

# 2025 Colorado Science and Engineering Fair

## Grand Award Winners

### 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*  
 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

# 2025 Colorado Science and Engineering Fair

## Grand Award Winners

### 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 AI*  
 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 Gastrointestinal 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*  
 Summit 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 Reduce 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 Academiaie 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

# 2025 Colorado Science and Engineering Fair

## Grand Award Winners

### Third Place

Humza Memon 7th grade  
*From Kitchen to Energy: Leveraging Fermentation Enhancers for Improved Biogas Production*  
 Crescent View Academy 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 Skin*  
 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

Jack Griepentrog 9th grade  
*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 Lakes*  
 Yuma Middle School Yuma

### Honorable Mention

Ben Zhao 8th grade  
*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  
 Zoe Kugler 12th grade  
*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 Growth 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

# 2025 Colorado Science and Engineering Fair

## Grand Award Winners

### Third Place

Connor Stone 7th grade  
 Evelyn Lapp 8th grade  
*Insulation Investigation*  
 Brush Middle School Brush

### Honorable Mention

Benjamin Knight 7th grade  
*Wind Turbine Efficiency: Which Blade Design Works the Best?*  
 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*  
 Crescent View Academy Aurora

#### Second Place

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

Jude Chen 10th grade  
*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

Lyndee 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

# 2025 Colorado Science and Engineering Fair

## Grand Award Winners

### Junior Division Mathematics & Computer Sciences

#### First Place

Wensen Fang 8th grade  
*Blazing Bright: Uncovering the Truth Behind Wildfires in Colorado via Machine Learning*  
 Summit 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



# 2025 Colorado Science and Engineering Fair

## Grand Award Winners

### Honorable Mention

|  |              |
|--|--------------|
| Sreyanth Saipavan Alla   | 11th grade   |
| <i>BactiScan: A Deep Convolutional Neural Network for Tracking Shigella flexneri Infection</i> |              |
| Rock Canyon High School  | Castle Pines |

### Junior Division Physics & Astronomy

#### First Place

|                          |             |
|--------------------------|-------------|
| Lane Mattive             | 8th grade   |
| <i>Can I Get a Lift?</i> |             |
| Sargent Middle School    | Monte Vista |

#### Second Place

|                                  |              |
|----------------------------------|--------------|
| Vivian Bozek                     | 7th grade    |
| <i>Light It Up and Launch It</i> |              |
| St. Joseph Catholic School       | Fort Collins |

#### Third Place

|                                       |             |
|---------------------------------------|-------------|
| Elly Entz                             | 7th grade   |
| <i>Don't Interfere with Snow Gear</i> |             |
| Sargent Middle School                 | Monte Vista |

#### Honorable Mention

|   |           |
|---|-----------|
| Ryker Monahan   | 6th grade |
| <i>The Heat Is On: Testing Heat Resistant Materials</i> |           |
| Liberty School  | Joes      |

### Senior Division Physics & Astronomy

#### First Place

|  |            |
|--|------------|
| Tristan Cao  | 11th grade |
| <i>Emergent Quantum Inductance in Chiral Orbital Current State</i> |            |
| Stargate Charter School  | Thornton   |

#### Second Place

|  |                  |
|--|------------------|
| Helen Wan  | 10th grade       |
| <i>Time-Sensitive Medicine Dissolution in a Microgravity Environment Emulated by Acoustic Levitation</i> |                  |
| Pine Creek High School   | Colorado Springs |

#### Third Place

|   |            |
|---|------------|
| Julia Gao   | 10th grade |
| <i>Toward Discovery of the Sterile Neutrino: Deep Learning Muon Neutrino Reconstruction at ICARUS</i> |            |
| Fairview High School  | Boulder    |

#### Honorable Mention

|   |            |
|---|------------|
| Lillian Prime   | 12th grade |
| <i>Analysis and Comparison of Gravitational Wave Event Parameters</i> |            |
| Palmer High School  | Colorado   |

### Junior Division Plant Sciences

#### First Place

|   |             |
|---|-------------|
| Lola Sondrol  | 8th grade   |
| <i>Do Endophytes Affect the Growth of Lolium perenne?</i> |             |
| Monte Vista Online Academy                                | Monte Vista |

### Second Place

|   |             |
|---|-------------|
| Elaina Consaul  | 8th grade   |
| <i>Salinity Solution: A Study of How the Salinity in Water Affects Plant Growth</i> |             |
| Sargent Middle School   | Monte Vista |

### Third Place

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

### Honorable Mention

|   |           |
|---|-----------|
| Caprise Priestley   | 6th grade |
| <i>Electroculture Gardening and How It Affects Plants</i> |           |
| Mancos Middle School                                      | Mancos    |

### Honorable Mention

|                                  |           |
|----------------------------------|-----------|
| Grayson Kassib                   | 8th grade |
| <i>Aquaponics vs. Aeroponics</i> |           |
| West Grand Middle School         | Kremmling |

### Senior Division Plant Sciences

#### First Place

|  |            |
|--|------------|
| Laila Waldron  | 12th grade |
| <i>Differences in Floral Quality and Ecosystem Health Between Burn Areas and Logged Clear Cuts</i> |            |
| Nederland High School  | Nederland  |

#### Second Place

|   |           |
|---|-----------|
| Kaycee Clark  | 9th grade |
| <i>Cheater Cheater Rangeland Eater: A Study on Mitigating the Spread of Downy Brome Using Pseudomonas Fluoresens D7 and ACK55</i> |           |
| Wray Jr/Sr High School  | Wray      |

#### Third Place

|  |            |
|--|------------|
| Janet Ngomba Bajikijay                             | 12th grade |
| Mayssan Salim                                      | 12th grade |
| Nayibe Burciaga Buhaya                             | 12th grade |
| <i>The Effect of Nanoparticles on Plant Growth</i> |            |
| Lotus School for Excellence                        | Aurora     |

### Honorable Mention

|   |            |
|---|------------|
| Om Vegesna  | 10th grade |
| <i>Combating Root-Knot (Meloidogyne spp.) and Fusarium oxysporum with Stabilized Allicin and siRNA Constructs</i> |            |
| Fairview High School  | Boulder    |

### Honorable Mention

|   |            |
|---|------------|
| Siena Parr  | 12th grade |
| <i>Absorption of Glyphosate-Based Herbicide in Zea Mays Plants Utilizing Zinc-Oxide Nanoparticles</i> |            |
| Dolores High School   | Dolores    |

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

### 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 8th grade  
certificate, \$50  
Summit Charter Middle School Boulder  
*A Haptic Guidance System for Visually Impaired Sport Climbers*

Wensen Fang 8th grade  
certificate, \$100  
Summit 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 6th grade  
\$50, certificate, poster of pioneer scientist  
Telluride Intermediate School Telluride  
*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  
\$50, certificate, poster of pioneer scientist  
West Grand Middle School Kremmling  
*You Are What You Eat*

#### George Tchobanoglous Environmental Engineering Award

Paisley Anderson 8th grade  
\$50, certificate, poster of pioneer scientist  
Creede Schools Creede  
*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 Vilas  
*Technology with the Youth*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

### *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  
Summit 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*

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## Military

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### **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 Lakewood  
*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*

Calvin Nabors 8th grade  
Quinn 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*

Amy Zhang 10th grade  
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 Joes  
*Developing an Economical Method of Extracting REM from Mine Effluent Water*

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## Organizational

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### **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*



# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

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 Academiae 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*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

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*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

### Colorado Mycological Society

#### Excellence in Mycological Research Award

Lola Sondrol 8th grade  
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?*

Humza Memon 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 La Junta  
*Monarch Butterfly Pitstop*

Kaycee Clark 9th grade  
certificate, 1-year membership to CNPS, book on Colorado  
native plants, \$150  
Wray Jr/Sr High School Wray  
*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  
Emely Quijada 7th grade  
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*

Violet Sandridge 8th grade  
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*

### 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  
Samoyed 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*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

|  |            |
|--|------------|
| Janet Ngomba Bajikijay                             | 12th grade |
| Mayssan Salim                                      | 12th grade |
| Nayibe Burciaga Buhaya                             | 12th grade |
| certificate, \$500                                 |            |
| Lotus School for Excellence                        | Aurora     |
| <i>The Effect of Nanoparticles on Plant Growth</i> |            |

### Colorado State University Department of Agricultural Biology *Agricultural Biology Award*

|   |             |
|---|-------------|
| Elaina Consaul  | 8th grade   |
| certificate, \$100  |             |
| Sargent Middle School   | Monte Vista |
| <i>Salinity Solution: A Study of How the Salinity in Water Affects Plant Growth</i> |             |

|   |             |
|---|-------------|
| Lola Sondrol  | 8th grade   |
| certificate, \$100  |             |
| Monte Vista Online Academy                                | Monte Vista |
| <i>Do Endophytes Affect the Growth of Lolium perenne?</i> |             |

|   |            |
|---|------------|
| Om Vegesna  | 10th grade |
| certificate, \$100  |            |
| Fairview High School  | Boulder    |
| <i>Combating Root-Knot (Meloidogyne spp.) and Fusarium oxysporum with Stabilized Allicin and siRNA Constructs</i> |            |

|  |            |
|--|------------|
| Janet Ngomba Bajikijay                             | 12th grade |
| Mayssan Salim                                      | 12th grade |
| Nayibe Burciaga Buhaya                             | 12th grade |
| certificate, \$100                                 |            |
| Lotus School for Excellence                        | Aurora     |
| <i>The Effect of Nanoparticles on Plant Growth</i> |            |

### Colorado State University Department of Chemistry *Excellence in Chemistry Award*

|   |           |
|---|-----------|
| McKayla Red                                 | 8th grade |
| certificate, \$75                           |           |
| Ignacio Middle School                       | Ignacio   |
| <i>DIY Remedies for Getting a Stain Out</i> |           |

|   |           |
|---|-----------|
| Amelie Andujar  | 7th grade |
| Emely Quijada   | 7th grade |
| Bianeta Ugwo  | 7th grade |
| certificate, \$175  |           |
| Brush Middle School   | Brush     |
| <i>How Does UV Light Affect the Protection of Different Brands of Sunscreen</i> |           |

|   |                 |
|---|-----------------|
| Jack Griepentrog                                | 9th grade       |
| certificate, \$75                               |                 |
| SkyView Academy                                 | Highlands Ranch |
| <i>Baking the Perfect Chocolate Chip Cookie</i> |                 |

|   |           |
|---|-----------|
| Layna Snyder                                  | 9th grade |
| Caroline Prieto                               | 9th grade |
| certificate, \$175                            |           |
| Brush High School                             | Brush     |
| <i>The Lake Nyos Tragedy: What Caused It?</i> |           |

### Colorado State University Department of Horticulture & Landscape Architecture *Excellence in Horticulture Award*

|   |             |
|---|-------------|
| Elaina Consaul  | 8th grade   |
| certificate, \$100  |             |
| Sargent Middle School   | Monte Vista |
| <i>Salinity Solution: A Study of How the Salinity in Water Affects Plant Growth</i> |             |

|                                  |            |
|----------------------------------|------------|
| Yasaswini Vinjamuri              | 7th grade  |
| certificate, \$100               |            |
| Heritage Heights Academy         | Centennial |
| <i>Who Shrank the Potatoes?!</i> |            |

|  |             |
|--|-------------|
| Emilio Ortiz                           | 11th grade  |
| certificate, \$100                     |             |
| Monte Vista High School                | Monte Vista |
| <i>Soil Additives Are Spud-Tacular</i> |             |

|   |            |
|---|------------|
| Om Vegesna  | 10th grade |
| certificate, \$100  |            |
| Fairview High School  | Boulder    |
| <i>Combating Root-Knot (Meloidogyne spp.) and Fusarium oxysporum with Stabilized Allicin and siRNA Constructs</i> |            |

### Colorado State University Natural Heritage Program *CNHP Conservation Award*

|   |            |
|---|------------|
| Lauren Erickson   | 12th grade |
| certificate, pint glass, Wetlands of Colorado guidebook                                     |            |
| Evergreen High School   | Evergreen  |
| <i>The Effect of Fire Mitigation on Avian Biodiversity as Measured Through Bioacoustics</i> |            |

### Colorado's Electric Cooperatives *The Colorado EnergyWise Award*

|                                 |           |
|---------------------------------|-----------|
| Connor Stone                    | 7th grade |
| Evelyn Lapp                     | 8th grade |
| certificate, \$75               |           |
| Brush Middle School             | Brush     |
| <i>Insulation Investigation</i> |           |

|   |           |
|---|-----------|
| Ingram Olson  | 6th grade |
| certificate, \$175  |           |
| Telluride Intermediate School   | Telluride |
| <i>A Better Solar Panel: Can Coating Solar Panels Improve Their Efficiency?</i> |           |

|   |            |
|---|------------|
| Carson Stone  | 9th grade  |
| Chase Pollart   | 10th grade |
| certificate, \$75   |            |
| Brush High School   | Brush      |
| <i>Water Tower Power - Storing Solar Energy with an Elevated Pumped Storage Hydropower System</i> |            |



# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

Zoe Wang 10th grade  
certificate, \$175  
Fairview High School Boulder  
*From Bench to Atmosphere: New Materials for the Direct Air Capture (DAC) of CO<sub>2</sub> 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 Following 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*

Michael Caraher 8th grade  
certificate, science equipment/instruments  
St. John the Baptist Catholic School Longmont  
*Beware of the Pocket Rocket*

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  
Sargent Middle School Monte Vista  
*Can I Get a Lift?*

Mateo Feit 9th grade  
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  
certificate, \$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 - CO<sub>2</sub>/Greenhouse Gas Reduction CO<sub>2</sub> & 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<br>certificate, \$100<br>Boulder Country Day School<br><i>No Need for Speed</i>  | 8th grade<br><br>Boulder             | Maci Widger<br>certificate, \$50<br>Sargent Middle School<br><i>Under Pressure</i>  | 8th grade<br><br>Monte Vista           |
| Natalia Woolcock<br>certificate, \$100<br>The Academy of Charter Schools<br><i>Reimagine Meat Labeling: Could We Change Buyer Choices and Lower Greenhouse Emissions by Adding Carbon Footprint Data to Consumer Labels?</i> | 10th grade<br><br>Westminster        | Elliot Louthan<br>certificate, \$100<br>Idalia School<br><i>Special Needs Pig Feeder</i>  | 6th grade<br><br>Idalia                |
| Saahithi Kasa<br>certificate, \$100<br>Cherry Creek High School<br><i>Up in Smoke: The Effect of Protective Topical Ointment Against Wildfire Particle Penetration</i>   | 11th grade<br><br>Greenwood Village  | James Little<br>certificate, \$100<br>Monte Vista High School<br><i>Shooting for the Stars</i>  | 11th grade<br><br>Monte Vista          |
| Layna Snyder<br>Caroline Prieto<br>certificate, \$100<br>Brush High School<br><i>The Lake Nyos Tragedy: What Caused It?</i>  | 9th grade<br>9th grade<br><br>Brush  | Destiny Cornelius<br>Ky Harkness<br>certificate, \$50<br>Plainview School<br><i>Biochar: An Organic Approach to Urban Heat Management</i>                                       | 12th grade<br>12th grade<br><br>Towner |
| Gerardo Rodriguez Ramirez<br>certificate, \$50<br>Boston K-8 School<br><i>Breaking Down Light: Investigating the Effects That Different Wavelengths of Light Have on Plant Growth and Mitosis</i>                            | 7th grade<br><br>Aurora              | Jainil Parikh<br>certificate, \$100<br>Challenger Middle School<br><i>Harnessing Waste Powering Future</i>  | 6th grade<br><br>Colorado Springs      |
| Cameron Kempisty<br>certificate, \$100<br>Eagleview Middle School<br><i>Going Nuts Over Biochar: Pistachios vs. PFAS</i>   | 8th grade<br><br>Colorado Springs    | Zoe Wang<br>certificate, \$50<br>Fairview High School<br><i>From Bench to Atmosphere: New Materials for the Direct Air Capture (DAC) of CO2 Using Electro-Swing Chemistry</i>   | 10th grade<br><br>Boulder              |
| Hannah Shelton<br>certificate, \$50<br>Centauri High School<br><i>Sediment Signatures: Unveiling the Impact of Sedimentary Deposits on Diatoms Through Lake Bottom Sampling</i>  | 12th grade<br><br>La Jara            | Naomi Kruse<br>certificate, \$100<br>Schullandheim Homeschool<br><i>Paper for the Planet 2: Kickstarting Microbial Succession Following California Wildfires</i>                | 11th grade<br><br>Colorado Springs     |
| Reagan Futrell<br>certificate, \$100<br>Monte Vista High School<br><i>Gaining Ground: Effectiveness of Zeedyk Structures on Herbaceous Establishment and Moisture Retention within Waterways</i>                             | 11th grade<br><br>Monte Vista        | Wensen Fang<br>certificate, \$100<br>Summit Charter Middle School<br><i>Blazing Bright: Uncovering the Truth Behind Wildfires in Colorado via Machine Learning</i>              | 8th grade<br><br>Boulder               |
| Ingram Olson<br>certificate, \$100<br>Telluride Intermediate School<br><i>A Better Solar Panel: Can Coating Solar Panels Improve Their Efficiency?</i>   | 6th grade<br><br>Telluride           | Ayush Vispute<br>certificate, \$100<br>Rampart High School<br><i>Protein Flow v2: Biocomputational Analysis of Metabolic Pathways to Discover New Carbon Capturing Bacteria</i> | 10th grade<br><br>Colorado Springs     |
| Carson Stone<br>Chase Pollart<br>certificate, \$100<br>Brush High School<br><i>Water Tower Power - Storing Solar Energy with an Elevated Pumped Storage Hydropower System</i>  | 9th grade<br>10th grade<br><br>Brush | Julia Muro<br>certificate, \$100<br>North Middle School<br><i>Modified Atmosphere Packaging Strategies for Prolonged Organic Strawberry Health</i>                              | 8th grade<br><br>Colorado Springs      |
|  |                                      | Augustus Gdanitz<br>certificate, \$100<br>Wray Jr/Sr High School<br><i>The Use of Zeolites in Mitigating Red Algae Blooms</i>   | 11th grade<br><br>Wray                 |

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

Alexander Knight  
certificate, \$100  
Corwin International Magnet School  
*Taking Flight: Why Are Winglets Important?*  
7th grade  
Pueblo

Madison Gunnels  
certificate, \$100  
Brush High School  
*It's Not Mike Tyson, But It's Still a Siphon*  
9th grade  
Brush

Caprise Priestley  
certificate, \$50  
Mancos Middle School  
*Electroculture Gardening and How It Affects Plants*  
6th grade  
Mancos

Kyle Shee  
certificate, \$100  
Boulder Country Day School  
*What Fertilized Water Will Make a Plant Grow Better?*  
6th grade  
Boulder

Kaycee Clark  
certificate, \$100  
Wray Jr/Sr High School  
*Cheater Cheater Rangeland Eater: A Study on Mitigating the Spread of Downy Brome Using Pseudomonas Fluoresens D7 and ACK55*  
9th grade  
Wray

### National Security Agency NSA Special Award

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

Omar Manshad  
certificate, PiDog & Raspberry Pi4 & SD Card  
Crescent View Academy  
*Building a Safe Robotic Arm for Table-Top Interactions*  
8th grade  
Aurora

Oliver Ciembronowicz  
certificate, 3D Printer  
Vallis Cymbia Academaie  
Homeschool  
*Are They Listening To Us?*  
7th grade  
Frederick

Amy Zhang  
certificate, LimeSDR  
Lakewood High School  
*AI Guides, Vision-Impaired Act: Safety-Aware Actionable Guidance Via Vision-Language Models*  
10th grade  
Lakewood

Alexander Zhang  
certificate, PiDog, & Raspberry Pi4 & SDCard  
Fairview High School  
*SchoolFinance: A Novel Machine Learning Framework for Optimized School Funding Allocation*  
12th grade  
Boulder

Tanush Shekhar  
Jack Cerullo  
certificate, Digital Microscope  
Peak to Peak Charter School  
*Revolutionizing CryoEt: Novel Simulation Techniques for ML-Based Tomograph Labeling*  
11th grade  
12th grade  
Lafayette

Mateo Feit  
certificate, 3D Printer  
Fairview High School  
*The PetProfiler: Machine Learning and Mechanics for a Smart Doggy Door*  
9th grade  
Boulder

### Platte River Power Authority PRPA Special Award for Energy Efficiency and Innovation

Connor Stone  
Evelyn Lapp  
certificate, \$200  
Brush Middle School  
*Insulation Investigation*  
7th grade  
8th grade  
Brush

Carson Stone  
Chase Pollart  
certificate, \$300  
Brush High School  
*Water Tower Power - Storing Solar Energy with an Elevated Pumped Storage Hydropower System*  
9th grade  
10th grade  
Brush

### PRPA Special Award for Environmental Responsibility

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

Zoe Wang  
certificate, \$300  
Fairview High School  
*From Bench to Atmosphere: New Materials for the Direct Air Capture (DAC) of CO2 Using Electro-Swing Chemistry*  
10th grade  
Boulder

### Rocky Mountain Association of Geologists Foundation Excellence in Earth Sciences Award

Ben Zhao  
certificate, \$200  
Summit Charter Middle School  
*Earthquake Asperities Relation to Recurrence*  
8th grade  
Boulder

Lyndee Thomson  
Ryder Pryor  
certificate, \$300  
West Grand Middle School  
*Waters' Ways*  
7th grade  
7th grade  
Kremmling

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

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 Skin*

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*

Juakin Sawatzky 10th grade  
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*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

### *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*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

### 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 CO<sub>2</sub> & 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*



# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

### Association for Women Geoscientists

#### AWG Excellence in the Geosciences Award

Aylin Melgar Bobadilla 8th grade  
 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*

Alex Kugler 12th grade  
 Zoe Kugler 12th grade  
 certificate  
 Monarch High School Louisville  
*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 Health*

### 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 Dilley 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 Yuma  
*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*

# 2025 Colorado Science and Engineering Fair

## Special Awards Press Release

Mateo Guerrero 8th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
Summit Charter Middle School Boulder  
*Fruit Flies Attraction to Different Doughs to Conclude Health Inferences*

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*

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*

Kenley Mitchell 7th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
Sargent Middle School Monte Vista  
*Light It Before You Bite It!*

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*

Kendyl Osborn 7th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
La Junta Junior High School La Junta  
*Monarch Butterfly Pitstop*

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?*

Bianca Buczkowski 8th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
Monument Academy Monument  
*Should Solar Panels Track the Sun?*

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*

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*

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  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
West Grand Middle School Kremmling  
*Waters' Ways*

Wensen Fang 8th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
Summit Charter Middle School Boulder  
*Blazing Bright: Uncovering the Truth Behind Wildfires in Colorado via Machine Learning*

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*

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*

Paisley Wiersma 8th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
Genoa-Hugo School Hugo  
*What's in That Water?*

Lane Mattive 8th grade  
certificate, nomination to enter the 2025 Junior Innovators  
Challenge  
Sargent Middle School Monte Vista  
*Can I Get a Lift?*

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*

# 2025 Colorado Science and Engineering Fair Special Awards Press Release

## 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*

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## Teacher

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## 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