

**We've Changed  
our Name!**  
Formerly Hamilton-  
Wentworth Halton  
Science and  
Engineering Fair  
(HWHSEF)

# BASEF

Bay Area Science and Engineering Fair

NOON

**Fair Dates: April 3-6, Mohawk College  
Fennel Campus, Hamilton**

**Registration Dates: February 14 (noon) to March 7 (noon)**

**Calling students in grades 7 through OAC! It's time to gear up for the 2002 Science and Engineering Fair, taking place April 3-6 at Mohawk College in Hamilton. Project registration will be available online between February 14 and March 7 on the Fair 2002 website:**

### ***Call for Entries***

Projects can be entered in one of the following categories: Life Sciences, Biotechnology, Physical Sciences, Mathematics and Computer Science, and Earth and Environmental Sciences.

Group projects are limited to two students, and each school is limited to eight projects at the Junior level, and sixteen at each of the Intermediate and Senior level. For detailed information please check our website, or ask your teacher.

### ***Prizes and Awards***

There are many exciting prizes and awards to be won, including cash prizes totaling thousands of dollars, and trips to the Canada-wide Science Fair (to be held in Saskatoon May 11-19, 2002) and the International Science and Engineering Fair (to be held in Louisville, Kentucky May 12-18, 2002). The trips are all expenses paid, and include adult chaperone arrangements. In addition,

participants can win certificates, merit awards, trophies, scholarships and special awards.

### ***Rules and Regulations***

The 2002 Fair is open to students registered in grades 7 to OAC in schools within the regions of Hamilton and Halton, including independent or private schools, as well as home schools. It is not necessary to have participated in a school science fair prior to entering.

There's a maximum of two students per project, and each school is restricted to eight projects at the junior level, sixteen in the intermediate level, and sixteen in senior level. The levels are:

*Junior (grades 7 & 8)*

*Intermediate (grades 9 & 10)*

*Senior (grades 11 to OAC)*

All intermediate and Senior students must complete a research plan prior to experimentation. Please see

the website ([basef.mcmaster.ca](http://basef.mcmaster.ca)) for details and the required forms.

All levels are eligible to compete in each of the six categories:

*Life Sciences*

*Biotechnology*

*Physical Sciences*

*Engineering Sciences*

*Mathematics and Computer Science*

*Earth and Environment Sciences*

Please enter early, as places are limited and entries may be turned away once the limit is reached. Registration begins February at noon. A project abstract must be included with the registration. Be sure to have the permission form completed and signed, and faxed back to us (see the registration section of our Web page for more details) Students must be present for afternoon judging on Thursday April 4, 2002. Exceptional circumstances must be

discussed with the Judge-in-Chief prior to registration.

### **Safety and Ethical Considerations**

Safety and ethical considerations must be adhered to for all projects. Please see our website for details.

Electrical components such as switches and wiring must be of an approved variety.

Projects requiring 110V power must use a grounded plug.

No water or gas sources of any type are available.

Any equipment incorporating lasers or other potentially harmful radiation must meet provincial regulations.

No living vertebrate animals shall be displayed in exhibits.

Any project involving vertebrate animals, human subjects, tissue or DNA may

be required to meet additional regulations. Contact the Judge-in Chief or check the website for further details prior to experimentation.

All displays must be freestanding and fit within the space provided. Maximum dimensions are  
Height: 274 cm (including provided table)  
Width: 122 cm (side to side)  
Depth: 76 cm (from to back).

### **Fair 2001 Review**

Approximately 200 students participated in the 41<sup>st</sup> Hamilton-Wentworth & Halton Science and Engineering Fair in April 2001, held at Sheridan College in Oakville. Nine students went on to participate in the Canada-wide Science Fair held at the Queen's University in Kingston, while two students earned spots on

Team Canada, which competed at the International Science and Engineering Fair in San Jose, California.

### **A Student Participant's Perspective**

Jeff Alfonsi was a gold medal winner at the 2001 Hamilton-Wentworth and Halton Science & Engineering Fair. He was also awarded a trip to the Canada Wide Science Fair held in Kingston, Ontario in May 2001. In his statement below, he talks about the impact these two fairs had on his life.

**CWSF: Can't Wait Start Fast?**  
– by Jeff Alfonsi

No that's not what CWSF stands for; CWSF stands for Canada-Wide Science Fair. But the notion of starting now certainly pertains to the Canada-Wide Science Fair.

My name is Jeff Alfonsi. I am an OAC student, a first time science fair participant, and a 2001 CWSF survivor. In fact, my work received an Honourable Mention at CWSF. When I was asked to write a student's perspective of the Canada-Wide Science Fair I had no problem jotting down a list of reasons and advantages to compete in this fair, or any other science fair for that matter. By the time the list was finished, I felt that CWSF served as a complement to education- every student should compete in a science fair. Here's why:

## **Fair 2002 Schedule**

### **Wednesday, April 3**

Project set-up beginning at 4 p.m. in the Fennell Campus Gymnasium, Mohawk College (Corner of West 5<sup>th</sup> and Fennell Avenue)

### **Thursday, April 4**

Judging of projects, all days. Students must be present for judging during the afternoon.

### **Friday, April 5**

Student Activities Day! Sign up for a variety of exciting activities and excursions as part of your registration. Lunch will be provided

### **Saturday, April 6**

Projects will be open for viewing by the public, followed by the Awards Ceremony.

We are considering providing bus transportation between Halton and Mohawk College on April 5<sup>th</sup> and 6<sup>th</sup>. With our website for details

The CWSF was of paramount importance to my education. For the first time in my life I had to combine science – problem solving, accurate laboratory skills, innovation- with art -writing, speaking, and designing a clear and attractive backboard- into one project. From this integration of art and science, I discovered my multifaceted skills and capabilities, and I learned much from the wise and experienced comments from mentors and judges. In addition to practical skills, I learned invaluable transferable skills: time management, how to clearly communicate my thoughts, work ethic, and interview skills. After the fair, I was in awe over the project I completed; you too will feel pride and awe at a project that you completed.

I was once told that you could only learn when you are around people who are smarter than you, or completed a project for the CWSF. When I first arrived in the exhibit hall and set my project up at the end of an aisle marked “Senior Computers and Mathematics”, I perused the projects around me: to the left an artificial intelligence project, and across from me, someone had made an entire operating system. At that point I realized that I wasn’t in Kansas anymore. Nonetheless, I got to meet some unique people who exhibited novel projects. And upon talking to them I was inspired to challenge myself

beyond the rigor of my current project in my future endeavors. Outside of the exhibit hall, the Fair allowed me to take a boat cruise, eat endless bowls of ice cream, and get a week off school. During the one week of the CWSF, you will realize that all the late nights and sweat you put into your project is a small price to pay for this great experience.

Why was CWSF a complement to my education? It forms everything you have learned in school- and I mean everything, even kindergarten finger painting- into one project. This project is a reflection of your education, which is then compared alongside some of the smartest students and edifiers in Canada. After the fair, you can determine your strengths and weaknesses and begin to improve them for the next year. Undoubtedly, this experience extended beyond the scope of any classroom I have ever been in. My only regret is not starting earlier, so my advice to you is: Can’t Wait Start Fast.

***The winning entries included:***

HDSEF Committee trophy:  
(Primary school accumulating the most points)  
St. Bernadette

Herb Gildea Memorial trophy:  
(Secondary school accumulating the most points)  
St. Mary’s High School

IISEF trip award winners:  
*“REALE Global Warming Solutions II”* Geoff Olynyk, Aldershot H.S.

*“The effects of heavy metal toxicity on developing invertebrate nervous system”* Eva Vertes, HighLand H.S.

CWSF trip award winners:  
*“Building Blocks of the Future”* Hsinwen Than, St. Mary’s H.S.

*“How can we prevent buildings from collapsing during severe earthquakes?”* Queenie Leung, Oackville Christian H.S.

*“Electromagnetic Fields”* Jenna Bihun, Alysha Keir Holy Spirit H.S.

*“The Trans Neural Pathway: Combining Computers and Research”* Jeff Alfonsi, St. Mary’s H.S.

*“Memorize This!”* Olivia Potvin, Siobhan Kiely St. Bernadette

*“REALE Global Warming Solutions II”* Geoff Olynyk Aldershot H.S.

*“The effects of heavy metal toxicity on developing invertebrate nervous system”* Eva Vertes, HighLand H.S.

Alternate CWSF Entry:  
*“H2Oh No!”* Daniel Teoh, St Teresa of Avila

“Visual Turbulence”  
Alexander Bilyk, St.  
Joachim

### **Activity Day 2002...can't wait!**

Activity Day will be held on Friday, April 5, 2001 ALL DAY starting at 8 a.m. at Mohawk College. The day is FREE OF CHARGE to science fair participants and is comprised of a series of fun activities. Some are educational but most are just plain old fun! The day is intended to give each student a break from the hectic pace of the fair.

Activity Day 2002 is still under construction; however, to give you an idea of what the day is about, let's take a quick look at last year. The day began with drop-off at 8:30 a.m. and ended with a pick-up at 4:30 p.m. The morning consisted of a series of great field trips. The students singed up for their activities when they registered for the fair online. They gave first, second, and third choices and activities were assigned on a first-come, first-served basis. (All events are usually space restricted.) Field trips usually include swimming, skating, sports domes activities, dance lessons, and airplane flights with The Young Eagles, to name a few. A hotdog and hamburger lunch was provided for the students back at the host site. (Special diets and allergies must be noted upon registration.) In the afternoon, the students were off and running again on the second half of their chosen activities.

The day ended at 4:30 p.m. with everyone reporting back to Sheridan College for pickup.

Plans are underway for 2002, and organizers are busy lining up the day's events. The Young Eagles group was once again expressed interest in taking the students on flying tours over the region. And with all the great venues Hamilton and Halton have to offer, I know the organizers will put together a fantastic day for the students. All science fair participants are invited to attend and of course we're always looking for volunteers to help plan and conduct our day. Keep your eyes on our website at [basef.mcmaster.ca](http://basef.mcmaster.ca) for updates, and if you can lend a hand, please contact us through our website.

Student Activities Committee  
BASEF 2002

### **Want to Help?**

The bay Area Science and Engineering Fair owes its continuing success to the efforts of hundreds of volunteers from our education and business communities. You can help too! For more information, contact us at [basef@mcmaster.ca](mailto:basef@mcmaster.ca), or see other contact information below.

### **Are you a Teacher?**

We encourage your comments, suggestions and participation in making our science fair even more beneficial to students and teachers alike. Our education system is undergoing change,

and we welcome your input to ensure we continue to provide a meaningful and relevant experience to your students. Please contact our Outreach Program Chair at [basef@mcmaster.ca](mailto:basef@mcmaster.ca), or see other contact information below.

### **Would you like to be a Judge?**

In order to ensure a fair and balanced judging process, we try to have every project judged by at least three qualified judges. However, given the high quantity and quality of entries, each judge only has time to efficiently judge a small number of projects. We generally require about 150 judges each year, who are prepared to devote a day of their time to the process. Judges bring their skills and experience to bear in assessing the merits of entries, and also provide feedback to the students. If you are interested in judging and have at least a high school education and some relevant experience, we would like to hear from you. We offer training to all judges. Please contact our Judge-in Chief at [basef.judging@mcmaster.ca](mailto:basef.judging@mcmaster.ca).

### **Are you a Science Fair Alumnus?**

Did you enjoy and benefit from your experience at a science fair in the past? Perhaps you are interested in helping other students enjoy a similar experience. If you could spare some time, or simply want to keep in touch with what's going on each year, we'd

certainly like to hear from you. We'd be happy to add you to our mailing list. Contact our Alumni Chair at [hwhsef.alumni@mcmaster.ca](mailto:hwhsef.alumni@mcmaster.ca).

***Interested in Sponsorship?***

You, or someone you know, might be interested in helping us in other ways. The Science Fair is made possible by donations that take many forms: operating funds, donations and loans of equipment and supplies (from food to photocopiers), offers of services of all types (from printing to busing) and prizes and awards to name a few. We provide recognition of our donors at various levels, and can provide receipts for tax purposes. If you want to know more, please contact our

Funding Chair, at [basef@mcmaster.ca](mailto:basef@mcmaster.ca).

Contact Information  
*Website* ([basef.mcmaster.ca](http://basef.mcmaster.ca)).

Look at our Website for more information on all aspects of Fair 2002 including:

Category definition, judging criteria, prizes and awards sponsors  
Rules and Guidelines, Activities Day, Project dimensions  
Sample abstracts, registration form, safety regulations, instructions  
Science Fair links  
Special Awards

*Electronic Mail*  
([basef@mcmaster.ca](mailto:basef@mcmaster.ca)) We will

be monitoring our e-mail on a daily basis. It's one of the best ways to ask questions and get prompt replies.

*Voicemail:*

Hamilton 905-974-7975

Oakville 905-693-7076

You can leave a message at either of these numbers and someone will get back to you as soon as possible

*Paper Mail:*

Our regular mailing address is:  
Bay Area Science and Engineering Fair  
c/o McMaster University,  
JHE343C  
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