



BASEF

Bay Area Science and Engineering Fair Annual Report 2004

c/o McMaster University, JHE-A214, 1280 Main Street West, Hamilton, Ontario, Canada, L8S 4L7
Registered Charity: BN 11895 1565 RR0001



Team BASEF 2004
St. John's, Newfoundland

Thanks to our sponsors, 404 students, from 52 schools, displayed 288 amazing projects and had the opportunity to participate in BASEF 2004. Here's what some of them had to say:

"The fair was excellent. Never before have I been able to interact with so many people who like me, have a passion for science." Chris, Grade 8

"BASEF was a fun and rewarding experience and has encouraged me to pursue a career in one of the many fields of science." Patrick, Grade 10

"It was fascinating to talk with other very intelligent science fair participants, and to learn about their projects." Augustine, Grade 7

"I enjoyed being able to share what I learned with the judges. This fair will definitely affect my future direction in the Science and Technology areas because I learned so much." Diane, Grade 8

"BASEF 2004 was a wonderful experience. I enjoyed sharing all that I learned while performing my experiment, with others." Madeleine, Grade 9

BASEF Partnerships

Students

Volunteers

Sponsors

Teachers

Parents

About BASEF

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 Grade 7 to 12 in attendance at public, separate, independent, private and home schools. BASEF is a registered charity and volunteer driven organization with a diverse group of committee members from business, education, health sciences and industry.



The mission of BASEF is 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.

Our mission is accomplished through Outreach Activities and the Regional Science Fair event.

1. Outreach Activities:

A. Outreach Team: The BASEF Outreach Team makes site visits to schools and offices throughout the region to promote science fairs and offer assistance to teachers, students and parents in the nuts and bolts of preparing projects for science fairs. For BASEF 2004, more than 40 Outreach presentations were made to various groups ranging from teachers and students to political offices and service clubs. We responded to more than 100 telephone and email requests for individual assistance. BASEF volunteers offer their services as science fair judges at various schools and provide additional coaching to teachers and students.

B. Outreach Project: In 2003, BASEF undertook a new project entitled “**Science Success**”, to develop both presentation materials and workbooks for teachers and students. The overriding objective of this project is to increase the occurrence of project-based science and engineering study by students and teachers, in school and out of school settings by providing enabling tools. These materials were distributed to all teachers who registered students at BASEF 2003 and BASEF 2004, for field testing.

2. BASEF 2004:

BASEF volunteers organized and staged the 44th Annual Regional Science Fair at Mohawk College, Hamilton, from March 31st to April 3rd, 2004. Registration for all students is free and includes Activity Day tours, transportation and lunch.

At BASEF 2004, 145 gold, silver or bronze Merit Award medals (including \$7,210 in cash), 154 Special Awards (cash awards totaling \$13,875), twenty all expense paid trips to the Canada Wide Science Fair in St. John’s, Newfoundland, and four all expense paid trip awards to the Intel International Science and Engineering Fair in Portland, Oregon were awarded. Each of the medal winners also won a \$500 entrance scholarship to be redeemed on acceptance at either Mohawk or Sheridan College.

We believe BASEF has the distinction of offering the largest prize purse of any regional fair in Canada.



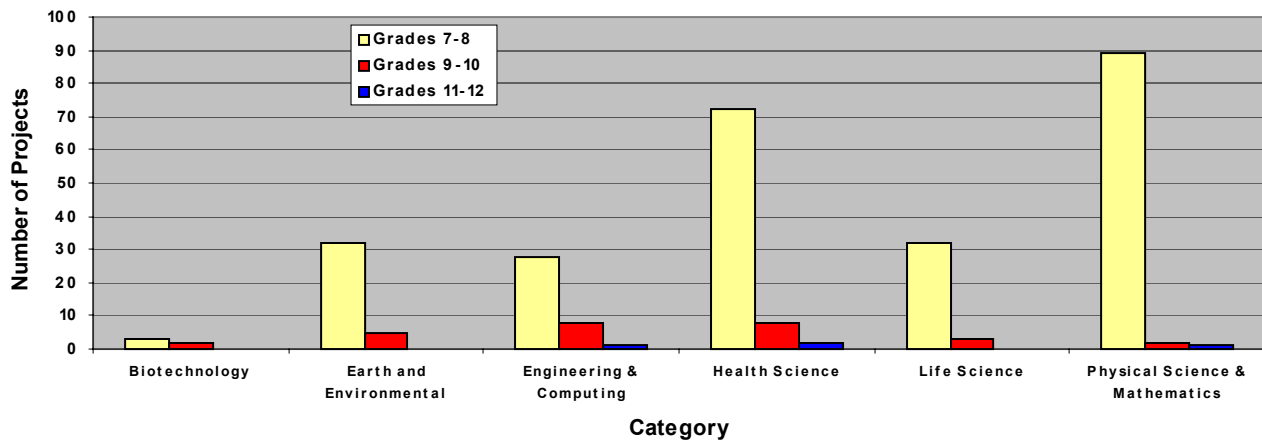
BASEF 2005

Sheridan College

March 30th-April 2nd, 2005

Participation 2004

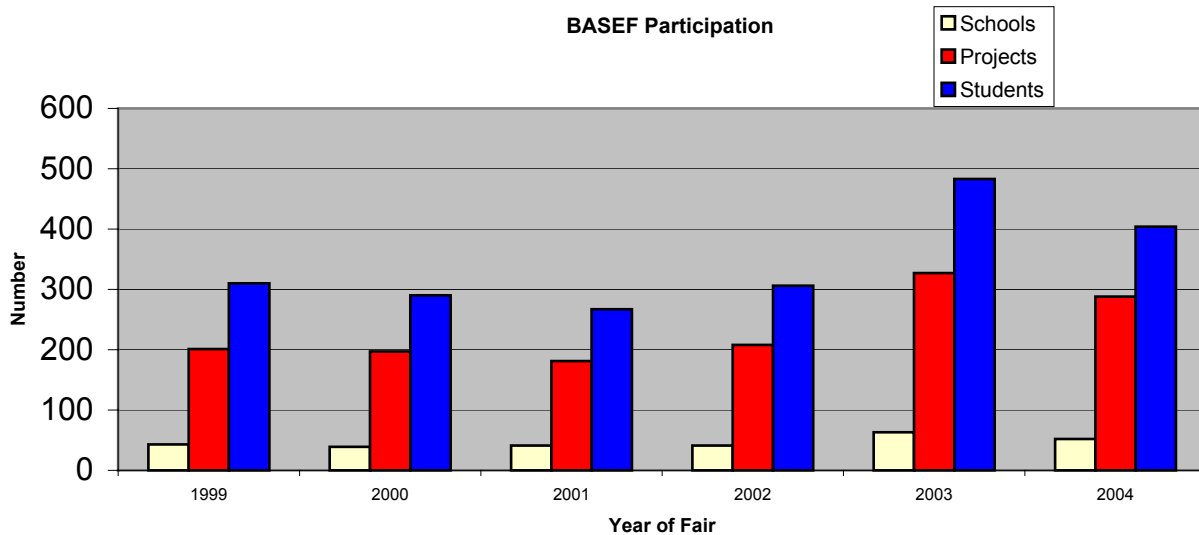
Projects by Category and Division



Participation Highlights:

- 256 registered projects in the Grade 7-8 (Junior) division; 32 high school projects (28 Intermediate & 4 Senior)
- highest number of high school projects for the past 6 years
- 231 projects by female students and 173 projects by male students
- project categories were changed by the Youth Science Foundation to better reflect participation rates: Computing was combined with Engineering, Mathematics became part of the Physical Sciences Category and Life Sciences was split into two categories, Health Sciences (human) and Life Sciences (non human)

BASEF Participation



Comparative Participation Rates:

- there was a 65% increase in participation from BASEF 2002 to BASEF 2003
- overall participation fell 12 % below 2003 levels, primarily due to display space constraints at Mohawk College and the necessity of limiting the number of projects each school was permitted to register
- participation rates are still much higher than in other previous years
- the number of schools participating fell in 2004 and this will be addressed through our Outreach program

Financial Highlights

Statement of Operations – Fund Balance

For the period September 1, 2003 – August 31, 2004
(unaudited, with comparative amounts for the Year Ended August 31, 2003)

Revenue	2004	2003
General	\$66,899	\$63,076
Special Awards	13,600	11,225
Ontario Trillium - Operations	10,900	25,400
Ontario Trillium - Outreach	11,700	0
Interest/GST Rebate	1,104	644
Total Revenue	104,203	100,345
Total Expenses	102,944	105,147
Excess of Expenses over Revenue	1,259	(4,802)
Fund Balance-Beginning of Year	15,980	20,782
Fund Balance-End of Period	\$17,239	\$15,980

Administrative Expenses as at August 31, 2004

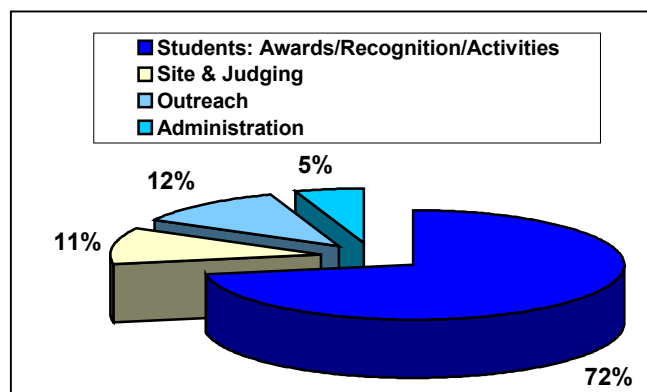
Administration Expenses	
Office Expenses	\$2,100
Ceremony/Sponsor Recognition	1,292
Marketing & Publicity	968
Fundraising	809
Registration	226
Volunteers	62
Total Administration	\$5,457

Summary of Disbursements as at August 31, 2004

Expense Summary	
Students: Awards/Recognition/Activities	\$74,438
Site & Judging	11,101
Outreach	11,948
Administration	5,457
Total Expenses	\$102,944

Student : Awards, Recognition, Activities	
Participation Awards	\$3,020
Student Activities	2,092
Trophies & Medals	778
Photography	711
Merit Awards	7,210
Special Awards	13,575
CWSF	37,169
Intel ISEF	9,883
Total to Students	\$74,438

Total Disbursements by Expense Category



Notes:

- fiscal year end is August 31, 2004; annual review engagement financial report available in January
- BASEF received donations of in kind services for advertising, printing, web hosting and Activity Day lunch
- student awards, recognition and activities were 72 % of the total disbursements of \$ 102,944
- site expenses vary by fair location (McMaster, Mohawk or Sheridan)
- Outreach expenses include the cost of two contracted positions to produce draft copies of the “Science Success” manuals and workbooks and begin field testing in schools
- each student participant received a “goody” bag that contained the official BASEF teeshirt, other items donated by corporate sponsors and a keepsake framed photo of their display
- all medallists received a cash award (\$130 gold, \$90 silver, \$50 bronze)
- BASEF administers the cash awards donated by sponsors for Special Awards
- 20 BASEF students and 4 adult chaperones traveled to the Canada Wide Science Fair in May 2004
- 4 BASEF students and 1 adult chaperone traveled to the Intel International Fair in May 2004
- operational funding from the Ontario Trillium Foundation was a declining 2 year grant
- Outreach funding from the Ontario Trillium Foundation was for the “Science Success” project

Highlights of BASEF 2004

- 404 students from 52 schools with 288 projects
- Over \$165,000 in cash, awards, prizes and scholarships
- Twenty students won trips to the Canada Wide Science Fair in St. John's, Newfoundland
- Four students won trips to the Intel International Science Fair in Portland, Oregon
- Dayna Walker had an unprecedented second win of 1st Place Best in Fair, Anthony Chiarelli won 2nd Place Best in Fair (3rd place in 2003) and Joseph Querques won 3rd Place Best in Fair
- More alumni participants than ever
- Ten of the 24 students advancing to International or National competition were previous trip winners
- 32 high school participants; all six Gold medals awarded at BASEF were won by Intermediate or Senior students
- Over 300 volunteers from our communities helped make BASEF 2004 a resounding success



BASEF members of Team Canada in Portland, Oregon included Mark Brejnik, Anthony Chiarelli, Ben Gulak and Dayna Walker.

Congratulations to Anthony Chiarelli, whose project *Invisible Cryptography - A Medical Application* won the following awards at ISEF in Portland:

Intel ISEF Best of Category Award - Third Award (\$1,000)

IEEE Regional Award of Merit (\$50)

DuPont Honourable Mention Award (\$500)

Honorable Mention Award for International students

**BASEF students won over \$ 46,000 in cash, awards and scholarships at the 2004 Canada Wide Science Fair in St. John's, Newfoundland.
Team BASEF was the #1 Regional Fair team in Canada!**

CWSF 2004 top winners included BASEF 2004 Gold Medallists:

Colin O'Flynn, Westdale, (Hamilton)

Gold Medal: Top Senior Engineering Project

(\$1500 cash award, and \$ 2000 scholarship to the University of Western Ontario)

University of Saskatchewan \$ 10,000 scholarship

Memorial University \$ 15,000 scholarship

Natalie Raso, St. Thomas More, (Hamilton)

Gold Medal: Top Intermediate Health Science Project

(\$1500 cash award, and \$ 2000 scholarship to the University of Western Ontario)

All expense paid trip to participate in the 3rd APEC Youth Science Festival in Beijing, China

Canadian Society of Medical Laboratory Scientists award of \$ 500

Twelve of the 19 projects from BASEF 2004 at CWSF won awards, including 2 Gold medals, 3 Silver medals, 2 Bronze medals and numerous special awards.

BASEF 2004 Sponsors

BASEF 2004
gratefully acknowledges all corporate sponsors of the 2004 Fair

Title Sponsor



THE ONTARIO TRILLIUM FOUNDATION
LA FONDATION TRILLIUM DE L'ONTARIO

The Ontario Trillium Foundation, an agency of the Ministry of Culture, receives annually \$ 100 million in government funding generated through Ontario's charity casino initiative.

Diamond

The Hamilton Spectator

Microsoft

Platinum

**Dofasco
Manulife Financial
Mohawk College
Sheridan College**

**JNE Consulting
McMaster University
Primary Fluid Systems**

Gold

Fortinos

Life Touch

Silver

Boehringer-Ingelheim, City of Hamilton-Economic Development, Community Awareness and Emergency Response, Comstock Canada, Edward Oldham, P.Eng., Halton Business Development Centre, Genum, Halton Catholic District School Board, Halton District School Board, Hamilton-Halton Construction Association, Hamilton-Wentworth District School Board, Hamilton-Wentworth Catholic District School Board, Hillfield-Strathallan College, Optimist Club of Stoney Creek, Bruce Riddiough C.A., SciTech Ontario, Seldon Griffin Graphics, Triple Crown Enterprises, Union Gas

Bronze

Agilent Technologies Canada, Burlington Pump, Deloitte & Touche, ISPE Central Canada Chapter, John Deere Foundation, Judy Marsales Real Estate, Knights of Columbus, Leppert Business Systems, Office Depot, Pioneer Hi-Bred, Process Controls & Instrumentation, Sims Moelich Associates, Teachers Credit Union

and our sponsors at the Friend level.