

# Press Release

## Colorado Science and Engineering Fair

For Colorado Students in Grades 6 - 12

Hosted by the Center for Science, Mathematics & Technology Education



April 10 - 12, 2008  
in the Lory Student Center  
at Colorado State University  
Fort Collins, Colorado

# 2008 Colorado Science and Engineering Fair

## Grand Awards Press Release

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### Junior Division Best Individual Project

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#### First Place

Molly Graber 8th grade  
*The Effects of Bovine Colostrum on Breast Cancer*  
 North Middle School Colorado Springs

#### Second Place

Zane Willburn 7th grade  
*Water Purification off the Grid*  
 Mancos Middle School Mancos

#### Third Place

Garret Cerny 6th grade  
*Is It Easier to Always Be Right?*  
 Eagle County Carter Academy Wolcott

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### Senior Division Best Individual Project

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#### First Place

Gwyneth Glissmann 11th grade  
*Analyzing Arctic Solar Flux and Ice Extent Loss Projections*  
 Peak to Peak Charter School Lafayette

#### Second Place

Sarah Guthrie 11th grade  
*The Mechanisms and Actions of Parthenolide on Platelet 5-HT Secretion In Vitro*  
 Boulder High School Boulder

#### Third Place

Ben Armstrong 10th grade  
*Enemies of the Environment: Estrogen Mimics*  
 Monte Vista High School Monte Vista

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### Junior Division Best Team Project

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#### First Place

Loren Koszowski & Anna Mellman 7th grade  
*Who Would You Rather Kiss?*  
 Stanley British Primary School Denver

#### Second Place

Claire Derr & Allison Gudvangen 7th grade  
*Fill Up Not Freeze Up*  
 North Middle School Colorado Springs

#### Third Place

Matthew Mandelski & Zofie Mandelski 7th grade  
*The Healthiest Spirogyra*  
 St. Columba School Durango

#### Honorable Mention

Kendra Gomez & Alixx Vigil 7th grade  
*Cash, Credit, Coins*  
 Pueblo School for Arts and Sciences Pueblo

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### Senior Division Best Team Project

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#### First Place

Danielle Pite, Kelly Lane & Anna Hermann 12th grade  
*Didymosphenia geminata: The Core Question*  
 Boulder High School Boulder

#### Second Place

Anika Petach & Tanya Petach 9th grade  
*Pine Beetle Outbreaks: Spatial Analysis and Pheromone Population Control*  
 Fairview High School Boulder

#### Third Place

Julia Buzan & Joseph Smith 12th grade  
*Determining a Non-Contact Method for Testing Skin Elasticity and Density*  
 Cherry Creek High School Greenwood Village

#### Honorable Mention

Tonya Pavlekno & Laura Gudvangen 9th grade  
*The Superbug: How It Spreads*  
 Palmer High School Colorado Springs

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### Junior Division Animal Sciences

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#### First Place

Nakayla Lestina 8th grade  
*Biological Control of Canada Thistle Phase 2 Analyzing the Spread of Three Natural Insect Enemies*  
 Dove Creek Middle School Dove Creek

#### Second Place

Wyatt Palser 7th grade  
*Attack of the Killer Worms!!!*  
 Otis Jr/Sr High School Otis

#### Third Place

Sarah Reed 8th grade  
*Supersize Me! The Effect of Junk Food on Mice*  
 Summit Middle School Boulder

#### Honorable Mention

Rennie Winkelman 8th grade  
*What Size of Sand Does the Aquatic Worm *T. tubifex* Prefer?*  
 Blevins Junior High School Fort Collins

**Honorable Mention**

Rebecca Roskowski 8th grade  
*Are Crawfish That Fish Eat Contributing to High Mercury Levels in Large Fish in the Colorado River Basin?*  
 East Middle School Grand Junction

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**Senior Division  
 Animal Sciences**


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**First Place**

Lindsey Denison 11th grade  
*The Onion Thrip Trick*  
 Paonia Jr/Sr High School Paonia

**Second Place**

Connie Liu 9th grade  
*Classification and Evolutionary Biology of Solifugids by Rostrum*  
 Cherry Creek High School Greenwood Village

**Third Place**

Brandy Haller 10th grade  
*Comparison of Mountain Pine Beetle in Colorado and Surrounding States*  
 Woodlin School Woodrow

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**Junior Division  
 Behavioral & Social Sciences**


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**First Place**

Garret Cerny 6th grade  
*Is It Easier to Always Be Right?*  
 Eagle County Carter Academy Wolcott

**Second Place**

Zachary Tanner 8th grade  
*Rock, Paper, Scissors: A Game of Chance?*  
 Summit Middle School Boulder

**Third Place**

Diane Schulze 8th grade  
*Monkey See, Monkey Do: Literary Imagery and the Mirror Neuron System*  
 Cherry Creek Challenge School Denver

**Honorable Mention**

Dante Carter 6th grade  
*Does Music Affect Test Scores?*  
 North Middle School Colorado Springs

**Honorable Mention**

Dirk Marshall 7th grade  
*The Eyes Have It: Do Your Eyes Show Your Personality?*  
 Cherry Creek Challenge School Denver

**Honorable Mention**

Codi Inloes-Williams 6th grade  
*Making Cents of H<sub>2</sub>O*  
 Timberview Middle School Colorado Springs

**Honorable Mention**

Alexandra Kirschbaum 7th grade  
*Wake Up! A Comparative Study between Sleep and Mood*  
 Merino Jr/Sr High School Merino

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**Senior Division  
 Behavioral & Social Sciences**


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**First Place**

Sarah Oden 9th grade  
*Insight in Sight, This Art Is All Right*  
 Monte Vista High School Monte Vista

**Second Place**

Leela Khanna 10th grade  
*Brainwave Coherence: Developing the Full Potential of the Brain*  
 Palmer High School Colorado Springs

**Third Place**

Allie Martin 9th grade  
*The Task At Hand: Is Multitasking Affecting Our Health and Productivity?*  
 Woodlin School Woodrow

**Honorable Mention**

Rachel Kelley 12th grade  
*Characteristics Common to Homeless Youth Pursuing the GED Certification*  
 Cherry Creek High School Greenwood Village

**Honorable Mention**

Amelia Eads 9th grade  
*Is It Safe to Dish and Drive? The Effect of Cell Phone Usage on Reaction Time*  
 Blevins Junior High School Fort Collins

**Honorable Mention**

Samuel Galler 12th grade  
*Hemispheric Lateralization in Auditory Cortex for Words Versus Partial Speech Sounds*  
 Boulder High School Boulder

**Team Nomination**

Kelsey Burns & Rachel Strauch 11th grade  
*Brainwashed*  
 Arriba-Flagler Public School Flagler

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**Junior Division  
 Chemistry**


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**First Place**

Kelsey Piper 8th grade  
*Going Bananas: Does the Vitamin C Concentration of a Banana Vary with Ripeness?*  
 Summit Middle School Boulder

**Second Place**

Kassidy Knutson 7th grade  
*Effects of Acid Rain on Structural Materials*  
 Wiggins Jr/Sr High School Wiggins

**Third Place**

Kole Van Treese 7th grade  
*Difference in Diesel*  
 Sargent Jr/Sr High School Monte Vista

**Honorable Mention**

Iris Belensky 8th grade  
*New and More Energy Efficient Ways to Cure Polymer Clay*  
 Summit Middle School Boulder

**Honorable Mention**

Tess Ringlein 6th grade  
*Pucker Up to Poison*  
 Yuma Middle School Yuma

**Honorable Mention**

Justin Lewton 8th grade  
*Homegrown Biodiesel the Way to Go?*  
 Weld Central Junior High School Keenesburg

**Team Nomination**

Claire Derr & Allison Gudvangen 7th grade  
*Fill Up Not Freeze Up*  
 North Middle School Colorado Springs

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**Senior Division  
Chemistry**

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**First Place**

Sarah Guthrie 11th grade  
*The Mechanisms and Actions of Parthenolide on Platelet 5-HT Secretion In Vitro*  
 Boulder High School Boulder

**Second Place**

Bradley Falk 12th grade  
*Chemical Comparison of the Relative Efficiency of the 2-Hydroxymethylphenol Synthesis of Aspirin*  
 Cherry Creek High School Greenwood Village

**Third Place**

Travis Zuniga 9th grade  
*The Wonder Drug (A Chemical Analysis of Analgesics to Detect Aspirin)*  
 South High School Pueblo

**Honorable Mention**

Lisa Grossman 12th grade  
*Synthetic vs. Natural Vitamin E: Optical Isomerism, Synergy and Antioxidant Testing Problems*  
 Palmer High School Colorado Springs

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**Junior Division  
Earth & Space Sciences**

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**First Place**

Sara Cunningham 6th grade  
*Crystals*  
 Our Lady of Fatima School Lakewood

**Second Place**

Carl Scheevel 7th grade  
*Effectiveness of Various Ground Covers on Soil Erosion on a 32.5% Grade*  
 East Middle School Grand Junction

**Third Place**

Brisha Wakasugi 7th grade  
*Potato Pedology: A Soil Study of Two Different San Luis Valley Growing Horizons*  
 Sierra Grande Jr/Sr High School Blanca

**Honorable Mention**

Isaac Beverlin 6th grade  
*ARCHES: Solid Rock to Windows in Time*  
 Dolores Middle School Dolores

**Team Nomination**

Jennifer Bushnell & Kelsey Rohlfing 7th grade  
*Do Your Rocks Need Sunscreen?*  
 Irving Middle School Colorado Springs

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**Senior Division  
Earth & Space Sciences**

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**First Place**

Gwyneth Glissmann 11th grade  
*Analyzing Arctic Solar Flux and Ice Extent Loss Projections*  
 Peak to Peak Charter School Lafayette

**Second Place**

Tawney Bleak 9th grade  
*S.O.S. 2 - Save Our Soil, Phase Two*  
 Otis Jr/Sr High School Otis

**Third Place**

Christopher Krause 10th grade  
*Caution: Urbanization May Be Hot!*  
 The Classical Academy Colorado Springs

**Honorable Mention**

Bryant Elrick 11th grade  
*Just Passing Through*  
 Arriba-Flagler Public School Flagler

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**Junior Division  
Energy & Transportation**

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**First Place**

Sara Volz 7th grade  
*Are Biodiesel Emissions Safer Than Commercial Diesel Emissions?*  
 Cheyenne Mountain Charter Academy Colorado Springs

**Second Place**

Katie Weiss 8th grade  
*The effect of fermentation on fruit*  
 The Ricks Center for Gifted and Talented Denver

**Third Place**

Kyle Harlow 7th grade  
*It's All How You Spin It: Wind Generator Efficiency  
 Based On Propeller Size and Shape*  
 Mountain View Core Knowledge Canon City

**Honorable Mention**

Kayla Boren 6th grade  
*Burn It Up - Measuring Fuel Efficiency in Manure*  
 St. Columba School Durango

**Honorable Mention**

Laura Mummery 6th grade  
*Blowin' in the Wind*  
 St Columba Catholic School Durango

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**Senior Division  
 Energy & Transportation**

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**First Place**

Andrew West 12th grade  
*Regenerative Diesel Fuel Production Utilizing  
 Vegetable Oil and Catalytic Hydrocracking*  
 Conifer High School Conifer

**Second Place**

Max Krakauer 12th grade  
*Testing the Effects of Gasoline, E-85 Gasoline Mix, and  
 2,5-Dimethylfuran on Saccharomyces cerevisia*  
 Palmer High School Colorado Springs

**Third Place**

Joline Lobato 12th grade  
*Solar Powered Sand Beds and Other Heat Transfer  
 Sources*  
 Antonito High School Antonito

**Honorable Mention**

Christy Farnsworth 10th grade  
*Hydrogen: It's All Down Hill*  
 Paonia Jr/Sr High School Paonia

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**Junior Division  
 Engineering**

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**First Place**

Zane Willburn 7th grade  
*Water Purification off the Grid*  
 Mancos Middle School Mancos

**Second Place**

Garrett Glissmann 8th grade  
*Determining Position by Interfacing a GPS to the Web*  
 Peak to Peak Charter School Lafayette

**Third Place**

Jeffrey King 6th grade  
*Wing Designs: Who's at the Top?*  
 Timberview Middle School Colorado Springs

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**Senior Division  
 Engineering**

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**First Place**

Karthik Kumar-Rao 12th grade  
*Creating a Quantum Optical Source Using Laser  
 Pointers and Parametric Down Conversion*  
 Fairview High School Boulder

**Second Place**

Cameron Kruse 12th grade  
*The Dirt on Baseball: Engineering a Path Toward  
 Standardizing the Baseball Mudding Process*  
 Home School Colorado Springs

**Third Place**

Jesse Ellison 10th grade  
*Plasma Propulsion*  
 Bayfield High School Bayfield

**Honorable Mention**

J. Raleigh Burt 10th grade  
*Weather or Knot: The Effects of Environment and  
 Exposure on High Strength Safety Textile, Phase 2*  
 Sargent Jr/Sr High School Monte Vista

**Honorable Mention**

Shannon Tsai 12th grade  
*Constructing a Nanowire: Metallization of Silver onto  
 DNA*  
 Fairview High School Boulder

**Honorable Mention**

Nina Popovic-Basta 11th grade  
*Wireless Powercord*  
 Fairview High School Boulder

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**Junior Division  
 Environmental Sciences**

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**First Place**

Casey Campbell 7th grade  
*The Effects of Coal Bed Methane Produced Water*  
 La Veta Jr/Sr High School La Veta

**Second Place**

Rachel Beverlin 8th grade  
*GEYSER SPRING: A Further Characterization of  
 Colorado's Only Geyser*  
 Dolores Middle School Dolores

**Third Place**

Heather Hilson 8th grade  
*A Century in the Life of Trees*  
 Summit Middle School Boulder

**Honorable Mention**

Alexa Major 8th grade  
*Is AgriBlend the Answer?*  
 Fowler Jr/Sr High School Fowler

**Honorable Mention**

Emily Walck 7th grade  
*Washing Water to Ta'nagiz*  
 Cortez Middle School Cortez

**Team Nomination**

Matthew Mandelski & Zofie Mandelski 7th grade  
*The Healthiest Spirogyra*  
 St. Columba School Durango

**Senior Division  
 Environmental Sciences**

**First Place**

Ben Armstrong 10th grade  
*Enemies Of The Environment: Estrogen Mimics*  
 Monte Vista High School Monte Vista

**Second Place**

Caleb Kruse 10th grade  
*C The Difference II: The Effect of Ascorbic Acid on  
 Zooxanthellal Density During Coral Bleaching*  
 Home School Colorado Springs

**Third Place**

Alex Schnaderbeck 12th grade  
*The Effects of Limestone on the Productivity of Aquatic  
 Invertebrates*  
 Sargent Jr/Sr High School Monte Vista

**Honorable Mention**

Grant Slinger 11th grade  
*Effects of Soil Type on Groundwater Contamination,  
 Phase II*  
 Stratton High School Stratton

**Team Nomination**

Molly Nelson 9th grade  
 Jason Carwin 9th grade  
*The Effects of Elevated CO<sub>2</sub> Levels on Plants in  
 Different Environments*  
 Fleming High School Fleming

**Team Nomination**

Danielle Pite, Kelly Lane & Anna Hermann 12th grade  
*Didymosphenia geminata: The Core Question*  
 Boulder High School Boulder

**Junior Division  
 Mathematics & Computer Sciences**

**First Place**

Matthew Persons 8th grade  
*Tic Tac Text*  
 Boltz Junior High School Fort Collins

**Second Place**

Tucker Leavitt 7th grade  
*Golden Music: Phi and the Musical Arts*  
 Miller Middle School Durango

**Third Place**

Rahul Shankar 8th grade  
*Co-operating Robots: Behavior-Based Robots Using  
 Subsumption Architecture*  
 Mountain Ridge Middle School Colorado Springs

**Senior Division  
 Mathematics & Computer Sciences**

**First Place**

Chelsea Oden 12th grade  
*The Probability of Me*  
 Monte Vista High School Monte Vista

**Second Place**

Michael Crane 11th grade  
*A Disease Model of XDR-TB*  
 Cherry Creek High School Greenwood Village

**Third Place**

Tim Schneider 12th grade  
*Will Your Vote Count?*  
 Durango High School Durango

**Honorable Mention**

Alex Przedpelski 12th grade  
*Predicting Rockies Home Attendance*  
 Monarch High School Louisville

**Honorable Mention**

Rhiannon Campbell 9th grade  
*Where'd That Fake Blood Come From?*  
 Holly Jr/Sr High School Holly

**Junior Division  
 Medicine & Health**

**First Place**

Molly Graber 8th grade  
*The Effects of Bovine Colostrum on Breast Cancer*  
 North Middle School Colorado Springs

**Second Place**

Bruno Mediate 7th grade  
*Chewing Gum for Brain Activity*  
 The Classical Academy Colorado Springs

**Third Place**

Amanda Coopersmith 7th grade  
*The Effects of Over the Counter Medication on Fruit  
 Flies*  
 Cherry Creek Challenge School Denver

**Honorable Mention**

Katie Braun 8th grade  
*Can You Hear Me, Now?*  
 Boltz Junior High School Fort Collins

**Honorable Mention**

Tanner Elliott 8th grade  
*Got Germs?*  
 Cortez Middle School Cortez

**Honorable Mention**

Sydney Hooton 7th grade  
*A Wormy Situation: The Effect of Diet Pills on Caenorhabditis elegans*  
 Merino Jr/Sr High School Merino

**Honorable Mention**

Adam Warren 8th grade  
*Music to Your Ears: A Study of Headphone Types, dB Levels, and the Risk of Potential Hearing Loss*  
 The Classical Academy Colorado Springs

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**Senior Division  
 Medicine & Health**

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**First Place**

Rishi Rawat 12th grade  
*Differential Expression of BCL-2 proteins in U2OS: A Look at What Really Kills Cancer*  
 Boulder High School Boulder

**Second Place**

Kelsey Martin 10th grade  
*BONE BACK: Statins Inhibit Osteosarcoma Cells' Growth and Metastasis*  
 Woodlin School Woodrow

**Third Place**

Katelyn Yowell 9th grade  
*The Effects of Anthocyanins on Planaria Regeneration*  
 Genoa-Hugo School Hugo

**Honorable Mention**

Chace Carver 11th grade  
*The Effects of Bisphenol A from Polycarbonate Plastics on Lumbriculus variegatus*  
 Merino Jr/Sr High School Merino

**Team Nomination**

Tonya Pavlekno & Laura Gudvangen 9th grade  
*The Superbug: How It Spreads*  
 Palmer High School Colorado Springs

**Team Nomination**

Julia Buzan & Joseph Smith 12th grade  
*Determining A Non-Contact Method for Testing Skin Elasticity and Density*  
 Cherry Creek High School Greenwood Village

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**Junior Division  
 Microbiology**

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**First Place**

Ellery Goeltzenleuchter 8th grade  
*Caution Spice at Work*  
 Blevins Junior High School Fort Collins

**Second Place**

Stephen O'Connor-Seville 8th grade  
*Microbes Make Electricity*  
 Dolores Middle School Dolores

**Third Place**

Alexis Shinn 7th grade  
*Bacteria Is It What's for Dinner? Bacterial Growth on Grocery Store Produce*  
 Merino Jr/Sr High School Merino

**Honorable Mention**

Austin Titus 8th grade  
*What Are the Effects of Certain Cleaners on Bacteria?*  
 Buchanan Middle School Wray

**Honorable Mention**

Dakota Jackson 7th grade  
*The Effect of Temperature on Bacteria Growth*  
 Russell Middle School Colorado Springs

**Honorable Mention**

Kelli Lynch 8th grade  
*What's in Your Wallet?*  
 Blevins Junior High School Ft. Collins

**Honorable Mention**

Trent Capraro 8th grade  
*Does Temperature Effect the Growth of Mold on Bread?*  
 Genoa-Hugo School Hugo

**Team Nomination**

Kendra Gomez & Alixx Vigil 7th grade  
*Cash, Credit, Coins*  
 Pueblo School for Arts and Sciences Pueblo

**Team Nomination**

Loren Koszowski & Anna Mellman 7th grade  
*Who Would You Rather Kiss?*  
 Stanley British Primary School Denver

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**Senior Division  
 Microbiology**

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**First Place**

Kelsey Moore 12th grade  
*HIV-1 and Endothelial Progenitor Cell Dysfunction*  
 Monarch High School Louisville

**Second Place**

Adwai Eswaran 10th grade  
*Elimination of E. coli Bacteria from the Standard Cotton Dishrag by Exposure to Microwaves*  
 Cherry Creek High School Greenwood Village

**Third Place**

Krista Kinkel 10th grade  
*Ring Ring Bacteria Calling! How Much Bacteria Do You Think Is on Your Phone? Do You Dare Find Out?*  
 Arriba-Flagler Public School Flagler

**Honorable Mention**

Erika Baker 10th grade  
*Eye Can't See Clearly Now! A Comparison Study of Contact Types with E. coli and S. epidermidis*  
 Merino Jr/Sr High School Merino

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**Junior Division  
Physics**

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**First Place**

Lorne Muir II 8th grade  
*Hail! No!*  
The Classical Academy Colorado Springs

**Second Place**

Layne Barrett 8th grade  
*Twist but Don't Shout*  
The Classical Academy Colorado Springs

**Third Place**

Aidan Mike 6th grade  
*Elecrto-Flow*  
North Middle School Colorado Springs

**Honorable Mention**

Ellie Gossage 7th grade  
*Can You Hear Me Now? The Effect of Perimeter Boards  
on Sound Volume*  
East Middle School Grand Junction

**Honorable Mention**

Clay Mullins 8th grade  
*Get the Point?*  
Sargent Jr/Sr High School Monte Vista

**Honorable Mention**

Emily Sandner 7th grade  
*Wingin' It Density Altitude's Effect on Lift*  
St. Columba Middle School Durango

**Honorable Mention**

Erin Biringen 8th grade  
*The Perfect Turn*  
Summit Middle School Boulder

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**Senior Division  
Physics**

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**First Place**

Marlena Widman 10th grade  
*Junkyard Multispectral Imaging*  
The Classical Academy Colorado Springs

**Second Place**

Antonia Lira 10th grade  
*Pig-In-A-Blanket*  
Lamar High School Lamar

**Third Place**

Collin Dutro 11th grade  
*Do You See What I Hear?*  
Genoa-Hugo School Hugo

**Team Nomination**

Sarah Rumbley & Devyn Shafer 12th grade  
*Polarimetry With Laser-Illuminated Digital Holography*  
Peak to Peak Charter School Lafayette

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**Junior Division  
Plant Sciences**

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**First Place**

Haley Matteson 6th grade  
*Too Hot or Not- The Effects of Global Warming on  
Germination & Growth of Flower, Vegetable, Weed  
Seeds*  
North Middle School Colorado Springs

**Second Place**

K C Zinn 8th grade  
*To Rot or Not: Potato Susceptibility to Pink Rot,  
Phytophthora erythroseptica*  
Sargent Jr/Sr High School Monte Vista

**Third Place**

Kent Schaller 7th grade  
*Got Minerals?*  
The Classical Academy Colorado Springs

**Honorable Mention**

Ryan Ernst 7th grade  
*Possible Harms of pH*  
Wiggins Jr/Sr High School Wiggins

**Honorable Mention**

Joel Knepper 7th grade  
*A Plant's Favorite Color*  
Brentwood Middle School Greeley

**Honorable Mention**

Haley Hervert 6th grade  
*A Cup of Tea Please: Brewing the Perfect Tea for Your  
Plant*  
Eagle County Charter Academy Edwards

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**Senior Division  
Plant Sciences**

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**First Place**

Kirk Wilkinson 12th grade  
*Finding a Biomarker of Physiological Ageing in Potato  
Seed Tubers*  
Monte Vista High School Monte Vista

**Second Place**

Kaitlyn Lingus 12th grade  
*Power of a Biological Control Agent: Compensation  
Suppression of Convolvulus arvensis Implementing  
Host-Specific Aceria malherbae - Phase IV*  
Branson School Branson

**Third Place**

Jordan Lestina 9th grade  
*Biodiesel from Sunflower Oil - An Analysis of Soil  
Fertility and Sunflower Oil Content*  
Dove Creek High School Dove Creek



**Honorable Mention**

Delani Miller 9th grade  
*Monarch Mitigation: What Soil Does Milkweed  
Germinate in the Best?*  
Blevins Junior High School Fort Collins

**Team Nomination**

Anika Petach 11th grade  
Tanya Petach 9th grade  
*Pine Beetle Outbreaks: Spatial Analysis and Pheromone  
Population Control*  
Fairview High School Boulder

# 2008 Colorado Science and Engineering Fair

## Special Awards Press Release

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### Colorado Science and Engineering Fair

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#### *Ralph Desch Memorial Technical Writing Award*

Sarah Guthrie 11th grade  
 certificate, \$100  
 Boulder High School Boulder  
*The Mechanisms and Actions of Parthenolide on Platelet 5-HT Secretion In Vitro*

#### *Poster Art Contest*

Boya Liu  
 certificate, \$100  
 Fairview High School Boulder

#### *Student Choice Award*

Heather Hilson 8th grade  
 certificate, \$50  
 Summit Middle School Boulder  
*A Century in the Life of Trees*

Chace Carver 11th grade  
 certificate, \$50  
 Merino Jr/Sr High School Merino  
*The Effects of Bisphenol A from Polycarbonate Plastics on Lumbriculus variegatus*

#### *Pioneers of Science – Georges LCF Cuvier*

Brianna Honebein 7th grade  
 certificate, \$30  
 Ward Middle School Ordway  
*Ants in Action*

#### *Pioneers of Science – Margaret Mead*

Dirk Marshall 7th grade  
 certificate, \$30  
 Cherry Creek Challenge School Denver  
*The Eyes Have It: Do Your Eyes Show Your Personality?*

#### *Pioneers of Science – Sigmund Freud*

Lizette van Zyl 8th grade  
 certificate, \$30  
 Boltz Junior High School Fort Collins  
*Reading in Colors*

#### *Pioneers of Science – Alfred Bernhard*

Melissa Poet 7th grade  
 certificate, \$30  
 Arriba-Flagler Public School Flagler  
*Got 'Acidity' Milk?*

#### *Pioneers of Science – Marie Curie*

Tanner Dunivan 7th grade  
 certificate, \$30  
 Walsh Jr/Sr High School Walsh  
*Up in Flames*

#### *Pioneers of Science – Edwin Hubble*

Isaac Beverlin 6th grade  
 certificate, \$30  
 Dolores Middle School Dolores  
*ARCHES: Solid Rock to Windows in Time*

#### *Pioneers of Science – Alfred Lothar Wegner*

Antonio Huizar 6th grade  
 certificate, \$30  
 Quest Academy Dacono  
*Craters & Meteors: How a Meteor's Weight Affects the Crater*

#### *Pioneers of Science – James Prescott Joule*

Jessika Gill 7th grade  
 certificate, \$30  
 Merino Jr/Sr High School Merino  
*Lend Me Your Ears!*

#### *Pioneers of Science – Sir William Grove*

Kayla Boren 6th grade  
 certificate, \$30  
 St. Columba School Durango  
*Burn It Up - Measuring Fuel Efficiency in Manure*

#### *Pioneers of Science – Nicola Tesla*

Ken Garcia 8th grade  
 certificate, \$30  
 Brush Middle School Brush  
*Investigating the Magnus Effect Phenomenon*

#### *Pioneers of Science – James Buchanan Eads*

Joshua Steklac 8th grade  
 certificate, \$30  
 Mackintosh Academy Littleton  
*Magnetic Levitation*

#### *Pioneers of Science – Rachel Louise Carson*

Chayenne Jackson 7th grade  
 certificate, \$30  
 Merino Jr/Sr High School Merino  
*Is Your Water Glowing? Water Analysis of Colorado*

#### *Pioneers of Science – Charles Babbage*

Carlos Nunez 6th grade  
 certificate, \$30  
 La Veta Elementary School La Veta  
*The Power Within: Conventional vs. Non-Conventional Cancer Treatment*

#### *Pioneers of Science – GV Black*

Devon Montague 7th grade  
 certificate, \$30  
 Centauri Middle School LaJara  
*Diabetes the Sweet Disease*

#### *Pioneers of Science – Albert Schweitzer*

Kaley Kukus 7th grade  
 certificate, \$30  
 Woodlin School Woodrow  
*Got Protein?*

*Pioneers of Science – Jonas Edward Salk*

Layne McCaleb 6th grade  
certificate, \$30  
Arickaree School Anton  
*Purell, Does It Really Kill 99.99% Bacteria?*

*Pioneers of Science – Albert Einstein*

Dayton Fisher 6th grade  
certificate, \$30  
Yuma Middle School Yuma  
*Vary the Viscosities of Crude Oil*

*Pioneers of Science – Max Planck*

Andrew Haines 6th grade  
certificate, \$30  
North Middle School Colorado Springs  
*Materials That Can Shield Sound*

*Pioneers of Science – Sir Isaac Newton*

Rachael Gessert 6th grade  
certificate, \$30  
West Jefferson Middle School Conifer  
*The Science Behind CSI: Blood Drop Patterns and Angle of Impact*

*Pioneers of Science – Luthar Burbank*

Madison Dewey 6th grade  
certificate, \$30  
North Middle School Colorado Springs  
*Lettuce Taste the Difference*

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**Military**

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**United States Air Force**

*Air Force ROTC Award*

Sarah Rumbley 12th grade  
Devyn Shafer 12th grade  
certificate, pad folio, WiFi hotspot finder, USB flash drive,  
ballpoint pen, messenger bag  
Peak to Peak Charter School Lafayette  
*Polarimetry with Laser-Illuminated Digital Holography*

Cahl Johnson 9th grade  
certificate, pad folio, WiFi hotspot finder, USB flash drive,  
ballpoint pen, messenger bag  
Kim School Kim  
*Rocketry: Does Size Matter?*

Adam Goss 12th grade  
certificate, pad folio, WiFi hotspot finder, USB flash drive,  
ballpoint pen, messenger bag  
Brush High School Brush  
*Design and Construction of a Flexible Robotic Device*

Jesse Ellison 10th grade  
certificate, pad folio, WiFi hotspot finder, USB flash drive,  
ballpoint pen, messenger bag  
Bayfield High School Bayfield  
*Plasma Propulsion*

**United States Army**

Bethany Dilda 10th grade  
certificate, \$50 US savings bond  
Branson School Branson  
*The Golden Ratio in Natural Adaptations*

Jake McHargue 9th grade  
certificate, \$50 US savings bond  
Lake County High School Leadville  
*Termite . . . Might Not*

Grant Slinger 11th grade  
certificate, \$50 US savings bond  
Stratton High School Stratton  
*Effects of Soil Type on Groundwater Contamination, Phase II*

Cameron Kruse 12th grade  
certificate, \$50 US savings bond  
Home School Colorado Springs  
*The Dirt on Baseball: Engineering a Path Toward Standardizing the Baseball Mudding Process*

Antonia Lira 10th grade  
certificate, silver medallion, \$100 US savings bond  
Lamar High School Lamar  
*Pig-In-A-Blanket*

**United States Navy & Marine Corps**

Erin Biringen 8th grade  
certificate, medallion  
Summit Middle School Boulder  
*The Perfect Turn*

Shannon Craig 7th grade  
certificate, medallion  
West Jefferson Middle School Conifer  
*The Statistics on Statistics*

Zane Willburn 7th grade  
certificate, medallion  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Elliott Saslow 7th grade  
certificate, medallion  
Colorado Virtual Academy (Home School) Durango  
*The Best Way to Grow Tomato and Pepper Plants: Hydroponics with River Water or Tap Water*

Samuel Galler 12th grade  
certificate, \$75 gift certificate, medallion  
Boulder High School Boulder  
*Hemispheric Lateralization in Auditory Cortex for Words Versus Partial Speech Sounds*

Chelsea Oden 12th grade  
certificate, \$75 gift certificate, medallion  
Monte Vista High School Monte Vista  
*The Probability of Me*

Max Krakauer 12th grade  
certificate, \$75 gift certificate, medallion  
Palmer High School Colorado Springs  
*Testing the Effects of Gasoline, E-85 Gasoline Mix, and 2,5-Dimethylfuran on Saccharomyces cerevisia*

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## Organizational

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### Air & Waste Management Association Rocky Mountain States Section

Sara Volz \$20 Cheyenne Mountain Charter School <i>Are Biodiesel Emissions Safer Than Commercial Diesel Emissions?</i>	7th grade Colorado Springs
Jessica Constant \$50 Saint Joseph Catholic School <i>Yours, Mine, and Ours: A Basic Model of the Spread of Air Pollutants</i>	7th grade Fort Collins
Christopher Krause \$75 The Classical Academy <i>Caution: Urbanization May Be Hot!</i>	10th grade Colorado Springs
Olivia Pecukonis Laura Garcia \$100 or equivalent subscription to a professional Brush High School <i>The Removal of Ferric Ions Utilizing Mollusk Shells</i>	12th grade 12th grade Brush

### American Association of University Women

Alexandria Farnsworth \$100 Paonia Jr/Sr High School <i>Energy with a Spin</i>	8th grade Paonia
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### American Chemical Society Colorado Local Section

Aidan Mike certificate, \$100 North Middle School <i>Electro-Flow</i>	6th grade Colorado Springs
Sarah Guthrie certificate, \$100 Boulder High School <i>The Mechanisms and Actions of Parthenolide on Platelet 5-HT Secretion In Vitro</i>	11th grade Boulder

### American Institute of Chemical Engineers Rocky Mountain Section

Jessika Gill \$75 Merino Jr/Sr High School <i>Lend Me Your Ears!</i>	7th grade Merino
Kassidy Knutson \$100 Wiggins Jr/Sr High School <i>Effects of Acid Rain on Structural Materials</i>	7th grade Wiggins
Shannon Tsai \$75 Fairview High School <i>Constructing a Nanowire: Metallization of Silver onto DNA</i>	12th grade Boulder

Bradley Falk \$100 Cherry Creek High School <i>Chemical Comparison of the Relative Efficiency of the 2-Hydroxymethylphenol Synthesis of Aspirin</i>	12th grade Greenwood Village
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### American Statistical Association Colorado/Wyoming Chapter

Zachary Tanner \$75, acknowledgement at Chapter Spring Meeting and on Chapter web site Summit Middle School <i>Rock, Paper, Scissors: A Game of Chance?</i>	8th grade Boulder
Shannon Craig \$75, engraved Ipod Shuffle, acknowledgement at Chapter Spring Meeting and on Chapter web site West Jefferson Middle School <i>The Statistics on Statistics</i>	7th grade Conifer
Sarah Oden \$75, acknowledgement at Chapter Spring Meeting and on Chapter web site Monte Vista High School <i>Insight in Sight, This Art Is All Right</i>	9th grade Monte Vista
Sarah Guthrie \$75, engraved Ipod Shuffle, acknowledgement at Chapter Spring Meeting and on Chapter web site Boulder High School <i>The Mechanisms and Actions of Parthenolide on Platelet 5-HT Secretion In Vitro</i>	11th grade Boulder

### American Vacuum Society Rocky Mountain Chapter

Sara Volz \$50, \$50 matching award to sponsor Cheyenne Mountain Charter School <i>Are Biodiesel Emissions Safer Than Commercial Diesel Emissions?</i>	7th grade Colorado Springs
Jesse Eads \$100, \$100 matching award to sponsor Dolores Middle School <i>Photon's Effect on Space Time Curvature</i>	7th grade Dolores
Shannon Tsai \$50, \$50 matching award to sponsor Fairview High School <i>Constructing a Nanowire: Metallization of Silver Onto DNA</i>	12th grade Boulder
Jesse Ellison \$100, \$100 matching award to sponsor Bayfield High School <i>Plasma Propulsion</i>	10th grade Bayfield

**American Water Works Association, Rocky Mountain Section & Rocky Mountain Water Environment Association**

Casey Campbell 7th grade  
\$200  
La Veta Jr/Sr High School La Veta  
*The Effects of Coal Bed Methane Produced Water*

Zane Willburn 7th grade  
\$400  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Alex Schnaderbeck 12th grade  
\$200  
Sargent Jr/Sr High School Monte Vista  
*The Effects of Limestone on the Productivity of Aquatic Invertebrates*

Ben Armstrong 10th grade  
\$400  
Monte Vista High School Monte Vista  
*Enemies of the Environment: Estrogen Mimics*

**Armbruster Associates**

*Charles Armbruster Memorial Award*

Cade Carlson 6th grade  
\$100  
Wiggins Jr/Sr High School Wiggins  
*The Aerodynamics of Paper Airplanes*

**ASM International**

Ashley Motley 6th grade  
certificate, \$50  
Wiggins Jr/Sr High School Wiggins  
*How Heat Transfers*

Kassidy Knutson 7th grade  
certificate, \$75  
Wiggins Jr/Sr High School Wiggins  
*Effects of Acid Rain on Structural Materials*

**Association for Women Geoscientists**

**Laramide Chapter**

Emily Walck 7th grade  
\$75, achievement medal  
Cortez Middle School Cortez  
*Washing Water to Ta'nagiz*

Nicole Mayer 9th grade  
\$75, achievement medal  
Blevins Junior High School Fort Collins  
*Killed By Campers: The Effect of Dish Soap on Plants*

**BP**

*BP Special Award for Energy*

Courtlyn Carpenter 7th grade  
certificate, computer  
East Middle School Grand Junction  
*Using Evapotranspiration Covers to Reduce Groundwater Pollution*

Andrew West 12th grade  
certificate, computer  
Conifer High School Conifer  
*Regenerative Diesel Fuel Production Utilizing Vegetable Oil and Catalytic Hydrocracking*

**Colorado Association of Meat Processors**

Tonya Pavlekno & Laura Gudvangen 9th grade  
certificate, \$60  
Palmer High School Colorado Springs  
*The Superbug: How It Spreads*

**Colorado Association of Science Teachers**

Laura Mummery 6th grade  
certificate, \$50  
St Columba Catholic School Durango  
*Blowin' in the Wind*

Layne Barrett 8th grade  
certificate, \$50  
The Classical Academy Colorado Springs  
*Twist but Don't Shout*

Collin Dutro 11th grade  
certificate, \$50  
Genoa-Hugo School Hugo  
*Do You See What I Hear?*

Sean Buck 11th grade  
certificate, \$50  
Cherry Creek High School Greenwood Village  
*Bringing the Forest Back into Balance: The Mountain Pine Beetle Infestation*

*Gerald Gromko Award*

Christy Farnsworth 10th grade  
plaque, \$150  
Paonia Jr/Sr High School Paonia  
*Hydrogen: It's All Down Hill*

**Colorado Biology Teachers' Association**

Wyatt Palser 7th grade  
certificate, \$75  
Otis Jr/Sr High School Otis  
*Attack of the Killer Worms!!!*

Nataara Tamada 11th grade  
certificate, \$75  
Sierra Grande Jr/Sr High School Blanca  
*Healthy Potatoes: Searching for A-Amylase Inhibitor and RS in Cultivars to Lower the Glycemic Index*

**Colorado Dental Association**

Loren Koszowski & Anna Mellman 7th grade  
plaque, \$50, invitation to present at the Colorado Dental Association's Annual Meeting and 1 night's lodging at the headquarter hotel/resort during the 122nd CDA's Annual session  
Stanley British Primary School Denver  
*Who Would You Rather Kiss?*

Amber Wilson 8th grade  
plaque, \$50, invitation to present at the Colorado Dental Association's Annual Meeting and 1 night's lodging at the headquarter hotel/resort during the 122nd CDA's Annual session

Lamar Middle School Lamar  
*Are Your Teeth In Danger?*

Megan Kavalec & Amy Solis 6th grade  
CSU Bookstore gift cards & gift bag  
Canon City Middle School Canon City  
*Tooth Trouble*

### Colorado Environmental Health Association

Alexis Shinn 7th grade  
certificate, \$75

Merino Jr/Sr High School Merino  
*Bacteria Is It What's for Dinner? Bacterial Growth on Grocery Store Produce*

Chace Carver 11th grade  
certificate, \$150, invitation to exhibit at the CEHA Annual Educational Conference

Merino Jr/Sr High School Merino  
*The Effects of Bisphenol A from Polycarbonate Plastics on Lumbriculus variegatus*

### Colorado Foundation for Agriculture

#### Agriculture in the Classroom Award

K C Zinn 8th grade  
certificate, \$50

Sargent Jr/Sr High School Monte Vista  
*To Rot or Not: Potato Susceptibility to Pink Rot, Phytophthora erythroseptica*

Brisha Wakasugi 7th grade  
certificate, \$50

Sierra Grande Jr/Sr High School Blanca  
*Potato Pedology: A Soil Study of Two Different San Luis Valley Growing Horizons*

Kaitlyn Lingus 12th grade  
certificate, \$50

Branson School Branson  
*Power of a Biological Control Agent: Compensation Suppression of Convolvulus arvensis Implementing Host-Specific Aceria malherbae - Phase IV*

Grant Slinger 11th grade  
certificate, \$50

Stratton High School Stratton  
*Effects of Soil Type on Groundwater Contamination, Phase II*

### Colorado Geological Survey &

#### Division of Reclamation Mining and Safety

Isaac Beverlin 6th grade  
packet & book

Dolores Middle School Dolores  
*ARCHES: Solid Rock to Windows in Time*

Carl Scheevel 7th grade  
\$150

East Middle School Grand Junction  
*Effectiveness of Various Ground Covers on Soil Erosion on a 32.5% Grade*

Alex Schnaderbeck 12th grade  
\$150

Sargent Jr/Sr High School Monte Vista  
*The Effects of Limestone on the Productivity of Aquatic Invertebrates*

### Colorado Medical Society

Corissa Kiepkke 6th grade  
\$100, invitation to exhibit at the Colorado Medical Society Annual Meeting and attendance at the Presidential Inaugural

Dinner with a paid overnight stay  
North Middle School Colorado Springs  
*The Effects of Exercise on Memory*

Kelsey Martin 10th grade  
\$100, invitation to exhibit at the Colorado Medical Society Annual Meeting and attendance at the Presidential Inaugural

Dinner with a paid overnight stay  
Woodlin School Woodrow  
*BONE BACK: Statins Inhibit Osteosarcoma Cells' Growth and Metastasis*

### Colorado Mineral Society

Dayton Fisher 6th grade  
\$25, mineral sample, book

Yuma Middle School Yuma  
*Vary the Viscosities of Crude Oil*

Carl Scheevel 7th grade  
\$40, mineral sample, book

East Middle School Grand Junction  
*Effectiveness of Various Ground Covers on Soil Erosion on a 32.5% Grade*

Jeffrey Hibbert 9th grade  
\$25, mineral sample, book

Lone Star School Otis  
*Qualitative Assay of Radionuclide Species in Ash from Coal Combustion*

Grant Slinger 11th grade  
\$40, mineral sample, book

Stratton High School Stratton  
*Effects of Soil Type on Groundwater Contamination, Phase II*

### Colorado Mycological Society

K C Zinn 8th grade  
certificate, \$50

Sargent Jr/Sr High School Monte Vista  
*To Rot or Not: Potato Susceptibility to Pink Rot, Phytophthora erythroseptica*

### Colorado River Watch

Casey Campbell 7th grade  
\$50

La Veta Jr/Sr High School La Veta  
*The Effects of Coal Bed Methane Produced Water*

## Colorado Scientific Society

Casey Campbell \$50 La Veta Jr/Sr High School <i>The Effects of Coal Bed Methane Produced Water</i>	7th grade La Veta
Isaac Beverlin \$75 Dolores Middle School <i>ARCHES: Solid Rock to Windows in Time</i>	6th grade Dolores
Jeffrey Hibbert \$75 Lone Star School <i>Qualitative Assay of Radionuclide Species in Ash from Coal Combustion</i>	9th grade Otis
Gwyneth Glissmann \$100 Peak to Peak Charter School <i>Analyzing Arctic Solar Flux and Ice Extent Loss Projections</i>	11th grade Lafayette

## Colorado Veterinary Medical Association & CVMA Auxiliary & Auxiliary to the AVMA

Laci Pennington certificate & gold medallion from Auxiliary to the AVMA; \$50 from CVMA; \$50 from CVMA Auxiliary Lamar Middle School <i>Canine Diabetes Mellitus</i>	8th grade Lamar
Jessie Haugen certificate & gold medallion from Auxiliary to the AVMA; \$50 from CVMA; \$50 from CVMA Auxiliary Sargent Jr/Sr High School <i>What's the Pus? Preventing Staphylococcus Epidermidis Growth in Surgical Procedures</i>	11th grade Monte Vista

## Colorado-Wyoming Society of American Foresters

Heather Hilson \$100 savings bond Summit Middle School <i>A Century in the Life of Trees</i>	8th grade Boulder
Sean Buck \$100 savings bond Cherry Creek High School <i>Bringing the Forest Back into Balance: The Mountain Pine Beetle Infestation</i>	11th grade Greenwood Village

## Covidian Energy-Based Devices

Chace Carver plaque, Dino-Lite Microscope Camera Combo Merino Jr/Sr High School <i>The Effects of Bisphenol A from Polycarbonate Plastics on Lumbriculus variegatus</i>	11th grade Merino
Lisa Grossman plaque, Dino-Lite Microscope Camera Combo Palmer High School <i>Synthetic vs. Natural Vitamin E: Optical Isomerism, Synergy and Antioxidant Testing Problems</i>	12th grade Colorado Springs

## Colorado State University Dept. of Biochemistry & Molecular Biology

Sarah Guthrie certificate, \$100 Boulder High School <i>The Mechanisms and Actions of Parthenolide on Platelet 5-HT Secretion In Vitro</i>	11th grade Boulder
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## Colorado State University Department of Chemistry

Tess Ringlein certificate, \$100 Yuma Middle School <i>Pucker Up To Poison</i>	6th grade Yuma
Lisa Grossman certificate, \$100 Palmer High School <i>Synthetic vs. Natural Vitamin E: Optical Isomerism, Synergy and Antioxidant Testing Problems</i>	12th grade Colorado Springs

## Colorado State University Dept. of Horticulture & Landscape Architecture

K C Zinn \$150 Sargent Jr/Sr High School <i>To Rot or Not: Potato Susceptibility to Pink Rot, Phytophthora erythroseptica</i>	8th grade Monte Vista
Theo Kurtzer \$150 Merino Jr/Sr High School <i>Goodness Gracious Great Balls of Manure</i>	7th grade Merino
Royce Hoffner \$150 Home School <i>Stage Specific Expression of Peroxidase Enzymes in Wound Healing Potato Tubers</i>	10th grade Center
Kaitlyn Lingus \$150 Branson School <i>Power of a Biological Control Agent: Compensation Suppression of Convolvulus arvensis Implementing Host-Specific Aceria malherbae – Phase IV</i>	12th grade Branson

## Eastman Kodak Company

K C Zinn digital camera Sargent Jr/Sr High School <i>To Rot or Not: Potato Susceptibility to Pink Rot, Phytophthora erythroseptica</i>	8th grade Monte Vista
Christy Farnsworth digital camera Paonia Jr/Sr High School <i>Hydrogen: It's All Down Hill</i>	10th grade Paonia

## Eppler Family

Aidan Mike 6th grade  
microprocessor kit & digital multimeter (approximate value - \$150)  
North Middle School Colorado Springs  
*Electro-Flow*

Kayleigh Santala 7th grade  
microprocessor kit & digital multimeter (approximate value - \$150)  
Arriba-Flagler Public School Flagler  
*Electromagnets*

## Fort Collins Conservation District

Carl Scheevel 7th grade  
plaque, \$50  
East Middle School Grand Junction  
*Effectiveness of Various Ground Covers on Soil Erosion on a 32.5% Grade*

Tawney Bleak 9th grade  
plaque, \$50  
Otis Jr/Sr High School Otis  
*S.O.S. 2 - Save Our Soil, Phase Two*

## Human Factors & Ergonomics Society Rocky Mountain Section

Adam Warren 8th grade  
\$100  
The Classical Academy Colorado Springs  
*Music to Your Ears: A Study of Headphone Types, dB Levels, and the Risk of Potential Hearing Loss*

## Institute of Electrical and Electronics Engineers

Garrett Glissmann 8th grade  
\$100  
Peak to Peak Charter School Lafayette  
*Determining Position by Interfacing a GPS to the Web*

Jesse Ellison 10th grade  
\$150  
Bayfield High School Bayfield  
*Plasma Propulsion*

## Little Shop of Physics

### Matthew McCausland Memorial Award

Jesse Ellison 10th grade  
\$100  
Bayfield High School Bayfield  
*Plasma Propulsion*

## Lockheed Martin

Hannah Wardell 7th grade  
\$50 US savings bond  
Irving Middle School Colorado Springs  
*Defeating Passive Infrared Sensors*

Jesse Ellison 10th grade  
\$100 US savings bond, nominal Lockheed Martin logo item  
Bayfield High School Bayfield  
*Plasma Propulsion*

## MAST Institute

Alexandria Farnsworth 8th grade  
\$50  
Paonia Jr/Sr High School Paonia  
*Energy with a Spin*

Jordan Lestina 9th grade  
\$50  
Dove Creek High School Dove Creek  
*Biodiesel from Sunflower Oil - An Analysis of Soil Fertility and Sunflower Oil Content*

## MWH Americas, Inc.

Zane Willburn 7th grade  
plaque, \$100  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Alexandria Farnsworth 8th grade  
plaque, \$200  
Paonia Jr/Sr High School Paonia  
*Energy with a Spin*

Bradley Falk 12th grade  
plaque, \$100  
Cherry Creek High School Greenwood Village  
*Chemical Comparison of the Relative Efficiency of the 2-Hydroxymethylphenol Synthesis of Aspirin*

Dong-Kou Kim 11th grade  
plaque, \$200  
Fountain Valley School of Colorado Springs  
*Piezo Generator*

## National Geophysical Data Center

Heather Hilson 8th grade  
certificate, \$100 US savings bond  
Summit Middle School Boulder  
*A Century in the Life of Trees*

## National Renewable Energy Laboratory

Andrew West 12th grade  
\$100  
Conifer High School Conifer  
*Regenerative Diesel Fuel Production Utilizing Vegetable Oil and Catalytic Hydrocracking*

## Optical Society of America Rocky Mountain Section

Lizette van Zyl 8th grade  
Framed certificate, 1-year subscription for Discover magazine  
Boltz Junior High School Fort Collins  
*Reading in Colors*

Sarah Rumbley 12th grade  
Devyn Shafer 12th grade  
Framed certificate, 1-year subscription for Discover magazine  
Peak to Peak Charter School Lafayette  
*Polarimetry with Laser-Illuminated Digital Holography*



## Rio Tinto Minerals, Inc.

Michelle Hoffmann 7th grade  
\$100  
Weld Central Junior High School Keenesburg  
*Insulation Situation*

Iris Belensky 8th grade  
\$200  
Summit Middle School Boulder  
*New and More Energy Efficient Ways to Cure Polymer Clay*

Shelby Messer 10th grade  
\$100  
Genoa-Hugo School Hugo  
*Color to Dye For*

Alana Wilbee 9th grade  
\$200  
Palmer High School Colorado Springs  
*A Well Spun Yarn*

## Rocky Mountain Association of Geologists

Isaac Beverlin 6th grade  
certificate, cash award  
Dolores Middle School Dolores  
*ARCHES: Solid Rock to Windows in Time*

Jessika Gill 7th grade  
certificate, cash award  
Merino Jr/Sr High School Merino  
*Lend Me Your Ears!*

Paxton Becker 7th grade  
certificate, cash award  
Merino Jr/Sr High School Merino  
*Sunny Blow! A Comparative Research between Wind and Solar Energies*

Alex Schnaderbeck 12th grade  
certificate, cash award  
Sargent Jr/Sr High School Monte Vista  
*The Effects of Limestone on the Productivity of Aquatic Invertebrates*

## Rocky Mountain Goats Foundation

Rebecca Roskowski 8th grade  
\$150  
East Middle School Grand Junction  
*Are Crawfish That Fish Eat Contributing to High Mercury Levels in Large Fish in the Colorado River Basin?*

Brady Buck 11th grade  
\$150  
Wray Jr/Sr High School Wray  
*Republican River Research Analyzing Aquatic Health*

## Rocky Mountain Inventors' Association

Zane Willburn 7th grade  
\$50  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Tim Schneider 12th grade  
\$100  
Durango High School Durango  
*Will Your Vote Count?*

## Society for Advancement of Chicanos and Native Americans in Science

Rachel Gonzales 6th grade  
\$50  
Miller Middle School Durango  
*Remember This!*

Travis Zuniga 9th grade  
\$50  
South High School Pueblo  
*The Wonder Drug (A Chemical Analysis Of Analgesics To Detect Aspirin)*

## Society for Mining, Metallurgy and Exploration Colorado Section

Isaac Beverlin 6th grade  
\$100  
Dolores Middle School Dolores  
*ARCHES: Solid Rock to Windows in Time*

Carl Scheevel 7th grade  
\$200  
East Middle School Grand Junction  
*Effectiveness of Various Ground Covers on Soil Erosion on a 32.5% Grade*

Jeffrey Hibbert 9th grade  
\$100  
Lone Star School Otis  
*Qualitative Assay of Radionuclide Species in Ash from Coal Combustion*

Jared Bannon 10th grade  
\$200  
Branson School Branson  
*Grassland Regeneration after Juniper Tree Removal. Phase II*

## Society of Manufacturing Engineers Northern Colorado, Chapter 354

Zane Willburn 7th grade  
certificate, \$100 US savings bond  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Hannah Wardell 7th grade  
certificate, \$100 US savings bond  
Irving Middle School Colorado Springs  
*Defeating Passive Infrared Sensors*

Adam Goss 12th grade  
certificate, \$150 US savings bond  
Brush High School Brush  
*Design and Construction of a Flexible Robotic*

Cameron Kruse 12th grade  
certificate, \$150 US savings bond  
Home School Colorado Springs  
*The Dirt on Baseball: Engineering a Path Toward Standardizing the Baseball Mudding Process*

**Society of Women Engineers  
Rocky Mountain Section**

Alexandria Farnsworth 8th grade  
certificate, \$75  
Paonia Jr/Sr High School Paonia  
*Energy with a Spin*

Emily Walck 7th grade  
certificate, \$100  
Cortez Middle School Cortez  
*Washing Water to Ta'nagiz*

Nina Popovic-Basta 11th grade  
certificate, \$75  
Fairview High School Boulder  
*Wireless Powercord*

Christy Farnsworth 10th grade  
certificate, \$100  
Paonia Jr/Sr High School Paonia  
*Hydrogen: It's All Down Hill*

**Soil & Water Conservation Society  
Colorado Chapter**

Courtlyn Carpenter 7th grade  
certificate, ribbon, \$35  
East Middle School Grand Junction  
*Using Evapotranspiration Covers to Reduce Groundwater  
Pollution*

Casey Campbell 7th grade  
certificate, ribbon, \$70  
La Veta Jr/Sr High School La Veta  
*The Effects of Coal Bed Methane Produced Water*

Grant Slinger 11th grade  
certificate, ribbon, \$35  
Stratton High School Stratton  
*Effects of Soil Type on Groundwater Contamination, Phase II*

Tawney Bleak 9th grade  
certificate, ribbon, \$70  
Otis Jr/Sr High School Otis  
*S.O.S. 2 - Save Our Soil, Phase Two*

**SPIE - The International Society for Optics and  
Photonics**

Liam Jasperse-Sjolander 8th grade  
\$50  
North Middle School Colorado Springs  
*A Light Delusion: The Effects of Light Pollution on Algae*

Marlena Widman 10th grade  
\$100  
The Classical Academy Colorado Springs  
*Junkyard Multispectral Imaging*

Karthik Kumar-Rao 12th grade  
\$150  
Fairview High School Boulder  
*Creating A Quantum Optical Source Using Laser Pointers  
and Parametric Down Conversion*

**The Inventors' Roundtable**

Rahul Shankar 8th grade  
\$25  
Mountain Ridge Middle School Colorado Springs  
*Co-operating Robots: Behavior-Based Robots Using  
Subsumption Architecture*

Tim Schneider 12th grade  
\$25  
Durango High School Durango  
*Will Your Vote Count?*

Zane Willburn 7th grade  
\$75  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Cameron Kruse 12th grade  
\$75  
Home School Colorado Springs  
*The Dirt on Baseball: Engineering a Path Toward  
Standardizing the Baseball Mudding Process*

**United States Geological Survey**

Casey Campbell 7th grade  
reference book and mineral specimen and medal  
La Veta Jr/Sr High School La Veta  
*The Effects of Coal Bed Methane Produced Water*

Caleb Kruse 10th grade  
reference book and mineral specimen and medal  
Home School Colorado Springs  
*C The Difference II: The Effect of Ascorbic Acid on  
Zooxanthellal Density During Coral Bleaching*

**University of Colorado Health Sciences Center  
Medical Scientist Training Program**

Samuel Galler 12th grade  
\$50  
Boulder High School Boulder  
*Hemispheric Lateralization in Auditory Cortex for Words  
Versus Partial Speech Sounds*

Rishi Rawat 12th grade  
\$50  
Boulder High School Boulder  
*Differential Expression of BCL-2 proteins in U2OS: A Look at  
What Really Kills Cancer*

**US Department of Commerce**

Adam Goss 12th grade  
alternate for the opportunity for summer employment with the  
Department of Commerce, with the possibility for future  
continuing employment  
Brush High School Brush  
*Design and Construction of a Flexible Robotic Device*

Tim Schneider 12th grade  
opportunity for summer employment with the Department of  
Commerce, with the possibility for future continuing  
employment  
Durango High School Durango  
*Will Your Vote Count?*

## Xcel Energy

### Environmental Stewardship Award

Laura Mummery \$100 St Columba Catholic School <i>Blowin' in the Wind</i>	6th grade Durango
Molly Nelson Jason Carwin \$150 Fleming High School <i>The Effects of Elevated CO<sub>2</sub> Levels on Plants in Different Environments</i>	9th grade 9th grade Fleming

### Innovation in Energy Award

Alexandria Farnsworth \$100 Paonia Jr/Sr High School <i>Energy with a Spin</i>	8th grade Paonia
Christy Farnsworth \$150 Paonia Jr/Sr High School <i>Hydrogen: It's All Down Hill</i>	10th grade Paonia

## Yale University Science & Engineering Association

Nina Popovic-Basta certificate, pewter medallion Fairview High School <i>Wireless Powercord</i>	11th grade Boulder
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## Zahourek Systems, Inc.

Corissa Kiepke Maniken models, including clay and tool accessories (valued at \$174) North Middle School <i>The Effects of Exercise on Memory</i>	6th grade Colorado Springs
Chace Carver Maniken models, including clay and tool accessories (valued at \$174) Merino Jr/Sr High School <i>The Effects of Bisphenol A from Polycarbonate Plastics on Lumbriculus variegates</i>	11th grade Merino

## Zonta Club of Boulder County Amelia Earhart Award

Emily Sandner \$100 St. Columba Middle School <i>Wingin' It: Density Altitude's Effect on Lift</i>	7th grade Durango
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## Scholarships

### Adams State College Foundation

#### Adams State College Scholarships

Brandy Haller equivalent to one-year resident tuition and fees Woodlin School <i>Comparison of Mountain Pine Beetle in Colorado and Surrounding States</i>	10th grade Woodrow
Kenzie Witt equivalent to one-year resident tuition and fees Arriba-Flagler Public School <i>Reading: Beyond Black &amp; White</i>	10th grade Flagler
Shelby Messer equivalent to one-year resident tuition and fees Genoa-Hugo School <i>Color to Dye For</i>	10th grade Hugo
Bryant Elrick equivalent to one-year resident tuition and fees Arriba-Flagler Public School <i>Just Passing Through</i>	11th grade Flagler
Darla Rosenbrock equivalent to one-year resident tuition and fees Brush High School <i>Energy Content in Different Biodiesel</i>	10th grade Brush
Cahl Johnson equivalent to one-year resident tuition and fees Kim School <i>Rocketry: Does Size Matter</i>	9th grade Kim
Ben Armstrong equivalent to one-year resident tuition and fees Monte Vista High School <i>Enemies of the Environment : Estrogen Mimics</i>	10th grade Monte Vista
Bethany Dilda equivalent to one-year resident tuition and fees Branson School <i>The Golden Ratio in Natural Adaptations</i>	10th grade Branson
Jessie Haugen equivalent to one-year resident tuition and fees Sargent Jr/Sr High School <i>What's the Pus? Preventing Staphylococcus Epidermidis Growth in Surgical Procedures</i>	11th grade Monte Vista
Erika Baker equivalent to one-year resident tuition and fees Merino Jr/Sr High School <i>Eye Can't See Clearly Now! A Comparison Study of Contact Types with E. coli and S. epidermidis</i>	10th grade Merino
Antonia Lira equivalent to one-year resident tuition and fees Lamar High School <i>Pig-In-A-Blanket</i>	10th grade Lamar

Royce Hoffner 10th grade  
equivalent to one-year resident tuition and fees  
Home School Center  
*Stage Specific Expression of Peroxidase Enzymes in Wound  
Healing Potato Tubers*

Tyler Wilson 11th grade  
Nuala Del Piccolo 12th grade  
Chiara Del Piccolo 10th grade  
equivalent to one-year resident tuition and fees  
Basalt High School Basalt  
*Mudslide Effect on Macroinvertebrate Diversity*

**Colorado School of Mines**  
*Colorado School of Mines Scholarships*

Bryant Elrick 11th grade  
four year 50% resident tuition scholarship  
Arriba-Flagler Public School Flagler  
*Just Passing Through*

Dong-Kou Kim 11th grade  
four year 50% resident tuition scholarship  
Fountain Valley School of Colorado Colorado Springs  
*Piezo Generator*

Michael Crane 11th grade  
four year 50% resident tuition scholarship  
Cherry Creek High School Greenwood Village  
*A Disease Model of XDR-TB*

Collin Dutro 11th grade  
four year 50% resident tuition scholarship  
Genoa-Hugo School Hugo  
*Do You See What I Hear?*

Grant Slinger 11th grade  
four year 50% resident tuition scholarship  
Stratton High School Stratton  
*Effects of Soil Type on Groundwater Contamination, Phase II*

David Wu 11th grade  
four year 50% resident tuition scholarship  
Cherry Creek High School Greenwood Village  
*Charcoal and Methanol Production by the Destructive  
Distillation of Cellulosic Waste*

**University of Colorado - Boulder**  
*College of Engineering & Applied Science  
Scholarships*

Nicole Reeves & Ethan Merritt 11th grade  
\$1,500 one year scholarship  
Wray Jr/Sr High School Wray  
*Paycheck Performance*

Marlena Widman 10th grade  
\$2,500 one year scholarship  
The Classical Academy Colorado Springs  
*Junkyard Multispectral Imaging*

Max Krakauer 12th grade  
\$3,000 one year scholarship  
Palmer High School Colorado Springs  
*Testing the Effects of Gasoline, E-85 Gasoline Mix, and 2,5-  
Dimethylfuran on Saccharomyces cerevisia*

**Intel Foundation**  
*Ryan Patterson Scholarship*

Andrew West 12th grade  
\$2,000 non-renewable scholarship to college of choice  
Conifer High School Conifer  
*Regenerative Diesel Fuel Production Utilizing Vegetable Oil  
and Catalytic Hydrocracking*

**Lockheed Martin**  
*Teacher of the Year Award*

Doug Steward  
certificate, \$3,000 grant  
Monte Vista High School Monte Vista

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**Society for Science & the Public**

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**American Meteorological Society**

Gwyneth Glissmann 11th grade  
certificate  
Peak to Peak Charter School Lafayette  
*Analyzing Arctic Solar Flux and Ice Extent Loss Projections*

Brady Buck 11th grade  
certificate  
Wray High School Wray  
*Republican River Research Analyzing Aquatic Health*

**American Psychological Association**  
*Achievement in Psychological Science Award*

Allie Martin 9th grade  
certificate  
Woodlin School Woodrow  
*The Task at Hand: Is Multitasking Affecting Our Health and  
Productivity?*

**Herbert Hoover Presidential Library Association**  
*Herbert Hoover Young Engineer Award*

Karthik Kumar-Rao 12th grade  
certificate, medallion  
Fairview High School Boulder  
*Creating A Quantum Optical Source Using Laser Pointers  
and Parametric Down Conversion*

**Intel Corporation**  
*Intel Excellence in Computer Science Award*

Chelsea Oden 12th grade  
certificate, \$200 (to be mailed)  
Monte Vista High School Monte Vista  
*The Probability of Me*

**National High School & Two-Year College  
Mathematics Honor Society**  
*Mu Alpha Theta Award*

Chelsea Oden 12th grade  
certificate  
Monte Vista High School Monte Vista  
*The Probability of Me*

## National Society of Professional Engineers

### Innovative Engineering Award

Cameron Kruse 12th grade  
certificate, lapel pin  
Home School Colorado Springs  
*The Dirt on Baseball: Engineering a Path Toward  
Standardizing the Baseball Mudding Process*

## Ricoh Americas Corporation

### Ricoh Sustainability Development Award

Joline Lobato 12th grade  
certificate  
Antonito High School Antonito  
*Solar Powered Sand Beds and Other Heat Transfer Sources*

## Scientific American

### Scientific American Award for Outstanding Achievement

Gwyneth Glissmann 11th grade  
certificate, 1-year subscription to Scientific American  
Peak to Peak Charter School Lafayette  
*Analyzing Arctic Solar Flux and Ice Extent Loss Projections*

Sarah Guthrie 11th grade  
certificate, 1-year subscription to Scientific American  
Boulder High School Boulder  
*The Mechanisms and Actions of Parthenolide on Platelet 5-  
HT Secretion In Vitro*

Ben Armstrong 10th grade  
certificate, 1-year subscription to Scientific American  
Monte Vista High School Monte Vista  
*Enemies of the Environment : Estrogen Mimics*

Danielle Pite 12th grade  
Kelly Lane 12th grade  
Anna Hermann 12th grade  
certificate, 1-year subscription to Scientific American  
Boulder High School Boulder  
*Didymosphenia geminata: The Core Question*

## Society for In Vitro Biology

### Outstanding Achievement for Ability and Creativity in In Vitro Biology Award

Sarah Guthrie 11th grade  
Certificate  
Boulder High School Boulder  
*The Mechanisms and Actions of Parthenolide on Platelet 5-  
HT Secretion In Vitro*

## Society for Science & the Public

### SSP Middle School Competition

Nakayla Lestina 8th grade  
nomination to enter the SSP national competition  
Dove Creek Middle School Dove Creek  
*Biological Control of Canada Thistle Phase 2: Analyzing the  
Spread of Three Natural Insect*

Garret Cerny 6th grade  
nomination to enter the SSP national competition  
Eagle County Carter Academy Wolcott  
*Is It Easier to Always Be Right?*

Kelsey Piper 8th grade  
nomination to enter the SSP national competition  
Summit Middle School Boulder  
*Going Bananas: Does the Vitamin C Concentration of a  
Banana Vary with Ripeness?*

Sara Cunningham 6th grade  
nomination to enter the SSP national competition  
Our Lady of Fatima School Lakewood  
*Crystals*

Sara Volz 7th grade  
nomination to enter the SSP national competition  
Cheyenne Mountain Charter School Colorado Springs  
*Are Biodiesel Emissions Safer Than Commercial Diesel  
Emissions?*

Zane Willburn 7th grade  
nomination to enter the SSP national competition  
Mancos Middle School Mancos  
*Water Purification off the Grid*

Casey Campbell 7th grade  
nomination to enter the SSP national competition  
La Veta Jr/Sr High School La Veta  
*The Effects of Coal Bed Methane Produced Water*

Matthew Persons 8th grade  
nomination to enter the SSP national competition  
Boltz Junior High School Fort Collins  
*Tic Tac Text*

Molly Graber 8th grade  
nomination to enter the SSP national competition  
North Middle School Colorado Springs  
*The Effects of Bovine Colostrum on Breast Cancer*

Ellery Goeltzenleuchter 8th grade  
nomination to enter the SSP national competition  
Blevins Junior High School Fort Collins  
*Caution Spice at Work*

Lorne Muir II 8th grade  
nomination to enter the SSP national competition  
The Classical Academy Colorado Springs  
*Hail! No!*

Haley Matteson 6th grade  
nomination to enter the SSP national competition  
North Middle School Colorado Springs  
*Too Hot or Not- The Effects of Global Warming on  
Germination & Growth of Flower, Vegetable, Weed Seeds*

Wyatt Palser 7th grade  
nomination to enter the SSP national competition  
Otis Jr/Sr High School Otis  
*Attack of the Killer Worms!!!*

Zachary Tanner 8th grade  
nomination to enter the SSP national competition  
Summit Middle School Boulder  
*Rock, Paper, Scissors: A Game of Chance?*

Kassidy Knutson  
nomination to enter the SSP national competition  
Wiggins Jr/Sr High School  
*Effects of Acid Rain on Structural Materials* 7th grade Wiggins

Carl Scheevel  
nomination to enter the SSP national competition  
East Middle School  
*Effectiveness of Various Ground Covers on Soil Erosion on a 32.5% Grade* 7th grade Grand Junction

Katie Weiss  
nomination to enter the SSP national competition  
The Ricks Center for Gifted & Talented  
*The Effect of Fermentation on Fruit* 8th grade Denver

Garrett Glissmann  
nomination to enter the SSP national competition  
Peak to Peak Charter School  
*Determining Position by Interfacing a GPS to the Web* 8th grade Lafayette

Rachel Beverlin  
nomination to enter the SSP national competition  
Dolores Middle School  
*GEYSER SPRING: A Further Characterization of Colorado's Only Geyser* 8th grade Dolores

Tucker Leavitt  
nomination to enter the SSP national competition  
Miller Middle School  
*Golden Music: Phi and the Musical Arts* 7th grade Durango

Bruno Mediate  
nomination to enter the SSP national competition  
The Classical Academy  
*Chewing Gum for Brain Activity* 7th grade Colorado Springs

Stephen O'Connor-Seville  
nomination to enter the SSP national competition  
Dolores Middle School  
*Microbes Make Electricity* 8th grade Dolores

Layne Barrett  
nomination to enter the SSP national competition  
The Classical Academy  
*Twist but Don't Shout* 8th grade Colorado Springs

K C Zinn  
nomination to enter the SSP national competition  
Sargent Jr/Sr High School  
*To Rot or Not: Potato Susceptibility to Pink Rot, Phytophthora erythroseptica* 8th grade Monte Vista

### **United States Metric Association**

*Best Use of the International System of Units Award*

Danielle Pite, Kelly Lane & Anna Hermann  
certificate  
Boulder High School  
*Didymosphenia geminata: The Core Question* 12th grade Boulder

### **United States Public Health Service**

#### *US Public Health Service Challenge*

Meg Rudy & Kylee Firlit  
certificate  
Palmer High School  
*Running Against the Temperature* 10th grade Colorado Springs