Hamilton-Wentworth and Halton Science & Engineering Fair 2000

<u>Fair Dates:</u> April 5 - 8, 2000, Mohawk College <u>Registration Dates:</u> February 16 to 12:00 Noon March 8, 2000 On-Line at <u>www.mcmaster.ca/hwhsef/</u>

Once again, it's time to begin preparing for the Hamilton-Wentworth and Halton Science & Engineering Fair (HWHSEF)! This year's fair is the 40th fair in a row for us, and promises to be better than ever. You may have noticed a small change from the official name we've used in the past; we changed it to better recognize the fact that we represent both the Regions of Hamilton-Wentworth and Halton, under the sanction of the Canadian Youth Science Foundation (YSF). The YSF is the organizing body of Canada's national science fair, the Canada-Wide Science Fair.

Since 1960, thousands of young people from both Regions have benefited from the experience of participating in a regional fair. Many have won prizes and awards, and the best each year have gone on to national and international science fairs! Many are now active in careers related to science and technology. Some of our alumni continue to be involved with organizing our fair, and others.



CALL FOR ENTRIES

Calling all students in grades 7 through OAC! Gear up for the Year 2000 Science and Engineering Fair at Mohawk College, April 5-8. Project registration will be available on-line between February 16 and March 8, at the Fair 2000 Web Site (www.mcmaster.ca/hwhsef).



Projects can be in one of the following categories: Life Sciences, Biotechnology, Physical Sciences, Engineering Sciences, Computer Technology, Earth and Environmental Sciences. Group projects are limited to two students, and each school is limited to 8 projects per level (Junior, Intermediate, and Senior). For more information, check our web site, or ask your teacher.

PRIZES & AWARDS

There are many prizes and awards to be won, including cash and trips to the Canada-Wide Science Fair, and the International Science and Engineering Fair. The trips are all expenses paid, and include adult chaperone arrangements.

The cash prizes total thousands of dollars, in addition to certificates, merit awards, trophies, scholarships, gift certificates, etc. Even schools can win trophies!

FAIR 2000 EVENTS

Wednesday, April 5	PROJECT SETUP, and safety checks, late afternoon and evening.	
Thursday, April 6	JUDGING of Projects, all day. Students must be present for judging during the afternoon.	
Friday, April 7	STUDENT ACTIVITIES Day! Sign up for various activities as part of your Registration.	
	Activities are still being finalized, but here's a hint: Are you interested in aeronautics?	
	Or perhaps civil engineering? or what about the weather? Lunch will also be provided.	
Saturday, April 8	Projects will be open to the public, followed by the AWARDS CEREMONY.	

The Fair is open to students registered in grades 7 to OAC in schools within the Regions of Hamilton-Wentworth and Halton. This includes Independent or Private schools, and Home Schools. It is NOT necessary to have participated in a school science fair first, before entering.

Maximum of two students per project, and each school is restricted to 8 projects per level at which it is eligible to participate. Please enter early, once registration begins. Places are limited, and entries may be turned away once the limit is reached. All entries are subject to the rules and requirements of the Hamilton-Wentworth and Halton Science & Engineering Fair.

Levels:	Categories:		
Junior (grades 7 & 8)	Life Sciences	Biotechnology	
Intermediate (grades 9 & 10)	Physical Sciences	Engineering Sciences	
Senior (grades 11 to OAC)	Computer Technology	Earth and Environmental Sciences	

Reminders: Students must register on-line during the Registration period, February 16 to March 8, 2000. Registration deadline is March 8, 2000 at 12:00 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 web page for more details). Students must be present for afternoon judging. Exceptional circumstances must be discussed prior to registration with the Judge in Chief.

<u>Safety considerations</u> apply to projects, and will be checked AND enforced. Please see our web site for details. A brief summary of some safety items follows:

- 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 special provincial regulations.
- No living vertebrate animals shall be displayed in exhibits in science fairs.

Any project involving vertebrate animals, human subjects, tissue or DNA may be required to meet additional requirements.
 Contact the Science Fair Judge in Chief (hwhsef.judging@mcmaster.ca), or check the web site, 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) and Depth 76 cm (front to back).

New This Year: All Intermediate and Senior students must complete a research plan prior to experimentation. Please see the web site (www.mcmaster.ca/hwhsef/) for details and the required forms.

FAIR 1999 REVIEW

Last April 10 saw the windup of the 39th Annual Hamilton District Science and Engineering Fair, held at McMaster University. More than 300 students spent several days immersed in an environment that saw their science and presentation skills tested, and they all benefited from the experience. Whether it was feedback from judges on their project, or something they learned at one of the many educational activities on Activity Day, or the experience of being called to the Awards Ceremony stage, to be recognized for their project abilities, or just making new friends with similar interests, everyone took something valuable home with them, as a result of participating in the Science Fair.

Some of our participants were chosen to go further with their projects, of course. Our Grand Prize trip winners were off to either Edmonton for the Canada-Wide Science Fair, or to Philadelphia to participate in the Intel International Science and Engineering Fair! Some of the many winners were:

HDSEF Committee Trophy (Awarded to the top elementary school)

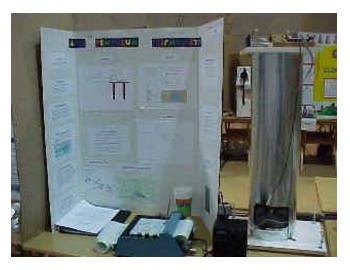
Appleby College, Independent

The Gildes Memorial Trophy (Awarded to

Herb Gildea Memorial Trophy (Awarded to the top secondary school)

St. Mary's High School, Hamilton-Wentworth Catholic





District School Board

Intel International Science and Engineering Fair Trip Award (Philadelphia, Pennsylvania)

- "Robotic Revolution", Michael Belshaw, St. Mary's High School
- "REALE Global Warming Solutions", Geoff Olynyk, Aldershot High School

Canada Wide Science Fair Trip Awards (Edmonton, Alberta)

- "Vision and Memory", Hsinwen Than, St. Augustine's
- "Listen to the Light: The Amazing Electronic Photophone", Gillian Shaughnessy, Holy Family
- "Digital Dealership Database", Brett Dixon and David Taubensee, Ancaster High & Vocational School
- "New Laser Pendulum Seismometer", Ann Kallin and Melissa Slack, Dalewood Senior

Alternate CWSF Entry

• "Power On! Tracking the Sun to Maximize Solar Cell Efficiency", Ben Leung & Steve Olynyk, John T. Tuck

WANT TO HELP?

Organizing and running the Science Fair each year is carried out by literally hundreds of volunteers and sponsors from the area's business and education communities. The generous donations these people and organizations make of their time, services and money all go towards producing one of the best Canadian regional science fairs! But we are always in need of more help! If you'd like to find out more about assisting with the Science Fair, please contact us at hwhsef@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 help in ensuring we continue to change and improve along with it. Please contact our Outreach Program Chair at hwhsef@mcmaster.ca, or see other contact information below.

Want to Help Judge the Science Fair? In order to provide a good balance of judging input, we try to have every project judged by at least 3 qualified people. However each judge only has time to effectively judge a small number of projects. So we need to obtain the help of around 150 people from our community each year, who are prepared to spend a day taking part in the judging process. They provide feedback to the students on their projects, and provide their skills and experience in judging the merits of each and every project. If you are interested in judging, and have at least a high school education and some related experience, we would like to hear from you. We offer training to all judges. Please contact our Judge in Chief at hwhsef.judging@mcmaster.ca, or see other contact information below.

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 provide this same experience for today's students. If you could spare a little time, or just want to stay 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 or see below.

Interested in Helping Sponsor the Science Fair? You, or someone you know, might be interesting 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 bussing) and prizes and awards, just 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 hwhsef@mcmaster.ca or see below.

CONTACT INFORMATION

1. Web Site (www.mcmaster.ca/hwhsef/)

Look at our Web Site for more information on all aspects of the FAIR 2000, including:

Category DefinitionsJudging CriteriaPrizes and AwardsSponsorsRules and GuidelinesActivities DayProject dimensionsOrganizersSample AbstractsRegistration FormSafety RegulationsInstructions

Science Fair Links

Electronic Mail (hwhsef@mcmaster.ca)

We will be monitoring our E Mail on a near daily basis. It's one of the best ways to ask us questions, and for us to get the answers back to you. Because we use E Mail a lot ourselves for organizing the Fair, we can easily make sure your question or comment gets to the right person in our volunteer organization quickly, and the answer gets back to you.

3. Voice Mail (905-381-0108 or 1-800-240-9042)

You can leave us a message at this number, and we'll get back to you as quickly as we can. If it's urgent, you can have us paged through this number.

4. Paper Mail

In case it's needed, we also have a regular mail address:

Hamilton-Wentworth and Halton Science & Engineering Fair,

c/o McMaster University, JHE343C,

1280 Main Street West,

Hamilton, ON L8S 4K1.

December, 1999.