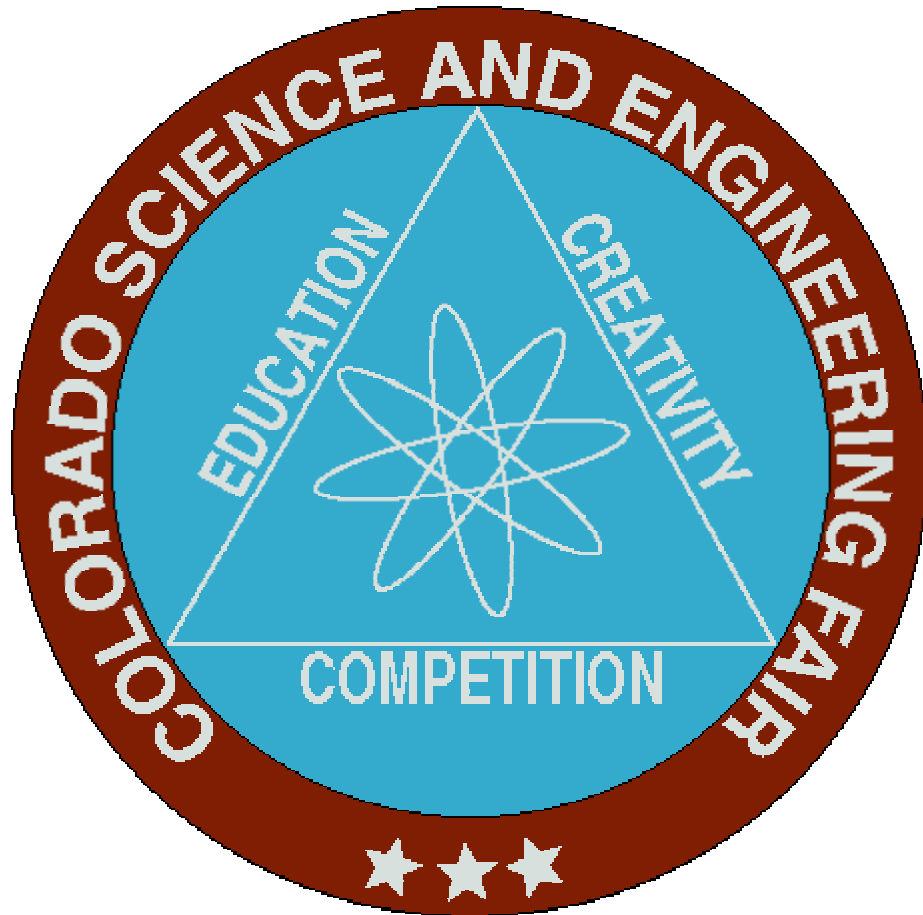


1995 Annual Report



1995 Annual Report

From start to finish, and at all levels of participation, the science fair experience is one not only of competition, but also of camaraderie, creativity, cooperation, and education. This is the essence of the logo for the Colorado Science and Engineering Fair.

This year marked the fortieth anniversary of the Colorado Science and Engineering Fair (formerly the Colorado State Science Fair). For Forty years, Annually, the Colorado Science and Engineering Fair has provided the opportunity for students in grades 7 – 12 from thirteen regions around the state to develop and display their interests and talents in engineering and science and to see what their peers are accomplishing in similar areas. Each year, over 220 of our state's top students present their projects at the state science fair. Professional scientists and engineers from across Colorado serve as judges for the state science fair, examining the presentation of students' exhibits, reviewing the students' research notebooks, and conducting one-on-one interviews with each student who participates.

In addition to getting the rare opportunity to speak with working scientists, Colorado Science and Engineering Fair student participants compete for awards in a number of categories: Botany, Earth & Environmental Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences, and Zoology. Recognition for outstanding exhibits in each of these categories as well as an award for technical writing are given to students at the Colorado Science and Engineering Fair Awards Ceremony. At this time, special awards are also presented by professional organizations, government agencies, and industries for exhibits that best represent their particular emphases or philosophies. The top two senior division winners at the state level are awarded a trip to the International Science and Engineering Fair. In 1995, the International Science and Engineering Fair was held in Ontario, Canada where Colorado students competed with their peers from the United States and several other countries.

Many educational experiences are available to students who participant in the CSEF. Tours of university and local corporate research facilities provide opportunities for students and their families to see research in action. The judges' interviews and the opening night Food, Fun and Friendship Mixer after judging allow the students to interact with professional scientists and engineers and with each other. Many students have said that having the chance to meet and speak with their peers about their science projects is the most beneficial aspect of the Colorado Science and Engineering Fair.

1995 Colorado Science and Engineering Fair

The 40th Colorado Science and Engineering Fair was held at the Lory Student Center on the Colorado State University campus on April 13 – 15, 1995. Two hundred thirty-eight students participated in this three day event and competed for honors in their respective categories. Lauren Kinnee from Palmer High School in Colorado Springs, took first place this year in the All Fair competition. Her project was *Predicting Okapi Longevity: The Kinnee Coefficient*. She received an expense paid trip to the International Science and Engineering Fair. Runner-up in the All Fair competition was Jason Oraker from Palmer High School in Colorado Springs for the exhibit *The International Bacculaureate: A Comparison of Self-Esteem, Locus of Control, and Affect Balance*. He also received a trip to the International Science and Engineering Fair. Third place in the Senior Division was Bryan Kim from Cherry Creek High School in Denver for the exhibit *The Construction of a Liquid Parabolic Mirror*.

The top winner of the Junior Division was Sara McDonnall of Lamar High School in Lamar for the project *The River Wild: A Study of the Pollutants of the Arkansas River in Colorado*. The runner-up in the Junior Division was Holly Huffman of Cherry Creek High School in Denver for the project *An Assessment of Insole Insert Compressibility in Running Shoes: A Comparative Study*. Third best in

the Junior Division was Loring Harkness of Southern Hills Middle School in Boulder for the project *Some Graphs are Planar Than Others*.

This year's fair saw the addition of team competition. The winners in the Senior Division were Tiffany Hall and Argharan Rahimpour from Palmer High School in Colorado Springs for the project *I Can't Believe It's Not Buffer*. The winners in the Junior Division were Marviel Guadarrama and Claudia Vasquez from Weld Central Jr/Sr High School in Greeley for the project *The Effects of Caffeine on Daphnia*.

1995 International Science and Engineering Fair

The 46th International Science and Engineering Fair was held May 7 – 13th in Hamilton, Ontario, Canada. This year more than 1,000 finalists represented 30 countries from around the globe. There were 15 disciplinary categories plus a Team Projects interdisciplinary category. This was the first ISEF held outside of the US and the largest ever.

Colorado sent 13 delegates and 3 teams who participated in 6 of the 16 ISEF categories. Colorado's top CSEF finalist, Lauren Kinnee, a 9th grader from Colorado Springs, won a fourth place in the ISEF Grand Awards Zoology category. The CSEF second place winner, Jason Oaker, also from Colorado Springs, won third place in the Behavioral and Social Sciences category. All in all, Colorado students won six awards at this year's ISEF.

In addition to the top winners from the Senior Division, the CSEF also sent the top two winners in the Junior Division as observers. This was an exciting experience for these young scientists.

Organization

The Colorado Science and Engineering Fair would not be possible without the dedication and tremendous efforts of many committed individuals and organizations including school districts, universities, government agencies, corporations, and professional associations. These groups sustain the CSEF through financial and resource support, special awards and most importantly, through providing dedicated volunteers to serve on the fair's many working committees.

It is no exaggeration to say that the state science fair volunteers indeed make the fair possible each year by serving on the Advisory Council and its various committees. They and others also serve as judges for the Colorado Science and Engineering Fair. Prior to the statewide event, thirteen regional science fairs and a great number of local school science fairs are conducted throughout the state; each of these fairs is supported and promoted by hardworking and dedicated educators at the local level. Before a student's exhibit even makes it to a local fair, it requires the encouragement and support from individual teachers, sponsors, and parents to help students see their projects through from inception to finished exhibit. The Colorado Science and Engineering Fair is a product of all of these people.

The success of each year's fair is directly dependent upon the support of public and private organizations, government agencies, school districts, universities, and the efforts and coordination of more than three hundred dedicated volunteers. To organize and stage the fair each year requires a great effort, but it also offers many personal challenges and rewards. To witness the level of achievement, pride and excitement of these bright young people in their scientific endeavors is one of the rewards that all of the volunteers share, and it also speaks to the high level of students' aptitude and enthusiasm for science in Colorado.

Colorado Science and Engineering Fair Sponsors provide the majority of the financial and resource support. In addition, each sponsor also provides two volunteers to serve on the CSSF, Inc. Board of Directors.

Gold Sponsors

US West Advanced Technologies
Old Chicago Restaurant
Anheuser-Busch, Inc.

Silver Sponsors

Martin Marietta Astronautics Group

Sponsors

A Foundation for Basics
American Cancer Society
CH2M Hill, Inc. Engineering
Colorado Dental Association
Colorado Engineering Council
Colorado Medical Society
Colorado State University
Cortech, Inc.
Eastman Kodak Company
EG&G Rocky Flats Plant

Hewlett-Packard Company
Manville Corporation
National Renewable Energy Lab
Raytheon Engineering
StorageTek Corporation
Symbios Logic (formerly NCR)
The Gates Corporation
University of Colorado, College of Engineering
Hach Company
US Department of Commerce
NTIA, NOAA, NIST

In addition, generous financial support has been provided by these firms, organizations, and individuals.

Financial Contributors

Alfred Manufacturing
American Society of Civil Engineers Auxiliary
ASM International – Rocky Mountain Chapter
Ball Aerospace
Colorado Biomedical
Denver Federal Center Professional Engineering Group
DJ's Sport Shoppe
King Soopers
Loral Command and Control Systems
Science Applications International Corporation
James Sites
Subway – Rocky Mountain Business Ventures
Teledyne Water Pik
United Technologies

Board of Directors

President: John Lehman
1st Vice President: Sue Refner
2nd Vice President: John Jacobi
Secretary: Dave Lovering
Treasurer: Jim Sites
CSEF Coordinator: Kate Taylor

A Foundation for Basics – Ruth Taylor, Don Taylor
American Cancer Society – Richard Shipman, Jennifer Scott-Nazaryk
Anheuser-Busch, Inc. – Skip Beck
CH2M Hill, Inc. Engineering – vacant
Colorado Dental Association – Robert Morrow, Thomas Oberle
Colorado Engineering Council – Gina Holland, Jing Chang
Colorado Medical Society – William Pierson, Gordon Tagge
Colorado Memory Systems – Kristin Howerton
Colorado State University – Tom Gorell, Jim Sites
Cortech, Inc. – John Cheronis
Eastman Kodak Company – Joe Eddins, Sue Refner
EG&G, Rocky Flats Plant – Kay Bentzen, Teresa Mikulsky
Gates Corporation – Martha Hoff, Lewis Keim
Hach Company – Cindee Arduino
Hewlett-Packard Company – John Jacobi, Kristin Howerton
Manville Corporation – Joni Baird
Martin Marietta Astronautics Group – Joy Knight
National Renewable Energy Lab – Dan Blake, Gloria Kratz
Old Chicago Restaurant – Brooke Robertson
Public Service of Colorado – vacant
Raytheon Engineers and Constructors – H. J. Bell, R. F. Brody
StorageTek Foundation – Arlyce Lewis
Symbios Logic – Tanya Melton
US Department of Commerce/NIST – John Lehman, Dave Lovering
US Department of Commerce/NOAA – Dave Clark
US Department of Commerce/NTIA – Elizabeth Pol, Natalie Sexton
US West Technologies – Lalana Sperline, Bud Wonsiewicz

Working Committees

Fair Director – Christal McDougall

CSEF Coordinator – Kate Taylor

Awards Ceremony – Ken Yoder, Tom Gorell, Gina Holland, Beverly Meier, Lalana Sperline, Kate Taylor

Display & Safety – Elemer Bernath, Orville Boge, Dan Van Gorp, Elizabeth Pol, Don Gabriel, Don Hurt, Nancy Gettman, Rich Shipman, Paul Josephson, Tony Jorsted, Mike Kearns, Jim Stevens

Finance – Dan Blake, Carl Edstrom, John Jacobi, Don Taylor, Kristin Howerton, Tom Gorell, Larry Anderson

Host Families – Sue Refner

Photography – Joe Eddins, Ray Alvarado, Ed Lobato, Jessie Ramirez, Larry Jakel, Natalie Sexton, Tom Gorell

Publicity – Dave Clark

Registration – Kate Taylor, Ruth Taylor, Carl Edstrom, Jan Sorenson, Lucy Adams, Sue Refner

Regular Judging – Gina Holland, Carl Edstrom, Elizabeth Ralph, Lucy Adams, Sue Refner, Beverly Meier

Room Set-Up – Jim Sites, Ken Yoder, Tom Gorell, John Lehman, Skip Beck, Elemer Bernath, Paul Josephson, Dan Van Gorp, Tony Gorsted

Scientific Review – Elemer Bernath, Charles Johnson, Steve Iona, Connie Vader

Special Awards Judging – Mary Brunner, Ken Yoder, Beverly Meier

Tours/Speaker – Lynn Butler, Rich Shipman, Skip Beck, Kristin Howerton

Volunteers –Lynn Butler, Rich Shipman, Skip Beck, Kristin Howerton, Christal McDougall

Past Colorado Science and Engineering Fair Directors

Charles Bragaw	1956-1967
Calvin Fisher	1968-1974
Sam Shushan	1975-1977
Gordon Moore	1978
Russell B. Stoner	1979-1981
Virgil Sandborn	1981-1983
James Sites	1984-1985
Llyod Walker	1986-1988
Connie Vader-Lindholm	1989-1990
Lynn Butler	1991
Kate Taylor	1992-1994
Christal McDougall	1995

Advisory Council

Joe Allen
Ray Alvarado
Larry Anderson
Leo Armstrong
Jerry Bauer
Don Boyle
Mary Brunner
Lynn Butler
Carl Edstrom
Calvin Fisher
Nancy Gettman
Larry Jakel
Gregg Janus
Charles Johnson
Tony Jorstad

Paul Josephson
Mike Kearns
Jack McGrew
Beverly Meier
Bob Philbin
Linda Preston
Virgil Sandborn
Frank Sander
James Stevens
Doug Steward
Russell Stoner
Harvey Teyler
Connie Vader
Dan Van Gorp
Ken Yoder

CSEF Advisory Council also includes all Regional Fair Directors and the CSSF, Inc. Board of Directors.

Regional Science Fairs

Arkansas Valley

Kathleen Close, Director

Northeast Colorado

William Hothus, Director

Boulder Valley

Jessica Feld and Karen Hyden, Co-Directors

Pikes Peak

Georgia Matteson, Director

Denver Metro

Herschel Neumann, Director

San Juan Valley

Martha Iverson and Don May, Co-Directors

East Central

Harry Wolf, Director

San Luis Valley

Lucy Adams, Director

Longs Peak

Terry Scott, Director

Southeast Colorado

Robert Williams, Director

Morgan/Washington Bi-County

Elemer Bernath & Don Gabriel, Co-Directors

Spanish Peaks

Usha Herbert, Director

Western Colorado

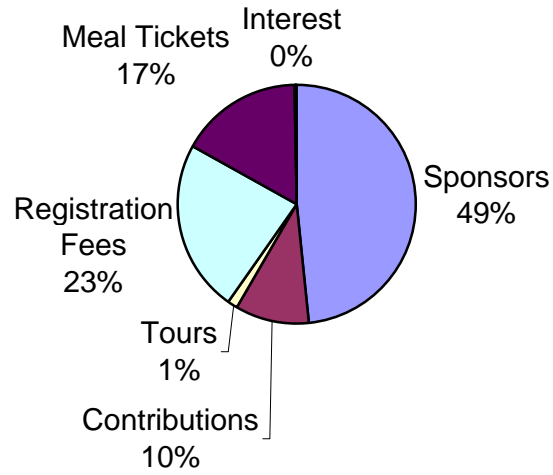
Orville Boge and Rob Robison, Co-Directors

Colorado State Science Fair, Inc.

INCOME	1991	1992	1993	1994	1995
Sponsors	\$5,000	\$8,000	\$7,850	\$9,500	\$12,250
Contributions	\$1,745	\$1,530	\$2,250	\$2,200	\$2,544
Tours	\$185	\$196	\$107	\$1,302	\$316
Registration Fees	\$4,260	\$4,334	\$4,928	\$5,800	\$5,925
Meal Tickets	\$3,123	\$3,456	\$3,423	\$3,266	\$4,238
Interest	<u>\$197</u>	<u>\$154</u>	<u>\$134</u>	<u>\$104</u>	<u>\$58</u>
	\$14,510	\$17,670	\$18,692	\$23,172	\$25,311
EXPENSES					
Student Awards	\$2,061	\$2,791	\$2,946	\$3,044	\$4,987
Travel to ISEF	\$3,656	\$3,182	\$2,708	\$2,761	\$2,926
ISEF Affiliation	\$500	\$500	\$500	\$500	\$500
Meals	\$6,241	\$6,274	\$8,110	\$8,656	\$7,067
Coordinator	\$0	\$1,250	\$1,750	\$3,600	\$4,200
Printing	\$1,932	\$1,463	\$1,646	\$2,930	\$1,226
Busses/Tours	\$50	\$0	\$0	\$2,300	\$0
Supplies, Misc.	<u>\$900</u>	<u>\$1,455</u>	<u>\$1,420</u>	<u>\$1,506</u>	<u>\$1,836</u>
	\$15,340	\$16,915	\$19,080	\$25,297	\$22,745
ASSETS					
Checking	\$178	\$848	\$324	\$1,152	\$2,957
Savings	<u>\$2,779</u>	<u>\$2,934</u>	<u>\$3,068</u>	<u>\$124</u>	<u>\$905</u>
	\$2,957	\$3,782	\$3,392	\$1,276	\$3,862
PARTICIPANTS	213	197	224	228	238

1995 Financial Profile

Income for 1995



Expenses for 1995

