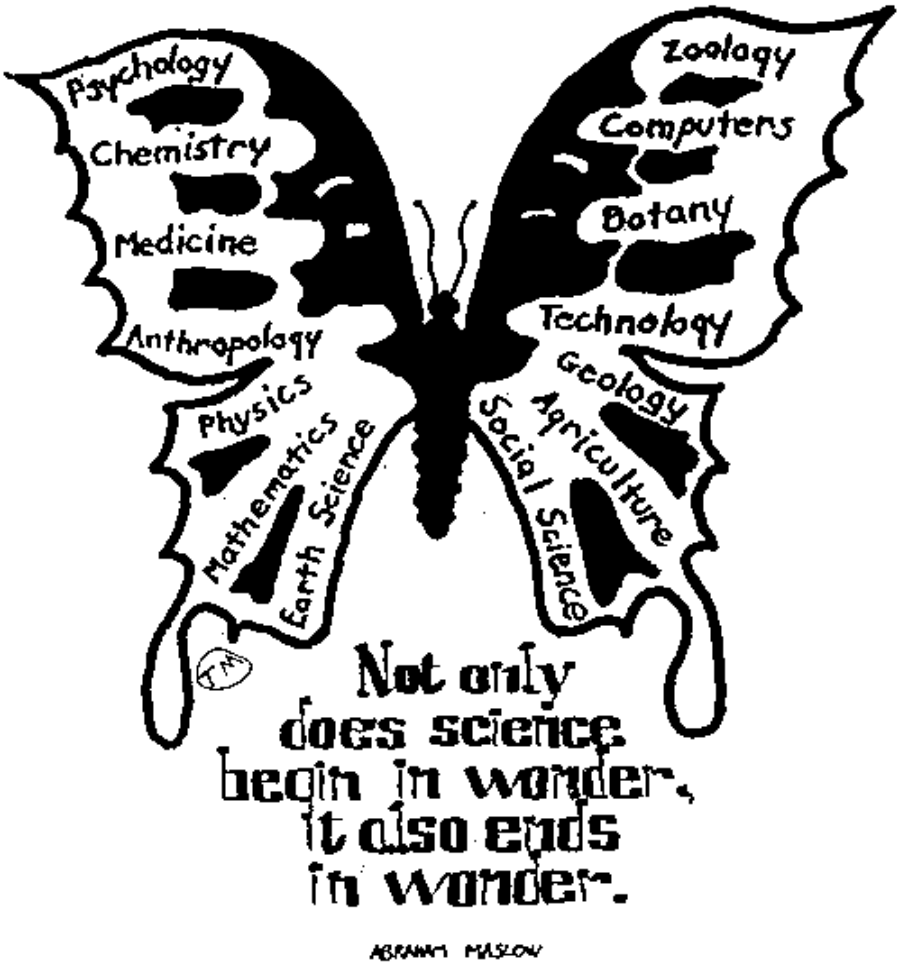

San Luis Valley Regional Science Fair, Inc.

2016 Annual Report

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San Luis Valley Regional Science Fair
2016 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 San Luis Valley Regional Science Fair.

Established in 1949, the San Luis Valley Regional Science Fair, Inc. is a private, non-profit organization, which holds a regional competition each year. More than 800 students from the San Luis Valley and Chaffee County, participate in Science Fair at their schools. The purpose of the fair is to stimulate student interest and encourage the students in science and engineering by recognition of their abilities and achievements.

This year's winners were chosen from among 287 exhibits presented by 342 finalists. These finalists represented 13 public school districts, home-schoolers from the San Luis Valley, students from Salida, and private schools. More than 300 judges, including professional scientists, engineers, medical professionals, mathematicians, and advanced Adams State University students, interview the students and evaluate their projects before selecting the winners. In addition, there were also businesses, professional societies, and government agencies that provide their own representatives to help judge exhibits based on their criteria. These judges confer the Special Awards, including scholarships, summer internships, cash, medals, and scientific calculators, which represents an aspect of the bestowing organization. Over 1500 people attended the Awards Ceremony this year which was held in Plachy Hall gym at Adams State University.

In addition, receiving the rare opportunity to speak with working scientists, SLV Regional Science Fair students participate in three grade level divisions for the grand awards in a number of categories: Behavioral and Social Science, Biomedical Science, Botany, Chemistry, Consumer Science, Earth and Space Science , Engineering, Environmental Science, Mathematics and Computer Science, Physics and Zoology.

Participating in Science Fair is one of the few activities that expects students to integrate virtually all areas of their academic development. They use the library for literature reviews, history and research; the students execute experimentation and generally complete mathematical analysis; they write reports; they utilize artistic styles in the preparation of their presentation boards; and they are expected to orally present their projects to the judges. Awards are also given for technical writing, oratory skills, display, originality, and overall projects. Winning Junior and Senior division projects are awarded trips to the Colorado Science & Engineering Fair, which is held in Fort Collins, Colorado. In addition, the two senior division students with outstanding overall projects are awarded an all-expense paid trip to the Intel International Science & Engineering Fair. In 2016 the Intel International Fair was held in Phoenix, Arizona, where Colorado students competed with their peers from more than 75 countries, regions and territories to showcase their independent research projects.

Many educational experiences are made available to students who participate in the San Luis Valley Regional Science Fair. Recent programs have included Science From CU; the Alamogordo Space Center; Mobil Ed Productions; Physics is Fun; the Denver Museum of Nature and Science; Visible Productions and Mike Mullane (Ret.), NASA Astronaut. Last year's program, "Marine Biology," was presented by Science From CU. Students discovered the watery world of jelly fish, seahorses sharks and other ocean creatures. They learned about the characteristics of marine vertebrates and invertebrates by observing museum specimens. Adams State University, Title 5, STEM sponsored the educational program for the students.

The judges' interviews and the educational programs 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 SLV Regional Science Fair.
Scholarships from Adams State University and other organizations are also presented. Adams State University awards $3,000 in scholarships for outstanding science fair participants who have a desire to further their education at ASU. The San Luis Valley Research Center – Colorado State University, Department of Horticulture and Landscape Architecture - offers a $900 summer internship to a San Luis Valley student, in grades eight through twelve, who shows excellence in the field of potato research, from the Botany category. A new family scholarship was established a couple of years ago that is awarded to a graduating senior student that will be attending Colorado State University and majoring in a field of science.

The San Luis Valley Regional Science Fair is devoted to increasing the academic involvement and excellence between all fourth through twelfth grade students in our region. Student winners from each category are presented monetary awards. There are also many local and national awards that are presented to deserving student participants. With the help of our local sponsors and contributors, the San Luis Valley Regional Science Fair is able to present $26,000 (either in monetary awards, scholarships, all-expense paid trips to the international fair or material awards) to the outstanding students of our region.

Organization

The San Luis Valley Regional Science Fair would not be possible without the dedication and tremendous efforts of many committed individuals, as well as public and private organizations, school districts, Adams State University, government agencies, corporations, professional associations, and local businesses. These groups sustain the Fair through their financial and resource support, special awards, and most importantly, through providing dedicated volunteers to serve on the Fair's working committees and/or Board of Directors. Many of these businesses not only make monetary donations, but also allow their employees to serve as judges for the San Luis Valley Regional Science Fair. Prior to this regional event, many local school fairs are conducted throughout the region. Each of these fairs is supported by hardworking and dedicated educators at the local school level. Before a student's project is accepted at the Regional Fair, it requires the encouragement and support from individual teachers, science fair coordinators, and parents to help the student see their project from conception to the finished exhibit. The success of the San Luis Valley Regional Science Fair is dependent on all of these dedicated individuals.

To organize and stage the Fair every year requires a great effort by many people, 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 volunteers of the Fair share. It also speaks of the high level of students' aptitude and enthusiasm for science in the San Luis Valley.

* * *

My experience at ISEF was amazing! We attended training seminars that taught us how to present better, work with other people, improve our speaking skills and inspire us to do more. I enjoyed touring the City of Phoenix. Participating in ISEF has been one of my favorite science fair experiences. I encourage all science fair students to strive for the opportunity to attend ISEF, 2016.
- Keaton Fischer, 2016 ISEF Student Observer – Freshman, Sirerra Grande High School

Mission Statement

The San Luis Valley Regional Science Fair is an organization that:

- Honors winners from local San Luis Valley school fairs at an annual Regional Science Fair
- Sends finalists from the Regional Science Fair to the Colorado Science and Engineering Fair (CSEF)
- Provides two overall winners at the Regional Science Fair with an all expense paid trip to participate in the Intel International Science and Engineering Fair (ISEF)
- Encourages students to pursue careers in science, technology, mathematics, or engineering
- Provides a forum for developing academic skills, such as conducting an independent scientific investigation, writing a research paper, speaking, preparing an organized display, and becoming familiar with the scientific method.

The San Luis Valley Regional Science Fair supports local school fairs by:

- Providing a forum where local fairs can influence policies, rules, and by-laws of the San Luis Valley Regional Science Fair
- Providing rules and requirements for participation in all fairs – Regional, State, and International.
- Coordinate mentors
- Provides judges and critique at local school fairs.

Impact Statement

The following represent some of the impacts the San Luis Valley Regional Fair has had on the San Luis Valley:

- Awareness, appreciation, and recognition of the importance of science in our society, livelihoods, academic achievement and lifelong success
- An increased awareness of academic competition and the importance of science among Valley educators
- An increased quality of educational activities in all schools in the region
- An increased usage of libraries and the Internet
- An increased exposure to robotics, holography, pathology, space art, moon geology, and the scientific method to the general public.

* * *

Since I was in fourth grade, science fair has been a big part of my life. I think that the first time I went to state in 6th grade, I realized that science would always be in my life, and since then I have strived to do my best. This past year, I went to Intel ISEF in Phoenix, Arizona. It was such an amazing experience, I couldn't stop smiling from the time I left to the time I got home. It was so cool to meet people from all over the world, and just to see all of the amazing projects and ideas people have. There were so many smart kids who are going to do very well in life there as well. My goal for the next three years is to go to ISEF as many times as possible, and to maybe even win an award there too.

-Molly Nehring – Monte Vista High School, Sophomore, 2016 ISEF Finalist

Top Winners of the 2016 San Luis Valley Regional Science Fair

COLORADO AWARD WINNERS

The following students were chosen to represent the
San Luis Valley Regional Science
Fair at the Colorado State Science Fair:

Senior Division

Aaliyah Rose Garcia –Center High School
Cassidy Plane –Alamosa High School
Leighton Burt – Sargent High School
Molly Nehring – Monte Vista High School
Kelsey Lindbloom -Salida High School
Carmen Ruggles - Center High School
Parker Randolph – Monte Vista High School
Amber Michel – Monte Vista High School

Junior Division

Sara Nehring – Monte Vista Middle School
Kristine Hoffner –Home School Middle School
Chinmay Jayanty - Sargent Middle School
Kage Lane Pepper – Sargent Middle School
Brennan Gearhart – Sargent Middle School
Landon Tolsma - Sargent Middle School
Drew Smith – Sargent Middle School
Cole W. Seger - Sargent Middle School
Caleb Uriah Rabon – Sargent Middle School
Keaton Fischer –Sierra Grande Middle School
Greg Watts – Sargent Middle School

INTEL/ISEF WINNERS

The following two students were chosen to represent the San Luis Valley Regional Science Fair at the Intel International Science and Engineering Fair:

Molly Nehring - Monte Vista High School
Leighton Burt - Sargent High School

Alternate

Kelsey Lindbloom – Salida High School

Junior Observer Award

Keaton Fischer – Sierra Grande Middle School

TEACHER AWARDS

The following teachers were chosen to attend the
Intel International Science and Engineering Fair:

Loree Harvey - Monte Vista High School
Rafe Paulson - Sargent High School

SCHOOL AWARDS

The following School Awards are based on the total tabulations of all Grand Awards received by their students:

Small Elementary School	Sierra Grande Elementary School
Large Elementary School	Alamosa Elementary School
Small Middle School	Sargent Middle School
Large Middle School	Monte Vista Middle School
Small High School	Center High School
Large High School	Monte Vista High School

WORKING COMMITTEE MEMBERS

Fair Director:	Lucy Adams

The Fair Director is actively involved in all working committees hereto mentioned and is also an ex-officio member of the SLV Regional Science Fair Board of Directors.

Awards Ceremony:	SLV Regional Science Fair Board of Directors Joy DiCamillo Judy Prester Tayler Rocha
Display and Safety:	Dr. Curtis Crawford
Finance:	SLV Regional Science Fair Board of Directors
Publishing:	Joy DiCamillo and Judy Prester
Registration:	SLV Regional Science Fair Board of Directors
Regular Judging:	Diana Jones – Judge Coordinator
Room Setup:	SLV Regional Science Fair Board of Directors Monte Vista High School MESA/Science Club Parent Volunteers ASU Facilities
Scientific Review Committee:	Dr. Larry Sveum – Chair Curtis Crawford- DVM Ms. Jody Oaks Robert Kirk Dr. Marty Jones Ms. Loree Harvey
Website Committee:	Julie Messick Tayler Rocha

* * *

It has been 21 years since my first science fair project and I am still reaping the benefits. That first project was the gateway to 7 more, which took me to the state competition 5 times and the international science and engineering fair twice. I can easily say that science fair was the most valuable activity I participated in throughout school. Science fair was a family affair, with my parents helping craft experiments, edit my reports, and put together my boards late into the night. My younger brother came along to ISEF, which no doubt lit a fire in him as well.

Completing the reports for my projects taught me how to effectively write about procedures, results, and implications of my research. Presenting my projects allowed me to develop confidence in public speaking and the ability to connect with my audience. These skills helped me through college, where I graduated with honors. Now, being able to connect with people from many different backgrounds through writing and speaking is a critical part of my job as Manager of the San Luis Valley Water Conservancy District. I am incredibly grateful for how Science Fair shaped me and helped me become the person I am today.

-Heather Dutton, Manager, San Luis Valley Water Conservancy District

Highlights of the San Luis Valley Regional Science Fair for 2016

Sixty-seven years of Science Fair was celebrated in the San Luis Valley this past year. What an honorable history for an organization! Our Science Fair is one of the oldest in the country!

Two students were awarded an all expense trip to attend the Intel ISEF at Phoenix, AZ this past spring.

Our fair was again successful, thanks to wonderful sponsorship that allowed a middle school student to attend the Intel International Science and Engineering Fair, as a Student Observer.

Again this past year, SLVRSF added 8 new contributors and several "In Kind" contributors to the listing.

The 2016 Regional Fair had a total of 287 projects with 342 students participating.

19 SLV students attended the Colorado State Science and Engineering Fair. These 19 students received a total of 29 awards, plus two teacher awards were presented to valley teachers.

Of all the San Luis Valley projects entered at CSEF, 68.4% won an award. San Luis Valley students won 5.6% of all total special awards given. The following are examples:

- 9 of those students placed in the grand awards.
- There were 20 different special awards given to our students, which had a total monetary amount of $1475 and included other prizes.
- Adams State University awarded 2 scholarships to Valley students, which is equivalent to one-year tuition and fees, (approximately $18,000)
- Colorado College awarded a summer Merit Scholarship to 2 students. This was a $500 Merit Scholarship to attend Colorado College during the summer of 2016 as a pre-college student.
- One student was awarded a $1,000 renewable undergraduate scholarship from Colorado School of Mines, renewable for up to 3 additional years for use towards an undergraduate degree.
- One student was awarded a 4-year $500 conditional engineering scholarship
- One student was awarded a certificate nomination to enter the Bob and Melani Walton Sustainability Solution Initiative Grand Prize (a trip to Arizona for the 2017 Sustainability Solutions Festival)
- One middle school student was nominated to participate in the Broadcom Masters program.

Board member Jody Oaks and Fair Director Lucy Adams were members of the Display and Safety Committee at the Intel International Science and Engineering Fair held in Phoenix, AZ.

Our website, SLVRSF.org has materials for our teachers, parents, and students listed on it. There is also a registration form for our judges. Student registration for the 2017 will be available at a later date. One may also find the Board of Directors, the mission statement and history of SLVRSF on the website.

New contributors and visitors to the site are able to view information on how to donate/contribute to the fair. Additional support to the SLV Regional Science Fair can be given by using GoodSearch, GoodShop, Razoo and AmazonSmiles. Links may be found by visiting our website at:

SLVRSF.org

Another great year for the San Luis Valley Regional Science Fair!

I remember my first experience with the San Luis Valley Regional Science Fair. I was in fourth grade, I remember dropping basketballs and tennis balls from different heights and measuring the distance the balls would bounce up. I did not know the study of physics, nor the constant rate of acceleration due to gravity close to the surface of earth. I had no chance in mathematically expressing elastic collisions versus inelastic collisions. However, that night of the award ceremony, I was called to the stage. Shaking and nervous, my name was called for an honorable mention award. Thrilled to bits, I remember having the most intense feeling of accomplishment and satisfaction. With that feeling of accomplishment, I gained confidence and desire. I had to do better the next year. The following years I did projects from calculating areas of circles of alfalfa fields to designing gloves to help my grandfather with his severe case of hand tremors. Science fair has built desire, perseverance, and confidence in my personality.

In college, I pursued an education in mathematics and physics. I attended Adam State University. I was asked to judge the San Luis Valley Region Science Fair each year as spring break approached. I was fortunate to be able to judge for three years, and each year I learned a deeper understanding of science and all its various branches. Also worth noting, I learned that I enjoy communicating and connecting with the youth. I am currently a science teacher who loves his job. I was fortunate to be able to attend ISEF this past year in Phoenix, Arizona with a student. To be around so many brilliant young minds was truly an inspiring moment. I then realized the importance of science education. Through science, I have been able to find meaning out of life and build an identity as a science educator. Science fair has undoubtedly impacted my life by helping me with my scientific literacy and critical thinking skills. I thank all of you who support and help this wonderful organization. You are inspiring the youth and helping young minds change the world. Thank you.

-Rafe Paulson, Sargent High School Science Fair Coordinator

I was a participant of the San Luis Valley Regional Science Fair beginning in fifth grade and continuing to my senior year of high school. When I tell people about all my years in science fair, they look surprised and ask something along the lines of why I wanted to participate for so long. See, they're thinking of elementary science fair projects, bottle rockets and volcanoes. Now that's a great starting place, but science fair goes far beyond that.

From eighth grade to twelfth grade, I worked on projects involving microbial fuel cells, a way to create renewable energy. Now at the collegiate level, I was awarded a grant from the University of North Carolina at Chapel Hill to perform my own research. For my research program, I must create a research proposal, meet with professors, allocate funds, and finally perform research, Because of science fair, I'm already familiar with this process. My professor of English for Pre-Health and Medicine asked me how I acquired my scientific writing abilities. I told her—science fair. As I navigate college, I see the benefits of science fair every day. I'm not afraid to talk to professors, I've been talking to science fair judges since I was a young child. I know how to present myself and clearly communicate because of science fair. Participation in science fair is positively impacting every facet of my life as I continue throughout my education.

As I look towards a degree in biomedical and health sciences engineering, I know that my goals will not happen easily or overnight, but science fair taught me tenacity and the ability to think outside the box. Science fair was the best part of my K-12 education. I started out as a shy child, unsure, and now I hope to improve lives, one microbial fuel cell at a time. Never give up on science fair, because it can change the lives of youths. I am living proof of that.

-Kelsey Lindbloom, Salida High School 2016 ISEF Alternate