Junior Division Best of CSEF Project

First Place

Omar Manshad 8th grade

Building a Safe Robotic Arm for Table-Top Interactions

Crescent View Academy Aurora

Second Place

Sienna Harden 7th grade Cora Bauer 8th grade

Are Dewormers Needed Here?

St. Joseph Catholic School Fort Collins

* Third Place

Cameron Kempisty 8th grade

Going Nuts Over Biochar: Pistachios vs. PFAS

Eagleview Middle School Colorado Springs

Senior Division Best of CSEF Project

First Place

Amy Zhang 10th grade

AI Guides, Vision-Impaired Act: Safety-Aware Actionable

Guidance Via Vision-Language Models

Lakewood High School Lakewood

Second Place

Tristan Cao 11th grade

Emergent Quantum Inductance in Chiral Orbital Current

State

Stargate Charter School Thornton

Third Place

Sophia Zhang 11th grade

Natural Eutectogels As a Novel Material for Green Electronic

Skin

Fairview High School Boulder

Fourth Place

Lydia Mekelburg 12th grade

Year Two- Spatial Analysis of Chronic Wasting Disease in Northern Colorado Deer Populations: Analysis of Age

Structure Utilizing Cementum Annuli

Yuma High School Yuma

* Fifth Place

Natalie Muro 11th grade

A Sustainable Cyanobacteria Mitigation Method for Freshwater Ecosystems in the Rocky Mountain Region

Palmer High School Colorado Springs

Junior Division Animal Sciences

First Place

Sienna Harden 7th grade Cora Bauer 8th grade

Are Dewormers Needed Here?

St. Joseph Catholic School Fort Collins

Second Place

Finnley Reitz 7th grade

The Great Quail Query

Lamar Middle School Lamar

Third Place

Hannah Deering 7th grade

The Potential Relationship Between Tibia Length and Speed in

Samoyed Dogs Running 100 Yards

Yuma Middle School Yuma

Honorable Mention

Ava Shah 8th grade

How Exercise Affects Stress Levels in Horses

Summit Charter Middle School Boulder

Honorable Mention

Levi Spencer 8th grade

Light Triggers on Serotonin Levels

Liberty School Joes

Senior Division Animal Sciences

First Place

Lydia Mekelburg 12th grade

Year Two- Spatial Analysis of Chronic Wasting Disease in Northern Colorado Deer Populations: Analysis of Age

Structure Utilizing Cementum Annuli

Yuma High School Yuma

Second Place

Chloe Whiton 12th grade

The Snack Snatcher Stopper:" An Automatic Locking Dog Bowl

Centaurus High School Louisville

Third Place

Priya Mayjoy 9th grade

Monitoring Apis Mellifera Linnaeus for Winter Survival, Year Two

1 WO

Lamar High School Lamar

Honorable Mention

Teagan Bruchez 10th grade

The Effects of the Transfer of Wolves and the Fertility Rate of Grand County Cattle

West Grand High School Kremmling

Junior Division Behavioral & Social Sciences

First Place

Juliet Huckabay 8th grade

The Impact of Age on Pattern Separation and Completion

Skinner Middle School Denver

Second Place

Marin Hayes 8th grade

No Need for Speed

Boulder Country Day School Boulder

Third Place

Luke Tollefson 6th grade Where's Waldo: A Study on Attention Using Eye Tracking
St. John the Evangelist Catholic School Loveland

* Honorable Mention

Helen Ostrowski 8th grade Who Wrote It? How Genre Affects Students' Ability to Detect 41

Monument Academy Monument

Honorable Mention

Anabelle Pettinger 8th grade

Technology with the Youth

Vilas Schools Vilas

Senior Division Behavioral & Social Sciences

First Place

Zachary Gao
11th grade
Impacts of Political Views on Donations to Refugees with
Different Linguistic Framing

Cherry Creek High School Greenwood Village

* Second Place

Ella Blakeley 11th grade Perceptions Across Generations: Analyzing Age-Related

Differences in Distinguishing Between AI and Real Facial Stimuli

Palmer Ridge High School Monument

* Third Place

Vanya Lavu 12th grade

Developing a Novel Enzyme Therapy for Improving GAD and Gastointestinal Health in Rats

The Classical Academy Colorado Springs

Honorable Mention

Jerry Lou 11th grade

The Effects of Cartoons on Developing Healthy Eating Habits in Children

Stargate Charter School Thornton

Junior Division Biomedical & Health Sciences

First Place

Mateo Guerrero 8th grade

Fruit Flies Attraction to Different Doughs to Conclude Health Inferences

Summer Charter Middle School Boulder

Second Place

Vedanth Raju 7th grade

A Novel Plant-Based Topical Drug "Curcaza+" to Help Treat

Diabetic Foot Ulcers/Infections and Help Reduc

Antimicrobial Resistance

Aurora Quest K-8 School Aurora

Third Place

Travis Wise 8th grade

Analysis of Glucose Levels in Food to Aid in Hypoglycemic

Recovery

Liberty School

Joes

Honorable Mention

Elizabeth Lauren George 8th grade

Which Glucose Monitor Is Most Accurate?

West Grand Middle School Kremmling

Honorable Mention

Elsa Ciembronowicz 7th grade

Origianl Kitchen Insulin

Vallis Cymbia Academaie Homeschool Frederick

Senior Division Biomedical & Health Sciences

First Place

Jenny Xu 11th grade Amanda Zou 11th grade

Disrupting PCSK9 and ANGPTL3 Genes with CRISPR for

Hypercholesterolemia Treatment

Fairview High School Boulder

Second Place

Roa Lee 11th grade *MMP-Deactivating Therapeutic Contact Lenses for Corneal*

Melting

Mountain Vista High School Highlands Ranch

Third Place

Saahithi Kasa 11th grade

Up in Smoke: The Effect of Protective Topical Ointment

Against Wildfire Particle Penetration

Cherry Creek High School Greenwood Village

Honorable Mention

Maria Sears 12th grade

Lung Distance Relationship: A Remote Monitoring Device

That Tracks Pulmonary Function

Monte Vista High School Monte Vista

Junior Division Chemistry

First Place

Violet Sandridge 8th grade

Radiation Resilience: Evaluating Photostability in Natural

and Synthetic Sunscreens

Summit Charter Middle School Boulder

Second Place

Kenley Mitchell 7th grade

Light It Before You Bite It!

Sargent Middle School Monte Vista

Third Place Humza Memon 7th grade From Kitchen to Energy: Leveraging Fermentation Enhancers for Improved Biogas Production Crescent View Academy Lakes Aurora **Honorable Mention** Jocelyn Schoenfeld 6th grade Skittles Chromotography Genoa-Hugo School Hugo **Honorable Mention** Elizabeth Gerk 7th grade A World of Water Wiggins Middle School Wiggins Senior Division Chemistry First Place Sophia Zhang 11th grade Natural Eutectogels As a Novel Material for Green Electronic Fairview High School Boulder **Second Place** Arnav Venkatesh 10th grade Enhancing Microbot Functionality Through Single Layered Hydrogels Grandview High School Aurora **Third Place** Neha Pesaramelli 11th grade Measuring Chemical Kinetics in High School Labs Peak to Peak Charter School Lafayette **Honorable Mention** Bogar Quezada 10th grade Desulfurization Sierra Grande High School Blanca **Honorable Mention** 9th grade Jack Griepentrog Baking the Perfect Chocolate Chip Cookie SkyView Academy Highlands Ranch Junior Division Earth & Environmental Sciences * First Place

Cameron Kempisty 8th grade

Going Nuts Over Biochar: Pistachios vs. PFAS

Eagleview Middle School Colorado Springs

Second Place

Kendyl Osborn 7th grade

Monarch Butterfly Pitstop

La Junta Junior High School La Junta Third Place

Kayla Melby 6th grade Photosynthesis Through Thick and Thin: Development of a Light Collecting Device to Prevent Winterkill in Ice Covered

Yuma Middle School

Honorable Mention

8th grade Ben Zhao

Yuma

Earthquake Asperities Relation to Recurrence

Summit Charter Middle School Boulder

Honorable Mention

Aylin Melgar Bobadilla 8th grade Nayla Gutierrez 8th grade

Helpful Organisms: Using Microorganisms in Eutrophic

Bodies of Water

Wray Jr/Sr High School Wray

Senior Division Earth & Environmental Sciences

First Place

Alex Kugler 12th grade 12th grade Zoe Kugler

Comparison of Aurora Activity with Thermosphere Na and Fe (TINa and TiFe) Layers at McMurdo Station

Monarch High School Louisville

Second Place

Lauren Erickson 12th grade

The Effect of Fire Mitigation on Avian Biodiversity as

Measured Through Bioacoustics

Evergreen High School Evergreen

Third Place

Emma Bahr 12th grade

Effect of Temperature on Growt of Diatoms Skeletonema

costatum and Ditylum brightwellii

Palmer High School Colorado Springs

Honorable Mention

Hannah Shelton 12th grade

Sediment Signatures: Unveiling the Impact of Sedimentary Deposits on Diatoms Through Lake Bottom Sampling

Centauri High School La Jara

Junior Division Energy

First Place

Ingram Olson 6th grade

A Better Solar Panel: Can Coating Solar Panels Improve

Their Efficiency?

Telluride Intermediate School Telluride

* Second Place

Bianca Buczkowski 8th grade

Should Solar Panels Track the Sun?

Monument Academy Monument

Third Place Connor Stone 7th grade Evelyn Lapp 8th grade Insulation Investigation

Brush Middle School Brush

Honorable Mention

7th grade Benjamin Knight Wind Turbine Efficiency: Which Blade Design Works the

Corwin International Magnet School Pueblo

Senior Division Energy

First Place

Carson Stone 9th grade Chase Pollart 10th grade

Water Tower Power - Storing Solar Energy with an Elevated

Pumped Storage Hydropower System

Brush High School Brush

Junior Division Engineering

First Place

Omar Manshad 8th grade Building a Safe Robotic Arm for Table-Top Interactions Aurora

Crescent View Academy

Second Place

Ella Music 8th grade A Haptic Guidance System for Vissually Impaired Sport

Summit Charter Middle School Boulder

Third Place

Evan Gopinath 7th grade

The Pumpkin Carver

Nevin Platt Middle School Boulder

Honorable Mention

Maci Widger 8th grade

Under Pressure

Sargent Middle School Monte Vista

Honorable Mention

Cooper Bolyard 8th grade

Under Pressure

Wiggins Middle School Wiggins

Senior Division Engineering

First Place

Cuinn Archer 9th grade

Smart Wheels: An RC Car That Measures and Analyzes

Shapes

Mancos High School Mancos

Second Place

Mateo Feit 9th grade

The PetProfiler: Machine Learning and Mechanics for a

Smart Doggy Door

Fairview High School Boulder Third Place

Devon Mahorney 9th grade

Road Ready

West Grand High School Kremmling

Honorable Mention

10th grade Jude Chen

Development of Digital Correlation Software to Evaluate Mechanical Properties of 3D-Printed Polymers for

Sustainable Material Innovation

Fairview High School Boulder

Junior Division Environmental Engineering

First Place

Paisley Anderson 8th grade

Mineral Mining Monsters: Time Will Tail

Creede Schools Creede

Second Place

Lvndee Thomson 7th grade

Ryder Pryor 7th grade

Waters' Ways

West Grand Middle School Kremmling

Third Place

Payal Gopinath 7th grade

Plant Growing Conditions

Nevin Platt Middle School Boulder

Honorable Mention

Jainil Parikh 6th grade

Harnessing Waste Powering Future

Challenger Middle School Colorado Springs

Honorable Mention

Solomon Charlton-Jones 7th grade

The Poly Cracker 2.0: A Size and Weight Controlled

Birdhouse

Flagstaff Academy Charter School Longmont

Senior Division Environmental Engineering

First Place

Natalie Muro 11th grade

A Sustainable Cyanobacteria Mitigation Method for Freshwater Ecosystems in the Rocky Mountain Region

Palmer High School Colorado Springs

Second Place

Siddhi Singh 11th grade A Low-Cost, Onboard Animal Detection System to Mitigate

Wildlife-Vehicle Collisions

STEM School Highlands Ranch

Third Place

Naomi Kruse 11th grade

Paper for the Planet 2: Kickstarting Microbial Succession

Following California Wildfires

Schullandheim Homeschool Colorado Springs

Junior Division Mathematics & Computer Sciences

First Place

Wensen Fang 8th grade Blazing Bright: Uncovering the Truth Behind Wildfires in

Colorado via Machine Learning

Summer Charter Middle School Boulder

Second Place

Bode Monahan 8th grade

Frequency Chaos: Coding a Wi-Fi Interrupter for Tactical

Use

Liberty School Joes

Third Place

Madeleine Hahn 6th grade

Is AI Racist or Sexist?

Flagstaff Academy Charter School Longmont

Honorable Mention

Oliver Ciembronowicz 7th grade

Are They Listening To Us?

Vallis Cymbia Academaie Homeschool Frederick

Senior Division Mathematics & Computer Sciences

First Place

Amy Zhang 10th grade

AI Guides, Vision-Impaired Act: Safety-Aware Actionable

Guidance Via Vision-Language Models

Lakewood High School Lakewood

Second Place

Devang Pandey 12th grade

Enhancing Brain Tumor Classification with Synthetic Data

Via Gen Models and Hybrid Training

Fairview High School Boulder

* Third Place

Ayush Vispute 10th grade

Protein Flow v2: Biocomputational Analysis of Metabolic Pathways to Discover New Carbon Capturing Bacteria

Rampart High School Colorado Springs

Honorable Mention

Aishwarya Kamineni 10th grade

Optimization of Non-Invasive Pneumonia Prediction Using

Novel Machine Learning Algorithms

Grandview High School Aurora

Honorable Mention

Tanush Shekhar 11th grade
Jack Cerullo 12th grade

Revolutionizing CryoEt: Novel Simulation Techniques for ML-

Based Tomograph Labeling

Peak to Peak Charter School Lafayette

Junior Division Micro & Molecular Biology

* First Place

Julia Muro 8th grade

Modified Atmosphere Packaging Strategies for Prolonged

Organic Strawberry Health

North Middle School Colorado Springs

Second Place

Paisley Wiersma 8th grade

What's in That Water?

Genoa-Hugo School Hugo

Third Place

Anmoldeep Singh Gill 7th grade

Antibiotic Resistance in Escherichia coli

Lamar Middle School Lamar

Honorable Mention

Eli Harrison 7th grade

Jagadish White 7th grade

The Effect of Pet Toothpaste on the Canine Oral

Home School Erie

Honorable Mention

Grace Cullen 8th grade

Bacteria Buster

Yuma Middle School Yuma

Honorable Mention

Cash Stone 8th grade

Mold Patrol: How Storage Conditions Affect Mold Growth

and Animal Feed

Genoa-Hugo School Hugo

Senior Division Micro & Molecular Biology

First Place

Serene Park 11th grade

The Effect of Glyphosate on Bacillus subtilis Biofilm

Cherry Creek High School Greenwood Village

* Second Place

Cami Wolkow 11th grade
Genetically Enhancing Fungi to Bioremediate Tetracycline

Palmer High School Colorado Springs

Third Place

Ria Rajaseckharan 10th grade

Glycopeptidolipids: A New Diagnostic Tool for COPD and Cystic Fibrosis Patients Infected with Non-Tuberculous

Mycobacteria

Fossil Ridge High School Fort Collins

Honorable Mention

Maxwell Minson 12th grade

Determining the Distribution of Red Fluorescent Protein Marked Agrobacterium Tumefaciens within Different Species

of Legumes

Broomfield High School Broomfield

Honorable Mention Sreyanth Saipavan Alla 11th grade BactiScan: A Deep Convolutional Neural Network for Tracking Shigella flexneri Infection Rock Canyon High School Castle Pines Junior Division Physics & Astronomy First Place Lane Mattive 8th grade Can I Get a Lift? Sargent Middle School Monte Vista **Second Place** Vivian Bozek 7th grade Light It Up and Launch It St. Joseph Catholic School Fort Collins **Third Place** Elly Entz 7th grade Don't Interfere with Snow Gear Sargent Middle School Monte Vista **Honorable Mention** Ryker Monahan 6th grade The Heat Is On: Testing Heat Resistant Materials Liberty School Joes Senior Division Physics & Astronomy First Place Tristan Cao 11th grade Emergent Quantum Inductance in Chiral Orbital Current Stargate Charter School Thornton **Second Place** Helen Wan 10th grade Time-Sensitive Medicine Dissolution in a Micrgravity Environment Emulated by Acoustic Levitation Pine Creek High School Colorado Springs **Third Place** Julia Gao 10th grade Toward Discovery of the Sterile Neutrino: Deep Learning Muon Neutrino Reconstruction at ICARUS Fairview High School Boulder **Honorable Mention** Lillian Prime 12th grade Analysis and Comparison of Gravitational Wave Event Parameters

Junior Division Plant Sciences

First Place

Palmer High School

Lola Sondrol 8th grade Do Endophytes Affect the Growth of Lolium perenne? Monte Vista Online Academy Monte Vista **Second Place**

Elaina Consaul 8th grade Salinity Solution: A Study of How the Salinity in Water Affects Plant Growth

Sargent Middle School

Monte Vista

Third Place

Thomas D'Attilo 7th grade New Zealand Mud Snails and How Do We Get Rid of Them? Nevin Platt Middle School Boulder

Honorable Mention

Caprise Priestley 6th grade Electroculture Gardening and How It Affects Plants Mancos Middle School Mancos

Honorable Mention

Grayson Kassib 8th grade

Aquaponics vs. Aeroponics

West Grand Middle School Kremmling

Senior Division Plant Sciences

First Place

Laila Waldron 12th grade Differences in Floral Quality and Ecosystem Health Between Burn Areas and Logged Clear Cuts

Nederland High School Nederland

Second Place

Kaycee Clark 9th grade Cheater Cheater Rangeland Eater: A Study on Mitigating the Spread of Downy Brome Using Pseudomonas Fluoresens D7 and ACK55

Wray Jr/Sr High School Wray

Third Place

Janet Ngomba Bajikijay 12th grade Mayssan Salim 12th grade Nayibe Burciaga Buhaya 12th grade

The Effect of Nanoparticles on Plant Growth

Lotus School for Excellence Aurora

Honorable Mention

Om Vegesna 10th grade

Combating Root-Knot (Meloidogyne spp.) and Fusarium oxysporum with Stabilized Allicin and siRNA Constructs

Fairview High School Boulder

Honorable Mention

Colorado

Siena Parr 12th grade

Absprbtion of Glyphosate-Based Herbicide in Zea Mays

Plants Utilizing Zinc-Oxide Nanoparticles

Dolores High School Dolores

Colorado Science & Engineering Fair

Elemer Bernath Technical Writing Award

Anirudh Rao

7th grade

certificate, \$25 STEM School

Highlands Ranch

A Novel Approach to Wound Management Using Hydrovoltaic

Sensors

Ella Music certificate, \$50 8th grade

Summit Charter Middle School

Boulder

A Haptic Guidance System for Visually Impaired Sport

Climbers

Wensen Fang

8th grade

certificate, \$100

Summer Charter Middle School

Boulder

Blazing Bright: Uncovering the Truth Behind Wildfires in

Colorado via Machine Learning

Ralph Desch Technical Writing Award

Serene Park

11th grade

certificate, \$25

Cherry Creek High School

Greenwood Village The Effect of Glyphosate on Bacillus subtilis Biofilm

Devang Pandey

12th grade

certificate, \$50

Fairview High School

Boulder

Enhancing Brain Tumor Classification with Synthetic Data Via Gen Models and Hybrid Training

Vanya Lavu

12th grade

certificate, \$100

The Classical Academy

Colorado Springs

Developing a Novel Enzyme Therapy for Improving GAD and

Gastrointestinal Health in Rats

Junior Division Student Choice Award

Evan Gopinath

7th grade

certificate, momentum

Nevin Platt Middle School

Boulder

The Pumpkin Carver

Senior Division Student Choice Award

Teagan Bruchez

10th grade

certificate, momentum

West Grand High School

Kremmling

The Effects of the Transfer of Wolves and the Fertility Rate of

Grand County Cattle

Poster Art Contest

Anirudh Rao 7th grade certificate, \$100, use of artwork for next year's publications &

t-shirt design

STEM School Highlands Ranch

Pioneers of Science

Burt Ratan Energy Award

Ingram Olson

\$50, certificate, poster of pioneer scientist Telluride Intermediate School

Telluride

6th grade

A Better Solar Panel: Can Coating Solar Panels Improve

Their Efficiency?

Dian Fossey Animal Sciences Award

Ava Shah

8th grade

\$50, certificate, poster of pioneer scientist

Summit Charter Middle School

Boulder

How Exercise Affects Stress Levels in Horses

Elizabeth Helen Blackburn Biomedical & Health Sciences Award

Trynity Typhair

8th grade

8th grade

Creede

\$50, certificate, poster of pioneer scientist

West Grand Middle School

Kremmling

You Are What You Eat

George Tchobanoglous Environmental Engineering

Award

Paisley Anderson \$50, certificate, poster of pioneer scientist

Creede Schools

Mineral Mining Monsters: Time Will Tail

Isaac Newton Physics & Astronomy Award

Yezan Kassir

8th grade

\$50, certificate, poster of pioneer scientist

Crescent View Academy Aurora

Marble Roller Coaster

James Patrick Allison Micro & Molecular Biology Award

Grace Cullen

8th grade

\$50, certificate, poster of pioneer scientist

Yuma Middle School Yuma

Bacteria Buster

John Goodenough Chemistry Award

Jocelyn Kramer

8th grade

\$50, certificate, poster of pioneer scientist Good Shepherd Catholic School

Denver

To Be or Not To Be Organic

Leon Festinger Behavioral & Social Sciences Award

Anabelle Pettinger

8th grade

\$50, certificate, poster of pioneer scientist

Vilas Schools Technology with the Youth Vilas

Luther Burbank Plant Sciences Award

Gabriel Ferguson 7th grade

\$50, certificate, poster of pioneer scientist

Craver Middle School Colorado City

Rootin' Rivals

Mary Ainsworth Behavioral & Social Sciences Award

Layla Reiss 8th grade

\$50, certificate, poster of pioneer scientist

Summer Charter Middle School Boulder

Saving the Team

Steven Chu Engineering Award

Alex Dicker 7th grade

\$50, certificate, poster of pioneer scientist

Monte Vista Middle School Monte Vista

Screw Water

Tim Berners-Lee Mathematics & Computer Sciences Award

Oliver Ciembronowicz 7th grade

\$50, certificate, poster of pioneer scientist

Vallis Cymbia Academaie Frederick

Homeschool

Are They Listening To Us?

Wangari Muta Maathai Earth & Environmental Sciences Award

Kayla Melby 6th grade

\$50, certificate, poster of pioneer scientist

Yuma Middle School Yuma

Photosynthesis Through Thick and Thin: Development of a Light Collecting Device to Prevent Winterkill in Ice Covered Lakes

Military

United States Air Force Research Laboratory

Air Force Award

Amy Zhang 10th grade certificate, sling pack, power bank, USB flash memory drive,

USB car charger

Lakewood High School

AI Guides, Vision-Impaired Act: Safety-Aware Actionable Guidance Via Vision-Language Models

Vaughn Bankston 9th grade

certificate, sling pack, power bank, USB flash memory drive, USB car charger

Mancos High School Mancos

Unmanned Aerial Vehicle Iteration IX

John Finnessy 8th grade certificate, sling pack, power bank, USB flash memory drive, USB car charger

Challenge School Aurora

Making a Robotic Hand

United States Navy & Marine Corps

Navy Science and Engineering Award

Abigail Lam 8th grade

certificate, ONR medallion, letter of congratulations

Flagstaff Academy Charter School Longmont

The Human Body in Space

8th grade Calvin Nabors **Ouinn Dempsie** 8th grade

certificate, ONR medallion, letter of congratulations

Bayfield Middle School Bayfield

Sci-Fi in Reality

Xander Skul 7th grade

certificate, ONR medallion, letter of congratulations

D60 Online School Pueblo

Tensegrity Table

Benjamin Boedeker 7th grade

certificate, ONR medallion, letter of congratulations

Fort Morgan Middle School Fort Morgan

Hot Shot: An Observational Study of 5th Grade Boy Basketball Shot Percentage Evaluation and Optimization

Sreyanth Saipavan Alla 11th grade

certificate, ONR medallion, letter of congratulations

Rock Canyon High School Castle Pines

BactiScan: A Deep Convolutional Neural Network for

Tracking Shigella flexneri Infection

10th grade Amy Zhang

certificate, ONR medallion, letter of congratulations

Lakewood High School Lakewood

AI Guides, Vision-Impaired Act: Safety-Aware Actionable

Guidance Via Vision-Language Models

Juakin Sawatzky 10th grade

certificate, ONR medallion, letter of congratulations

Liberty School

Developing an Economical Method of Extracting REM from Mine Effluent Water

Organizational

Joes

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

Air & Waste Management Award

 * Cameron Kempisty 8th grade

certificate, \$100

Eagleview Middle School Colorado Springs

Going Nuts Over Biochar: Pistachios vs. PFAS

* Jainil Parikh 6th grade certificate, \$200
Challenger Middle School Colorado Springs Harnessing Waste Powering Future

Sihan "Hunter" Liu 10th grade certificate, \$100

Colorado Rocky Mountain School Carbondale Sustainable Nitrate Remediation and Ammonia Production via Electrocatalysis Using a One-Dimensional Ni-BTA Coordination Polymer

Destiny Cornelius 12th grade
Ky Harkness 12th grade
certificate, \$200
Plainview School Towner

Biochar: An Organic Approach to Urban Heat Management

American Association of University Women AAUW CO Award for Women in STEM

Elsa Ciembronowicz 7th grade

certificate, \$250 Vallis Cymbia Academaie Frederick

Homeschool

Original Kitchen Insulin

Saahithi Kasa 11th grade

certificate, \$250

Cherry Creek High School Greenwood Village Up in Smoke: The Effect of Protective Topical Ointment Against Wildfire Particle Penetration

American Industrial Hygiene Association Rocky Mountain Section

Excellence in Protection of Occupational Health & Safety Award

Anirudh Rao 7th grade certificate, \$150
STEM School Highlands Ranch

A Novel Approach to Wound Management Using Hydrovoltaic Sensors

Colter Dennison 9th grade certificate, \$150

Mancos High School Mancos

Toxic Tributaries 2: Rivers Effect on Soil Chemistry

American Statistical Association Colorado/Wyoming Chapter

David Young Memorial Award

* Bianca Buczkowski 8th grade certificate, student membership in the ASA, acknowledgement at chapter spring meeting and on the chapter website; \$200 Monument Academy Monument Should Solar Panels Track the Sun?

Julia Gao
10th grade
certificate, student membership in the ASA, acknowledgement
at chapter spring meeting and on the chapter website; \$200
Fairview High School
Boulder
Toward Discovery of the Sterile Neutrino: Deep Learning
Muon Neutrino Reconstruction at ICARUS

American Vacuum Society Rocky Mountain Chapter

Excellence in Physical Sciences & Engineering
Award

* Bianca Buczkowski 8th grade certificate, \$100, \$100 matching award for adult sponsor Monument Academy Monument Should Solar Panels Track the Sun?

Azucena Perez 7th grade certificate, \$200, \$200 matching award for adult sponsor Lamar Middle School Lamar Radiation Safety First: The Life Saving Power of Radiation Shielding

Carson Stone 9th grade
Chase Pollart 10th grade
certificate, \$100, \$100 matching award for adult sponsor
Brush High School Brush
Water Tower Power - Storing Solar Energy with an Elevated
Pumped Storage Hydropower System

Maria Sears 12th grade certificate, \$200, \$200 matching award for adult sponsor Monte Vista High School Monte Vista Lung Distance Relationship: A Remote Monitoring Device That Tracks Pulmonary Function

Broadcom Foundation

Broadcom Coding with Commitment Award

Bode Monahan 8th grade certificate, Raspberry Pi Pico Kit, \$250
Liberty School Joes
Frequency Chaos: Coding a Wi-Fi Interrupter for Tactical
Use

Colorado Biology Teachers Association

CBTA Best Biology Project Award

Ansley DePue 8th grade certificate, \$100
Wray Jr/Sr High School Wray

The Effects of Light Wavelength Treatments Towards the Germination Response and Seedling Growth Rate of Zea mays

Hannah Deering 7th grade certificate, \$150

Yuma Middle School Yuma
The Potential Relationship Between Tibia Length and Speed in

Samoyed Dogs Running 100 Yards

Teagan Bruchez 10th grade certificate, \$150 West Grand High School Kremmling The Effects of the Transfer of Wolves and the Fertility Rate of

Grand County Cattle

Natalie Muro 11th grade

certificate, \$200

Palmer High School Colorado Springs

A Sustainable Cyanobacteria Mitigation Method for Freshwater Ecosystems in the Rocky Mountain Region

Colorado BioScience Institute

Future of Life Science Award

Vedanth Raju 7th grade

certificate, \$25

Aurora Quest K-8 School Aurora A Novel Plant-Based Topical Drug "Curcaza+" to Help Treat Diabetic Foot Ulcers/Infections and Help Reduce Antimicrobial Resistance

Maria Sears 12th grade certificate, feature in the Institute's "Success Stories", \$75 Monte Vista High School Monte Vista Lung Distance Relationship: A Remote Monitoring Device That Tracks Pulmonary Function

Colorado Chemistry Teachers Association

CCTA Chemistry Award

Neha Pesaramelli 11th grade

certificate, \$150

Peak to Peak Charter School Lafayette Measuring Chemical Kinetics in High School Labs

Colorado Environmental Health Association

Environmental Health Award

Sierra Winslow 8th grade

certificate, \$75

Eagleview Middle School Colorado Springs Radon Detector: Where Does Radon Typically Accumulate in

Buildings?

Natalia Woolcock 10th grade

certificate, invitation to exhibit at the CEHA Annual

Educational Conference (valued at \$400), \$150

The Academy of Charter Schools Westminster

Reimagine Meat Labeling: Could We Change Buyer Choices and Lower Greenhouse Emissions by Adding Carbon

Footprint Data to Consumer Labels?

Colorado Foundation for Agriculture

Jack Fenwick Award for Agricultural Science

Caprise Priestley 6th grade

certificate, \$50

Mancos Middle School Mancos

Electroculture Gardening and How It Affects Plants

Elliot Louthan 6th grade

certificate, \$50

Idalia School Idalia

Special Needs Pig Feeder

Bennett Esterday 10th grade

certificate, \$50

Animas High School Durango

Avant-Garde Agriculture: Indole-3-Acetic Acid and Growth in

Tomatoes

Liam Griffin 9th grade

certificate, \$50

Sargent High School Monte Vista

An Absorbent Advantage: Using Wool Pellets to Conserve

Water in Soil

Colorado Medical Society

CMS Education Foundation Award

Vedanth Raju 7th grade certificate, invitation to exhibit at the Colorado Medical Society Annual Meeting (Sept. 13 in Keystone) and attend the Presidential Inaugural Dinner with a paid overnight stay Aurora Quest K-8 School Aurora A Novel Plant-Based Topical Drug "Curcaza+" to Help Treat

Diabetic Foot Ulcers/Infections and Help Reduce

Antimicrobial Resistance

Maria Sears 12th grade certificate, invitation to exhibit at the Colorado Medical Society Annual Meeting (Sept. 13 in Keystone) and attend the Presidential Inaugural Dinner with a paid overnight stay Monte Vista High School Monte Vista Lung Distance Relationship: A Remote Monitoring Device

That Tracks Pulmonary Function

Colorado Mineral Society

Best Earth Science Award

Maci Widger 8th grade

certificate, \$50, mineral specimen, book

Sargent Middle School Monte Vista

Under Pressure

Augustus Gdanitz 11th grade

certificate, \$35, mineral specimen, book

Wray Jr/Sr High School Wray

The Use of Zeolites in Mitigating Red Algae Blooms

Colter Dennison 9th grade

certificate, \$50, mineral specimen, book

Mancos High School Mancos

Toxic Tributaries 2: Rivers Effect on Soil Chemistry

Colorado Mychological Society

Excellence in Mycological Research Award

Lola Sondrol certificate, \$25, CMS membership, certificate, signed copy of Vera Evenson's "Rocky Mountain Mushrooms"

Monte Vista Online Academy Monte Vista

Do Endophytes Affect the Growth of Lolium perenne?

7th grade certificate, \$50, CMS membership, certificate, signed copy of Vera Evenson's "Rocky Mountain Mushrooms"

Crescent View Academy Aurora

From Kitchen to Energy: Leveraging Fermentation Enhancers for Improved Biogas Production

* Cami Wolkow 11th grade certificate, \$100, CMS membership, certificate, signed copy of Vera Evenson's "Rocky Mountain Mushrooms" Palmer High School Colorado Springs

Genetically Enhancing Fungi to Bioremediate Tetracycline

Colorado Native Plant Society

Native Plant Award

Kendyl Osborn 7th grade certificate, 1-year membership to CNPS, book on Colorado

native plants, \$150 La Junta Junior High School

Monarch Butterfly Pitstop

Kaycee Clark 9th grade certificate, 1-year membership to CNPS, book on Colorado native plants, \$150

Wray Jr/Sr High School

Cheater Cheater Rangeland Eater: A Study on Mitigating the Spread of Downy Brome Using Pseudomonas Fluoresens D7 and ACK55

Colorado Section of the American Chemical **Society**

ACS Chemistry Award

Amelie Andujar 7th grade 7th grade Emely Quijada Bianeta Ugwo 7th grade

certificate, \$50

Brush Middle School Brush

How Does UV Light Affect the Protection of Different Brands of Sunscreen

Jocelyn Schoenfeld 6th grade

certificate, \$50

Genoa-Hugo School Hugo

Skittles Chromatography

Kassidy Schlepp 8th grade

certificate, \$50

St. John the Baptist Catholic School Longmont

The Last Light

Kenley Mitchell 7th grade

certificate, \$75

Sargent Middle School Monte Vista

Light It Before You Bite It!

Jocelyn Kramer 8th grade

certificate, \$125

Good Shepherd Catholic School Denver

To Be or Not To Be Organic

8th grade Violet Sandridge

certificate, \$150

Summit Charter Middle School Boulder Radiation Resilience: Evaluating Photostability in Natural

and Synthetic Sunscreens

Layna Snyder 9th grade Caroline Prieto 9th grade

certificate, \$75

Brush High School Brush

The Lake Nyos Tragedy: What Caused It?

Arnav Venkatesh 10th grade

certificate, \$125

Grandview High School Aurora

Enhancing Microbot Functionality Through Single Layered Hydrogels

Sophia Zhang 11th grade

certificate, \$150

Fairview High School Boulder Natural Eutectogels As a Novel Material for Green Electronic

Skin

La Junta

Colorado State University College of Agricultural Sciences

Innovations in the Science of Agriculture Awards

Hannah Deering 7th grade

certificate, \$500

Yuma Middle School Yuma

The Potential Relationship Between Tibia Length and Speed in Samoved Dogs Running 100 Yards

Luciana Dougherty 6th grade

certificate, \$500

Sacred Heart of Jesus Catholic School Boulder

Can Those Tiny Gels Save Agriculture's Water Crisis?

Haydan Drullinger 11th grade

certificate, \$500

Liberty School Joes

AgriVision: Augmented Reality for Precision Farming

Priya Mayjoy 9th grade

certificate, \$500

Lamar High School Lamar

Monitoring Apis Mellifera Linnaeus for Winter Survival, Year

Two

Aurora

Janet Ngomba Bajikijay 12th grade Mayssan Salim 12th grade Nayibe Burciaga Buhaya 12th grade certificate, \$500

Lotus School for Excellence

The Effect of Nanoparticles on Plant Growth

Colorado State University Department of Agricultural Biology

Agricultural Biology Award

Elaina Consaul 8th grade

certificate, \$100

Sargent Middle School Monte Vista Salinity Solution: A Study of How the Salinity in Water Affects

Plant Growth

Lola Sondrol 8th grade

certificate, \$100

Monte Vista Online Academy Monte Vista

Do Endophytes Affect the Growth of Lolium perenne?

Om Vegesna 10th grade

certificate, \$100

Fairview High School Boulder

Combating Root-Knot (Meloidogyne spp.) and Fusarium oxysporum with Stabilized Allicin and siRNA Constructs

Janet Ngomba Bajikijay12th gradeMayssan Salim12th gradeNayibe Burciaga Buhaya12th grade

certificate, \$100

Lotus School for Excellence Aurora

The Effect of Nanoparticles on Plant Growth

Colorado State University Department of Chemistry

Excellence in Chemistry Award

McKayla Red 8th grade

certificate, \$75

Ignacio Middle School Ignacio

DIY Remedies for Getting a Stain Out

Amelie Andujar 7th grade Emely Quijada 7th grade Bianeta Ugwo 7th grade

certificate, \$175

Brush Middle School Brush

How Does UV Light Affect the Protection of Different Brands

of Sunscreen

Jack Griepentrog 9th grade

certificate, \$75

SkyView Academy Highlands Ranch

Baking the Perfect Chocolate Chip Cookie

Layna Snyder 9th grade Caroline Prieto 9th grade

certificate, \$175

Brush High School Brush

The Lake Nyos Tragedy: What Caused It?

Colorado State University Department of Horticulture & Landscape Architecture

Excellence in Horticulture Award

Elaina Consaul 8th grade

certificate, \$100

Sargent Middle School Monte Vista Salinity Solution: A Study of How the Salinity in Water Affects

Plant Growth

Yasaswini Vinjamuri 7th grade

certificate, \$100

Heritage Heights Academy Centennial

Who Shrank the Potatoes?!

Emilio Ortiz 11th grade

certificate, \$100

Monte Vista High School Monte Vista

Soil Additives Are Spud-Tacular

Om Vegesna 10th grade

certificate, \$100

Fairview High School Boulder

Combating Root-Knot (Meloidogyne spp.) and Fusarium oxysporum with Stabilized Allicin and siRNA Constructs

Colorado State University Natural Heritage Program

CNHP Conservation Award

Lauren Erickson 12th grade

certificate, pint glass, Wetlands of Colorado guidebook

Evergreen High School Evergreen

The Effect of Fire Mitigation on Avian Biodiversity as Measured Through Bioacoustics

Colorado's Electric Cooperatives

The Colorado EnergyWise Award

Connor Stone 7th grade Evelyn Lapp 8th grade

certificate, \$75

Brush Middle School Brush

Insulation Investigation

Ingram Olson 6th grade

certificate, \$175

Telluride Intermediate School Telluride

A Better Solar Panel: Can Coating Solar Panels Improve Their Efficiency?

- -

Carson Stone 9th grade
Chase Pollart 10th grade

certificate, \$75

Brush High School Brush

Water Tower Power - Storing Solar Energy with an Elevated

Pumped Storage Hydropower System

Zoe Wang 10th grade Michael Caraher 8th grade certificate, science equipment/instruments certificate, \$175 Fairview High School Boulder St. John the Baptist Catholic School Longmont From Bench to Atmosphere: New Materials for the Direct Air Beware of the Pocket Rocket Capture (DAC) of CO2 Using Electro-Swing Chemistry

Colorado-Wyoming Society of American Foresters

Excellence in Forestry Research Award

Cameron Kempisty 8th grade certificate, \$200 Eagleview Middle School Colorado Springs Going Nuts Over Biochar: Pistachios vs. PFAS

Naomi Kruse 11th grade

certificate, \$200

Schullandheim Homeschool Colorado Springs Paper for the Planet 2: Kickstarting Microbial Succession Folloing California Wildfires

Gromko Family

Gerald Gromko Memorial Award

Haydan Drullinger 11th grade certificate, \$250 Liberty School Joes

AgriVision: Augmented Reality for Precision Farming

Institute of Electrical and Electronics Engineering, High Plains Section

IEEE Award

Ella Music 8th grade certificate, \$125 Amazon gift card Summit Charter Middle School Boulder A Haptic Guidance System for Visually Impaired Sport Climbers

Tristan Cao 11th grade certificate, \$175 Amazon gift card Stargate Charter School Thornton

Emergent Quantum Inductance in Chiral Orbital Current State

Little Shop of Physics

Matthew McCausland Memorial Award

* Laurel Amber Kent 7th grade certificate, science equipment/instruments Eagleview Middle School Colorado Springs Magic Mouse: A Touchless, Thermin-based Mouse to Help People with Hand Limitations

Maci Widger 8th grade

certificate, science equipment/instruments

Sargent Middle School Monte Vista Under Pressure

Emily Abdulsalam 8th grade

certificate, science equipment/instruments

Crescent View Academy Aurora How Does Viscosity of Different Liquids Affect the Speed of a Moving Object?

Elliot Louthan 6th grade

certificate, science equipment/instruments

Idalia School Idalia

Special Needs Pig Feeder

Lane Mattive 8th grade

certificate, science equipment/instruments

Monte Vista Sargent Middle School

Can I Get a Lift?

9th grade Mateo Feit

certificate, science equipment/instruments

Fairview High School Boulder

The PetProfiler: Machine Learning and Mechanics for a

Smart Doggy Door

Dillon Curtis 10th grade Meah Ring Hall 12th grade Hector Villacana Saucedo 10th grade

certificate, science equipment/instruments

Brush High School Brush

Modeling the Flight Paths of Conical Meteorites

Tyler Wickham 12th grade

certificate, science equipment/instruments

Golden High School Golden

Breathe Easy: Comfort-Focused Respirators for Wildland

Firefighters

Lockheed Martin

Lockheed Martin Aerospace Award

Lane Mattive 8th grade csrtificate, \$150

Sargent Middle School Monte Vista

Can I Get a Lift?

Helen Wan 10th grade

certificate, \$350

Pine Creek High School Colorado Springs

Time-Sensitive Medicine Dissolution in a Microgravity Environment Emulated by Acoustic Levitation

Matt Hannifin - CO2/Greenhouse Gas Reduction

CO2 & Greenhouse Gas Reduction Award

Westlea Tipsword 9th grade

certificate, \$100

Homeschool Saguache Effects of Vitamin E Supplements on Horse Health and

Performance

2025 Colorado Science and Engineering Fair

Special Awards Press Release						
Marin Hayes	8th grade	Maci Widger	8th grade			
certificate, \$100 Boulder Country Day School <i>No Need for Speed</i>	Boulder	certificate, \$50 Sargent Middle School <i>Under Pressure</i>	Monte Vista			
Natalia Woolcock certificate, \$100	10th grade	Elliot Louthan certificate, \$100	6th grade			
The Academy of Charter Schools Reimagine Meat Labeling: Could We Change B and Lower Greenhouse Emissions by Adding Co		Idalia School Special Needs Pig Feeder	Idalia			
Footprint Data to Consumer Labels?	ing Caroon	James Little certificate, \$100	11th grade			
Saahithi Kasa certificate, \$100	11th grade	Monte Vista High School Shooting for the Stars	Monte Vista			
Cherry Creek High School Greenwood Village Up in Smoke: The Effect of Protective Topical Ointment Against Wildfire Particle Penetration		Destiny Cornelius Ky Harkness certificate, \$50	12th grade 12th grade			
Layna Snyder Caroline Prieto	9th grade 9th grade	Plainview School Biochar: An Organic Approach to	Towner Urban Heat Management			
certificate, \$100 Brush High School	Brush	* Jainil Parikh certificate, \$100	6th grade			
The Lake Nyos Tragedy: What Caused It? Gerardo Rodriguez Ramirez	7th grade	Challenger Middle School Harnessing Waste Powering Future	Colorado Springs			
certificate, \$50 Boston K-8 School	Aurora	Zoe Wang certificate, \$50	10th grade			
Breaking Down Light: Investigating the Eff- Wavelengths of Light Have on Plant Growth	yth and Mitosis	Fairview High School From Bench to Atmosphere: New M				
Cameron Kempisty certificate, \$100	8th grade	* Name : W	-			
Eagleview Middle School Going Nuts Over Biochar: Pistachios vs. 1	Colorado Springs PFAS	* Naomi Kruse certificate, \$100 Schullandheim Homeschool	11th grade Colorado Springs			
Hannah Shelton certificate, \$50	12th grade	Paper for the Planet 2: Kickstarting Microbial Succession Following California Wildfires				
Centauri High School Sediment Signatures: Unveiling the Impac		Wensen Fang certificate, \$100	8th grade			
Deposits on Diatoms Through Lake Botton Reagan Futrell	m Sampung 11th grade	Summer Charter Middle School Blazing Bright: Uncovering the Tru	Boulder ath Behind Wildfires in			
certificate, \$100 Monte Vista High School	Monte Vista	* Ayush Vispute	10th grade			
Gaining Ground: Effectiveness of Zeedyk Structures on Herbaceous Establishment and Moisture Retention within Waterways		certificate, \$100 Rampart High School Protein Flow v2: Biocomputational	Colorado Springs			
Ingram Olson certificate, \$100	6th grade	Pathways to Discover New Carbon				
Telluride Intermediate School A Better Solar Panel: Can Coating Solar Their Efficiency?	Telluride Panels Improve	* Julia Muro certificate, \$100 North Middle School	8th grade Colorado Springs			
Carson Stone	9th grade	Modified Atmosphere Packaging St Organic Strawberry Health	trategies for Prolonged			
Chase Pollart certificate, \$100	10th grade	Augustus Gdanitz	11th grade			
Brush High School Brush Water Tower Power - Storing Solar Energy with an Elevated Pumped Storage Hydropower System		certificate, \$100 Wray Jr/Sr High School <i>The Use of Zeolites in Mitigating R</i>	Wray ed Algae Blooms			

	1			
	Alexander Knight	7th grade	Tanush Shekhar	11th grade
	certificate, \$100	5 11	Jack Cerullo	12th grade
	Corwin International Magnet School	Pueblo	certificate, Digital Microscope	T C u
	Taking Flight: Why Are Winglets Important?		Peak to Peak Charter School	Lafayette
	Madison Gunnels certificate, \$100	9th grade	Revolutionizing CryoEt: Novel Simula ML-Based Tomograph Labeling	ttion Techniques for
	Brush High School	Brush	Mateo Feit	9th grade
	It's Not Mike Tyson, But It's Still a Siphon		certificate, 3D Printer	Č
	Caprise Priestley	6th grada	Fairview High School	Boulder
	certificate, \$50	6th grade	The PetProfiler: Machine Learning ar	nd Mechanics for a
	Mancos Middle School	Mancos	Smart Doggy Door	
	Electroculture Gardening and How It Affects Pl		Platte River Power	Authority
	-		PRPA Special Award for Ene	<u> </u>
	Kyle Shee	6th grade	-	rgy Efficiency and
	certificate, \$100 Boulder Country Day School	Boulder	Innovation	
	What Fertilized Water Will Make a Plant Grow		Connor Stone	7th grade
	what Pertilized water with Make a Plant Grow	Deller:	Evelyn Lapp	8th grade
	Kaycee Clark	9th grade	certificate, \$200	
	certificate, \$100		Brush Middle School	Brush
	Wray Jr/Sr High School	Wray	Insulation Investigation	
	Cheater Cheater Rangeland Eater: A Study on I		Carson Stone	9th grade
	Spread of Downy Brome Using Pseudomonas F and ACK55	iuoresens D/	Chase Pollart	10th grade
	unu ACKSS		certificate, \$300	_
	National Security Agency		Brush High School	Brush
	NSA Special Award		Water Tower Power - Storing Solar E	nergy with an Elevated
*	•	741 1-	Pumped Storage Hydropower System	
	Eddici i illioci itolit	7th grade	PRPA Special Award for Environmental	
certificate, Cyber Bot Eagleview Middle School Colorado Springs		Jorado Springs	Responsibility	
	Magic Mouse: A Touchless, Thermin-based Mon		•	iy
	People with Hand Limitations	use to freip	* Jainil Parikh	6th grade
	•	0.1 1	certificate, \$200	~
	Omar Manshad	8th grade	Challenger Middle School	Colorado Springs
	certificate, PiDog & Raspberry Pi4 & SD Card Crescent View Academy	Aurora	Harnessing Waste Powering Future	
	Building a Safe Robotic Arm for Table-Top Inte.		Zoe Wang	10th grade
			certificate, \$300	
	Oliver Ciembronowicz	7th grade	Fairview High School	Boulder
	certificate, 3D Printer	D 1 1 1	From Bench to Atmosphere: New Mat	v
	Vallis Cymbia Academaie Homeschool	Frederick	Capture (DAC) of CO2 Using Electro-	-Swing Chemistry
	Are They Listening To Us?		Rocky Mountain Associati	on of Geologists
	,		Foundation	_
	Amy Zhang	10th grade	Excellence in Earth Sci	
	certificate, LimeSDR	T 1 1		
	Lakewood High School	Lakewood	Ben Zhao	8th grade
AI Guides, Vision-Impaired Act: Safety-Aware Acti Guidance Via Vision-Language Models		<i>аснопадне</i>	certificate, \$200	D 11
			Summit Charter Middle School	Boulder
Alexander Zhang certificate, PiDog, & Raspberry Pi4 & SDCa		12th grade	Earthquake Asperities Relation to Rec	rurrence
		D 11	Lyndee Thomson	7th grade
Fairview High School SchoolFinance: A Novel Machine Learning Fra Ontimized School Funding Allocation		Boulder	Ryder Pryor	7th grade
		mework Jor	certificate, \$300	¥7 41
	Optimized School Funding Allocation		West Grand Middle School	Kremmling
			Waters' Ways	

Lochlan DaRonco 12th grade certificate, \$200

Evergreen High School Evergreen

Bear Creek Geological and pH Analysis

Colter Dennison 9th grade

certificate, \$300

Mancos High School Mancos

Toxic Tributaries 2: Rivers Effect on Soil Chemistry

Society for Mining, Metallurgy, and Exploration, **Colorado Section**

Award for Excellence in Mineral Science & Engineering

Paisley Anderson 8th grade

plaque, \$200

Creede Schools Creede

Mineral Mining Monsters: Time Will Tail

Ava Boblitt 6th grade

plaque, \$300

Bayfield Middle School Bayfield

Neutralizing Acid from Acid Mine Drainage in Silverton,

Colorado

Naomi Kruse 11th grade

plaque, \$300

Schullandheim Homeschool Colorado Springs Paper for the Planet 2: Kickstarting Microbial Succession

Following California Wildfires

Juakin Sawatzky 10th grade

plaque, \$500

Liberty School Joes

Developing an Economical Method of Extracting REM from

Mine Effluent Water

Society of Manufacturing Engineers, Colorado Chapter 354

Andy Keller Memorial Award

John Finnessy 8th grade

certificate, recognition by the local chapter, \$200

Challenge School Aurora

Making a Robotic Hand

Mateo Feit 9th grade

certificate, recognition by the local chapter, \$100

Fairview High School Boulder

The PetProfiler: Machine Learning and Mechanics for a

Smart Doggy Door

Maddox King 10th grade

certificate, recognition by the local chapter, \$150

Yuma High School Yuma

Future Development of a Computer Chip: Year 1 - Coding

Society of Women Engineers Rocky Mountain Section

SWE Award

Laurel Amber Kent 7th grade

certificate, \$75

Eagleview Middle School Colorado Springs

Magic Mouse: A Touchless, Thermin-based Mouse to Help

People with Hand Limitations

Ella Music 8th grade

certificate,\$100

Summit Charter Middle School Boulder

A Haptic Guidance System for Visually Impaired Sport

Climbers

Sophia Zhang 11th grade

certificate, \$75

Fairview High School Boulder

Natural Eutectogels As a Novel Material for Green Electronic

Siddhi Singh 11th grade

certificate,\$100

STEM School Highlands Ranch

A Low-Cost, Onboard Animal Detection System to Mitigate

Wildlife-Vehicle Collisions

State of Colorado - Division of Reclamation, Mining & Safety

DRMS Outstanding Science Exhibit Award

Paisley Anderson 8th grade

certificate, gift bag, \$100

Creede Schools Creede

Mineral Mining Monsters: Time Will Tail

10th grade Juakin Sawatzky

same award

Liberty School Joes

Developing an Economical Method of Extracting REM from

Mine Effluent Water

The Biophysical Society

The Biophysics Award

Izzy Michael 9th grade

certificate, \$100

Green Mountain High School Lakewood

Bone Trauma Analysis

The Morrow Family

Fire Fighter Award

Tyler Wickham 12th grade

certificate, \$100

Golden High School Golden

Breathe Easy: Comfort-Focused Respirators for Wildland

Firefighters

Morrow Family Dental Award

Eli Harrison 7th grade
Jagadish White 7th grade
certificate,

Home School Erie

The Effect of Pet Toothpaste on the Canine Oral

* Cami Wolkow 11th grade

certificate,

Palmer High School Colorado Springs Genetically Enhancing Fungi to Bioremediate Tetracycline

The Sara Volz Family

Best Contributions to Fundamental Science Award

Julia Gao 10th grade

certificate, \$300

Fairview High School Boulder

Toward Discovery of the Sterile Neutrino: Deep Learning

Muon Neutrino Reconstruction at ICARUS

* Ayush Vispute 10th grade

certificate, \$300

Rampart High School Colorado Springs

Protein Flow v2: Biocomputational Analysis of Metabolic Pathways to Discover New Carbon Capturing Bacteria

The Warnock Family

Warnock Family Award

Maria Sears 12th grade

certificate, \$100

Monte Vista High School Monte Vista

Lung Distance Relationship: A Remote Monitoring Device

That Tracks Pulmonary Function

Julia Gao 10th grade

certificate, \$100

Fairview High School Boulder

Toward Discovery of the Sterile Neutrino: Deep Learning

Muon Neutrino Reconstruction at ICARUS

The Wilkins Family

Young Entrepreneur's Award

Maria Sears 12th grade

certificate, \$750

Monte Vista High School Monte Vista

Lung Distance Relationship: A Remote Monitoring Device

That Tracks Pulmonary Function

The Wojtaszek Family

Paul Wojtaszek Memorial Award

Ria Rajaseckharan 10th grade

certificate, \$100

Fossil Ridge High School Fort Collins

Glycopeptidolipids: A New Diagnostic Tool for COPD and Cystic Fibrosis Patients Infected with Non-Tuberculous

Mycobacteria

Thermo Fisher Scientific

Advancing Equity Through Innovation Award

Grace Cullen 8th grade

certificate, \$200

Yuma Middle School Yuma

Bacteria Buster

* Julia Muro 8th grade

certificate, \$200

North Middle School Colorado Springs Modified Atmosphere Packaging Strategies for Prolonged

Organic Strawberry Health

Sammy Maloney 8th grade

certificate, \$200

Bayfield Middle School Bayfield

Breaking Barriers: Language Learning and Cultural

Understanding

* Sierra Winslow 8th grade

certificate, \$200

Eagleview Middle School Colorado Springs

Radon Detector: Where Does Radon Typically Accumulate in

Buildings?

Trout Unlimited

Trout Unlimited River Conservation Award

* Naomi Kruse 11th grade

certificate, \$75

Schullandheim Homeschool Colorado Springs Paper for the Planet 2: Kickstarting Microbial Succession

Following California Wildfires

Amelie Hunziker 12th grade
AJ Gruenewald 12th grade

certificate\$125

Monarch High School Louisville

Reaching New Lights: An Explorative Study on the

Occurrence of Biofluorescence in Amphibia

Kayla Melby 6th grade

certificate, \$200

Yuma Middle School Yuma

Photosynthesis Through Thick and Thin: Development of a Light Collecting Device to Prevent Winterkill in Ice Covered

Lakes

Zonta Club of Boulder County

Amelia Earhart Award

* Lillian Prime 12th grade

certificate, \$100

Palmer High School Colorado Springs

Analysis and Comparison of Gravitational Wave Event

Parameters

Scholarships

Colorado School of Mines

Colorado School of Mines CSEF Scholarships

Jenny Xu 11th grade Amanda Zou 11th grade

\$1,000 CSM scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at the Colorado School of Mines

Fairview High School Boulder Disrupting PCSK9 and ANGPTL3 Genes with CRISPR for

Hypercholesterolemia Treatment

Roa Lee 11th grade \$1,000 CSM scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at the Colorado

School of Mines

Mountain Vista High School Highlands Ranch

MMP-Deactivating Therapeutic Contact Lenses for Corneal

Melting

Sophia Zhang 11th grade

\$1,000 CSM scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at the Colorado School of Mines

Fairview High School Boulder Natural Eutectogels As a Novel Material for Green Electronic Skin

Natalie Muro 11th grade \$1,000 CSM scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at the Colorado

School of Mines
Palmer High School Colorado Springs
A Sustainable Cyanobacteria Mitigation Method for

Freshwater Ecosystems in the Rocky Mountain Region

Tristan Cao 11th grade \$1,000 CSM scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at the Colorado School of Mines

Stargate Charter School Thornton

Emergent Quantum Inductance in Chiral Orbital Current State

Siddhi Singh 11th grade

\$1,000 CSM scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at the Colorado School of Mines

STEM School Highlands Ranch

A Low-Cost, Onboard Animal Detection System to Mitigate Wildlife-Vehicle Collisions

Colorado State University College of Agricultural Sciences

Innovations in the Science of Agriculture Scholarship

Teagan Bruchez 10th grade certificate, \$1,000 scholarship for the 1st semester of attendance at CSU while enrolled in a College of Ag Sciences major

West Grand High School Kremmling
The Effects of the Transfer of Wolves and the Fertility Rate of
Grand County Cattle

Ali Abostate 12th grade certificate, \$1,000 scholarship for the 1st semester of attendance at CSU while enrolled in a College of Ag Sciences major

Lotus School for Excellence Aurora

The Role of Green Roofs in Urban Sustainability

Colorado State University, Pueblo

Colorado State University Pueblo Scholarship

Mateo Feit 9th grade certificate, \$1,000 renewable scholarship to Colorado State

University, Pueblo

Fairview High School Boulder

The PetProfiler: Machine Learning and Mechanics for a Smart Doggy Door

Matt Hannifin

Reduction of CO2 & Greenhouse Gases Scholarship

* Ayush Vispute 10th grade certificate, \$3,200 non-renewable scholarship
Rampart High School Colorado Springs
Protein Flow v2: Biocomputational Analysis of Metabolic
Pathways to Discover New Carbon Capturing Bacteria

Society

American Psychological Association

APA Achievement in Research in Psychological Science Award

Sammy Maloney 8th grade

certificate, APA student membership

Bayfield Middle School Bayfield

Breaking Barriers: Language Learning and Cultural

Understanding

Calvin Johnson 12th grade Aarnav Jain 12th grade

certificate, APA student membership

Peak to Peak Charter School Lafayette Sympathetic Nervous System Activation Effects on Short-Term

Memory in a Virtual Environment

Association for Women Geoscientists

AWG Excellence in the Geosciences Award

Aylin Melgar Bobadilla Nayla Gutierrez 8th grade certificate, honorary AWG membership

Wray Jr/Sr High School Wray

Helpful Organisms: Using Microorganisms in Eutrophic **Bodies of Water**

Lemelson Foundation

Lemelson Early Inventor Prize

Solomon Charlton-Jones 7th grade \$100 (response required from winner to process), certificate Flagstaff Academy Charter School Longmont The Poly Cracker 2.0: A Size and Weight Controlled Birdhouse

NASA

NASA Earth System Science Award

Ben Zhao 8th grade certificate

Summit Charter Middle School

Boulder Earthquake Asperities Relation to Recurrence

12th grade Alex Kugler Zoe Kugler 12th grade

certificate

Louisville Monarch High School Comparison of Aurora Activity with Thermosphere Na and Fe (TINa and TiFe) Layers at McMurdo Station

National Oceanic and Atmospheric Administration

Taking the Pulse of the Planet Award

Aidan Tipton 8th grade Silas Morrison 8th grade

certificate

Bayfield Middle School Bayfield

Oceanic Waste Removal

Allan Luo Yu 10th grade

certificate

Fairview High School Boulder

The Effects of Climate Change on Allergens and Human Heath

Regneron

Regeneron Biomedical Science Award

Aishwarya Kamineni 10th grade certificate, \$375 (response required from winner to process payment)

Grandview High School Aurora

Optimization of Non-Invasive Pneumonia Prediction Using Novel Machine Learning Algorithms

Ricoh

Ricoh Sustainable Development Award

Ben Zhao 8th grade

certificate

Summit Charter Middle School Boulder

Earthquake Asperities Relation to Recurrence

Ali Abostate 12th grade

certificate

Lotus School for Excellence Aurora

The Role of Green Roofs in Urban Sustainability

Society for In Vitro Biology

Outstanding Achievement in In Vitro Biology Award

Zechariah Dillev 11th grade certificate, membership in the Society, recognition in Society's news letter and on website

South High School Pueblo

Cloning and Testing of Phage Genes

Society for Science

Thermo Fisher Junior Innovators Challenge

Sienna Harden 7th grade Cora Bauer 8th grade

certificate, nomination to enter the 2025 Junior Innovators

Challenge

St. Joseph Catholic School Fort Collins

Are Dewormers Needed Here?

Hannah Deering 7th grade certificate, nomination to enter the 2025 Junior Innovators

Challenge

Yuma Middle School

The Potential Relationship Between Tibia Length and Speed in

Samoyed Dogs Running 100 Yards

Juliet Huckabay 8th grade

certificate, nomination to enter the 2025 Junior Innovators

Challenge

Skinner Middle School Denver

The Impact of Age on Pattern Separation and Completion

Marin Hayes 8th grade

certificate, nomination to enter the 2025 Junior Innovators

Challenge

Boulder Country Day School Boulder

No Need for Speed

Lola Sondrol 8th grade

certificate, nomination to enter the 2025 Junior Innovators

Challenge

Monte Vista Online Academy Monte Vista

Do Endophytes Affect the Growth of Lolium perenne?

Elaina Consaul 8th grade

certificate, nomination to enter the 2025 Junior Innovators

Challenge

Sargent Middle School Monte Vista

Salinity Solution: A Study of How the Salinity in Water Affects

Plant Growth

Special Awards Press Release					
Mateo Guerrero 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Summer Charter Middle School Boulder Fruit Flies Attraction to Different Doughs to Conclude Health Inferences	Ella Music 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Summit Charter Middle School Boulder A Haptic Guidance System for Visually Impaired Sport Climbers				
Vedanth Raju 7th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Aurora Quest K-8 School Aurora A Novel Plant-Based Topical Drug "Curcaza+" to Help Treat Diabetic Foot Ulcers/Infections and Help Reduce Antimicrobial Resistance	Paisley Anderson 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Creede Schools Creede Mineral Mining Monsters: Time Will Tail Lyndee Thomson 7th grade Ryder Pryor 7th grade				
Violet Sandridge 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Summit Charter Middle School Boulder Radiation Resilience: Evaluating Photostability in Natural and Synthetic Sunscreens	certificate, nomination to enter the 2025 Junior Innovators Challenge West Grand Middle School Waters' Ways Wensen Fang 8th grade				
Kenley Mitchell 7th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Sargent Middle School Monte Vista Light It Before You Bite It!	certificate, nomination to enter the 2025 Junior Innovators Challenge Summer Charter Middle School Boulder Blazing Bright: Uncovering the Truth Behind Wildfires in Colorado via Machine Learning Peda Marchan				
* Cameron Kempisty 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Eagleview Middle School Colorado Springs Going Nuts Over Biochar: Pistachios vs. PFAS	Bode Monahan 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Liberty School Joes Frequency Chaos: Coding a Wi-Fi Interrupter for Tactical Use				
Kendyl Osborn 7th grade certificate, nomination to enter the 2025 Junior Innovators Challenge La Junta Junior High School La Junta Monarch Butterfly Pitstop	* Julia Muro 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge North Middle School Colorado Springs Modified Atmosphere Packaging Strategies for Prolonged Organic Strawberry Health				
Ingram Olson 6th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Telluride Intermediate School Telluride A Better Solar Panel: Can Coating Solar Panels Improve Their Efficiency?	Paisley Wiersma 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Genoa-Hugo School Hugo What's in That Water?				
* Bianca Buczkowski 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Monument Academy Monument Should Solar Panels Track the Sun?	Lane Mattive 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Sargent Middle School Monte Vista Can I Get a Lift?				
Omar Manshad 8th grade certificate, nomination to enter the 2025 Junior Innovators Challenge Crescent View Academy Aurora Building a Safe Robotic Arm for Table-Top Interactions	Vivian Bozek 7th grade certificate, nomination to enter the 2025 Junior Innovators Challenge St. Joseph Catholic School Fort Collins Light It Up and Launch It				

United States Metric Association

Outstanding Achievement in the Use of the International System Award

Ben Zhao 8th grade

certificate, membership in the US Metric Association

Summit Charter Middle School Boulder

Earthquake Asperities Relation to Recurrence

Yale Science & Engineering Association

Outstanding Achievement in Science & Engineering Award

Haydan Drullinger 11th grade

certificate, E-book (response required from winner to be processed)

Liberty School Joes

AgriVision: Augmented Reality for Precision Farming

Teacher

Colorado Association of Science Teachers

CAST Teacher Award

Bryan Eubank

certificate, \$150, one year free membership to CAST

Creede Schools Creede

Brady Archer

certificate, \$150, one year free membership to CAST

Mancos Middle School Mancos

Colorado Science & Engineering Fair

Doug Steward Memorial Teacher Award

Brady Archer

certificate, \$350

Mancos Middle School Mancos

Amy Melby

certificate, \$350

Yuma High School Yuma

James Osborn certificate, \$350

Las Animas High School Las Animas

Kristi Mathiesen certificate, \$350

Monte Vista Middle School Monte Vista

Lockheed Martin

CSEF Teacher of the Year

Brady Archer

certificate, \$3,000 grant for use at the school for student

research

Mancos Middle School Mancos