The Bay Area Science and Engineering Fair (BASEF) is the regional fair for the City of Hamilton, Region of Halton and the counties of Brant, Haldimand and Norfolk. BASEF is open to over 100,000 students from grades 7 to 12 attending public, separate, independent, private and home schools. BASEF is a registered charity run by a diverse group of committee volunteers from business, education, and industry.

**Mission**

To promote project based science and encourage youth to conduct research in areas of science, engineering and technology, utilizing the scientific method or engineering design process.

We believe all students should be given the opportunity to participate in science fairs. Students learn invaluable academic and life skills through researching, experimenting, displaying and presenting their projects. The judging process and public viewing components allow students to practice their “people” and communication skills and gain self-confidence and a sense of accomplishment for a job well done.

**Goals**

Our goal at BASEF is to make science fair participation a rewarding and enjoyable experience. Students may not win big in their first or even second science fair competition, however they gain the tremendous opportunity to meet other students interested in science and technology, and get a chance to meet and learn from some of our successful science fair veterans.

**Major Activities**

BASEF volunteers organized and staged the 52nd Annual Regional Fair at Mohawk College in Hamilton.

Mohawk’s administration and staff gave excellent support, cooperation and assistance to BASEF and provided a warm welcome to our students, volunteers, and visitors.

BASEF’s YES (Youth Engaged in Science) Outreach Program provided guidance and mentors for 10 projects in two schools new to BASEF.

This year BASEF initiated a new program, the **Teacher’s Activity Day**, to provide training to teachers who want to successfully support student science fair projects. The workshops consisted of a full day of training by BASEF’s very experienced former Chief Judge, Tom Crawford.

**Science Success!** Materials developed by BASEF continue to be used at the regional, national and international level.

BASEF committee members regularly volunteer their time to assist teachers through judging at school science fairs, mentoring students, and easing newcomers through the regulations, rules, and scientific review requirements.
Fair Highlights

Over $172,000 in cash, prizes, trips, scholarships and participation awards.

185 students received Merit Awards, $10,200 in cash, and $92,500 in merit scholarships.

157 special awards were presented totalling $15,460 in cash, $7,000 in scholarships and one internship valued at $2,152.

Activity Morning
sponsored by Bell Canada

BASEF Activity Morning is an outreach event for both BASEF student participants and local grade 7 and 8 students, designed to create interest in BASEF for future fairs. Morning activities consisted of a series of speakers, presentations, and demonstrations. The keynote address was given by Dr. Mick Bhatia of the Stem Cell and Cancer Research Institute at McMaster University. Other presentations were given by McMaster's Venture/Leap Program, Green Age Design of the Hamilton-based Carego Group of Companies, and McMaster University Chemistry professors. Without the sponsorship of Bell Canada, an event of this magnitude would not be possible. Thank you Bell Canada for your support.
Our Top 20 students won trips to either the Canada Wide Science Fair (CWSF) in Charlottetown, PEI, or to the Intel International Science and Engineering Fair (IISF) in Pittsburgh, PA in May 2012.

National Competition Results - Canada Wide Science Fair

Alex and Erik Bercik
Westdale, Hamilton

A Novel Rooftop Wind Turbine for Convenient Residential Use

Bronze Medal winner

Graham Bohm
St. Augustine, Dundas

From Salted Streets To Salty Streams

Silver Medal winner

Catharine Bowman
St. Augustine, Dundas

Paw Prints Through the Forest: Tracking Grey Wolves in Superior National Forest

Silver Medal winner

Olivia Cerilli
Canadian Martyrs, Burlington

Get a Grip on it!

Silver Medal winner

Adrian Hucal
Our Lady of Peace, Hamilton

Where Does the Wind Test Best?

Bronze Medal winner

Kaushar Mahetaji
W. H. Morden Public School, Oakville

Corresponding With the Brain

Bronze Medal winner

John Mikhaeil
King’s Christian Collegiate, Oakville

Detoxification of Jatropha Oil-Cake from Phorbol Esters

Bronze Medal winner

Alexander Rey
Brantford Collegiate Institute and Vocational School, Brantford

More than Just Brushing

Bronze Medal winner

Actuarial Award

Arjuna Yusuf
Ancaster High, Ancaster

The Effect of Baroque Music and Silent Sitting on Concentration

Bronze Medal winner

Edmund Zamora
Trinity Christian School, Burlington

Double Trouble - The Effects of Multitasking and the Dangers of Distracted Driving

Bronze Medal winner

Information Challenge Award

International Competition Results - Intel International Science and Engineering Fair

Four BASEF students competed as part of "Team Canada" at the Intel International Science and Engineering Fair, held in Pittsburgh, PA: Eisha Ahmed (Abbey Park High School), Camilla Michalski (Bishop Ryan), Manjot Sangha (Iroquois Ridge High School), and Dennis Xu (Abbey Park High School)

While this BASEF team had no individual medal results this year, they were part of a successful Team Canada showing that included 14 Grand Awards.
Financial Highlights – Statement of Operations

For the year ended August 31, 2012 (unaudited)

Revenue

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>$ 67,792</td>
<td>$ 71,073</td>
</tr>
<tr>
<td>Special awards</td>
<td>14,185</td>
<td>14,060</td>
</tr>
<tr>
<td>Ontario MRI Travel Plan Grant</td>
<td>-</td>
<td>10,400</td>
</tr>
<tr>
<td>Interest/HST rebate</td>
<td>1,365</td>
<td>856</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 83,342</td>
<td>$ 96,389</td>
</tr>
</tbody>
</table>

Summary of Expenses

<table>
<thead>
<tr>
<th>Students: Awards/recognition/Activities</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Champion teacher award</td>
<td>338</td>
<td>573</td>
</tr>
<tr>
<td>Teacher workshop</td>
<td>333</td>
<td>-</td>
</tr>
<tr>
<td>Site and judging</td>
<td>8,043</td>
<td>7,882</td>
</tr>
<tr>
<td>Outreach</td>
<td>427</td>
<td>364</td>
</tr>
<tr>
<td>Information services</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administration</td>
<td>7,804</td>
<td>5,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 92,648</td>
<td>$ 80,588</td>
</tr>
</tbody>
</table>

Excess of (Expenses Over Revenues)

Revenue over Expenses $ (9,306) $ 15,801

Disbursements to Students

| Participation awards  | 3,372   | 4.5% |
| Trophies and medals    | 1,864   | 2.5% |
| Photography and audio visual | 452   | 0.6% |
| Merit awards           | 9,995   | 13.2%|
| Special awards         | 14,336  | 18.9%|
| Susan Joyce Memorial Award | 300   | 0.4% |
| Intel International Science and Engineering Fair | 10,085 | 13.3% |
| Canada Wide Science Fair | 35,299 | 46.6% |
| **Total**              | $75,703 |        |

Administration Expenses

| Office expenses         | 1,976   | 25.3% |
| Marketing and publicity | 772     | 9.9%  |
| Registration            | 1,332   | 17.1% |
| Fundraising             | 1,140   | 14.6% |
| Bank charges and interest | 631   | 8.1%  |
| Volunteers              | 412     | 5.3%  |
| Ceremony and sponsor recognition | 1,541 | 19.7% |
| **Total**               | $ 7,804 |        |
Sponsorship

### Title Sponsor

![ArcelorMittal](image)

### Diamond ($10,000+)

- Primary Fluid Systems Inc.

### Platinum ($5,000+)

- Mohawk College

### Gold ($2,500+)

- Lifetouch
- TaylorLeibow Accountants
- Union Gas Limited
- Youth Science Ontario

### Silver ($1,000+)

- ASECO Integrated Systems
- Boehringer Ingelheim Canada
- Canadian Linen & Uniform Service
- City of Hamilton, Economic Development
- D.E.N.M. Ltd.
- Dell Chemists
- Halton Catholic District School Board
- Halton District School Board
- Hamilton-Halton Construction Association
- Hamilton-Wentworth Catholic District School Board
- Hamilton-Wentworth District School Board
- Hillfield Strathallan College
- McMaster-Mohawk Bachelor of Technology Partnership
- McMaster Xerox Centre for Engineering Entrepreneurship & Innovation
- Ontario Power Generation

### Bronze ($500+)

- BattleGoat Studios
- Deloitte & Touche LLP
- Dillon Consulting
- Hamilton Chamber of Commerce
- Hamilton Community Awareness & Emergency Response
- John Deere Foundation

#### and our many Benefactors, and Sponsors at the Friends level

Sponsors donating in-kind services continued to help us provide an exceptional experience for BASEF participants. Key donations included: printing, posters, newspaper advertising, trip winners’ jackets, photo ID tags, accounting, and web hosting.

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

basef@basef.ca     basef.ca