Longmont

## Junior Division Best of CSEF Project

#### First Place

Aanshi Shah	8th grade
Make Some Noise! An Innovative Method to P	roduce Electricity
Using Sound	
Thunder Vista P-8 School	Broomfield
Second Place	
Diya Mehta	8th grade
Environmental Effects on the Embryonic Deve	lopment of Sea
Urchins	

Flagstaff Academy

#### Third Place

Charlie Danko	8th grade
An Affordable Robot for Dangerous Factories	
Flagstaff Academy	Longmont

## Senior Division Best of CSEF Project

#### First Place

Margaret Arthur	11th grade	
A Novel Phosphosite Localization Approach usin	g Tandem	
Phosphoprotein Mass Spectra and Temporal Dilated Networks		
Fairview High School	Boulder	

Second Place	
Aditi Avinash	11th grade
Model Validation and Preclinical Testin	g of Digestive Enzymes
for Gluten Breakdown	
Rock Canyon High School	Littleton

#### **Third Place**

Nathaniel Ellis11th gradeMOON-OPOLY II: Employing Additive ManufacturingTechnology for Lunar Construction with Waterless ConcreteDurango High SchoolDurango

#### **Fourth Place**

Carlos Ochoa-Marquez12th gradeThe Effect of Heavy Metal Toxicity on Solanum tuberosum,Cucurbita pepo, Medicago sativa, and Capsicum annuum PlantsInoculated with MycorrhizaeMonte Vista High SchoolMonte Vista

#### Fifth Place

1	
Marissa Martinez	12th grade
The Efficacy of Abiotic/Biotic Factors and Trap I	Design for
Effective Capture of Invasive American Bullfrog	
Monte Vista High School	Monte Vista

## Junior Division Animal Sciences

**First Place** 

Diya Mehta8th gradeEnvironmental Effects on the Embryonic Development of SeaUrchinsFlagstaff AcademyLongmont

#### Second Place

Grace Marmorstein 81	th grade
The Insect Repellent Properties of Nepetalactone	<u>8</u>
Challenge School	Denver
Third PlaceGrace Jones74I'm Not Yoking Around: Evaluating How the Food ThatChickens Eat Affect The Width of The Egg ShellWray Jr/Sr High School	th grade t Wray
Honorable Mention	
Ayra Memon 71 Bioluminescence in Pyrocystis Fusiformis	th grade
Crescent View Academy	Aurora
Honorable Mention	
Vivian Wolkow 61 Does the Tail Remember What the Head Saw?	th grade
North Middle School Colorado	Springs
Senior Division	
Animal Sciences	
First Place         Marissa Martinez       121         The Efficacy of Abiotic/Biotic Factors and Trap Design         Effective Capture of Invasive American Bullfrog	th grade 1 <i>for</i>
	te Vista
Everett Ediger 111 How Qualities of Soil Affect Where Aphonopelma Hent Burrows in the Colorado Grassland	th grade th grade <i>zi</i> La Junta
Third Place	
	th grade
Do Snakes Avoid Certain Colors of Light? Evergreen High School Ev	ergreen
	8
Junior Division Behavioral & Social Sciences	
First Place	
Liam Yee 88 Does The Student-Teacher Ratio in Middle School Affect Connected Students Feel To Their Teachers?	th grade th grade <i>ct How</i> Boulder
Third Place Samantha Goetz 61	th grade

Samantha Goetz	6th grade
How Childproof Are Medication Bottles?	-
St. Peter Catholic School	Monument

Monte Vista

8th orade		
Boulder	First Place	
	Aditi Avinash	11th grade
		of Digestive Enzyme
Sciences	5	Littletor
		Littletoi
e		
er on the Reliability of		11th grad
Nadarland	0 , ,	MRI Brain
Inedemand		Boulde
		Doulde
		10.1 1
		10th grade
Highlands Kanch		
		uun Boulde
9th grade		
zed Data About	Junior Divisio	n
Conifer		
Confier		
		8th grad
-		otil giud
ain Altering		Wiggin
Monto Visto		66
wonte vista		6th grad
1		
Sciences	Levels in Milk?	
	Good Shepherd Catholic School	Denve
8th grade	Third Place	
		8th grade
		o in Bruu
	Sargent Junior High School	Monte Vist
7th grade		
		6th grad
	The Magnificent Mastication Mechanism	our Bruu
Greenwood Village	Lamar Middle School	Lama
	Honorable Mention	
8th grade		7th grad
8th grade	Olive Spohn	7 th grad 7 th grad
ermining the		
ods Against Ionizing	Flagstaff Academy	Longmon
Wray		n
	Chemistry	
7th grade	First Place	
	Augustus Miller	11th grad
Rocky Ford		
		gradable 3D Printal
	Filament Marta Vista High School	Monto Vist
	A Sciences 12th grade er on the Reliability of Nederland 9th grade dia Highlands Ranch 9th grade ad Data About Conifer 11th grade ain Altering Monte Vista A Sciences 8th grade bon Dioxide Exhaled Denver 7th grade sth grade sth grade wray	Sth grade       Biomedical & Health         lity of Handwriting?       Biomedical & Health         Boulder       First Place         A       Model Validation and Preclinical Testing         Sciences       For Gluten Breakdown         Rock Canyon High School       Second Place         Jessie Hsu       Predicting Patient Disability in MS from H Abnormalities Using Machine Learning         9th grade       Fairview High School         10       Sth grade         11       Bignade         12       Bignade         13       Bignade         14       Bignade         15       Bignade         16       Bignade         17       Bignade

Monte Vista High School

Second Place	Third Place
Daniel Saeb 11th gra	
Investigating How Hydrogel Connectivity Influence Their	Economic Impacts of Wolf Populations on Livestock Ranching
Mechanical Properties	and Big Game Hunting in the Northern Rockies
Boulder High School Boul	der Evergreen High School Evergreen
Third Place	Honorable Mention
Victoria Balleau 12th ga	rde Joshua Ho 11th grade
The Effectiveness and Toxicity of Various Chemicals When	The Effects of Dissolved Organic Matter (DOM) on Emiliania
Removing Aerosol Oil-Based Spray Paints	Huxleyi
Evergreen High School Evergre	Fairview High School Boulder
Junior Division	Honorable Mention
Earth & Environmental Sciences	Cami Wolkow 9th grade
	Isolation of Fungi Capable of Antibiotic Bioremediation
First Place	Palmer High School Colorado Springs
Tyler Wise 8th gra	Junior Division
Does Crop Residue Affect Soil Water Retention	
Liberty School Jo	Lindigy
Second Place	First Place
Mathangi Kurup 8th gra	
The Effect of Microalgae Grown in Different Concentration	
Liquid Carbon on Atmospheric CO2 Levels	Using Sound
Challenge School Den	Ver         Thunder Vista P-8 School         Broomfield
Third Place	Second Place
Kaycee Clark 7th gra	de Advait Jadhav 6th grade
Putting Down Roots: The Study of How Poaceae Roots Affe	ct Sweat It Out, The Green Way!
Water Erosion	Chinook Train Elementary School Colorado Springs
Wray Jr/Sr High School W	ray Third Place
Honorable Mention	Vikram Raju 8th grade
Grace Xue 8th gra	
Using C. elegans To Determine Toxicity of Marshall Fire	Aurora Quest K-8 School Aurora
Summit Middle Charter School Boul	der
	Honorable Mention
Honorable Mention	Euan Shorkey 8th grade Embouchure Energy
Varun Velmurugan 7th gra Risk Assessment of Fluoride Contamination in Water: A Stu	
Using Brine Shrimp Model	
Campus Middle School Greenwood Villa	senior Division
Comion Districtor	Energy
Senior Division	First Place
Earth & Environmental Sciences	Natalie Muro 9th grade
First Place	Buoy Wave Energy Converters Capture of Ocean Wave Energy
Jacob Ho 11th gra	
How Abnormally Dry and Windy Were Days with Fires in	Second Direct
Colorado's Front Range from 1984-2021? Towards Identify	ing Second Place
Fire-Predictors for a Machine Learning Modeling System	Wilson Moyer 12th grade
Fairview High School Boul	der Applying Machine Learning to Forecast Solar Production and Reduce Reliance on Fossil Fuels
Second Place	Lakewood High School Lakewood
Minna Most 12th gra	
Teddy Blum 12th gra	Inira Place
Environmental Changes and the Effects of the SAM on	Shrey Konilia 10th grade
Coccolithophores in the Southern Ocean	Electrify Your Step - The Next Stride: Converting Foot Traffic
Monarch High School Louisv	into Renewable Energy Using Piezoelectric Transducers
0	The Classical Academy Colorado Springs

GI	and Award	s Press Release
Honorable Mention Keegan Gomez <i>Micro-renewable Energy</i> Centaurus High School	12th grade Lafayette	Honorable Mention Kenneth Zittel <i>R.O.T. Slide</i> Central High School
Junior Division Engineering		Junior D Environmenta
First Place Charlie Danko An Affordable Robot for Dangerous Factories	8th grade	First Place Zoe Wang Recycling by Zapping: Recyclabi
Flagstaff Academy Second Place	Longmont	Different Polyesters Summit Middle Charter School
David "Bear" Kent V <i>The Super Speaker: Using Digital Signal Proce</i> <i>Low-Quality Speakers</i> Eagleview Middle School	8th grade essing To Improve	Second Place Toshiro Nagafuji Alternatives to Sand in Concrete The Logan School
Third Place Cuinn Archer Colorado Air Conditioning Mancos Middle School	7th grade Mancos	Third Place Theodore Chastang Using Green Roofs to Absorb Flo Summit Middle Charter School
Honorable Mention Patrick Thomas Volatus Veritas: The Examination of Aircraft W According To Two Different Speed Variables Home School	8th grade <i>Ving Shape</i> Delta	Honorable Mention Bode Monahan Air Pollution Detection System Liberty School
Honorable Mention Morgan Drullinger	6th grade	Senior E Environmenta
Combining TPU and PLA to Make a Better 3D Liberty School	U	First Place Ella Seevers
Senior Division Engineering		Cole Gropp Energy Efficient Cooling of Build Conifer High School
First Place Nathaniel Ellis MOON-OPOLY II: Employing Additive Manufa Technology for Lunar Construction with Water Durango High School		Second Place Amrita Saini Investigating Natural Hydrogels Algae for Sustainable Lighting an Peak to Peak Charter School
Second Place Rhys Hanson The View From Above, Designing a High Powe to Expand Options for SAR, Mapping, and Mili Conifer High School		Third Place Alexander Zhang Stella Laird <i>Reprint: Closed-Loop Materials J</i> Fairview High School
<b>Third Place</b> Geo Raguraman <i>Regeneratus: An Adaptive, Regenerative Protec</i> <i>Law Enforcement and Armed Personnel</i>	11th grade	Junior D Mathematics & Co First Place Liam Griffin
Honorable Mention John Butler Pecker Protector Egg Defender West Grand High School	9th grade Kremmling	Running Low on Water: Formula Sargent Junior High School Second Place Helen Wan Measuring the Particulate Matter

11th grade

Pueblo

#### Division al Engineering

First Place		
Zoe Wang	8th grade	
Recycling by Zapping: Recyclability and Efficience	y of Recycling	
Different Polyesters		
Summit Middle Charter School	Boulder	
Second Place		
Toshiro Nagafuji	8th grade	
Alternatives to Sand in Concrete		
The Logan School	Denver	
Third Place		
Theodore Chastang	8th grade	
Using Green Roofs to Absorb Floodwaters	-	
Summit Middle Charter School	Boulder	
Honorable Mention		
Bode Monahan	6th grade	
Air Pollution Detection System	0	
Liberty School	Joes	
2		

# Division

al Engineering

	0 0
First Place	
Ella Seevers	12th grade
Cole Gropp	12th grade
Energy Efficient Cooling of Build	lings in the Mountains
Conifer High School	Conifer
Second Place	
Amrita Saini	11th grade
Investigating Natural Hydrogels	e
Algae for Sustainable Lighting an	
Peak to Peak Charter School	Lafayette
Third Place	
Alexander Zhang	10th grade

Alexander Zhang	10th grade
Stella Laird	10th grade
Reprint: Closed-Loop Materials Flow in	n Additive Manufacturing
Fairview High School	Boulder

# Division

# Computer Sciences

Liam Griffin	7th grade
Running Low on Water: Formula for the Future	
Sargent Junior High School	Monte Vista

8th grade er in Air Quality with Raspberry Pi Challenger Middle School Colorado Springs

Third Place	
Lucca Tumbush	8th grade
Seth Wilson	8th grade
Friend/Foe Light	C
Eagleview Middle School	Colorado Springs
Honorable Mention	
Aidan McGuire	7th grade
How Does Background Clutter Affect Image	Recognition
St. Peter Catholic School	Monument
Honorable Mention	
Daniel Joshua	8th grade
Pattern Detection i+6/8*n Rubik's Cubes	
Southern Hills Middle School	Boulder
Senior Division	
Mathematics & Computer	Sciences
First Place	
Margaret Arthur	11th grade
A Novel Phosphosite Localization Approach	
Phosphoprotein Mass Spectra and Temporal	Dilated Networks Boulder
Fairview High School	Boulder
Second Place	10.1 1
Michael Gao	10th grade
Long Short-term Memory Recurrent Neural N Strategy for Designing Targeted Antibiotic T	
Fairview High School	Boulder
	Doulder
Third Place	19th and a
Liam Sweeney American Sign Language Translator	12th grade
Centaurus High School	Lafayette
Junior Division	
Micro & Molecular Bio	ology
First Place	- 1 1
Lilly Hirsch	7th grade
How Well Do Disinfectants Work? Foundations Academy	Brighton
	Dirgitton
Second Place	741 1-
Piper Reitz Inflection Reflection: An Inquiry on Antibioti	7th grade
Lamar Middle School	Lamar
	Dumu
Third Place	<b>041</b> ,
Trista Hartman Cleaning My School, One Bacterium At A Tin	8th grade
Hi-Plains School	Seibert
	Selecti
Honorable Mention	Oth and a
Makayla Milligan Does the Environment Matter?	8th grade
Cardinal Community Academy	Keenesburg
	11000 mg
Honorable Mention Connor Knight	7th grade
Disinfecting with Boiling Water: Does It Mak	7th grade
Corwin International Magnet School	Pueblo

Senior Division		
Micro & Molecular Biology		
First Place		
Kylie Berg	11th grade	
Effect of Ionic Zinc Availability on th	e Replication of Human	
Mammary Epithelial Carcinoma Cell	S	
Fairview High School	Boulder	
Second Place		
Vanya Lavu	10th grade	
Am I Effective?	_	
The Classical Academy	Colorado Springs	
<b>Third Place</b> Armaan Gill <i>Confirming E. coli Transformations U</i> <i>Electrophoresis</i>	10th grade Using PCR Assay Tests and	
Lamar High School	Lamar	

Honorable Mention	
Max Montoya	9th grade
Terrific Tardigrades	_
Ignacio High School	Ignacio

# Junior Division

## Physics & Astronomy

First Place Lexi Oder	8th grade
How Does Asymmetry Affect Human Optics? Summit Middle Charter School	Boulder
Second Place Fischer Robbins <i>The Affects of Ski Wax</i> Summit Middle Charter School	8th grade Boulder
<b>Third Place</b> Hayden Forst From Ignition, Will Cotton, Wool or Polyester B Longest?	
Dove Creek Middle School	Dove Creek
Honorable Mention Evelyn Lapp The Force Is Strong with This One	6th grade
Brush Middle School	Brush

# Senior Division

Physics & Astronomy

First Place	
Abigail Ross	12th grade
Detecting Flares (Part 5)	-
Lamar High School	Lamar
Second Place	
Alexandra Flint	12th grade
Effect of Different Rover Wheel Materials on T	riboelectric
Charge of Lunar Simulant Dust Particles	
Peak to Peak Charter School	Lafayette

	Granu Awaro
<b>Third Place</b> Parker Stone Bailey Link	12th grade 12th grade
Performance of Pyramidal Airfoils i Chamber	-
Brush High School	Brush
<b>Honorable Mention</b> Addison Mondragon <i>Flourenheit: Does the Type of Flour</i> Monte Vista High School	9th grade <i>Effect Its Flammability?</i> Monte Vista
Junior Div Plant Scie	
First Place	
Levi Goncharov	8th grade
Ascorbic Acid In Leaves As A Metho	d of Determining Air
<i>Quality</i> Challenge School	Denver
Second Place	Denver
Tessa Piñeiro Plentiful Waterful: Which Propagati	6th grade ion Solution Helps Plants
Grow? Good Shepherd Catholic School	Danuar
÷	Denver
<b>Third Place</b> Shary Batiz <i>Vita-Grow?</i>	6th grade
Alta Vista Charter School	Lamar
Honorable Mention	
Paisley Wiersma	6th grade
Ashlyn Mosher How Fast Does Corn Mold?	6th grade
Genoa-Hugo School	Hugo
Senior Div	
Plant Scie	
F <b>irst Place</b> Carlos Ochoa-Marquez	12th grade
The Effect of Heavy Metal Toxicity of Cucurbita pepo, Medicago sativa, an Inconduct durith Museumbians	
Inoculated with Mycorrhizae Monte Vista High School	Monte Vista
Second Place Naomi Kruse Finding Ferns: Defining the Microc. Gametophyte Growth in the Santa M. Schullandheim Home School	
<b>Third Place</b> Hannah Shelton	10th grade
Warning! High Fire Danger! Obser between the Fuel Moisture Levels of to Observed Precipitation Levels	
Centauri High School	La Jara

Colorado Science & Engine	ering Fair
Elemer Bernath Memorial Technica	l Writing Award
Mathangi Kurup	8th grade
certificate	D
Challenge School The Effect of Microalgae Grown in Differen	Denver
Liquid Carbon on Atmospheric CO2 Levels	i Concentrations of
Grace Xue certificate	8th grade
Summit Middle Charter School Using C. elegans To Determine Toxicity of N	Boulder Marshall Fire
Kaycee Clark	7th grade
\$100, certificate	Waar
Wray Jr/Sr High School Putting Down Roots: The Study of How Poa	Wray
Water Erosion	eeue Roois Affect
Poster Art Contest	10th and a
Zoey Montoya \$100, certificate	10th grade
La Junta Jr/Sr High School	La Junta
Ralph Desch Memorial Technical Margaret Arthur certificate	Writing Award 11th grade
Fairview High School	Boulder
A Novel Phosphosite Localization Approach	
Phosphoprotein Mass Spectra and Tempora	l Dilated Networks
Marissa Martinez	12th grade
certificate Monte Vista High School	Monte Vista
The Efficacy of Abiotic/Biotic Factors and T	
Effective Capture of Invasive American Bull	
Alexander Zhang	10th grade
Stella Laird	10th grade
\$100, certificate	6
Fairview High School	Boulder
Reprint: Closed-Loop Materials Flow in Add	ditive Manufacturing
Student Choice Awar	•d
Patrick Thomas	8th grade
\$100, certificate	-
Home School	Delta
Volatus Veritas: The Examination of Aircrag According To Two Different Speed Variable	
John Butler \$100 cortificate	9th grade
\$100, certificate West Grand High School	Kremmling
Pecker Protector Egg Defender	Krenning
Pioneers of Science	
Burt Ratan	741- 1
Chase Buron	7th grade

Chase Buron	7th grade
\$50, certificate, poster of pioneer scientist Vail Mountain School	Vail

Saved By the Light

I	
<i>Dian Fossey</i> Vivian Wolkow \$50, certificate, poster of pioneer scientist	6th grade
North Middle School Colo Does the Tail Remember What the Head Saw?	orado Springs
Donna Theo Strickland Lexi Oder	8th grade
\$50, certificate, poster of pioneer scientist	-
Summit Middle Charter School How Does Asymmetry Affect Human Optics?	Boulder
Elizabeth Helen Blackburn	
Terra McClure \$50, certificate, poster of pioneer scientist	7th grade
Rocky Ford Jr/Sr High School Oh Snap!	Rocky Ford
George Tchobanoglous	
Bode Monahan \$50, certificate, poster of pioneer scientist	6th grade
Liberty School	Joes
Air Pollution Detection System	
Jack Kilby	
Berkely Ulibarri \$50, certificate, poster of pioneer scientist	8th grade
St. John the Evangelist Catholic	Loveland
School Using Probability To Model Radioisotope Dating	
Ι σιασ Ργοραριμής το Μοαρι Κααιοιςοιορρ Πατιάσ	
James Patrick Allison	
	8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School	
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub?	8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough	8th grade Monte Vista
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer	8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School	8th grade Monte Vista 6th grade Denver
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk?	8th grade Monte Vista 6th grade Denver
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger	8th grade Monte Vista 6th grade Denver fect Calcium
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit	8th grade Monte Vista 6th grade Denver
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger	8th grade Monte Vista 6th grade Denver fect Calcium
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist	8th grade Monte Vista 6th grade Denver <i>fect Calcium</i> 8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank	8th grade Monte Vista 6th grade Denver <i>fect Calcium</i> 8th grade Boulder
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank Tenleigh Lorenzini	8th grade Monte Vista 6th grade Denver <i>fect Calcium</i> 8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank	8th grade Monte Vista 6th grade Denver <i>fect Calcium</i> 8th grade Boulder
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank Tenleigh Lorenzini \$50, certificate, poster of pioneer scientist	8th grade Monte Vista 6th grade Denver <i>fect Calcium</i> 8th grade Boulder 8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank Tenleigh Lorenzini \$50, certificate, poster of pioneer scientist Wiggins Middle School Light IT grow Mary Ainsworth	8th grade Monte Vista 6th grade Denver <i>cect Calcium</i> 8th grade Boulder 8th grade Wiggins
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank Tenleigh Lorenzini \$50, certificate, poster of pioneer scientist Wiggins Middle School Light IT grow Mary Ainsworth William Walker	8th grade Monte Vista 6th grade Denver <i>fect Calcium</i> 8th grade Boulder 8th grade
James Patrick Allison Jaylee Rodriques \$50, certificate, poster of pioneer scientist Sargent Junior High School Rubby, Rub, Dub: What's in Your Tub? John Goodenough Jocelyn Kramer \$50, certificate, poster of pioneer scientist Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff Levels in Milk? Leon Festinger Eliana Feit \$50, certificate, poster of pioneer scientist Summit Middle Charter School Grip Strength: Increase Amount Luther Burbank Tenleigh Lorenzini \$50, certificate, poster of pioneer scientist Wiggins Middle School Light IT grow Mary Ainsworth	8th grade Monte Vista 6th grade Denver <i>cect Calcium</i> 8th grade Boulder 8th grade Wiggins

Steven Chu		Vikram Raju	8th grade
Durae Naranjo \$50, certificate, poster of pioneer scientist Sargent Junior High School	8th grade Monte Vista	same award Aurora Quest K-8 School Energenius: Clean Energy on the GO	Aurora
What Are We Really Drinking?		Rhys Hanson letter of congratulations, ONR medallion, cert	12th grade
Wangari Muta Maathai Adam Ouattara \$50, certificate, poster of pioneer scientist La Junta Jr/Sr High School Fires in the Comanche Grasslands	7th grade La Junta	medallion, & \$50 gift card (response required process payment) Conifer High School The View From Above, Designing a High Pow	from winner to Conifer <i>wer Rocket Glider</i>
Military		to Expand Options for SAR, Mapping, and Mu Ersel Serdar	
United States Air Force Reserve Offic Corps Air Force ROTC Award	cer Training	letter of congratulations, ONR medallion, cert medallion, & \$50 gift card (response required process payment)	
Patrick Thomas	8th grade	Cherry Creek High School Gr	reenwood Village
certificate, over-the-shoulder sling pack, power b dog tag USB flash memory drive, dual USB car o Home School Volatus Veritas: The Examination of Aircraft Win According To Two Different Speed Variables	charger Delta	Designing A More Efficient Altitude Compension Nozzle Alexandra Flint letter of congratulations, ONR medallion, cert medallion, & \$50 gift card (response required	12th grade tificate, ONR
Kane Schrock certificate, over-the-shoulder sling pack, power b dog tag USB flash memory drive, dual USB car o Arickaree School <i>Wind Tunnel Tests of Airfoil Performance</i>		process payment) Peak to Peak Charter School Effect of Different Rover Wheel Materials on Charge of Lunar Simulant Dust Particles Organizational	Lafayette
Ersel Serdar	10th grade	Air & Waste Management As	sociation
certificate, over-the-shoulder sling pack, power b dog tag USB flash memory drive, dual USB car o		Rocky Mountain States Se	ection
Cherry Creek High School Greer	nwood Village	Air & Waste Management A Juakin Sawatzky	<i>ward</i> 8th grade
Designing A More Efficient Altitude Compensati. Nozzle	ng Rocket	\$100, certificate	-
Parker Stone	12th grade	Liberty School Analysis of Mine Tailing Run-Off for Mine Ta	Joes
Bailey Link certificate, over-the-shoulder sling pack, power b dog tag USB flash memory drive, dual USB car o		Zoe Wang \$200, certificate	8th grade
Brush High School Performance of Pyramidal Airfoils in an Oscillar Chamber	Brush	Summit Middle Charter School Recycling by Zapping: Recyclability and Effic Different Polyesters	Boulder ciency of Recycling
United States Navy & Marine (	Corps	Siena Parr Samantha Abate	10th grade 10th grade
Navy Science & Engineering Av Kane Schrock letter of congratulations, certificate, ONR medall	6th grade	\$100, certificate Dolores High School Radon in Rural Colorado: The Not So Noble	Dolores
Arickaree School Wind Tunnel Tests of Airfoil Performance	Anton	Carlos Ochoa-Marquez	12th grade
Aidan McGuire letter of congratulations, certificate, ONR medall St. Peter Catholic School <i>How Does Background Clutter Affect Image Rec</i>	Monument	\$200, certificate Monte Vista High School The Effect of Heavy Metal Toxicity on Solanu Cucurbita pepo, Medicago sativa, and Capsic Inoculated with Mycorrhizae	
Aanshi Shah letter of congratulations, certificate, ONR medall Thunder Vista P-8 School Make Some Noise! An Innovative Method to Prod	Broomfield		

Using Sound

#### rganizational Management Association untain States Section

Air & Waste Management Awara	
Juakin Sawatzky	8th grade
\$100, certificate	
Liberty School	Joes
Analysis of Mine Tailing Run-Off for Mine Tailings	
Zoe Wang	8th grade
\$200, certificate	5

Siena Parr	10th grade
Samantha Abate	10th grade
\$100, certificate	
Dolores High School	Dolores
Radon in Rural Colorado: The Not So Noble Gas	

Carlos Ochoa-Marquez	12th grade	
\$200, certificate	-	
Monte Vista High School	Monte Vista	
The Effect of Heavy Metal Toxicity on Solanum tuberosum,		
Cucurbita pepo, Medicago sativa, and Capsicum annuum Plants		
Inoculated with Mycorrhizae		

A A	
American Association of	
AAUW CO Award fo	
Jocelyn Kramer \$100, certificate	6th grade
Good Shepherd Catholic School	Denver
The Exodus of Ca+: Does Contain	
Levels in Milk?	ier Material Affect Calcium
Cami Wolkow	9th grade
\$100, certificate Palmer High School	Colorado Springs
Isolation of Fungi Capable of Anti	1 0
American Industrial <b>H</b>	
<b>Rocky Mount</b>	ain Section
Excellence in Protection of	Occupational Health and
Safe	ty
Varun Velmurugan	7th grade
\$150, certificate	
Campus Middle School	Greenwood Village
Risk Assessment of Fluoride Conte Using Brine Shrimp Model	amination in Water: A Study
Using Brine Shrimp Model	
Siena Parr	10th grade
Samantha Abate	10th grade
\$150, certificate	
Dolores High School	Dolores
Radon in Rural Colorado: The No	i so noble Gas
American Institute of (	Chemical Engineers,
<b>Rocky Mount</b>	ain Section
Excellence in Chemical	Engineering Award
Anntheylea Bachicha	7th grade
\$150, certificate	
Goodnight School	Pueblo
To Filter or Not To Filter	
Benjamin Bagelman	8th grade
Dominic Osterholt	8th grade
\$200, certificate	
Friends School	Boulder
Enchanted Sand: A Device To Tur	n Sand into a Fluidized Bed
Autumn Schulz	9th grade
\$150, certificate	5
Ignacio High School	Ignacio
Presence of PFA's in Colorado We	ater
Ella Seevers	12th grade
Cole Gropp	12th grade
\$200, certificate	
Conifer High School	Conifer
Energy Efficient Cooling of Buildi	ings in the Mountains

#### American Statistical Association Colorado/Wyoming Chapter

David Young Memorial Awa	rd	
Parker Mitchell	7th grade	
\$200, certificate, student membership in the Am	erican	
Statistical Association, acknowledgment at chapter spring		
meeting and on chapter web site		
Sargent Junior High School	Monte Vista	
What Are You Breathing? Radon Levels in Schools		
Angelina Wang	10th grade	
same award	-	
Fairview High School	Boulder	

The Bowman-Birk Inhibitor: The Peptide with Potential Improvement for the Oral Delivery of Insulin

#### American Vacuum Society Rocky Mountain Chapter

## Excellence in Physical Sciences & Engineering

Excellence in I hysical sciences	s & Engineering
Award	
Aanshi Shah	8th grade
\$50, certificate, \$50 matching award to te	acher/sponsor
Thunder Vista P-8 School	Broomfield
Make Some Noise! An Innovative Method	to Produce Electricity
Using Sound	
Toshiro Nagafuji	8th grade
\$100, certificate, \$100 matching award to	teacher/sponsor
The Logan School	Denver
Alternatives to Sand in Concrete	
Nathaniel Ellis	11th grade
\$50, certificate, \$50 matching award to te	acher/sponsor
Durango High School	Durango
MOON-OPOLY II: Employing Additive M	lanufacturing
Technology for Lunar Construction with	Waterless Concrete
Kelly Yang	10th grade
\$100, certification, \$100 matching award	0
Fairview High School	Boulder
Skin PT: Pressure and Temperature Sense	ors for Electronic Skin
ASM Internation	nal
ASM Materials Education Fou	

ASM Materials Education $F$ oundation $A$	iwara
Ren Richards	7th grade
\$100, certificate	
Hi-Plains School	Seibert
Ice, Ice, Baby	
Kate Guengerich	7th grade
\$150, certificate	-
Peak to Peak Charter School	Lafayette
Infill Percentage and Strength to Weight Ratio of 3D	Printed
Parts	

#### **Broadcom Foundation**

Coding with Commitment Award

Helen Wan8th gradecertificate, \$250 gift certificate, Raspberry Pi Pico kitChallenger Middle SchoolColorado SpringsMeasuring the Particulate Matter in Air Quality with RaspberryPi

#### **Colorado Biology Teachers Association**

CBTA Best Biology Proj	ect Award
Vivian Wolkow	6th grade
\$100, certificate	
North Middle School	Colorado Springs
Does the Tail Remember What the Head	Saw?

Grace Marmorstein	8th grade
\$150, certificate	
Challenge School	Denver
The Insect Repellent Properties of Nepetalacton	e
Marissa Martinez	12th grade
\$150, certificate	
Monte Vista High School	Monte Vista
The Efficacy of Abiotic/Biotic Factors and Trap	Design for
Effective Capture of Invasive American Bullfrog	,
Aditi Avinash	11th grade
\$200, certificate	
Rock Canyon High School	Littleton
Model Validation and Preclinical Testing of Dis	gestive Enzymes

for Gluten Breakdown

#### **Colorado Bioscience Institute**

Future of Life Sciences Award	
Emma Beeby	8th grade
\$25, certificate	
Skinner Middle School	Denver
The Effect of Stress on the Amount of Carbon Dioxid	de Exhaled
Aditi Avinash	11th and a
Aditi Avinash	11th grade
\$75, certificate, student will be featured in the Institu	ute's
"Success Stories" in print, online, and on social med	lia
Rock Canyon High School	Littleton
Model Validation and Preclinical Testing of Digesti	ve Enzymes
for Gluten Breakdown	

#### **Colorado Chemistry Teachers Association** *CCTA Chemistry Award*

River Wilson	-	6th grade
\$150, certificate		-
Lamar Middle Sch	lool	Lamar
The Magnificent M	lastication Mechanism	
Victoria Balleau		12th garde

Victoria Balleau	12th garde
\$150, certificate	
Evergreen High School	Evergreen
The Effectiveness and Toxicity of Various C	hemicals When
Removing Aerosol Oil-Based Sprav Paints	

## **Colorado Environmental Health Association**

Environmental Health Award

Parker Mitchell	7th grade
\$75, certificate	Monte Vista
Sargent Junior High School What Are You Breathing? Radon Levels in School	10101100 01000
what Are Tou Breathing: Radon Levels in School	113
Autumn Schulz	9th grade
\$150, certificate, invitation to exhibit at the CEH	A Annual
Educational Conference (valued at \$400)	
Ignacio High School	Ignacio
Presence of PFA's in Colorado Water	

#### **Colorado Foundation for Agriculture**

Jack Fenwick Award for Agricul	tural Science
Jack Fenwick Awara for Agricui	iurai science
Ayush Vispute	8th grade
\$50, certificate	-
Mountain Ridge Middle School	Colorado Springs
Investigating Alternate Treatments of Acid I	1 0
Alora Dible	8th grade
same award	U
Liberty School	Joes
Dust in the Wind: A Wind Erosion Analysis	
Carlos Ochoa-Marquez	12th grade
same award	1201 81000
Monte Vista High School	Monte Vista
The Effect of Heavy Metal Toxicity on Solan	um tuberosum,

Cucurbita pepo, Medicago sativa, and Capsicum annuum Plants Inoculated with Mycorrhizae

Landon Hartman	12th grade
same award	
Evergreen High School	Evergreen
Economic Impacts of Wolf Populations on Livesto	ock Ranching
and Big Game Hunting in the Northern Rockies	

#### **Colorado Medical Society**

CMS Educational Foundation Award

CMS Educational Founda	non Awara
Kapil Bhandaram	7th grade
\$100, invitation to the winners and their p	parents to exhibit at the
Colorado Medical Society Annual Meetir	ng and attendance at the
Presidential Inaugural Dinner with a paid	overnight stay
Campus Middle School	Greenwood Village
Is There A Relationship Between Meditat	ion and Muscle
Reaction Time?	
Aditi Avinash	11th grade
\$100, invitation to the winners and their p	parents to exhibit at the
Colorado Medical Society Annual Meetin	ng and attendance at the
Presidential Inaugural Dinner with a paid	overnight stay
Rock Canyon High School	Littleton
Model Validation and Preclinical Testing	of Digastiva Enzymas

Model Validation and Preclinical Testing of Digestive Enzymes for Gluten Breakdown

Mancos

<b>Colorado Mineral Soci</b>	v
Best Earth Science Awa	rd
Karleigh Kinn \$35, mineral specimen, certificate, book	6th grade
St. Columba Catholic School Meteor Impact 101	Durango
Alora Dible \$50, mineral specimen, certificate, book	8th grade
Liberty School Dust in the Wind: A Wind Erosion Analysis	Joes
Colorado Mycological So	ciety
Excellence in Mycological Resea	rch Award
Makenzie Consaul	8th grade
\$25, CMS membership, certificate, signed cop	py of Vera
Evenson's "Rocky Mountain Mushrooms"	
Sargent Junior High School The Power of Pantego?	Monte Vista
Cami Wolkow	9th grade
\$50, CMS membership, certificate, signed cop Evenson's "Rocky Mountain Mushrooms"	py of Vera
	Colorado Springs
Isolation of Fungi Capable of Antibiotic Biore	emediation
Carlos Ochoa-Marquez	12th grade
\$100, CMS membership, certificate, signed co	opy of Vera
Evenson's "Rocky Mountain Mushrooms"	
Monte Vista High School	Monte Vista
The Effect of Heavy Metal Toxicity on Solanu. Cucurbita pepo, Medicago sativa, and Capsic Inoculated with Mycorrhizae	
<b>Colorado Native Plant So</b>	ciety
Colorado Native Plant Society	•
Kaycee Clark	7th grade
\$100, certificate, 1-year membership to Color	-
Plant Society, book on Colorado native plants	
Wray Jr/Sr High School	Wray
Putting Down Roots: The Study of How Poace Water Erosion	eae Roots Affect
Carlos Ochoa-Marquez	12th grade
\$200, certificate, 1-year membership to Color	-
Plant Society, book on Colorado native plants	
Monte Vista High School	Monte Vista
The Effect of Heavy Metal Toxicity on Solanu.	
Cucurbita pepo, Medicago sativa, and Capsic Inoculated with Mycorrhizae	rum annuum Plants
<b>Colorado Section of the America</b>	n Chemical
Society	
ACS Chemistry Awara	l
Tymbri Priestley \$50, certificate	6th grade

Mancos Middle School

Key Leavening Agents in Baking

Skyelyn Lefever	8th grade
same award Peetz Jr/Sr High School <i>Gel Electrophoresis</i>	Peetz
Maya Rokhlenko Olive Spohn	7th grade 7th grade
same award to each student Flagstaff Academy Water = Bad: Your Solution To Not Seeing in Rai	Longmont
Emma Smith	6th grade
\$75, certificate Mancos Middle School <i>Apple Rot Test</i>	Mancos
Jocelyn Kramer	6th grade
\$125, certificate	D
Good Shepherd Catholic School The Exodus of Ca+: Does Container Material Aff	Denver
Levels in Milk?	
Arath Carrazco \$150, certificate	8th grade
Wiggins Middle School Amount of Caffeine in Coffee	Wiggins
Natalie Tinoco \$50, certificate	10th grade
Miami Yoder High School Cleaning Products and Their Effects on Househol	Rush d Surfaces
Victoria Balleau	12th garde
same award Evergreen High School	Evergreen
The Effectiveness and Toxicity of Various Chemic	
Removing Aerosol Oil-Based Spray Paints	
Emilio Martinez \$75, certificate	10th grade
Alamosa High School Project SP-8 (Sabatier Process to Infinity)	Alamosa
Augustus Miller \$125, certificate	11th grade
Monte Vista High School Synthesizing Cellulose Acetate and Paper-Based A Cellulose Derivatives to Produce a Biodegradable Filament	
Daniel Saeb	11th grade
\$150, certificate Boulder High School Investigating How Hydrogel Connectivity Influence Mechanical Properties	Boulder ce Their
<b>Colorado State University</b>	
<b>College of Agricultural Scien</b>	

Innovations in the Science of Agriculture Award Ayush Vispute 8th grade

\$500, certificate Mountain Ridge Middle School Investigating Alternate Treatments of Acid Rain

Grace Jones \$500, certificate Wray Jr/Sr High School I'm Not Yoking Around : Evaluating How The Fo Chickens Eat Affect The Width of The Egg Shell	7th grade Wray od That
Valerie Goodland \$500, certificate	11th grade
Monte Vista High School You're Fired: An Analysis of Fire on Soil Sterilize Hydrophobicity	Monte Vista ation and
Aditi Avinash	11th grade
\$500, certificate	T '1 .
Rock Canyon High School	Littleton
Model Validation and Preclinical Testing of Dige for Gluten Breakdown	estive Enzymes
·	
John Butler	9th grade
\$500, certificate Wast Grand High School	Vrommling
West Grand High School Pecker Protector Egg Defender	Kremmling
<b>Colorado State University</b>	
Colorado Natural Heritage Pro	gram
<b>CNHP</b> Conservation Awara	
Kaycee Clark	7th grade
pint glass, Wetlands of Colorado guidebook, cert	
Wray Jr/Sr High School	Wray
Putting Down Roots: The Study of How Poaceae Water Erosion	<i>Roots Affect</i>
Landon Hartman	12th grade
pint glass, Wetlands of Colorado guidebook, cert	
Evergreen High School Economic Impacts of Wolf Populations on Livest	Evergreen
and Big Game Hunting in the Northern Rockies	JCK Kunching
	_
<b>Colorado State University</b>	
<b>Department of Agricultural Bi</b>	
Agricultural Biology Awara	
Grace Marmorstein	8th grade
\$100, certificate	Danuar
Challenge School The Insect Repellent Properties of Nepetalactone	Denver
· · · · ·	
Tyler Wise	8th grade
\$100, certificate	Issa
Liberty School Does Crop Residue Affect Soil Water Retention	Joes
Naomi Kruse	9th grade
\$100, certificate	anda Seriera
Schullandheim Home School Col Finding Ferns: Defining the Microclimate That E	orado Springs Enables

Gametophyte Growth in the Santa Monica Mountains

Zoey Montoya10th gradeEverett Ediger11th grade\$100, certificate1La Junta Jr/Sr High SchoolLa JuntaHow Qualities of Soil Affect Where Aphonopelma HentziBurrows in the Colorado Grassland

#### **Colorado State University Department of Chemistry**

Excellence in Chemistry Award

Gwendolyn Hohl	7th grade
Joe White	7th grade
\$150, certificate	
Genoa-Hugo School	Hugo
Does pH Affect How Fast Water Freezes?	
Ainsley Soleta	12th grade
Luke Ferguson	12th grade
\$150, certificate	
Brush High School	Brush
Tensile Strength of Nylon 6, 10	

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

<i>Excellence in Horticulture</i>	Award
Levi Goncharov	8th grade
\$100, certificate	
Challenge School	Denver
Ascorbic Acid In Leaves As A Method of Det	ermining Air
Quality	
Theodore Chastang	8th grade
\$100, certificate	-
Summit Middle Charter School	Boulder
Using Green Roofs to Absorb Floodwaters	
Naomi Kruse	9th grade
\$100, certificate	U
Schullandheim Home School	Colorado Springs
Finding Ferns: Defining the Microclimate The	hat Enables
Gametophyte Growth in the Santa Monica M	
Carlos Ochoa-Marquez	12th grade
\$100, certificate	-
Monte Vista High School	Monte Vista

The Effect of Heavy Metal Toxicity on Solanum tuberosum, Cucurbita pepo, Medicago sativa, and Capsicum annuum Plants Inoculated with Mycorrhizae

# Colorado State University, Energy InstituteExcellence in Energy Achievement AwardWilson Moyer12th grade\$250, certificate12th gradeLakewood High SchoolLakewoodApplying Machine Learning to Forecast Solar Production andReduce Reliance on Fossil Fuels

	sociation
Veterniary Science Award	d
Vivian Wolkow	6th grade
\$100, certificate	-
North Middle School C	Colorado Springs
Does the Tail Remember What the Head Saw?	
Veterniary Science Award	d
Harrison Ruleman	12th grade
\$100, certificate	
Evergreen High School	Evergreen
Do Snakes Avoid Certain Colors of Light?	
Colorado-Wyoming Society of A	merican
Foresters	
Excellence in Forestry Research	Award
Adam Ouattara	7th grade
\$200, certificate	C
La Junta Jr/Sr High School	La Junta
Fires in the Comanche Grasslands	
Excellence in Forestry Research	Award
Valerie Goodland	11th grade
same award	-
Monte Vista High School	Monte Vista
You're Fired: An Analysis of Fire on Soil Steri	lization and
Hydrophobicity	
<b>Gromko Family</b>	
Gerald Gromko Memorial Av	vard
Ersel Serdar	10th grade
\$250, certificate	
	eenwood Village
Designing A More Efficient Altitude Compense	ating Rocket
Nozzle	
Institute of Electrical and Elec	
Engineers, High Plains Sec	tion
IEEE Award	
Charlie Danko	8th grade
	ourgrade
\$125 cash card, certificate	-
Flagstaff Academy	Longmont
Flagstaff Academy An Affordable Robot for Dangerous Factories	-
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award	-
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur	-
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate	Longmont 11th grade
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School	Longmont 11th grade Boulder
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u	Longmont 11th grade Boulder sing Tandem
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal L	Longmont 11th grade Boulder sing Tandem
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal I Networks	Longmont 11th grade Boulder sing Tandem
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal L Networks Lemelson Foundation	Longmont 11th grade Boulder sing Tandem Dilated
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal L Networks Lemelson Foundation Lemelson Early Inventor Pr	Longmont 11th grade Boulder sing Tandem Dilated
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal I Networks Lemelson Foundation Lemelson Early Inventor Pr Justin Bendixson	Longmont 11th grade Boulder sing Tandem Dilated
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal I Networks Lemelson Foundation Lemelson Early Inventor Pr Justin Bendixson Myles Marhofer	Longmont 11th grade Boulder sing Tandem Dilated vize 8th grade 8th grade
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal I Networks Lemelson Foundation Lemelson Early Inventor Pr Justin Bendixson Myles Marhofer \$100 (response required from winner to process)	Longmont 11th grade Boulder sing Tandem Dilated vize 8th grade 8th grade ss), certificate
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal I Networks Lemelson Foundation Lemelson Early Inventor Pr Justin Bendixson Myles Marhofer \$100 (response required from winner to proces Pueblo School for Arts & Science-	Longmont 11th grade Boulder sing Tandem Dilated vize 8th grade 8th grade
Flagstaff Academy An Affordable Robot for Dangerous Factories IEEE Award Margaret Arthur \$175cash card, certificate Fairview High School A Novel Phosphosite Localization Approach u Phosphoprotein Mass Spectra and Temporal I Networks Lemelson Foundation Lemelson Early Inventor Pr Justin Bendixson Myles Marhofer \$100 (response required from winner to process)	Longmont 11th grade Boulder sing Tandem Dilated vize 8th grade 8th grade ss), certificate

Little Shop of Physics	
Matthew McCausland Memorial Aw	ard
Rhett Taylor	8th grade
science equipment/instruments	C
Centauri Middle School	La Jara
Battle of the Tape: Which Tape Has the Strongest 7	Tensile
and Adhesive Strength?	
Matthew McCausland Memorial Aw	ard
Kane Schrock	6th grade
science equipment/instruments	-
Arickaree School	Anton
Wind Tunnel Tests of Airfoil Performance	
Matthew McCausland Memorial Awa	ard
Aanshi Shah	8th grade
science equipment/instruments	
	Broomfield
Make Some Noise! An Innovative Method to Produc	се
Electricity Using Sound	
Matthew McCausland Memorial Awa	ard
Parker Stone	12th grade
Bailey Link	12th grade
science equipment/instruments	
Brush High School	Brush
Performance of Pyramidal Airfoils in an Oscillating	g Wind
Chamber	_
Matthew McCausland Memorial Aw	ard
Keegan Gomez	12th grade
science equipment/instruments	
Centaurus High School	Lafayette
Micro-renewable Energy	
<b>Lockheed Martin</b>	
Lockheed Martin Aerospace Awar	d
Vikram Raju	8th grade
\$150, certificate	
Aurora Quest K-8 School	Aurora
Energenius: Clean Energy on the GO	
Lockheed Martin Aerospace Awar	d
Nathaniel Ellis	11th grade
\$350, certificate	
Durango High School	Durango
MOON-OPOLY II: Employing Additive Manufactur	
Technology for Lunar Construction with Waterless	Concrete
Morrow Family	
Dental & Forensics Award	
Elise Brodsky	12th grade
Nederland Middle-Senior High	Nederland
School	
The Effects of Perpatrator Race and Gender on the	
Reliability of Eyewitness Accounts	
Dental & Forensics Award	
River Wilson	6th grade
Lamar Middle School	Lamar
The Magnificent Mastication Mechanism	

Dental & Forensics Aw	vard	
Terra McClure	7th grade	
Rocky Ford Jr/Sr High School	Rocky Ford	Sylv
Oh Snap!		\$200
National Centers for Envir	onmental	Sarg
Information		Fuel
NCEI Award of Scientific Act	hievement	
Alora Dible	8th grade	Kee
cash award provided by an annonymous do	onor, certificate	\$200
Liberty School	Joes	Cent
Dust in the Wind: A Wind Erosion Analysis	5	Micr
National Geographic So	ociety	
That's Geography! Cultivating Er	npathy for the	Sien
Earth Award	1 20	Sam
Minna Most	12th grade	\$200
Teddy Blum	12th grade	Dolo
\$100 (response required from winner to p	-	Rad
Monarch High School	Louisville	
Environmental Changes and the Effects of	the SAM on	Wils
Coccolithophores in the Southern Ocean		\$400
Platte River Power Autl	hority	Lake
PRPA's Special Award for Energy	v Efficiencv &	App and
Innovation	55 5	Roc
Vikram Raju	8th grade	nov
\$200, certificate	U	Ren
Aurora Quest K-8 School	Aurora	\$50,
Energenius: Clean Energy on the GO		Hi-P
PRPA's Special Award for Energy	v Efficiency &	
		Ice.
Innovation	γ Цургегенеу α	Ice,
Innovation		
1 0 00	10th grade	Cass
<i>Innovation</i> Alex Mwangi Wachira		Cass Cars
Innovation Alex Mwangi Wachira \$300, certificate	10th grade	Cass
Innovation Alex Mwangi Wachira \$300, certificate Central High School	10th grade Pueblo	Cass Cars \$75,
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env	10th grade Pueblo	Cass Cars \$75, Brus
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility	10th grade Pueblo	Cass Cars \$75, Brus
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan	10th grade Pueblo	Cass Cars \$75, Brus <i>Reta</i> Autu
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility	10th grade Pueblo	Cass Cars \$75, Brus <i>Reta</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs	Cass Cars \$75, Brus <i>Reta</i> Autu \$75,
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i>	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i>	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility	10th grade Pueblo vironmental 8th grade Colorado Springs vality with	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i>	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez	10th grade Pueblo vironmental 8th grade Colorado Springs vality with	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i> <i>vironmental</i> 12th grade	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i> <i>vironmental</i> 12th grade	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Auro
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School Micro-renewable Energy	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i> <i>vironmental</i> 12th grade Lafayette	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Auro
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School Micro-renewable Energy <b>Regeneron</b>	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i> <i>vironmental</i> 12th grade Lafayette	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Auro <i>Ener</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School Micro-renewable Energy Regeneron Regeneron Biomedical Scien	10th grade Pueblo vironmental 8th grade Colorado Springs vality with vironmental 12th grade Lafayette ce Award 11th grade	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Auro <i>Ener</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School Micro-renewable Energy Regeneron Biomedical Scient Margaret Arthur certificate, \$375 (response required from w payment)	10th grade Pueblo vironmental 8th grade Colorado Springs vality with vironmental 12th grade Lafayette ce Award 11th grade	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Aura <i>Ener</i> ( Sylv \$100
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School Micro-renewable Energy Regeneron Regeneron Biomedical Scient Margaret Arthur certificate, \$375 (response required from w payment) Fairview High School	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i> <i>vironmental</i> 12th grade Lafayette <i>ce Award</i> 11th grade rinner to process Boulder	Cass Cars \$75, Brus <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Auro <i>Ener</i>
Innovation Alex Mwangi Wachira \$300, certificate Central High School Self-Powered Electric Cars PRPA's Special Award for Env Responsibility Helen Wan \$200, certificate Challenger Middle School Measuring the Particulate Matter in Air Qu Raspberry Pi PRPA's Special Award for Env Responsibility Keegan Gomez \$300, certificate Centaurus High School Micro-renewable Energy Regeneron Biomedical Scient Margaret Arthur certificate, \$375 (response required from w payment)	10th grade Pueblo <i>vironmental</i> 8th grade Colorado Springs <i>vality with</i> <i>vironmental</i> 12th grade Lafayette <i>ce Award</i> 11th grade inner to process Boulder <i>th using Tandem</i>	Casss Carss \$75, Bruss <i>Reta</i> Autu \$75, Igna <i>Pres</i> Vikr \$50, Auro Ener ( Sylv \$100 Sarg

Networks

Rocky Mountain Association of G	alogists
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Excellence in Earth Sciences Av	
vlvia Daugherty	8th grade
200, certificate	
urgent Junior High School	Monte Vista
uels of the Future	
Excellence in Earth Sciences Av	
eegan Gomez	12th grade
200, certificate	
entaurus High School	Lafayette
icro-renewable Energy	
Excellence in Earth Sciences Av	vard
ena Parr	10th grade
amantha Abate	10th grade
200, certificate	
olores High School	Dolores
adon in Rural Colorado: The Not So Noble G	as
Excellence in Earth Sciences Av	vard
ilson Moyer	12th grade
100, certificate	U
akewood High School	Lakewood
oplying Machine Learning to Forecast Solar 1	Production
nd Reduce Reliance on Fossil Fuels	
ocky Mountain Water Environment	t Association
Water Research Award	
en Richards	7th grade
50, certificate	/ th grade
i-Plains School	Seibert
e, Ice, Baby	Seibert
Water Research Award	
assius Middlemist	7th and a
arson Stone	7th grade
75, certificate	7th grade
rush Middle School	Dauch
	Brush
etain the Rain	
Water Research Award	
utumn Schulz	9th grade
75, certificate	÷ .
nacio High School	Ignacio
resence of PFA's in Colorado Water	
Science Toy Magic, LLC	
Chemistry CO2 & Greenhouse Gas I	Reduction
Award	
ikram Raju	8th grade
50, certificate	<u> </u>
urora Quest K-8 School	Aurora
nergenius: Clean Energy on the GO	
Chemistry CO2 & Greenhouse Gas I	Reduction
Award	
	8th anada
vlvia Daugherty	8th grade
00, certificate	Monto Vist-
rgent Junior High School uels of the Future	Monte Vista

Chemistry CO2 &	Greenhouse Gas Rea	duction
	Award	
Wilson Moyer		12th grade
\$50, certificate		T - la
Lakewood High School Applying Machine Learni	ing to Fougaget Solar Pro	Lakewood
and Reduce Reliance on I		auction
	Greenhouse Gas Red	duction
Chemistry CO2 &	Award	лисноп
Amrita Saini		11th grade
\$100, certificate		-
Peak to Peak Charter Sch	ool	Lafayette
Investigating Natural Hyd		inescent
Algae for Sustainable Lig	-	
Physics Classro	om Demonstration A	ward
Evelyn Lapp		6th grade
\$50, certificate		
Brush Middle School		Brush
The Force Is Strong with		
Physics Classro	om Demonstration A	ward
Kane Schrock		6th grade
\$100, certificate		
Arickaree School		Anton
Wind Tunnel Tests of Airf		
Physics Classro	om Demonstration A	ward
Natalie Muro		9th grade
\$50, certificate		
Palmer High School		rado Springs
Buoy Wave Energy Conve	erters Capture of Ocean V	Wave
Energy		
	om Demonstration A	ward
Parker Stone		12th grade
Bailey Link		12th grade
\$100, certificate		
Brush High School		Brush
Performance of Pyramida	al Airfoils in an Oscillatin	ig Wind
Chamber	1 0 0 1 .	, T
2	enhouse Gas Reduction	
Sylvia Daugherty		8th grade
\$50, certificate		
Sargent Junior High Scho	ol	Monte Vista
Fuels of the Future		
	enhouse Gas Reduction	
Aanshi Shah		8th grade
\$100, certificate	1	D
Thunder Vista P-8 School Make Some Noise! An Inn		Broomfield
	iovalive method to Frodu	ice
Electricity Using Sound Physics CO2 & Gra	mhouse Gas Peducti	on Award
-	enhouse Gas Reduction	
Natalie Muro		9th grade
\$50, certificate Palmer High School	Color	rado Springe
Buoy Wave Energy Conve		rado Springs
Energy	incris Cupiare of Ocean I	rure
2		

	Physics CO2 & Greenhouse Gas Redu	
	Keegan Gomez \$100, certificate	12th grade
	Centaurus High School Micro-renewable Energy	Lafayette
	Plant Sciences CO2 & Greenhouse G Award	as Reduction
	Pason Dible	6th grade
	\$50, certificate Liberty School	Joes
	The Effect of Organic Fertilizer on Corn	
	Plant Sciences CO2 & Greenhouse G	as Reduction
	Award	941 1-
	Teagan Bruchez \$100, certificate	8th grade
	West Grand Middle School	Kremmling
	Grass Matters!	-
	Plant Sciences CO2 & Greenhouse G Award	as Reduction
	Hannah Shelton	10th grade
	\$50, certificate Centauri High School	La Jara
	Warning! High Fire Danger! Observing the R	
	between the Fuel Moisture Levels of Pinyon P	ine and
	Sagebrush to Observed Precipitation Levels	
	Plant Sciences CO2 & Greenhouse G	as Reduction
	Award	10.1 1
	Carlos Ochoa-Marquez \$100, certificate	12th grade
	Monte Vista High School	Monte Vista
	The Effect of Heavy Metal Toxicity on Solanur	
	Cucurbita pepo, Medicago sativa, and Capsic	um annuum
	Plants Inoculated with Mycorrhizae Society for Mining, Metallurgy & H	Typloration
	Colorado Section	
	Award for Excellence in Mineral S	Science &
	Engineering	beienee a
	Toshiro Nagafuji	8th grade
	\$200, plaque	<u> </u>
	The Logan School	Denver
	Alternatives to Sand in Concrete	γ· ο
	Award for Excellence in Mineral S	science &
	Engineering	7th grada
	Kaycee Clark \$300, plaque	7th grade
	Wray Jr/Sr High School	Wray
	Putting Down Roots: The Study of How Poace Affect Water Erosion	
	<i>Award for Excellence in Mineral S</i>	Science &
	Engineering	
	Siena Parr	10th grade
ļ	Samantha Abate	10.1 1
		10th grade
	\$300, plaque	-
	\$300, plaque Dolores High School Radon in Rural Colorado: The Not So Noble (	Dolores

Award for Excellence in Mineral Scie	nce &
Engineering Carlos Ochoa-Marquez	12th grade
\$500, plaque Monte Vista High School The Effect of Heavy Metal Toxicity on Solanum tud Cucurbita pepo, Medicago sativa, and Capsicum of Plants Inoculated with Mycorrhizae	
Society of Manufacturing Engineers, (	Colorado
Chapter 354	
Andy Keller Memorial Award Charlie Danko	8th grade
\$200, certificate, recognition by the local chapter Flagstaff Academy <i>An Affordable Robot for Dangerous Factories</i>	Longmont
Andy Keller Memorial Award	
Wilson Moyer	12th grade
\$100, certificate, recognition by the local chapter	
Lakewood High School Applying Machine Learning to Forecast Solar Pro	Lakewood
and Reduce Reliance on Fossil Fuels	unction
Andy Keller Memorial Award	
Alexander Zhang	10th grade
Stella Laird	10th grade
\$150, certificate, recognition by the local chapter Fairview High School	Boulder
<i>Reprint: Closed-Loop Materials Flow in Additive</i>	Boulder
Manufacturing	
	Iountain
Manufacturing	Iountain
Manufacturing Society of Women Engineers, Rocky M Section SWE Award Kaycee Clark	<b>lountain</b> 7th grade
Manufacturing Society of Women Engineers, Rocky M Section SWE Award Kaycee Clark \$75, certificate	7th grade
Manufacturing Society of Women Engineers, Rocky M Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School	7th grade Wray
Manufacturing Society of Women Engineers, Rocky M Section SWE Award Kaycee Clark \$75, certificate	7th grade Wray
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F	7th grade Wray
Manufacturing Society of Women Engineers, Rocky M Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F Affect Water Erosion SWE Award Aanshi Shah	7th grade Wray
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F Affect Water Erosion SWE Award Aanshi Shah \$100, certificate	7th grade Wray Roots 8th grade
Manufacturing Society of Women Engineers, Rocky M Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F Affect Water Erosion SWE Award Aanshi Shah	7th grade Wray Roots 8th grade Broomfield
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School	7th grade Wray Roots 8th grade Broomfield
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Product	7th grade Wray Roots 8th grade Broomfield
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae K Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Produ Electricity Using Sound SWE Award Natalie Muro	7th grade Wray Roots 8th grade Broomfield
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae R Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Produ Electricity Using Sound SWE Award Natalie Muro \$75, certificate	7th grade Wray Roots 8th grade Broomfield <i>ice</i> 9th grade
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae K Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Produ Electricity Using Sound SWE Award Natalie Muro \$75, certificate Palmer High School Colo Buoy Wave Energy Converters Capture of Ocean	7th grade Wray Roots 8th grade Broomfield <i>ice</i> 9th grade rado Springs
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae F Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Produ Electricity Using Sound SWE Award Natalie Muro \$75, certificate Palmer High School Colo	7th grade Wray Roots 8th grade Broomfield <i>ice</i> 9th grade rado Springs
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae B Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Produ Electricity Using Sound SWE Award Natalie Muro \$75, certificate Palmer High School Colo Buoy Wave Energy Converters Capture of Ocean Energy	7th grade Wray Roots 8th grade Broomfield <i>ice</i> 9th grade rado Springs <i>Wave</i> 12th grade
Manufacturing         Society of Women Engineers, Rocky N         Section         SWE Award         Kaycee Clark         \$75, certificate         Wray Jr/Sr High School         Putting Down Roots: The Study of How Poaceae Is         Affect Water Erosion         SWE Award         Aanshi Shah         \$100, certificate         Thunder Vista P-8 School         Make Some Noise! An Innovative Method to Produce         Electricity Using Sound         SWE Award         Natalie Muro         \$75, certificate         Palmer High School       Colo         Buoy Wave Energy Converters Capture of Ocean         Energy         SWE Award         Ella Seevers         Cole Gropp	7th grade Wray Roots 8th grade Broomfield ice 9th grade rado Springs <i>Wave</i>
Manufacturing Society of Women Engineers, Rocky N Section SWE Award Kaycee Clark \$75, certificate Wray Jr/Sr High School Putting Down Roots: The Study of How Poaceae K Affect Water Erosion SWE Award Aanshi Shah \$100, certificate Thunder Vista P-8 School Make Some Noise! An Innovative Method to Produ Electricity Using Sound SWE Award Natalie Muro \$75, certificate Palmer High School Colo Buoy Wave Energy Converters Capture of Ocean Energy SWE Award Ella Seevers Cole Gropp \$100, certificate	7th grade Wray Roots 8th grade Broomfield <i>ice</i> 9th grade rado Springs <i>Wave</i> 12th grade 12th grade
Manufacturing         Society of Women Engineers, Rocky N         Section         SWE Award         Kaycee Clark         \$75, certificate         Wray Jr/Sr High School         Putting Down Roots: The Study of How Poaceae Is         Affect Water Erosion         SWE Award         Aanshi Shah         \$100, certificate         Thunder Vista P-8 School         Make Some Noise! An Innovative Method to Produce         Electricity Using Sound         SWE Award         Natalie Muro         \$75, certificate         Palmer High School       Colo         Buoy Wave Energy Converters Capture of Ocean         Energy         SWE Award         Ella Seevers         Cole Gropp	7th grade Wray Roots 8th grade Broomfield cce 9th grade rado Springs Wave 12th grade 12th grade 12th grade

	ciety, Colorado
Chapter	
Natural Resources Conserva	tion Award
Kaycee Clark	7th grade
\$100, certificate	C
Wray Jr/Sr High School	Wray
Putting Down Roots: The Study of How Po	
Affect Water Erosion	
Natural Resources Conserva	tion Award
Landon Hartman	12th grade
same award	
Evergreen High School	Evergreen
Economic Impacts of Wolf Populations on	
Ranching and Big Game Hunting in the N	
State of Colorado - Division of	Reclamation,
Mining and Safet	y
DRMS Outstanding Science E	xhibit Award
Juakin Sawatzky	8th grade
\$75, certificate, gift bag	U
Liberty School	Joes
Analysis of Mine Tailing Run-Off for Mine	e Tailings
DRMS Outstanding Science E	xhibit Award
Carlos Ochoa-Marquez	12th grade
\$75, certificate, gift bag	C
Monte Vista High School	Monte Vista
The Effect of Heavy Metal Toxicity on Sol	
Cucurbita pepo, Medicago sativa, and Ca	psicum annuum
Plants Inoculated with Mycorrhizae	
STEMGirls, LLC	
STEMGirls Middle School Risii	ng Star Award
Emma Beeby	8th grade
\$100, certificate	
Skinner Middle School	Denver
The Effect of Stress on the Amount of Cart	bon Dioxide
L'ada al a d	
Exhaled	•
The Biophysical Soc	v
	v
<b>The Biophysical Soc</b> <i>The Biophysical Society</i> Kylie Berg	v
The Biophysical Soc The Biophysical Society Kylie Berg cash award, certificate	Award 11th grade
The Biophysical Soc The Biophysical Society Kylie Berg cash award, certificate Fairview High School	Award 11th grade Boulder
The Biophysical Soc           The Biophysical Society           Kylie Berg           cash award, certificate           Fairview High School           Effect of Ionic Zinc Availability on the Rep	Award 11th grade Boulder <i>blication of</i>
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"	Award 11th grade Boulder plication of Cells
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz Fam	Award 11th grade Boulder blication of Cells <b>ily</b>
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"	Award 11th grade Boulder blication of Cells <b>ily</b>
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The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz FamBest Contribution to Fundmental	Award 11th grade Boulder blication of Cells ily Science Award
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz FamBest Contribution to FundmentalMargaret Arthur\$300, certificateFairview High School	Award 11th grade Boulder blication of Cells ily Science Award 11th grade Boulder
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz FamBest Contribution to FundmentalMargaret Arthur\$300, certificateFairview High SchoolA Novel Phosphosite Localization Approal	Award 11th grade Boulder blication of Cells ily Science Award 11th grade Boulder ch using Tandem
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz FamBest Contribution to FundmentalMargaret Arthur\$300, certificateFairview High SchoolA Novel Phosphosite Localization ApproaPhosphoprotein Mass Spectra and Tempo	Award 11th grade Boulder blication of Cells ily Science Award 11th grade Boulder ch using Tandem
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz FamBest Contribution to FundmentalMargaret Arthur\$300, certificateFairview High SchoolA Novel Phosphosite Localization ApproaPhosphoprotein Mass Spectra and TempoNetworks	Award 11th grade Boulder blication of Cells illy Science Award 11th grade Boulder ch using Tandem ral Dilated
The Biophysical SocThe Biophysical SocietyKylie Bergcash award, certificateFairview High SchoolEffect of Ionic Zinc Availability on the RepHuman Mammary Epithelial Carcinoma OThe Sara Volz FamBest Contribution to FundmentalMargaret Arthur\$300, certificateFairview High SchoolA Novel Phosphosite Localization ApproaPhosphoprotein Mass Spectra and TempoNetworksBest Contribution to Fundmental	Award 11th grade Boulder blication of Cells ily Science Award 11th grade Boulder ch using Tandem ral Dilated Science Award
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Lamar

Lamar High School

Detecting Flares (Part 5)

<b>Trout Unlimited</b>		
TU River Conservation Award		
Brandon Stup	12th grade	
\$75, certificate	U	
Evergreen High School	Evergreen	
Mimicking Invasive Crayfish Feeding Behavior with	h the	
Northern Crayfish		
TU River Conservation Award		
Lilly Figueroa	12th grade	
\$125, certificate	-	
Mancos High School	Mancos	
Environmental DNA Testing of Rural Aquatic Ecos	ystems for	
the Presence of Fish as Bioindicators		
TU River Conservation Award		
Kaycee Clark	7th grade	
\$200, certificate	-	
Wray Jr/Sr High School	Wray	
Putting Down Roots: The Study of How Poaceae Ro	oots	
Affect Water Erosion		
Wilkins Family		
Young Entrepreneur's Award		
Ella Seevers	12th grade	
Cole Gropp	12th grade	
\$750, certificate		
Conifer High School	Conifer	
Energy Efficient Cooling of Buildings in the Mount	ains	
Wojtaszek Family		
Paul Wojtaszek Memorial Award		
Aditi Avinash	11th grade	
\$200, certificate		
Rock Canyon High School	Littleton	
Model Validation and Preclinical Testing of Digest	ive	
Enzymes for Gluten Breakdown		
Zonta Club		
Amelia Earhart Award		
Kate Guengerich	7th grade	
\$100, certificate	0	
Peak to Peak Charter School	Lafayette	
Infill Percentage and Strength to Weight Ratio of 3.		
Printed Parts		
Scholarships		
<b>Colorado School of Mines</b>		
Colorado School of Mines CSEF Schol	arshin	
Aditi Avinash	11th grade	
\$1,000 Mines scholarship, renewable for up to 3 ad		
years for use towards an undergraduate degree at C		
Rock Canyon High School	Littleton	
Model Validation and Preclinical Testing of Digest		
Enzymes for Gluten Breakdown		

Colorado School of Mines CSEF Scholarship Augustus Miller 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Monte Vista High School Monte Vista Synthesizing Cellulose Acetate and Paper-Based Plastic from Cellulose Derivatives to Produce a Biodegradable 3D Printable Filament Colorado School of Mines CSEF Scholarship Jacob Ho 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Fairview High School Boulder How Abnormally Dry and Windy Were Days with Fires in Colorado's Front Range from 1984-2021? Towards Identifying Fire-Predictors for a Machine Learning Modeling System Colorado School of Mines CSEF Scholarship Jessie Hsu 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Fairview High School Boulder Predicting Patient Disability in MS from MRI Brain Abnormalities Using Machine Learning Colorado School of Mines CSEF Scholarship Nathaniel Ellis 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Durango High School Durango MOON-OPOLY II: Employing Additive Manufacturing Technology for Lunar Construction with Waterless Concrete Colorado School of Mines CSEF Scholarship Amrita Saini 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Peak to Peak Charter School Lafayette Investigating Natural Hydrogels to Sustain Bioluminescent Algae for Sustainable Lighting and CO2 Removal Colorado School of Mines CSEF Scholarship Margaret Arthur 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Fairview High School Boulder A Novel Phosphosite Localization Approach using Tandem Phosphoprotein Mass Spectra and Temporal Dilated Networks Colorado School of Mines CSEF Scholarship Daniel Saeb 11th grade \$1,000 Mines scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM Boulder High School Boulder Investigating How Hydrogel Connectivity Influence Their Mechanical Properties

#### Colorado State University, College of **Agricultural Sciences** Excellence in Agricultural Innovation Scholarship Luci Bruchez 10th grade Joseph Bropst 10th grade \$1,000 non-renewable scholarship to atend Colorado State University with a College of Agricultural Sciences major West Grand High School Kremmling Pasture Plump **Colorado State University, Pueblo** CSU Pueblo Scholarship Amrita Saini 11th grade \$1,000 renewable scholarship to attend CSU Pueblo Peak to Peak Charter School Lafayette Investigating Natural Hydrogels to Sustain Bioluminescent Algae for Sustainable Lighting and CO2 Removal Society American Psychological Association APA Achievement in Research in Psychological Science Award Juliet Huckabay 6th grade certificate, 1-year affiliate student membership in the APA Skinner Middle School Denver The Effect of Visual Stimulus on Heart Rate Across Different Age Groups APA Achievement in Research in Psychological Science Award Elise Brodsky 12th grade same award Nederland Middle-Senior High Nederland School The Effects of Perpatrator Race and Gender on the Reliability of Evewitness Accounts Association for Women Geoscientists AWG Excellence in the Geosciences Award Juakin Sawatzky 8th grade certificate Liberty School Joes Analysis of Mine Tailing Run-Off for Mine Tailings AWG Excellence in the Geosciences Award Siena Parr 10th grade Samantha Abate 10th grade same award Dolores High School Dolores Radon in Rural Colorado: The Not So Noble Gas NASA NASA Earth System Science Award Zoe Wang 8th grade certificate Summit Middle Charter School Boulder Recycling by Zapping: Recyclability and Efficiency of **Recycling Different Polyesters**

NASA Earth System Science Award	d
Minna Most	12th grade
Teddy Blum	12th grade
same award	
Monarch High School	Louisville
Environmental Changes and the Effects of the SAM	on
Coccolithophores in the Southern Ocean	

#### National Oceanic and Atmospheric Administration

Taking the Pulse of the Planet AwardAyush Vispute8th gradecertificate, invitation to a career exploration webinar inSummer 2023Mountain Ridge Middle SchoolColorado SpringsInvestigating Alternate Treatments of Acid Rain

#### Ricoh

Ricoh Sustainable Development Awa	ard
Theodore Chastang	8th grade
certificate	
Summit Middle Charter School	Boulder
Using Green Roofs to Absorb Floodwaters	

#### Ricoh Sustainable Development Award

	1
Foshiro Nagafuji	8th grade
same award	
The Logan School	Denver
Alternatives to Sand in Concrete	

#### Society for In Vitro Biology

Outstanding Achievement in In Vitro Biology

#### Award

Joshua Ho 11th grade certificate, membership in the Society, recognition in Society's news letter and on website Fairview High School Boulder *The Effects of Dissolved Organic Matter (DOM) on Emiliania Huxleyi Outstanding Achievement in In Vitro Biology Award* 

Valerie Goodland	11th grade
same award	
Monte Vista High School	Monte Vista
You're Fired: An Analysis of Fire on Soil Steri	lization and
Hydrophobicity	

#### United States Agency for International Development

USAID Science Champion Award	
Grace Marmorstein	8th grade
certificate	
Challenge School	Denver
The Insect Repellent Properties of Nepetalactone	
USAID Science Champion Award	
Will Noble	10th grade
same award	

Will Noble	10th grade
same award	
Yuma High School	Yuma
<i>Turbine Efficiency in Small-Scale Hydropower</i>	

#### **United States Metric Association** *Outstanding Achievement in the Use of the* International System Award Jocelyn Kramer 6th grade certificate, membership in the US Metric Association Good Shepherd Catholic School Denver The Exodus of Ca+: Does Container Material Affect Calcium Levels in Milk? Outstanding Achievement in the Use of the International System Award Ainsley Soleta 12th grade Luke Ferguson 12th grade certificate, membership in the US Metric Association Brush High School Brush Tensile Strength of Nylon 6, 10 Water Environment Federation Stockholm Junior Water Prize Tyler Wise 8th grade certificate Liberty School Joes Does Crop Residue Affect Soil Water Retention Stockholm Junior Water Prize Liam Griffin 7th grade same award Sargent Junior High School Monte Vista Running Low on Water: Formula for the Future Stockholm Junior Water Prize Juakin Sawatzky 8th grade same award Liberty School Joes Analysis of Mine Tailing Run-Off for Mine Tailings **Yale Science & Engineering Association Outstanding Achievement in Science &** Engineering Award Augustus Miller 11th grade certificate, medallion (response required from winner to process) Monte Vista High School Monte Vista Synthesizing Cellulose Acetate and Paper-Based Plastic from Cellulose Derivatives to Produce a Biodegradable 3D Printable Filament Teacher **Colorado Association of Science Teachers** CAST Teacher Award Terri Paulson \$150, certificate, 1-year free CAST membership Sargent Jr/Sr High School Monte Vista CAST Teacher Award Amy Melby same award

Yuma

Yuma High School

**Colorado Science & Engineering Fair** 

Doug Steward Memorial Award	
Andrew Shelton	
\$75, certificate	
Centauri Middle School	La Jara
Doug Steward Memorial Award	
Eric Halingstad	
\$75, certificate	
Conifer High School	Conifer
Doug Steward Memorial Award	
Dave Hopcia	
\$75, certificate	
Dolores High School	Dolores
Lockheed Martin	

CSEF Teacher of the Year Award

Andrew Shelton \$3,000 grant to use for their school's science fair program, certificate Centauri Middle School La Jara