

Pikes Peak Regional Science & Engineering Fair

2024 Final Results

Grand Awards

Senior Division Grand Award

- SA 1 Vanya Lavu [11] (The Classical Academy High School, Margaret Zielinski) “Healthy Gut! Healthy You! : Using Dorocephala Dactyligerina as a Model to Treat Gastrointestinal and Psychological Disorders With Novel Regenerative Enzymes”

Senior Division Grand Award Runner Up

- SB 6 Naomi Kruse [10] (Schullandheim, Tami Kruse) “Paper for the Planet”

International Science Fair Invitation

- SA 1 Vanya Lavu [11] (The Classical Academy High School, Margaret Zielinski) “Healthy Gut! Healthy You! : Using Dorocephala Dactyligerina as a Model to Treat Gastrointestinal and Psychological Disorders With Novel Regenerative Enzymes”
- SB 6 Naomi Kruse [10] (Schullandheim, Tami Kruse) “Paper for the Planet”

Junior Division Grand Award

- JB 4 Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) “To Grow or Not to Grow: Testing Biomass-based Materials for a Greener World”

Junior Division Grand Award Runner Up

- JD 5 Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) “Running: A heat stroke's downfall // Using a Peltier to prevent heat stroke”

Senior Division People’s Choice

- SD 5 Geo Raguraman [12] (Discovery Canyon High School) “InvisiEye 2.0: A compact, modernized solution to aid the blind and visually impaired”

Junior Division People’s Choice

- JA 3 Julia Muro [7] (North Middle School) “The Effect of Various Vinegar Rinse Concentrations on the Shelf Life of Strawberries”
- JA 11 Vivian Wolkow [7] (North Middle School, Erryn Tanner) “Can Planaria Distinguish One Color From Another?”

Category Awards

Senior Life Science

First Place – Senior Life Science

- SA 1 Vanya Lavu [11] (The Classical Academy High School, Margaret Zielinski) “Healthy Gut! Healthy You! : Using Dorothecephala Dactyligera as a Model to Treat Gastrointestinal and Psychological Disorders With Novel Regenerative Enzymes”

Second Place – Senior Life Science

- SA 2 Ayush Vispute [9] (Rampart High School) “ProteinFlow - An Innovative Biocomputational Approach to Discovering Bacteria with Applications to Various Fields Using Protein Sequence”

Third Place – Senior Life Science

- SA 7 Cameron Wolkow [10] (Palmer High School, Nathaniel Lohmann) “Just When You Thought Beer Couldn't Get Any Better: Engineering an Eco-Friendly Brewing Yeast”

Fourth Place – Senior Life Science

- SA 8 Madison Kragel [10] (Miami Yoder High School, Angela Grimes) “The Effect of Red Dye 40 on Pea Seed Germination”

Senior Earth and Environmental Science

First Place – Senior Earth and Environmental Science

- SB 6 Naomi Kruse [10] (Schullandheim, Tami Kruse) “Paper for the Planet”

Second Place – Senior Earth and Environmental Science

- SB 1 Keila Godinez [10] (Miami Yoder High School, Angela Grimes) “Novel Approaches to Protecting Steel From Environmental Corrosion”

Senior Physical Science

First Place - Senior Physical Science

- SC 5 Jessa Book [10] (Miami Yoder High School, Angela Grimes) “Strength of EMF Waves Radiating from High Powered Electrical Lines”

Second Place - Senior Physical Science

- SC 2 Katelyn Marquez [10] (Miami Yoder High School, Angela Grimes) “Effect of Acids on Alloy Metals of Costume Jewelry - A Way to Improve Appearance”

Senior Engineering, Mathematics and Computer Science

First Place - Senior Engineering, Mathematics and Computer Science

- SD 7 Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) “Effects of Mooring Systems on Submerged Point Absorber Wave Energy Converters”

Second Place - Senior Engineering, Mathematics and Computer Science

- SD 2 Shrey Rohilla [11] (The Classical Academy High School, Jennifer Smith) “Waste to Watts: Converting Locally Sourced Organic Waste into Activated Carbon Based Supercapacitors”

Third Place - Senior Engineering, Mathematics and Computer Science

- SD 5 Geo Raguraman [12] (Discovery Canyon High School) “InvisiEye 2.0: A compact, modernized solution to aid the blind and visually impaired”

Fourth Place - Senior Engineering, Mathematics and Computer Science

- SD 1 Aryan Tuteja [10], Vishnu Raja Kuma [10] (Discovery Canyon High School, Kris Goodman) “Ecoldentify: A Sustainable Approach to Waste Classification using AI”

Junior Life Science

First Place – Junior Life Science

- JA 8 Samantha Goetz [7] (St Peter Catholic School) “Is there a medication bottle that senior citizens can open and children cannot?”

Second Place - Junior Life Science

- JA 3 Julia Muro [7] (North Middle School) “The Effect of Various Vinegar Rinse Concentrations on the Shelf Life of Strawberries”

Third Place - Junior Life Science

- JA 11 Vivian Wolkow [7] (North Middle School, Erryn Tanner) “Can Planaria Distinguish One Color From Another?”

Fourth Place - Junior Life Science

- JA 1 Tim Guijt [6] (Eagleview Middle School, Jenine Winslow) “Measuring Electrolytes: Which drink comes out on top?”

Fifth Place - Junior Life Science

- JA 12 Michael Makofske [6] (Bear Creek Elementary, Valerie DeLello) “Indoor Germs vs. Outdoor Germs”

Sixth Place - Junior Life Science

- JA 2 Joanna Raguraman [6] (Discovery Canyon Middle School) “Cerebroclaris: Unraveling the Brainless Minds to Mitigate Neurodegeneration”

Junior Earth and Environmental Science

First Place – Junior Earth and Environmental Science

- JB 4 Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) “To Grow or Not to Grow: Testing Biomass-based Materials for a Greener World”

Second Place - Junior Earth and Environmental Science

- JB 5 Elise Gavin [7] (The Classical Academy Junior High, Dawn Ehresman) “Biodegradable or not? Trial by Fire”

Third Place - Junior Earth and Environmental Science

- JB 2 Matthew Homan [8] (Monument Academy, Karl Brown) “Does El Nino affect early season snowfall at Breckenridge and Crested Butte”

Fourth Place - Junior Earth and Environmental Science

- JB 1 Greta Tong [7], Lily Tong [7] (Challenger Middle School) “Edibottle: A Water Bottle that You Can Consume”

Junior Physical Science

First Place – Junior Physical Science

- JC 2 “Snow Force!” Lucia Montello [6] (Eagleview Middle School, Jenine Winslow) “Snow Force!”

Second Place - Junior Physical Science

- JC 7 Benjamin Bloomfield [6] (Bear Creek Elementary, Valerie DeLello) “Growing Crystals In Different Temperatures”

Third Place - Junior Physical Science

- JC 4 Arthur Holstein [8] (Monument Academy, Karl Brown) “Testing Efficiency of Different Wing Types”

Junior Engineering, Mathematics and Computer Science

First Place – Junior Engineering, Mathematics and Computer Science

- JD 5 Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) “Running: A heat stroke's downfall // Using a Peltier to prevent heat stroke”

Second Place - Junior Engineering, Mathematics and Computer Science

- JD 14 Benjamin Knauf [6] (Bear Creek Elementary, Valerie DeLello) “Breaking Bridges”

Third Place - Junior Engineering , Mathematics and Computer Science

- JD 2 Advait Jadhav [7] (Chinook Trail Middle School) “Shopcart 2050”

Fourth Place - Junior Engineering, Mathematics and Computer Science

- JD 4 Krishav Govindaraj [7] (Discovery Canyon Middle School) “Eyesync”

Fifth Place - Junior Engineering, Mathematics and Computer Science

- JD 6 Angelina Wan [7] (Challenger Middle School, Selina Webb) “Object Detection with Raspberry Pi to Help Blind Mobility”

Sixth Place - Junior Engineering, Mathematics and Computer Science

- JD 10 Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) “Revive Kundiawa: Harvesting Rain for Smarter water solution!”

Colorado Science and Engineering Fair

CSEF Invitations

- Benjamin Bloomfield [JC 7] [6] (Bear Creek Elementary, Valerie DeLello) “Growing Crystals In Different Temperatures”
- Jessa Book [SC 5][10] (Miami Yoder High School, Angela Grimes) “Strength of EMF Waves Radiating from High Powered Electrical Lines”
- Elise Gavin [JB 5] [7] (The Classical Academy Junior High, Dawn Ehresman) “Biodegradable or not? Trial by Fire”
- Samantha Goetz [JA 8] [7] (St Peter Catholic School) “Is there a medication bottle that senior citizens can open and children cannot?”
- Keila Godinez [SB 1] [10] (Miami Yoder High School, Angela Grimes) “Novel Approaches to Protecting Steel From Environmental Corrosion”
- Cameron Kempisty [JB 4] [7] (Eagleview Middle School, Elizabeth Busler) “To Grow or Not to Grow: Testing Biomass-based Materials for a Greener World”
- Laurel Kent [JD 5] [6] (Eagleview Middle School, Jenine Winslow) “Running: A heat stroke's downfall // Using a Peltier to prevent heat stroke”
- Benjamin Knauf [JD 14] [6] (Bear Creek Elementary, Valerie DeLello) “Breaking Bridges”
- Naomi Kruse [SB 6] [10] (Schullandheim, Tami Kruse) “Paper for the Planet”
- Vanya Lavu [SA 1] [11] (The Classical Academy High School, Margaret Zielinski) “Healthy Gut! Healthy You! : Using *Dorotocephala Dactyligeria* as a Model to Treat Gastrointestinal and Psychological Disorders With Novel Regenerative Enzymes”
- Katelyn Marquez [SC 2] [10] (Miami Yoder High School, Angela Grimes) “Effect of Acids on Alloy Metals of Costume Jewelry - A Way to Improve Appearance”
- Lucia Montello [JC 2] [6] (Eagleview Middle School, Jenine Winslow) “Snow Force!”
- Julia Muro [JA 3] [7] (North Middle School) “The Effect of Various Vinegar Rinse Concentrations on the Shelf Life of Strawberries”
- Natalie Muro [SD 7] [10] (Palmer High School, Nathaniel Lohmann) “Effects of Mooring Systems on Submerged Point Absorber Wave Energy Converters”
- Geo Raguraman [SD 5] [12] (Discovery Canyon High School) “InvisiEye 2.0: A compact, modernized solution to aid the blind and visually impaired”
- Shrey Rohilla [SD 2] [11] (The Classical Academy High School, Jennifer Smith) “Waste to Watts: Converting Locally Sourced Organic Waste into Activated Carbon Based Supercapacitors”
- Ayush Vispute [SA 2] [9] (Rampart High School) “ProteinFlow - An Innovative Biocomputational Approach to Discovering Bacteria with Applications to Various Fields Using Protein Sequence”
- Cameron Wolkow [SA 7] [10] (Palmer High School, Nathaniel Lohmann) “Just When You Thought Beer Couldn't Get Any Better: Engineering an Eco-Friendly Brewing Yeast”
- Vivian Wolkow [JA 11] [7] (North Middle School, Erryn Tanner) “Can Planaria Distinguish One Color From Another?”

2024 PPRSEF SPECIAL AWARDS

American Association of University Women Junior

- Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) JB4

American Association of University Women Senior

- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

American Institute of Aeronautics and Astronautics Rocky Mtn Section Junior

- Arthur Holstein [8] (Monument Academy, Karl Brown) JC4

American Institute of Aeronautics and Astronautics Rocky Mtn Section Senior

- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

American Psychological Association

- Alita Alvarez [12] (Palmer High School, Nathaniel Lohmann) SA4

American Statistical Association CO/WY Junior

- Samantha Goetz [7] (St Peter Catholic School) JA8

American Statistical Association CO/WY Senior

- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

Auria Junior 1st

- Advait Jadhav [7] (Chinook Trail Middle School) JD2

Auria Junior 2nd

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5

Auria Senior 1st

- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

Auria Senior 2nd

- Gurman Goraya [10] (Pine Creek High School) SD3

Association for Women Geoscientists

- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

BSCS

- Samantha Goetz [7] (St Peter Catholic School) JA8

Broadcom Coding with Commitment

- Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) JD10

Citizens Project

- Joanna Raguraman [6] (Discovery Canyon Middle School) JA2
- Helen Wan [9] (Pine Creek High School, Kyle Gracia) SD4

Colorado Associates in Medical Physics

- Rhianna Williams [12] (Palmer High School, Nathaniel Lohmann) SC1
- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5

Colorado Chapter of the Soil and Water Conservation Society Junior 1st

- Matthew Homan [8] (Monument Academy, Karl Brown) JB2

Colorado Chapter of the Soil and Water Conservation Society Junior 2nd

- Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) JB4

Colorado Chapter of the Soil and Water Conservation Society Senior 1st

- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

Colorado Chapter of the Soil and Water Conservation Society Senior 2nd

- Kevin Jaramillo [11] (Miami Yoder High School, Angela Grimes) SB2

Colorado College Excellence in Community and Social Justice

- Samantha Goetz [7] (St Peter Catholic School) JA8
- Angelina Wan [7] (Challenger Middle School, Selina Webb) JD6

Colorado College Excellence in Field-Based Research

- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5
- Kevin Jaramillo [11] (Miami Yoder High School, Angela Grimes) SB2

Colorado College Excellence in Rocky Mountain Regional Research

- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6
- Matthew Homan [8] (Monument Academy, Karl Brown) JB2

Colorado College Excellence in Sustainability and Conservation

- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5
- Helen Wan [9] (Pine Creek High School, Kyle Gracia) SD4

Cool Science Technical Presentation Award Junior

- Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) JD10

Cool Science Technical Presentation Award Senior

- Samuel Penney [12] (Palmer High School, Nathaniel Lohmann) SA3

Crosson Family Award

- Carter Briscoe [6] (Bear Creek Elementary, Valerie DeLello) JD13
- Aiden Nelson [6] (Eagleview Middle School, Jenine Winslow) JD9
- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5
- Delilah Epps [9] (Mitchell High School, Kiara Nath) SB5

Deep Space Exploration Society Junior 1st

- Advait Jadhav [7] (Chinook Trail Middle School) JD2

Deep Space Exploration Society Junior 2nd

- Angelina Wan [7] (Challenger Middle School, Selina Webb) JD6

Deep Space Exploration Society Senior 1st

- Shrey Rohilla [11] (The Classical Academy High School, Jennifer Smith) SD2

Deep Space Exploration Society Senior 2nd

- Rhianna Williams [12] (Palmer High School, Nathaniel Lohmann) SC1

Deep Space Exploration Society Senior 2nd

- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5

DOD STEM Leadership Prize

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5

El Paso County Conservation District Excellence Award Junior

- Matthew Homan [8] (Monument Academy, Karl Brown) B2J

El Paso County Conservation District Excellence Award Senior

- Keila Godinez [10] (Miami Yoder High School, Angela Grimes) SB1

El Paso County Conservation District Cultivator Award Junior

- Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) JB4

El Paso County Conservation District Cultivator Award Senior

- Delilah Epps [9] (Mitchell High School, Kiara Nath) SB5

EPA Encouragement Letter

- Greta Tong [7] (Challenger Middle School) JB1
- Lily Tong [7] (Challenger Middle School) JB1
- Matthew Homan [8] (Monument Academy, Karl Brown) JB2
- Emma Cole [6] (Eagleview Middle School, Jenine Winslow) JB3
- Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) JB4
- Elise Gavin [7] (The Classical Academy Junior High, Dawn Ehresman) JB5
- Aria Lawrence [6] (Challenger Middle School, Selina Webb) JB6
- Sophia Ellington [8] (Eagleview Middle School, Elizabeth Busler) JB7
- Annalyn Denson [6] (Bear Creek Elementary, Valerie DeLello) JB8
- Aiden Light [6] (Bear Creek Elementary, Valerie DeLello) JD15
- Keila Godinez [10] (Miami Yoder High School, Angela Grimes) SB1
- Kevin Jaramillo [11] (Miami Yoder High School, Angela Grimes) SB2
- Lucas Hudson [10] (Palmer High School, Nathaniel Lohmann) SB3
- Delilah Epps [9] (Mitchell High School, Kiara Nath) SB5
- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

Flagline.com Young Scientist Award Junior 1st

- Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) JD10

Flagline.com Young Scientist Award Junior 2nd

- Joanna Raguraman [6] (Discovery Canyon Middle School) JA2

Flagline.com Young Scientist Award Junior 3rd

- Aiden Light [6] (Bear Creek Elementary, Valerie DeLello) SA6

Flagline.com Young Scientist Award Senior 1st

- Abbygail Vallejo [12] (Palmer High School, Nathaniel Lohmann) SA6

Flagline.com Young Scientist Award Senior 2nd

- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5

Lemelson Early Inventor Prize

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5

Georgia and Charlie Matteson Award Junior

- Aria Lawrence [6] (Challenger Middle School, Selina Webb) JB6

Georgia and Charlie Matteson Award Senior

- Rhianna Williams [12] (Palmer High School, Nathaniel Lohmann) SC1

NASA Earth System Science Award

- Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) JB4

NDIA (National Defense Industrial Association) 6th 1st

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5

NDIA (National Defense Industrial Association) 6th 2nd

- Justin Beasley [6] (Bear Creek Elementary, Valerie DeLello) JD3

NDIA (National Defense Industrial Association) 7th 1st

- Krishav Govindaraj [7] (Discovery Canyon Middle School) JD4

NDIA (National Defense Industrial Association) 7th 2nd

- Angelina Wan [7] (Challenger Middle School, Selina Webb) JD6

NDIA (National Defense Industrial Association) 8th 1st

- Joseph Benham [8] (Monument Academy, Karl Brown) JC5

NDIA (National Defense Industrial Association) 8th 2nd

- Arthur Holstein [8] (Monument Academy, Karl Brown) JC4

National Society of Professional Engineers Junior

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5

National Society of Professional Engineers Senior

- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

NOAA

- Matthew Homan [8] (Monument Academy, Karl Brown) JB2

Old Town Bike Shop

- Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) JD10
- Helen Wan [9] (Pine Creek High School, Kyle Gracia) SD4
- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6
- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

Patent and Trademark Office Society (Overall Winner)

- Ayush Vispute [9] (Rampart High School) SA2

Patent and Trademark Office Society

- Nancy Marquez [10] (Miami Yoder High School, Angela Grimes) SC4
- Advait Jadhav [7] (Chinook Trail Middle School) JD2
- Vivian Wolkow [7] (North Middle School, Erryn Tanner) JA11
- Lucia Montello [6] (Eagleview Middle School, Jenine Winslow) JC2
- Matthew Homan [8] (Monument Academy, Karl Brown) JB2
- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6
- David Kent [9] (Air Academy High School) SD6

Peak STEM Academy

- Lucia Montello [6] (Eagleview Middle School, Jenine Winslow) JC2
- Justin Beasley [6] (Bear Creek Elementary, Valerie DeLello) JD3
- Krishav Govindaraj [7] (Discovery Canyon Middle School) JD4
- Angelina Wan [7] (Challenger Middle School, Selina Webb) JD6

Pikes Peak Peace and Justice Commission

- Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) JD10
- Angelina Wan [7] (Challenger Middle School, Selina Webb) JD6

Regeneron Biomedical Science Award

- Ayush Vispute [9] (Rampart High School) SA2

Ricoh Americas

- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

Society for In Vitro Biology

- Cameron Wolkow [10] (Palmer High School, Nathaniel Lohmann) SA7

Society for Women Engineers Junior

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5

Society for Women Engineers Senior

- Natalie Muro [10] (Palmer High School, Nathaniel Lohmann) SD7

Space Foundation

- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

Thermo Fisher Junior Innovator Award

- Samantha Goetz [7] (St Peter Catholic School) JA8
- Cameron Kempisty [7] (Eagleview Middle School, Elizabeth Busler) JB4
- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5
- Julia Muro [7] (North Middle School) JA3

UCCS Dept of Chemistry and Biochemistry

- Cameron Wolkow [10] (Palmer High School, Nathaniel Lohmann) SA7

US Air Force Junior

- Laurel Kent [6] (Eagleview Middle School, Jenine Winslow) JD5
- Sierra Winslow [7] (Eagleview Middle School, Jenine Winslow) JD10

US Air Force Senior

- Vanya Lavu [11] (The Classical Academy High School, Margaret Zielinski) SA1
- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

US Metric Association

- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5

USAID (US Agency for International Development)

- Naomi Kruse [10] (Schullandheim, Tami Kruse) SB6

US Navy Science Award Junior

- Conner Reed [6] (Eagleview Middle School, Jenine Winslow) JA4
- Maddie Matissek [6] (Eagleview Middle School, Jenine Winslow) JD8

US Navy Science Award Senior

- Samuel Penney [12] (Palmer High School, Nathaniel Lohmann) SA3
- Jessa Book [10] (Miami Yoder High School, Angela Grimes) SC5

Yale Science and Engineering Association

- Shrey Rohilla [11] (The Classical Academy High School, Jennifer Smith) SD2

CAST Awards for Teachers

- Karl Brown-Monument Academy
- Valerie DeLello-Bear Creek Elementary
- Dawn Ehresman-The Classical Academy
- Kris Goodman-Discovery Canyon High School
- Kyle Gracia-Pine Creek High School
- Kiara Nath-Mitchell High School
- Erryn Tanner-North Middle School
- Amy White- Challenger Middle School
- Margaret Zielinski-The Classical Academy High School