Mathematical Probabilities in Philosophical Science
Omar Hadi
Junior 7/8 Phys & Math Sci
Sir Ernest Macmillan Public School, HDSB

Q07 The World in the Perspective of a Synesthete
Gurleen Brar, Leena Mahmood
Junior 7/8 Health Sciences Human
Sir Ernest Macmillan Public School, HDSB

Q08 Changing the colour of Fire
Slader Moon
Junior 7/8 Phys & Math Sci
Sunningdale Public School, HDSB

Q09 The Future Of Thorium
Eric Génier, Jack McBain
Junior 7/8 Phys & Math Sci
Sunningdale Public School, HDSB

Q10 Mood, environment and perception
Mina Sehri, Kendra Hill
Junior 7/8 Health Sciences Human
W. H. Morden Public School, HDSB

Q11 Music, Friend or Foe?
Brendan Wimsatt
Junior 7/8 Health Sciences Human
W. H. Morden Public School, HDSB

Q12 I 'Suggest' You Look Closely
Onjoli Krywiak
Junior 7/8 Health Sciences Human
W. H. Morden Public School, HDSB

Q13 'Wi' Worry?
Sam Hollinrake
Junior 7/8 Life Sciences Non-Human
W. H. Morden Public School, HDSB

Q14 Avenging the Primula Plants
Davis Rutledge, Thomas Brecken
Junior 7/8 Earth & Env Sci
W. H. Morden Public School, HDSB

Q15 Are Adults or Children More Affected by the Power of Suggestion
Kaitlin Vickramasinghe, Eleni Piliouras
Junior 7/8 Health Sciences Human
W. H. Morden Public School, HDSB

Q16 Fishy Colors, How Betta Fish React to Different Environments
Andrei Adam
Junior 7/8 Life Sciences Non-Human
W. H. Morden Public School, HDSB
R03 Effects of triclosan on microorganisms
Erik Sauer
Senior 11/12 Earth & Env Sci
École secondaire Georges-P.-Vanier, CSV

R04 Age is but a number...or is it?
Yash Bhamare, Noah Kunej
Senior 11/12 Life Sciences Non-Human
North Park Collegiate and Vocational School, GEDSB

R05 Wave Blockers
Chelsea Warner, Nicole Brown
Junior 7/8 Eng & Comp Sci
Fairview Avenue Public School, GEDSB

R06 The True Cost To Society: Organic V.S. Non Organic
Noah Wirasinghe, Rachel Bruce
Junior 7/8 Biotechnology
St. Bernadette, HCDSB

R07 Gluten Vs. Gluten Free...Which Is Better?
Karen Hopkins, Kayla Corry
Junior 7/8 Health Sciences Human
St. Bernadette, HCDSB

R08 Personality Differences Between Dog People and Cat People
Silvia Guerrero, Valeria Baldeon
Junior 7/8 Health Sciences Human
St. Bernadette, HCDSB

R09 The Dissapearing Egg Shell
Laura Taraso, Vanessa Scarcelli
Junior 7/8 Life Sciences Non-Human
St. Bernadette, HCDSB

R10 How much sugar is in the foods we eat
Kendra Meikle, Trinidad Baigorria
Junior 7/8 Health Sciences Human
St. Bernadette, HCDSB

R11 The Teenage Brain
Rianna Furtado, Sophia Lavalle
Junior 7/8 Health Sciences Human
St. Bernadette, HCDSB

R12 Different particles found in water
Charlotte Toste, Emily Laing
Junior 7/8 Earth & Env Sci
St. Bernadette, HCDSB

R13 Riding on Air
Adrian Novakov, Felipe Moreno
Junior 7/8 Eng & Comp Sci
St. Bernadette, HCDSB

R14 Coffee, Tea and Sodas That Stain Teeth
Meagan Fernandes
Junior 7/8 Health Sciences Human
St. Bernadette, HCDSB

R15 Harnessing Clean Energy
Alexandra Rudic, Mia Eisenkoelbl
Junior 7/8 Health Sciences Human
St. Bernadette, HCDSB

R16 Under Water Volcano
Zahir Anderson
Junior 7/8 Earth & Env Sci
St. Bernadette, HCDSB

R17 External Heat transfer for Refrigerator Units to Improve Energy Efficiency and Reduce Costs in the Home
Cecelia Dietrich
Junior 7/8 Eng & Comp Sci
St. Andrew, HCDSB

R18 Glycoprotein Inhibitors to Fight HIV
Andy Xie
Intermediate 9/10 Biotechnology
White Oaks School, HDSB
R19  Negative Temperatures - Positive Power: An Application of the Seebeck Effect to Combat Residential Heat Loss
Abirami Sudharshan
Intermediate 9/10 Eng & Comp Sci
White Oaks School, HDSB

R20  Coiled Attraction
Maya Senthilkumaran
Junior 7/8 Eng & Comp Sci
W. H. Morden Public School, HDSB

R21  Morden Marshmallow Test
Ria Gambhir, Zachary Harding
Junior 7/8 Health Sciences Human
W. H. Morden Public School, HDSB

S01  Microwave Assisted Extraction of Polyphenols from Cocoa Powder
Aaron Gomes
Senior 11/12 Health Sciences Human
King's Christian Collegiate, IND

S02  Appoholics
Ben Korol
Junior 7/8 Health Sciences Human
Trinity Christian School, IND

S03  Egg Incubator
Molly O'sullivan, Jade Wicklund
Junior 7/8 Biotechnology
Guy B. Brown, HWDSB

S04  Are we eating our lunch or is our lunch eating us?
Tabassum Bakht, Shadia Nargis
Junior 7/8 Health Sciences Human
Hess Street, HWDSB

S05  Drug Solubility: How the delivery method of a drug changes how long it takes to get to the bloodstream
Habeba Ahmed
Junior 7/8 Health Sciences Human
Hess Street, HWDSB

S06  Musical Stairs
Amelia Silliker, Kendall Falconer
Junior 7/8 Health Sciences Human
Norwood Park, HWDSB

S07  Hand-Crank Powered Wheelchair
Ewen Cameron
Junior 7/8 Eng & Comp Sci
Spencer Valley, HWDSB

S08  Membrane-Based Medicine: Quantifying Cortisone Interactions through X-Ray Diffraction
Adree Khondker
Senior 11/12 Health Sciences Human
Westdale, HWDSB

S09  Investigating the variability of the non-thermal degradation of polystyrene in response to saturated forms of magnesium
Yajur Iyengar, Taehyoan (David) Won
Senior 11/12 Earth & Env Sci
Westdale, HWDSB

S10  Optimization and Construction of a 3D Printer
Colin Daly
Senior 11/12 Eng & Comp Sci
Cathedral, HWCD

S11  An Oxy-Hydrogen Powered Aircraft
Seth Stefanchuk, Marshall Stefanchuk
Junior 7/8 Phys & Math Sci
St. Mary, HWCD

S12  Smoking and Cancer: The Genetic Link
Luca Ramelli
Junior 7/8 Health Sciences Human
St. David, HWCD

S13  Solar Panels
Jacob Madalena, Josh Brooks
Junior 7/8 Eng & Comp Sci
St. Joachim, HWCD

S14  Suck It Up Buttercup: The Power Of Syphoning
David Boccalon
Junior 7/8 Phys & Math Sci
St. Luke, HWCD

S15  Bacteria on a Toilet Seat vs. Coins
Steven Kottaras, Michael Iantomasi
Junior 7/8 Life Sciences Non-Human
St. Marguerite d'Youville, HWCD

S16  The Pharmacological Potential of Apigenin and Diosmetin as a Novel Treatment for Chronic Lymphedema
Catharine Bowman
Senior 11/12 Health Sciences Human
St. Mary, HWCD
<table>
<thead>
<tr>
<th>Project ID</th>
<th>Title</th>
<th>Authors</th>
<th>School/Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>S17</td>
<td>Signal Shirt</td>
<td>Jason Clapiz</td>
<td>St. Michael, HWCD</td>
</tr>
<tr>
<td>S18</td>
<td>Our Signing Relative</td>
<td>Sarah Brown, Tuba Khan</td>
<td>Junior 7/8 Life Sciences Non-Human Escarpment View Public School, HDSB</td>
</tr>
<tr>
<td>S19</td>
<td>The Green Bin Of The Future</td>
<td>Zainab Raja, Beulah Osoba</td>
<td>Junior 7/8 Eng &amp; Comp Sci Escarpment View Public School, HDSB</td>
</tr>
<tr>
<td>S21</td>
<td>Plants &amp; Pollutants</td>
<td>Zia Baig, Steven Hua</td>
<td>Junior 7/8 Earth &amp; Env Sci Escarpment View Public School, HDSB</td>
</tr>
<tr>
<td>S22</td>
<td>The Scoop on Stroop</td>
<td>Henry Greenberg</td>
<td>Junior 7/8 Health Sciences Human Forest Trail Public School, HDSB</td>
</tr>
<tr>
<td>S23</td>
<td>Moving Objects with Bernoulli’s Principle</td>
<td>Darren Sun</td>
<td>Junior 7/8 Phys &amp; Math Sci Forest Trail Public School, HDSB</td>
</tr>
<tr>
<td>S24</td>
<td>Stranger Danger; Teaching Kids not to Trust Strangers</td>
<td>Juan Klahr, Murdoch Irwin</td>
<td>Junior 7/8 Eng &amp; Comp Sci John William Boich, HDSB</td>
</tr>
<tr>
<td>T01</td>
<td>Complex Harmonic Motion as a Means for Pseudorandom Number Generation</td>
<td>Joel Ruhland</td>
<td>North Park Collegiate and Vocational School, GEDSB</td>
</tr>
<tr>
<td>T02</td>
<td>The Push and Drink</td>
<td>Jackson Buggeln, Will Radix</td>
<td>Junior 7/8 Eng &amp; Comp Sci Caledonia Centennial Public School, GEDSB</td>
</tr>
<tr>
<td>T03</td>
<td>Is technology good or bad</td>
<td>Cyprien Petiteville, David Zanguna</td>
<td>Junior 7/8 Eng &amp; Comp Sci St. Bernadette, HCDSB</td>
</tr>
<tr>
<td>T04</td>
<td>How Powerful is Air?</td>
<td>Aaron Spence, Matthew Spence</td>
<td>Junior 7/8 Phys &amp; Math Sci St. Bernadette, HCDSB</td>
</tr>
<tr>
<td>T06</td>
<td>Nasty burgers</td>
<td>Emily DiDanieli, Laura Johnson</td>
<td>Junior 7/8 Health Sciences Human St. Bernadette, HCDSB</td>
</tr>
<tr>
<td>T07</td>
<td>EMMA: ElectroMyographically Manipulated Arm - The Future of Prosthetics</td>
<td>Katie Brent</td>
<td>Senior 11/12 Eng &amp; Comp Sci Notre Dame, HCDSB</td>
</tr>
<tr>
<td>T08</td>
<td>A Novel Investigation In Reducing Tanker Car Incident / Accident Using Engineered Technologies</td>
<td>Jack Mogus</td>
<td>Intermediate 9/10 Eng &amp; Comp Sci White Oaks School, HDSB</td>
</tr>
<tr>
<td>T09</td>
<td>Quantifying and comparing the effects of islet transplantation, mesenchymal, embryonic and induced pluripotent stem cell</td>
<td>Afif Bhimani, Randi Mao</td>
<td>Senior 11/12 Health Sciences Human White Oaks School, HDSB</td>
</tr>
<tr>
<td>T11</td>
<td>Fibre Reinforced Concrete (FRC), The Future of Structural Engineering</td>
<td>Hosam Sennah</td>
<td>Senior 11/12 Eng &amp; Comp Sci White Oaks School, HDSB</td>
</tr>
<tr>
<td>T12</td>
<td>How can robotics improve prosthetics?</td>
<td>Ayush Sahi, Aidan Lehal</td>
<td>Junior 7/8 Health Sciences Human W. H. Morden Public School, HDSB</td>
</tr>
<tr>
<td>T14</td>
<td>Galactic Gold Rush</td>
<td>Devaun Dhillon, Jared Denys-Varghese</td>
<td>Junior 7/8 Phys &amp; Math Sci Sunningdale Public School, HDSB</td>
</tr>
<tr>
<td>T15</td>
<td>3D printing: the future of biomedical engineering</td>
<td>Ryan Spence</td>
<td>Senior 7/8 Health Sciences Human W. H. Morden Public School, HDSB</td>
</tr>
<tr>
<td>T16</td>
<td>Turn it Off?</td>
<td>Ramindu Gunasekara, Sam Bisutti</td>
<td>Junior 7/8 Health Sciences Human Sir Ernest Macmillan Public School, HDSB</td>
</tr>
<tr>
<td>T17</td>
<td>Technology: Erasing Our Humanity?</td>
<td>Linna Luo, Hayley Naylor</td>
<td>Senior 7/8 Health Sciences Human Sir Ernest Macmillan Public School, HDSB</td>
</tr>
<tr>
<td>T19</td>
<td>How to shoot the perfect basketball shot?</td>
<td>Amritpal Kallah, Sam Tcherner</td>
<td>Junior 7/8 Phys &amp; Math Sci Sir Ernest Macmillan Public School, HDSB</td>
</tr>
</tbody>
</table>
T20  EyeLight: Leading Enlightened Drivers
Monica Mahut
Junior 7/8 Eng & Comp Sci
Rolling Meadows Public School, HDSB

T21  Walking In Circles
Charlie Finerty, Jack Peros
Junior 7/8 Health Sciences Human
Maple Grove Public School, HDSB

T22  uFind
Maxwell Boulanger, Riley Crawford
Junior 7/8 Eng & Comp Sci
Maple Grove Public School, HDSB

T23  How Does Weather Affect Your Mood?
Amelia Orzechowski, Hiva Askari
Junior 7/8 Health Sciences Human
Maple Grove Public School, HDSB

T24  Taking the Flyway
Caroline Mahut
Intermediate 9/10 Eng & Comp Sci
M. M. Robinson High School, HDSB

T25  The Water Saver
Sneha Rakulann, Hailey Gould
Junior 7/8 Eng & Comp Sci
John William Boich, HDSB

Thanks to our sponsors we're going places!
National & International Science Fair Competitors

The BASEF Students and Volunteers gratefully acknowledge the support of all of our sponsors
SPECIAL AWARDS – 2014

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

ArcelorMittal Dofasco Awards

Chemical Testing Award
Prize: $100
Criteria: Use of chemical testing and/or chemical principles to solve a technical problem

Commercial Department Award
Prize: $100
Criteria: Commercial and business planning tools in developing a potentially new or improved commercial product.

Engineering & Maintenance Technology Award
Prize: $100
Criteria: Engineering & Maintenance Technology principles and design to solve a technical problem.

Environmental Award
Prize: $100
Criteria: Physics, chemistry, or engineering to explore or solve a technical problem associated with environmental issues.

Hot Mill Award
Prize: $100
Criteria: Creative principles and design to solve a manufacturing or process problem.

Human Resources Training and Development
Prize: $100
Criteria: Teaching and training techniques in explaining or exploring a technical problem.

Information Systems Award
Prize: $100
Criteria: Information Systems and design to solve a technical problem.

Ironmaking Award
Prize: $100
Criteria: Project that best displays the use of Metallurgical or Material Science principles to solve a technical problem.

Material Handling & Logistics Department Award
Prize: $100
Criteria: 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: Scientific principles in exploring or solving a problem related to human health issues.

Process Automation Award
Prize: $100
Criteria: Project best displaying the use of Process Automation principles and design to solve a technical problem.

Product Development Business Process Award
Prize: $100
Criteria: Product Development principles and design in developing a new consumer product with commercial potential.

Product Research & Automotive Applications Award
Prize: $100
Criteria: Project that best displays the innovative application of materials, products, processes or design principles.

Quality Systems Award
Prize: $100
Criteria: Quality Systems principles and design to solve a technical problem.
SPECIAL AWARDS (Continued)

ArcelorMittal Dofasco Awards (continued)

Research and Development Award
Prize: $100
Criteria: Project that best displays investigative research & scientific principles to explore or solve a technical problem.

Steelmaking Award
Prize: $100
Criteria: Engineering and Materials Science principles to solve a technical problem.

Artistically Inspired Display Awards
Prize: Two cash awards of $50 each
Criteria: To the most artistically inspired display

Association for Iron & Steel Technology Northern Chapter Awards
Prize: Two cash 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 cash awards of $100 each
Criteria: Outstanding projects related to mining, metallurgy, and petroleum, any level

Canadian Nuclear Society (Golden Horseshoe Branch) Awards
Prize: Two cash awards at the intermediate or senior levels for $125 each and two at the junior level for $75 each.
Criteria: Projects relating to nuclear science and engineering, energy research or climate sciences

Best Wishes to all BASEF 2015 Participants

Proudly outfitting TEAM BASEF at the
Canada Wide Science Fair and the Intel International Science & Engineering Fair
SPECIAL AWARDS (Continued)

Cancer Assistance Program Awards
Prize: Two cash awards of $100 each
Criteria: Outstanding projects on topics related to cancer prevention.

Chemical Institute of Canada, Hamilton Section Awards
Prize: Three cash awards of $100 each
Criteria: Projects relating to chemistry, chemical engineering and chemical technology

Conservation Halton Awards
Prize: Two cash awards of $100 each
Criteria: Top two science projects that contribute to environmental research, protection, conservation, restoration or awareness by Halton students.

Dillon Consulting Limited Awards
Science and Engineering Award
Prize: $250
Criteria: Project showing excellence in Science and/or Engineering

Biological Sciences Award
Prize: $250
Criteria: Project showing excellence in Biological Science

Doris Casey Disability Solutions Award
Prize: $100
Criteria: Most innovative and creative technical solution focused on assisting individuals to overcome or compensate for physical or cognitive disabilities

Dr. Laura Blew Social Sciences Awards
Prize: Two prizes of $50 each
Criteria: Best 2 Social Science based projects

Dr. Colin J.L. Lock Memorial Chemistry Award
Prize: $100
Criteria: The project demonstrating the best application of chemistry

Dr. M. Doyle Award
Prize: A $200 cash award, 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

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.

Environment Hamilton Award
Prize: $55
Criteria: Most creative, ambitious, or well thought-out project that addresses environmental issues impacting the Greater Hamilton region.

Farncombe Family Digestive Health Research Awards
Prize: Two awards of $250 each
Criteria: Projects that explore digestive health, related diseases or general family nutrition through experimentation or in depth literature.
SPECIAL AWARDS (Continued)

Gowlings Innovation Award
Prize: $250
Criteria: Best project exploiting multiple areas of intellectual property protection, namely trademarks, patents, industrial design and copyright. The prize includes a complimentary consultation with a patent or trademark agent at the Gowlings Hamilton office.

Hamilton Academy of Dentistry Awards
Prize: Two awards of $100 each
Criteria: 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

Hamilton Amateur Astronomers Award honouring James A. Winger
Prize: $200
Criteria: Best project in demonstrating an understanding of a topic related to astronomy or physics.

Hamilton Association for the Advancement of Literature, Science & the Arts da Vinci Award
Prize: $250
Criteria: The candidate who best combines personal initiative with the scientific method.

Hamilton Chamber of Commerce Innovation Awards
Prize: 1st $250, 2nd $150, 3rd $100
Criteria: Awarded to the most deserving projects with potential commercial applications for students from Hamilton focused on improving our local environment, communities or quality of life.

Isabella O’Brien from St. Augustine Catholic Elementary School has been selected by Youth Science Canada to be the Team Canada delegate at the Broadcom MASTERS International to be held in May 2015 in Pittsburgh. One middle school science fair project from each of 13 countries is selected to participate in this program based on excellence in science, technology, engineering and math (STEM) and leadership potential. [https://student.societyforscience.org/broadcom-masters-international](https://student.societyforscience.org/broadcom-masters-international)

Delegates win an all-expense paid trip to participate in the Broadcom MASTERS International program. In addition they are official observers at the Intel International Science and Engineering Fair (ISEF), the largest high school science fair competition in the world, which is happening in Pittsburgh at the same time.

Isabella will be presenting her project “Trouble in Paradise: Can shell recycling buffer the effects of Ocean Acidification?” The project responds to the serious problem of high CO2 levels reducing pH levels in the ocean, which threatens the viability of corals and shelled sea life. Isabella wondered if waste from the seafood industry such as mussel, oyster and clam shells could be recycled back into the ocean to boost pH levels and reduce the deterioration in shell mass and coral decay. Her experiments on mollusk shells demonstrated that using recycled shell waste in powdered form did boost pH levels and also decreased the rate of shell degradation, thus mitigating the effects of ocean acidification.

In 2014, Isabella presented her project at the St. Augustine science fair, then the Hamilton Wentworth Catholic District School Board fair and finally the Bay Area Science and Engineering Fair (BASEF) where she was selected to represent BASEF, along with 15 other students at the Canada Wide Science Fair. She won a gold medal and the Junior Environmental challenge award at the Canada-Wide Science Fair in May 2014.
SPECIAL AWARDS (Continued)

Hamilton Wentworth Occasional Teacher Local Awards

Environment and Education Award
Prize: $50
Criteria: Junior project which most effectively educates others about an environmental issue.

Healthy Lifestyles Award
Prize: $50
Criteria: Junior project which 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 which demonstrates a high level of visual appeal, creativity, and overall quality of presentation.

Katie Brent, 16, of Oakville is a grade 11 student at Notre Dame Catholic Secondary School in Burlington, and has followed her passion for science at the Fair since 2011.

Last year, Katie’s computer science and engineering-focused project, “Telemetric Vest: Wearable Computing for Patient Welfare”, garnered six Special Awards in addition to a Gold Merit Award and a place on Team BASEF. Her project featured the application of wearable computing to medical and long-term care environments.

Last May she travelled to Windsor to compete at the Canada Wide Science Fair. At the national level, she was the recipient of a Bronze Merit medal and a scholarship to the University of Western Ontario. She also was one of three students chosen to represent Canada at the National Youth Science Forum (NYSF), which is held annually at the Australian National University in Canberra.

The NYSF is an intensive two-week science, technology and engineering oriented program for both Australian and international students interested in pursuing a career in the industry. The program is a prestigious one, receiving over 1 200 applicants annually, and accepting 250. International students hail from Canada, New Zealand, Germany, Brazil, Fiji, and South Africa.

Katie attended the Forum in January. She was a member of the chemistry focused interest group, “Curie”, and participated in lab visits, lectures, and debates. Highlights included a mock senate inquiry and attending the question period at the Australian Parliament House, and video conferencing with a scientist from The European Organization for Nuclear Research (CERN). They also visited NASA’s Canberra Deep Space Communication Complex.

Katie hopes that BASEF will continue to grow and attract scientific-minded students so that they might have the same life-changing opportunities she has had.
SPECIAL AWARDS (Continued)

Hillfield Strathallan College Awards of Excellence

**Biological Sciences**
Prize: $100
Criteria: Intermediate project that best displays excellence in sampling design in a biological science project.

**Environmental Sciences**
Prize: $100
Criteria: Junior or intermediate project that best displays innovation in identifying an environmental problem.

**Design and Engineering**
Prize: $100
Criteria: Senior level project that best displays innovation in identifying an ergonomic design problem.

Horizon Utilities Corporation Awards
Prize: Three awards of $300 each
Criteria: Projects that best demonstrate the production of electrical energy from "green sources", or new, viable approaches to using electrical energy more efficiently.

Indigenous Peoples of Canada Scientific Study Awards
Prize: 1st: $140; 2nd $80; 3rd $80
Criteria: For 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 Award
Prize: $100
Criteria: Best use of electronics in a science or engineering project, any level
SPECIAL AWARDS (Continued)

International Science & Engineering Affiliated Fair Awards for regional science fairs affiliated with the Intel International Science & Engineering Fair

Prize: certificates
Criteria: deserving intermediate and senior projects related to topics of interest to the following organizations:
- American Meteorological Society
- Creative scientific endeavour in the areas of atmospheric and related oceanic and hydrologic sciences
- American Psychological Association
- Outstanding research in psychological science in the category of behavioural and social sciences.
- ASM Materials Education Foundation
- Project demonstrating either the use of materials related concepts or a demonstration of some aspect of the materials paradigm.
- Association for Women Geoscientists
- Project done by a female exemplifying a high standard of innovativeness and scientific excellence in the geosciences
- ASU Walton Sustainability Solutions Initiative
- Project which seeks innovative solutions to society's most challenging problems, and conveys intent to solve a complex problem that involves social justice, environmental and economic prosperity.
- Intel Excellence in Computer Science
- Additional Award: $200USD
- Top winner in Computer Science category
- MU Alpha Theta
- Most challenging, original, thorough and creative investigation of a problem involving mathematics
- Ricoh Americas Corporation
- Project that addresses issues of environmental responsibility with sustainable development. The project must include know-how, procedures, goods and/or services, equipment and organizational/managerial process. The project must also protect the environment and conserve resources, prevent pollution and use all resources in a more sustainable manner.
- Society for In Vitro Biology
- Grade 11 project exhibiting in the areas of plant or animal in vitro biology or tissue culture
- Yale Science & Engineering Association
- Most outstanding Grade 11 project 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.

BASEF Alumnus, Ben Gulak, recipient of the first annual CWSF Alumni Award. 2013
Laurentian Chapter of SETAC Award
Prize: $200
Criteria: Best project and presentation on a topic related to environmental toxicology, chemistry, pollution, contamination, remediation or environmental protection.

McMaster University LEAP Award of Innovation
Prize: Registration to the 2015 LEAP Summer Program valued at $650
Criteria: Intermediate or Senior project by a female participant that demonstrates creativity and originality.

McMaster University Venture Engineering Science Award of Innovation
Prize: Registration to the Engineering & Science Stream of the 2015 Venture Camp valued at $230
Criteria: Junior project that demonstrates creativity and originality.

McMaster University Department of Chemistry and Chemical Biology Award
Prize: $100
Criteria: An outstanding senior or intermediate project connected to chemistry or chemical biology.
SPECIAL AWARDS (Continued)

McMaster University Engineering Society Awards
Prize: Two awards of $200 each
Criteria: Best Engineering Projects, one junior and one at any level, demonstrating excellent understanding of engineering and its applications

Mechanical Contractors Association of Hamilton Award
Prize: $250
Criteria: Best intermediate or senior engineering project.

M.G.DeGroote Institute for Infectious Disease Research Internship Awards
Prize: A 6-week paid summer internship as a research assistant in a laboratory at the M.G. DeGroote IIDR at McMaster University, valued at $2,000. Two runner-ups will be identified and given a certificate.
Criteria: Best senior student project in infectious disease, drug discovery or human health.

Mohawk College Building & Construction Sciences Awards
Civil Engineering
Prize: $50
Criteria: Project related to the field of Civil Engineering

Transportation
Prize: $50
Criteria: Project related to planning, design, or operation of any transportation mode or facility

Building Sciences
Prize: $50
Criteria: Project related to building sciences, building materials, or energy conservation in structures

Mohawk College Computer Science & Information Technology Computer Excellence Award
Prize: $50
Criteria: A project which demonstrates a thorough understanding of computer application and design in today's world.

Mohawk College Electrotechnology Department Engineering Technology Awards
Prize: Two awards of $50 each
Criteria: Deserving projects in engineering studies, one at the junior level and one at the intermediate level.

Mohawk College Mathematics Awards
Prize: Two awards of $50 each
Criteria: Deserving projects in the category of mathematics or statistics, one at the junior level and one at the senior level.

Nelson Steel Awards
Prize: Two awards of $50 each
Criteria: Outstanding projects at the junior level related to two of the following fields: Steel, Environmental or Chemistry

New Scientist Awards
Prize: Four awards of $50 each
Criteria: Projects that demonstrate a good understanding of the scientific method by a first time entrant in BASEF.

Nikola Tesla Innovation Award
Prize: $100
Criteria: Project which best displays the most innovative application of the body of knowledge associated with Nikola Tesla's work, and/or acknowledgment of Nikola Tesla's contribution by way of his work and inventions in the display.
SPECIAL AWARDS (Continued)

Primary Fluid Systems Awards
  **Junior or Intermediate Earth and Environment Awards**
  Prize: Two cash awards each of: $125, $75, $50
  Criteria: Deserving projects in junior or intermediate earth & environment

**Junior or Intermediate Engineering Awards**
Prize: Two cash awards each of $250, $150, $100
Criteria: Deserving projects in junior or intermediate engineering.

**Junior or Intermediate Physical Sciences Awards**
Prize: Two cash awards each of $125, $75, $50
Criteria: Deserving projects in physical science.

Procor Engineering Awards
Prize: Junior: $50, Intermediate: $100, Senior: $150
Criteria: Excellent engineering projects

Professional Engineers of Ontario Hamilton-Burlington Chapter Awards
Prize: 1st: $250, 2nd: $150, 3rd: $100
Criteria: Deserving, exceptional, outstanding projects in Engineering at any level.

Professional Engineers Ontario Oakville Chapter Awards
Prize: Three awards of $100 each
Criteria: Deserving engineering projects

Some of the projects presented at BASEF2014
Scenes from Canada Wide Science Fair 2014

Scenes from the Intel International Science & Engineering Fair 2014
SPECIAL AWARDS (Continued)

Rotary Club of Hamilton-East Wentworth Awards
Prize: 1st: $250, 2nd $150, 3rd $100  
Criteria: Best projects from schools situated in the Hamilton core as determined by the judge

Royal Botanical Gardens Award
Prize: $100 gift certificate from RBG shop plus 1 year RBG Family Membership  
Criteria: Best project in botanical or environmental sciences

SPIE International Society for Optics & Photonics Science Fair Awards
Prize: 1st: $250USD, 2nd: $150USD, 3rd: $100USD, to be requested by winners after the fair  
Criteria: Projects in optics or photonics where students best apply optics or photonics technology, techniques or principles.

The Research Institute at St. Joes Hamilton, Health Research Award
Prize: One cash award of $100 at the intermediate or senior level, and one 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 communicates the results of their project through an effective visual display.

Hamilton Amateur Astronomers
Canada’s largest independent astronomy club
Meetings second Friday monthly, 7:30 p.m. Spectator, 44 Frid St.
Free intro astronomy course
Observing, outings & workshops
Events, outreach & newsletter
Open to everyone
www.amateurastronomy.org
info@amateurastronomy.org
The BASEF 500 AWARDS

Eighteen projects* will win a $500 prize.
The "BASEF 500 Awards" are funded by a generous donor who wants to generate interest and encourage participation in the Fair.
The awards, based on merit judging marks, will be awarded to the top 18 projects that win $200 or less in other cash prizes.
* The winners must be first time recipients of these $500 awards. Award will be split between the partners.

Two schools will each win a $250 New School Award.
Funded by the same donor, the teachers from the two new** schools with the best project scores will win these awards for use in their classroom.
** schools that have not had projects in BASEF for at least 5 years
SCHOLARSHIPS

Judged and Awarded by Special Award Donors

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 2015-16 academic year. (Will be awarded to both students in a team project – maximum $10,000 value).
Criteria: The best project demonstrating excellence in scientific learning with joy and purpose

McMaster University Faculties of Science & Engineering Entrance Awards
Prize: Five $500 entrance awards, to be redeemed upon acceptance of admission to either of the Faculties of Science or Engineering. (Joint student winners will split the award).
Criteria: Projects demonstrating excellence in Science or Engineering research.

McMaster University Women in Engineering Entrance Awards
Prize: Two $500 entrance awards, to be redeemed upon acceptance of admission to Engineering I or Engineering I Co-op. (Joint student winners will split the award).
Criteria: Projects led by female students that demonstrate excellence in health sciences, science or engineering.

University of Ottawa Entrance Scholarship
Prize: $1,000 entrance scholarship applied to tuition fees upon being accepted into and registration in an undergraduate program in the Faculties of Engineering, Science or Health Sciences at the University of Ottawa. (Joint student winners will split the award).
Criteria: The most deserving Senior project.

Awarded to all projects earning Gold, Silver or Bronze Merit Award Winners

Mohawk College and Sheridan College – Award of Excellence Tuition Scholarship

Mohawk College and Sheridan College will provide a $500 scholarship to ALL BASEF 2015 Merit Award (Gold, Silver, Bronze) winners. The scholarship may be used toward first year tuition upon the recipients' acceptance and registration in any full-time program at either Mohawk College or Sheridan College. If multiple scholarships are accumulated over more than one year, only one of these scholarships may be used.
Proud sponsor of BASEF and the 2015 Merit Awards

“Opportunity is missed by most people because it is dressed in overalls and looks like work”

Thomas A. Edison

Primary Fluid Systems Inc.
Burlington, Ontario
www.primaryfluids.com
MERIT AWARDS

Sponsored by Primary Fluid Systems

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 150 independent judging volunteers who have come forward from educational institutions, local government organizations, business and industry in our regions. All participants in the Bay Area Science and Engineering Fair are eligible to win Merit Awards.

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

For Junior, Intermediate, Senior levels in:

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

Scoring:

- over 90% & ranking in top 7.5% of category: earns Gold medal & cash award
- over 80% & next 10% of category: earns Silver medal & cash award
- over 75% & next 12.5% of category: earns Bronze medal & cash award
We are honoured to support the 55th Annual Bay Area Science and Engineering Fair

We applaud the achievements of all BASEF 2015 participants as future innovators, entrepreneurs and leaders of tomorrow!

McMaster University has gained an international reputation for the innovative educational programming offered by each of its six faculties.

Undergraduate teaching is conducted through the DeGroote School of Business, the Faculties of Engineering, Health Sciences, Humanities, Science, and Social Sciences, and the distinctive Arts & Science program.

future.mcmaster.ca
GRAND PRIZE AWARDS

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

ARCELORMITTAL DOFASCO 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.

DRS. RANJAN SUR AND MONALISA SUR AWARD

Best Intermediate or Senior level project at the fair, a plaque to the winner’s school.

ROY MIDDLETON MEMORIAL AWARD

Best Junior Level Project at the fair, a plaque to the winner’s school.

HERB GILDEA MEMORIAL TROPHY

A 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.

BASEF COMMITTEE TROPHY

A trophy is awarded to the elementary school accumulating the most points. Points are earned from the number projects entered from the Junior level of each school and those projects earning Gold, Silver and Bronze Merit Awards.
GRAND PRIZE TRIP AWARDS

INTEL INTERNATIONAL SCIENCE & ENGINEERING FAIR TRIP AWARDS

Advancement to the 2015 Intel International Science & Engineering Fair, to be held in Pittsburgh, Pennsylvania from May 10 to 15, 2015. All trip expenses paid.

Up to 3 projects will be chosen from excellent exhibits at the secondary school (Intermediate & Senior) level.

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

Sponsored by

CANADA WIDE SCIENCE FAIR TRIP AWARDS

Advancement to the 2015 Canada Wide Science Fair (all trip expenses paid), to be held in Fredericton, New Brunswick from May 9 to May 16, 2015.

Up to 16 students who have presented excellent projects will be chosen (dependent on funding levels).

All projects entered in BASEF 2015 are eligible.

Sponsors are

- City of Hamilton, Economic Development Department
- Halton Catholic District School Board
- Halton District School Board
- Hamilton-Wentworth Catholic District School Board
- Hamilton-Wentworth District School Board
- Hillfield Strathallan College
- John Deere Canada ULC
- McMaster Innovation Park
- Masters Insurance (Hamilton)
PREPARE FOR THE ADVENTURE OF YOUR LIFE

mohawkcollege.ca
You don’t know what the vehicle of tomorrow will look like. But it will always be made with steel.

Higher energy absorption capacity
Better fuel economy
Superior formability
Ideal balance in weight, cost and safety
Corrosion resistance
Improved strength and toughness
Infinitely recyclable

Lower CO₂ emissions

Steel: driven by design

We are continually reinventing steel’s possibilities. Our smart steel solutions give automakers the freedom to create the vehicles their customers want. Together, we hit targets for fuel efficiency without compromising on safety, style or affordability, and with the lowest possible carbon footprint.

dofasco.arcelormittal.com /arcelormittalofasco /@ArcelorMittal_D