

*History of the  
Colorado State Science Fair, Inc.*

## *Colorado Science and Engineering Fair: A Brief History*

For nearly 60 years, the Colorado Science and Engineering Fair has been an avenue for the students of the state of Colorado to showcase their scientific and engineering research projects to the public. This state level competition was the brain child of Frederick W. Brown and Charles L. Bragaw of the National Bureau of Standards back in 1955. Along with support from the Colorado Engineering Council and the Colorado-Wyoming Academy of Science, the first Colorado-Wyoming Science Fair was held April 28, 1956 with 155 participants in both the junior and senior high school divisions from around Colorado. While Wyoming students did not participate the first year, they were involved from 1957 through 1969. In 1970, the science fair became an all-Colorado event and its name was changed to the Colorado State Science Fair. Now roughly 320 students from 13 regional science fairs in Colorado attend the CSEF each year, representing over 100 schools.

Colorado's Dr. Samuel Newman, a surgeon and Colorado Medical Society member was involved in the early years of the National Science Fair (now the International Science and Engineering Fair) and in 1957, encouraged the Colorado-Wyoming Science Fair to become affiliated with Science Service (now Society for Science & the Public) in order to send students to the national competition. Beginning in 1958, the top two senior division high school winners were sent to compete in the national competition and CSEF has been sending students ever since. Now the CSEF sends the top four senior division winners and many of the 13 regional science fairs also send students to compete in the Intel ISEF, giving Colorado a delegation of around 20 projects each year at the international competition.

The Colorado State Science Fair was headquartered at the National Bureau of Standards in Boulder from 1956 through 1968. At that point, the Colorado Medical Society took over management and key support of the science fair until 1978 when it again moved back to Boulder and was run by the National Institute for Telecommunication Sciences. Then in 1981, the CSEF moved to Colorado State University in Fort Collins, CO. Now, the CSEF is housed in the College of Natural Sciences Education & Outreach Center at CSU, where its current and longest tenured director, Ms. Courtney Butler is located.

In 1977 the Colorado State Science Fair was incorporated as a non-profit organization to coordinate and operate the state science fair. A Board of Directors, made up of representatives from the sponsors was formed to control and manage the corporation. Sponsors during the first year of incorporation included the American Cancer Society, Colorado Division, Cinderella City Merchants Association, the Colorado Engineering Council, the Colorado Medical Society and its auxiliary, the Denver Post, the National Bureau of Standards, NOAA, and the Office of Telecommunications/Institute for Telecommunication Science. In the beginning of the corporation, the name of the event and the organization were the same. However, in 1993, the event title was changed to the current Colorado Science and Engineering Fair.

- 1979 The categories for both divisions are Botany, Engineering, Mathematics, Physical Sciences (Chemistry & Physics) and Zoology.
- 1985 Health & Behavioral Sciences is added to both divisions. The categories for both divisions are now Botany, Engineering, Health & Behavioral Sciences, Mathematics, Physical Sciences and Zoology.
- 1986 10<sup>th</sup> – 12<sup>th</sup> grade students must compete in the Senior Division. 9<sup>th</sup> grade students may compete in the Senior Division if certified by their regional fair director. 7<sup>th</sup> – 8<sup>th</sup> grade students must compete in the Junior Division. 9<sup>th</sup> grade students may compete in the Junior Division if certified by their regional fair director.
- Sept. 1987 Computers are added to the Mathematics category in both divisions and will include projects related to research on computer software. Projects related to computer hardware will be placed in Engineering. Earth Sciences is added as a category for the Junior Division only. The categories for the Junior Division are now Botany, Earth Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences and Zoology. The categories for the Senior Division are now Botany, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences and Zoology.
- Earth Sciences is changed to Earth & Environmental Sciences in the Junior Division and is to include astronomy. The categories for the Junior Division are now Botany, Earth & Environmental Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences and Zoology. The categories for the Senior Division are now Botany, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences and Zoology.
- A finance committee is established.
- Nov. 1988 Earth & Environmental Sciences is added to the Senior Division. The categories for both divisions are now Botany, Earth & Environmental Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences, and Zoology.
- The 8 foot height limit for exhibits standing on tables is retained. Extraneous displays, exhibits and devices are not allowed at the fair.
- The number of special awards will be limited to four per organization.
- Jan. 1989 The fee per student registration for CSEF is \$20.
- Sept. 1989 Exhibits will be left on display until the banquet is over. Students not attending the banquet or those requiring exceptions for religious reasons must notify the CSEF Director in advance on the registration form. This requirement will be added to the published rules.
- Off-campus tour fee is \$1 and on-campus tour fee is \$.50.
- Nov. 1989 All judges must sign off on each interview and a minimum of 3 interviews will be made. Special judges will be asked to limit their time to ten minutes per student.

- Sept. 1990 The total CSEF allocation of projects was increased to 204, adding 6 for Pueblo and deducting 2 from Morgan/Washington.
- Sept. 1991 The fee per student registration for CSEF is raised to \$22.  
There are now 13 regional science fairs in Colorado.  
The cash allotment for student awards for 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> has been raised to \$100, \$50 and \$25 respectively.
- Sept. 1993 The fee per student registration for CSEF is raised to \$25.  
A sponsor must donate \$500 or more and is eligible for two seats on the Board of Directors. A Contributor may donate less than \$500. Sponsors and Contributors will be listed as such in the CSEF Program each year. It is reasonable to ask for more than \$500 and the finance committee is authorized to be creative with larger sponsorships.  
The name of the event is changed from “State Science Fair event” to the “Colorado Science and Engineering Fair.”  
CSEF mission statement is adopted.
- Sept. 1994 The height limit is changed to match the restrictions of ISEF.  
A guideline of up to 20% of entries in each category may receive an honorable mention award.
- Nov. 1994 There will be one award per division for the Team Project category. Teams will not be included in the All Fair judging. Regional fairs can only send one team from their region.  
As part of the registration fee, students will be given t-shirts.  
Advertisements by sponsors should not be in the program.  
CSEF will pay for all expenses for the top two Senior Division winners to attend ISEF and the CSEF Director has the discretion of providing partial funding to send up to two addition people to ISEF.  
In-kind sponsors need to submit the value and some detail of what they are bringing to the fair. In-kind sponsorship will be included in the annual report.
- Sept. 1995 In addition to the top two senior winners, a team of up to three students and an adult-in-charge will be sent to ISEF, paid for by CSEF.  
The CSSF, Inc. is now listed in the Combined Federal Campaign.
- Oct. 1995 An Interdisciplinary Teams category is added to both divisions. The categories for both divisions are now Botany, Earth & Environmental Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences, Zoology and Team Projects.  
The banquet will no longer be held. The Awards Ceremony will be held on Friday evening.

- April 1996 Regional fairs will now be allowed to send up to three teams per division from their region.
- Sept. 1996 All new special awards must have a minimum value of \$50. Awards that are certificates only will be announced, but not presented during the awards ceremony.
- The fee per student Registration for CSEF is raised to \$35 and all accompanying Adult-In-Charges will be charged a fee of \$35.
- Exhibit display restrictions will match ISEF guidelines.
- The Lynne Butler Memorial Scholarship is established.
- 6<sup>th</sup> – 8<sup>th</sup> grade students will compete in the Junior Division. 9<sup>th</sup> – 12<sup>th</sup> grade students will compete in the Senior Division. The regional fair allocations will stay the same for both divisions.
- CSEF mission statement summary is tabled.
- Sept. 1997 The Team Project category will now be awarded a 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and Honorable Mention awards and be included in the All Fair judging.
- Oct. 1997 Regional fair allocations have been changed and updated to reflect the overall proportion of students the regional fairs serve.
- April 1998 A recording secretary is hired for the CSSF, Inc. Board of Directors.
- The Colorado State Science Fair, Inc. becomes a member of CANPO – the Colorado Association of Non-Profit Organizations.
- Sept. 1998 Article 5, Section 3 of the by-laws is amended, establishing the Executive Committee which will consist of the four board officers (president, vice president, secretary & treasurer) and up to two board members at-large.
- A Board Member Handbook is proposed.
- Sept. 1999 Half of the travel expenses incurred by the recording secretary to attend the board meetings will be paid by CSSF, Inc.
- Nov. 1999 Earth & Environmental Sciences is split into two categories, Earth & Space Sciences and Environmental Sciences. The categories for both divisions are now Botany, Earth & Space Sciences, Environmental Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Physical Sciences, Zoology and Team Projects.
- The immediate past president will become a part of the executive board.
- A project moving policy is established to allow judges input into what category projects are judged in.
- The split of the Earth & Environmental Sciences category into Earth & Space Sciences and Environmental Sciences created the need for money to cover the cash awards of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>.
- April 2001 The CSSF, Inc. by-laws are updated and approved.

- Sept. 2001 An archival of documents policy is adopted to make sure that we don't lose any history.  
CSSF, Inc. Board of Director's Policy Handbook is adopted.  
Microbiology category is established. The categories for both divisions are now Botany, Earth & Space Sciences, Environmental Sciences, Engineering, Health & Behavioral Sciences, Mathematics & Computer Sciences, Microbiology, Physical Sciences, Zoology and Team Projects.
- Nov. 2001 The Grand Awards Policy is amended to include a \$500 award to be given to a winning team that cannot be sent to compete at ISEF due to Science Service restrictions on the number of teams that can be sent.  
A travel policy is adopted. This policy will be used for outreach travel and Scientific Review Committee work.  
A CSEF Director job description is adopted.  
Video of CSEF done by Bob Morrow was previewed.
- Jan. 2002 An Outreach Committee is formed  
A Records and Archival Policy Ad-Hoc Committee is formed.
- April 2002 Elemer Bernath was asked to be the CSEF Historian.  
Jim Stevens, Denver Metro Regional Science Fair Director, made a presentation about bringing the Intel ISEF to Denver and Colorado in 2006.
- Sept. 2002 All place awards are increased by \$25.00. First Place will now be \$125, Second Place will be \$75 and Third Place will be \$50.  
The Grand Awards Policy was amended to include Team Projects within the categories and eliminate a separate Team Category. Grand Awards Judges for each category will nominate up to 2 team projects that will receive a \$30 award and be eligible for judging of the Best Team Project Award of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place in each division. The Senior Division Best Team Project will be awarded a trip to compete at the ISEF.  
Archival material was placed with the Morgan Library at Colorado State University.  
A new Regional Science Fair has been organized in Pueblo. This region will encompass Fremont, Custer and Pueblo counties. Huerfano and Las Animas counties will join the Arkansas Valley RSF, effectively dissolving the Spanish Peaks RSF that has been held in Trinidad in the past.  
A Regional Science Fair Communication Policy was adopted to outline how the CSEF is to communicate and interact with the 13 regional science fairs.  
A grant was received from Intel to hold workshops for teachers in various regions of the state.
- Jan. 2003 The Physical Sciences category was split into two categories: Physics and Chemistry. The categories for both divisions are now Botany, Chemistry, Earth

& Space Sciences, Engineering, Environmental Sciences, Health & Behavioral Sciences, Mathematics & Computer Sciences, Microbiology, Physics and Zoology.

The Teacher of the Year Award is established.

- June 2003 A teacher workshop was held in Pueblo for the Southern Colorado RSF.
- July 2003 A teacher workshop was held in La Junta for the Arkansas Valley RSF.
- Sept. 2003 The 50<sup>th</sup> Anniversary Ad-Hoc Committee was established to plan events for the 50<sup>th</sup> Anniversary in 2005.
- Nov. 2003 CSSF, Inc. becomes a member of the Colorado Science Teacher Association (CAST).
- Lockheed Martin becomes the permanent sponsor of the Teacher of the Year Award.
- Sept. 2004 The category of Health & Behavioral Sciences was split into two categories of Behavioral & Social Sciences and Medicine & Health. The categories for both divisions are now Behavioral & Social Sciences, Botany, Chemistry, Earth & Space Sciences, Engineering, Environmental Sciences, Mathematics & Computer Sciences, Medicine & Health, Microbiology, Physics & Zoology.
- Courtney Butler and Jim Stevens made a presentation to Science Service on bringing the Intel ISEF to Denver in 2008.
- Jan. 2005 The Pioneers of Science Awards are established and funded entirely by donations from board members. The idea is to encourage those Junior Division finalists who are very enthusiastic about their research, but may not have it quite right yet. Each award will be named after a famous scientist in the field of study that the board member is sponsoring.
- April 2005 Science Service did not select Denver as a site for the 2008 Intel ISEF due to problems with the Colorado Convention Center.
- July 2005 A teacher workshop was held in Lamar for the Southeast Colorado RSF.
- Sept. 2005 A Regional Fair Allotment Policy was adopted to outline the number of spots at the CSEF each regional science fair receives each year.
- Nov. 2005 An ISEF Participation Policy was created to outline how CSEF designates its ISEF Finalists and what happens if a student is already attending from his/her regional science fair.
- The Grand Awards Policy was updated to make it clear that honorable mention awards can only be given if all three places are awarded.
- Jan. 2006 A Scientific Review Committee Membership and Operations Policy was adopted outlining that all members of the CSEF SRC need to be approved by the board of directors and how the committee is to handle the review of projects from the regional science fairs.
- July 2006 A teacher workshop was held in Alamosa for the San Juan Basin RSF and the San Luis Valley RSF, plus others from around the state.

- Sept. 2006 Cal Fisher, a former CSEF Director passed away in July of 2006 and left the CSEF a \$10,000 endowment that is to be used for publicity of the CSEF as decided by a three member committee (the Current CSEF Director, Russell Stoner, and Sam Sushan).
- Nov. 2006 A Special Awards Program Policy was adopted that gives the board of directors the right to decline having an organization participate in the special awards program.
- A new category of Energy & Transportation was created and Zoology was changed to Animal Sciences and Botany changed to Plant Sciences to match the Intel ISEF categories. The categories for both divisions are now Animal Sciences, Behavioral & Social Sciences, Chemistry, Earth & Space Sciences, Energy & Transportation, Engineering, Environmental Sciences, Mathematics & Computer Sciences, Medicine & Health, Microbiology, Physics & Plant Sciences.
- Nov. 2007 A CSEF Participation Policy was adopted that outlined that CSEF accepts finalists from all types of schools (public, charter, parochial, private, home, etc.) and that we encourage all of the regional science fairs to do so as well.
- April 2008 Miles Eddy did a professional video taping of the CSEF this year and produced a DVD and computer version of the video for CSEF to use for publicity.
- Jan. 2010 CSEF starts a CSEF Alumni Facebook page - <https://www.facebook.com/Colorado-Science-and-Engineering-Fair-Alumni-209098402517068/>.
- A T-shirt Design & Procurement Policy was adopted to aid the board of directors in choosing t-shirt designs and businesses to produce them.
- July 2010 The first CSEF Board of Directors Retreat was held in Alamosa, CO. The board members attending enjoyed a trip to the CSU Research Center and the Alligator Farm.
- Jan. 2011 The CSEF Director was named as the Executive Director of the Colorado State Science Fair, Inc. organization.
- July 2011 The board of directors created a strategic plan for the organization with two broad areas of finance and stakeholder engagement and outreach and science fair operations.
- Sept. 2011 The Grand Awards Policy was changed to have team projects judged against individual projects to mirror what the Intel ISEF began doing. All projects will be eligible for all grand awards.
- The grand award cash prizes were increased. First Place is now \$200/project; Second Place is now \$100/project; Third Place stays at \$50/project; and a Fourth Place is added at \$25/project.
- A slight change was made to the mission statement. Changing science, engineering and technology to science, technology, engineering and mathematics (STEM).



- Nov. 2011 The CSSF, Inc. by-laws were updated with changes to the executive committee assignments and jobs and to reflect the newly appointed Executive Director.
- 2012 CSEF started a new general interest Facebook page - <https://www.facebook.com/ColoradoStateScienceAndEngineeringFair>.
- Nov. 2012 The sponsorship levels were changed to include more levels. They are now Diamond (>\$10,000); Platinum (\$5,000-\$9,999); Gold (\$2,500-\$4,999); Silver (\$1,000-\$2,499); Bronze (\$750-\$999); and Copper (\$500-\$749). The “benefits” for each level were also updated to include such things as logo placement on t-shirts, web site, programs, etc.; banners and tables at the CSEF, and publicity exposure in press releases and Facebook.
- Sept. 2013 A Conflict of Interest statement is created that grand award judges need to adhere to in order to be a judge for the CSEF.
- April 2014 The CSEF was held at The Hilton Fort Collins due to construction on the Lory Student Center at CSU.
- Sept. 2014 The Recording Secretary position was abolished.
- Oct. 2014 A 60<sup>th</sup> Anniversary Reception was held with various CSEF Alumni and VIP guests in attendance. The group also got to see the newly renovated Lory Student Center.
- April 2015 The newly renovated Lory Student Center at CSU allowed the CSEF to increase the number of projects and there were a record 339 projects and 391 students in attendance this year.