Senior Division Sweepstakes Winners

The first place (Marcus J. Friskop Sweepstakes) winner received a gold state plaque, a jacket, a $200 cash award from the Marcus J. Friskop Family, a $500 cash award from the University of North Dakota Division of Student Affairs / UND Office of Research & Economic Development, and a 1 Year $2500 Scholarship to the University of North Dakota and will advance to the ISEF in Los Angeles California and will exhibit his/her project.

The second place (sweepstakes runner-up) winner received a gold state plaque, a jacket, a $250 cash award from the University of North Division of Student Affairs / UND Office of Research & Economic Development, and a 1 Year $2000 Scholarship to the University of North Dakota and will advance to the ISEF in Los Angeles California and will exhibit his/her project.

The third place (sweepstakes 2nd runner-up) winner received a state plaque, a hooded sweatshirt, a $200 cash award from the University of North Dakota School of Graduate Studies, and a 1 Year $1000 Scholarship to the University of North Dakota and will advance to the ISEF in Los Angeles California and will exhibit his/her project.

Senior Division – 1st Place – Sweepstakes Winner

Senior Division – 2nd Place – Sweepstakes Runner-Up
Isabelle Chambers, Inspire Innovation Lab, “Engineering a Device to Improve Vision via Photo Activation”

Senior Division – 3rd Place – Sweepstakes Second Runner-Up

Senior Division Place Winners

Projects that are selected as finalists received a gold plaque and a jacket and will advance to the ISEF in Los Angeles California in May and will exhibit their project.

Projects selected as alternates received a silver plaque and are alternates to the ISEF in Los Angeles California in May but will not exhibit their project unless a finalist from that region cannot attend.

Northwest Region
1st Finalist: Bryan Martinez, Trenton School District, “Nanosilver: Biohazard or Breakthrough”
3rd Finalist: Abigail Larson, Tioga School District, “No Not the Trailer”
1st Alternate: Hannah Johnson, Grenora School District, “Plant Growth Regulators and Fungicides on Wheat”
2nd Alternate: Katie Gibeau, Trenton School District, “Ozone Alert”
Northeast Region
2nd Alternate: Brian Sisk, St. Thomas School District, “How Should You Drive From Now On?”

Southwest Central Region
1st Finalist: Monica Zent, Dickinson School District, “Effects of ND Road Dust on A. Thaliana: An Assay of Chlorophyll & Ascorbate Peroxidase”
2nd Finalist: Abbigale Steeke, Scranton School District, “Effects of PG600 & CIDR’s on the Conception Rate of Ewes”
1st Alternate: Riley McLean, St Mary’s School District, “Are YOU What Your MOTHER Eats?”
2nd Alternate: Juliann Spilman, Mandan School District, "UV Treatment of Dental Appliances”

Southeast Central Region
1st Alternate: Desa Sand, Ellendale School District, “The Importance of Soil Carbon Sequestration”

Southeast Region
1st Finalist: Dylan Benson, Hankinson School District, “Effects of Household Remedies on Mold”
2nd Alternate: Hayden German, Hankinson School District, “The Performance of Biodegradable Cutting Oils in Drilling Applications”

Junior Division Sweepstakes Winners
The first place (Sweepstakes) winner received a gold state plaque, a $125 cash award from the ND IDeA Network of Biomedical Research Excellence and a $250 cash award in honorarium of Marcus J. Friskop from the Maddock High School Science Fair Alumni Students.

The second place (Sweepstakes Runner-Up) winner received a silver plaque and a $75 cash award from the ND IDeA Network of Biomedical Research Excellence.

Junior Division 1st Place – Sweepstakes Winner
Emma Kratcha, Hankinson School District, “Using Natural Enhancements to Improve Quality and Quantity of Sweet Corn”

Junior Division 2nd Place - Sweepstakes Runner-Up
Abby Post, Hankinson School District, “Productivity Analysis of Garden Vegetable Arrangement”
Junior Division Place Winners

All first and second place winners received a gold plaque. All third and fourth place winners receive a silver plaque.

Northwest Region
1st Place: Shane Waltner, Horse Creek, “This Little Light of Mine”
3rd Place: Martha Isley, East Fairview School District, “Got Watter”
4th Place: Malloree Falcon, Trenton School District, “Bacteria Around You”

Northeast Region
1st Place: Devika Jagadish, Schroeder School District, “Filthy Food’s Frenzy”
2nd Place: Madeleine Sanberg, Schroeder School District, “Drone-ing On”
3rd Place: Cooper Miller, Schroeder School District, “Sounds Great”
4th Place: Cade Halvorson, Schroeder School District, “Shake it Up”

Southwest Central Region
1st Place: Derek Haak, Strasburg School District, “Automatic Gate”
2nd Place: Andrew Mehlhoff, Wing School District, “The Energy of Nuts”

Southeast Central Region
1st Place: Madelyn Schmidt, Kidder County Tappen School District, “The Effect of Livestock Feed on the Production of Methane Gas from Manure”
2nd Place: Nick Seefeld, Ellendale School District, “Which Worm Promotes the Most Plant Growth?”
3rd Place: Nicole Schmidt, Ashley School District, “Over Reaction?”

Southeast Region
1st Place: Emerson Falk, Hankinson School District, “Comparative Analysis of Shampoo, Body Wash and Hand Soap”
2nd Place: Ally Habib, Hankinson School District, “A Microbiological Analysis of Essential Oil Use”
3rd Place: Jaxon Gronneberg, “Griggs County Central School District, “What are the Effects of Acid Rain on Plant Growth?”
4th Place: Ellie Brown, Griggs County Central School District, “Practice vs. Visualization”
Agriculture/Soil Science

**North Dakota Soil Conservation District/Auxiliary**
Project Related to Soil Conservation
1 Winner: Senior Division: A Cash Award of $150 And a Certificate
Alyssa Kemp, Cavalier School District, "Hydraulic Highways - An Investigation of Sub-surface Water Movement in Different Soil Types"

**North Dakota Soil Conservation District/Auxiliary**
Project Related to Soil Conservation
1 Winner: Senior Division: A Cash Award of $50 And a Certificate
Desa Sand, Ellendale School District, "The Importance of Soil Carbon Sequestration"

**North Dakota Soil Conservation District/Auxiliary**
Project Related to Soil Conservation
1 Winner: Junior Division: A Cash Award of $150 And a Certificate
Abby Post, Hankinson School District, "Productivity Analysis of Garden Vegetable Arrangement"

**North Dakota Soil Conservation District/Auxiliary**
Project Related to Soil Conservation
1 Winner: Junior Division: A Cash Award of $50 And a Certificate
Jaxon Gronneberg, Griggs County Central School District, "What are the Effects of Acid Rain on Plant Growth?"

**Farmers Union Insurance - North Dakota**
Project Related to Agriculture
2 Winners: Senior Division: A Cash Award of $50 And a Certificate
Addie Schnabel, Ashley School District, "Does Water pH Affect Plant Growth?"
Abbigale Steeke, Scranton School District, "Effects of PG600 & CIDR's on the Conception Rate of Ewes"

**Farmers Union Insurance - North Dakota**
Project Related to Agriculture
2 Winners: Junior Division: A Cash Award of $25 And a Certificate
Emma Kratcha, Hankinson School District, "Using Natural Enhancements to Improve Quality and Quantity of Sweet Corn"
Abby Post, Hankinson School District, "Productivity Analysis of Garden Vegetable Arrangement"
North Dakota Farm Bureau
Project Related to Agriculture
2 Winners: Junior Division: A Cash Award of $25 And a Certificate
Emma Kratcha, Hankinson School District, "Using Natural Enhancements to Improve Quality and Quantity of Sweet Corn"
Madelyn Schmidt, KC Tappen School District, "The Effect of Livestock Feed on the Production of Methane Gas from Manure"

North Dakota Farm Bureau
Project Related to Agriculture
2 Winners: Senior Division: A Cash Award of $25 And a Certificate
Monica Zent, Dickinson School District, "Effects of ND Road Dust on A. Thaliana: An Assay of Chlorophyll & Ascorbate Peroxidase"
Tara Binstock, Wing School District, "The Effects of Additional Products in a High Management Spring Wheat Program"

Chemistry/Biochemistry

American Association for Clinical Chemistry
Project in Clinical Chemistry
1 Winner: Senior Division: A Cash Award of $100 And a Certificate
Megan Schiltz, Hankinson School District, "The Physical and Biological Effect of Diabetes on the Body"

American Chemical Society-Red River Valley Section
Project in Field of Chemistry
1 Winner: Junior or Senior Division: A $100 Barnes and Noble Gift Card, A PC USB Mini Refrigerator Fridge Beverage Drink Can Cooler/Warmer, And a Certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"

NDSSEF Association
Project in Biochemistry
1 Winner: Junior Division: A Cash Award of $50 And A Certificate
Jaxon Gronneberg, Griggs County Central School District, "What are the Effects of Acid Rain on Plant Growth?"

NDSSEF Association
Project in Biochemistry
1 Winner: Senior Division: A Cash Award of $50 And A Certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"
Department of Chemistry
Project in Chemistry
1 Winner: Junior Division: Monetary award of $50 and a certificate
Andrew Mehlhoff, Wing School District, "The Energy of Nuts"

Department of Chemistry
Project in Chemistry
1 Winner: Senior Division: Monetary award of $100 and a certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"

Earth/Atmospheric Sciences

Department of Atmospheric Sciences
Project in Atmospheric Sciences
1 Winner: Junior or Senior Division: Monetary award of $75 and a certificate
Jaxon Gronneberg, Griggs County Central School District, "What are the Effects of Acid Rain on Plant Growth?"

Department of Geography
Project in Geography
1 Winner: Junior Division: Monetary award of $50 and a certificate
Hannah Fischer, Wing School District, "Soil Stabilizer, Part 2"

Department of Geography
Project in Geography
1 Winner: Senior Division: Monetary award of $50 and a certificate
Hannah Johnson, Grenora School District, "Plant Growth Regulators and Fungicides on Wheat"

Harold Hamm School of Geology & Geological Engineering
Project in Geology/Geological Engineering
1 Winner: Senior Division: Monetary award of $100 and a certificate
Evan Friesz, Grant County School District, "Measuring Nitrogen in Soils"

American Society of Photogrammetry and Remote Sensing, Heartland Region
Project in Geospatial Mapping or Earth Science
1 Winner: Senior Division: Monetary award of $100 and a certificate
Evan Friesz, Grant County School District, "Measuring Nitrogen in Soils"
**North Dakota Geological Society**  
Project in Field of Geology or Earth Science  
1 Winner: Junior Division: A Cash Award of $50 And a Certificate  
Baxter Sand, Ashley School District, "Rainfall Infiltration on the Bale Grazing Sites"

**North Dakota Geological Society**  
Project in Field of Geology or Earth Science  
1 Winner: Senior Division: A Cash Award of $50 And a Certificate  
Grant Schneider, Ashley School District, "Red Worm Recyclers"

**American Meteorological Society**  
Project Related to Meteorology  
2 Winners: Junior or Senior Division: A Certificate  
Baxter Sand, Ashley School District, "Rainfall Infiltration on the Bale Grazing Sites"  
Jaxon Gronneberg, Griggs County Central School District, "What are the Effects of Acid Rain on Plant Growth?"

**Association For Women Geoscientists**  
Project Related to Geosciences  
1 Winner (Must Be A Female Exhibitor): Junior or Senior Division: A Certificate  
India Bender, Ashley School District, "Water Works"

**National Oceanic & Atmospheric Administration**  
Project Related to Improved Understanding of the Earth's Processes  
1 Winner: Junior Division: A Certificate And A Medallion  
Martha Isley, East Fairview School District, "Got Water"

**NASA Earth System Science Award**  
Project Related to Earth's Interconnected Systems  
1 Winner: Junior or Senior Division: A Certificate  
Caleb Hauck, Ellendale School District, "Return of the Salty Soil"

**Energy/Power/Electricity**

**Otter Tail Power Company**  
Project Related to Energy or Electricity  
3 Winners: Senior Division: A Cash Award of $50 And a Certificate  
India Bender, Ashley School District, "Water Works"  
Tanner Kempf, Ashley School District, "Wind Energy - The Power of Pulleys"  
Billy Hermes, Hankinson School District, "The Effects of Building Materials on WiFi Signal"

**Otter Tail Power Company**  
Project Related to Energy or Electricity  
2 Winners: Junior Division: A Cash Award of $50 And a Certificate  
Madelyn Schmidt, KC Tappen School District, "The Effect of Livestock Feed on the Production of Methane Gas from Manure"  
Andrew Mehlhoff, Wing School District, "The Energy of Nuts"
Xcel Energy
Project Related to Energy or Electricity
3 Winners: Junior Division: A Cash Award of $25 And a Certificate
Tavon Stadler, Griggs County Central School District, "Does a Vertical or Horizontal Axis Wind Turbine Produce the Most Electrical Output?"
Shane Waltner, Horse Creek School District, "This Little Light of Mine"
Madeleine Sandberg, Schroeder School District, "Drone-ing On"

Xcel Energy
Project Related to Energy or Electricity
3 Winners: Senior Division: A Cash Award of $25 And a Certificate
McKenna Binder, KC Tappen School District, "How Does the Shape of a Wind Turbine's Blade Affect the Voltage It Produces?"
Bradyn Lachenmeier, KC Tappen School District, "The Amount of Available Heat Energy Within Different Crop Residues and Forage Products"
Anne Kesler, Mandan School District, "Effect of the Amount and Color of Light on a Solar Cell"

UND Energy and Environmental Research Center
Project in Energy, Power, and Electricity
1 Winner: Senior Division: Monetary award of $100 and a certificate

Engineering

College of Engineering and Mines
Project in Engineering
1 Winner: Junior Division: Monetary award of $50 and a certificate
Dylan Peterson, Hankinson School District, "The Deflection of End Mills While Machining"

College of Engineering and Mines
Project in Engineering
1 Winner: Senior Division: Monetary award of $100 and a certificate
Isabelle Chambers, Inspire Innovation Lab School District, "Engineering a Device to Improve Vision via Photo Activation"

College of Engineering and Mines
Project in Engineering (Female Winner)
1 Winner: Senior Division: $500 UND Engineering scholarship and a certificate
Isabelle Chambers, Inspire Innovation Lab School District, "Engineering a Device to Improve Vision via Photo Activation"
Society of Automotive Engineers
Project in Mobility Engineering
1 Winner: Junior Division: A Cash Award of $100 And a Certificate
Shane Waltner, Horse Creek School District, "This Little Light of Mine"

Society of Automotive Engineers
Project in Mobility Engineering
1 Winner: Senior Division: A Cash Award of $100 And a Certificate

ASM Materials Education Foundation
Project in Materials Engineering
1 Winner: Junior or Senior Division: A Medallion And A Certificate
Andra Smith, Trinity Christian School District, "Sneaky Sounds"

Engineering

Department of Petroleum Engineering
Project in Engineering
1 Winner: Senior Division: Monetary award of $50 and a certificate
Alyssa Kemp, Cavalier School District, "Hydraulic Highways - An Investigation of Sub-surface Water Movement in Different Soil Types"

Engineering (Chemical)

Department of Chemical Engineering
Project in Chemical Engineering
1 Winner: Junior Division: Monetary award of $50 and a certificate
Trevor Olderbak, Schroeder School District, "Got Plastic?"

Department of Chemical Engineering
Project in Chemical Engineering
1 Winner: Senior Division: Monetary award of $50 and a certificate
Austyn Rafteseth, Grant County School District, "Is Dawn Dish Soap Really the Best Grease Fighter?"

Engineering (Civil)

Department of Civil Engineering
Project in Civil Engineering
1 Winner: Junior Division: Monetary award of $25 and a certificate
Cade Halvorson, Schroeder School District, "Shake it Up"

Department of Civil Engineering
Project in Civil Engineering
1 Winner: Senior Division: Monetary award of $25 and a certificate
Alex Vander Vorst, Strasburg School District, "Let's Get Bridgey With It"
Engineering (Electrical)

**Dr. Richard Schultz Award - Department of Electrical Engineering**
Project in Electrical Engineering
1 Winner: Junior Division: Monetary award of $50 and a certificate
Tavon Stadler, Griggs County Central School District, "Does a Vertical or Horizontal Axis Wind Turbine Produce the Most Electrical Output?"

**Dr. Richard Schultz Award - Department of Electrical Engineering**
Project in Electrical Engineering
1 Winner: Senior Division: Monetary award of $50 and a certificate
Tanner Kempf, Ashley School District, "Wind Energy - The Power of Pulleys"

**IEEE Red River Valley Section**
Project in Electrical Engineering
1 Winner: Senior Division: Monetary award of $50 and a certificate
Billy Hermes, Hankinson School District, "The Effects of Building Materials on WiFi Signal"

**IEEE Red River Valley Section**
Project in Electrical Engineering
1 Winner: Junior Division: Monetary award of $50 and a certificate
Madalynn Sauter, Grant County School District, "Can I Make a Robot That Can Feed My Cows via Remote?"

Engineering (Mechanical)

**Department of Mechanical Engineering**
Project in Mechanical Engineering
1 Winner: Junior Division: Monetary award of $50 and a certificate
Madeleine Sandberg, Schroeder School District, "Drone-ing On"

**Department of Mechanical Engineering**
Project in Mechanical Engineering
1 Winner: Senior Division: Monetary award of $50 and a certificate
Hayden German, Hankinson School District, "The Performance of Biodegradable Cutting Oils in Drilling Applications"
Environmental Sciences

**College of Engineering and Mines**  
Project in Energy/Environmental Science  
1 Winner: Senior Division: Monetary award of $100 and a certificate  

**Coalition For Conservation & Environmental Education**  
Outstanding Environmental Project  
1 Winner: Senior Division: A Cash Award of $50, A Large Purple Rosette Ribbon, And a Certificate  
Monica Zent, Dickinson School District, "Effects of ND Road Dust on A. Thaliana: An Assay of Chlorophyll & Ascorbate Peroxidase"

**Coalition For Conservation & Environmental Education**  
Outstanding Environmental Project  
1 Winner: Junior Division: A Cash Award of $50, A Large Purple Rosette Ribbon, And a Certificate  
Madelyn Schmidt, KC Tappen School District, "The Effect of Livestock Feed on the Production of Methane Gas from Manure"

**Ricoh Corporation**  
Project Related to Environmentally Friendly Businesses  
1 Winner: Senior Division: A Certificate  
Desa Sand, Ellendale School District, "The Importance of Soil Carbon Sequestration"

**NDSSEF Association**  
Project Related to Environmental Remediation  
1 Winner: Junior Division: A Cash Award of $50 And A Certificate  
Maezy Myers, Griggs County Central School District, "The Effect of Crop Runoff on Micro Organisms"

**NDSSEF Association**  
Project Related to Environmental Remediation  
1 Winner: Senior Division: A Cash Award of $50 And A Certificate  
Alyssa Kemp, Cavalier School District, "Hydraulic Highways - An Investigation of Sub-surface Water Movement in Different Soil Types"
Human Nutrition/Nursing

**Department of Nutrition & Dietetics**
Project in Nutrition and Food Science
1 Winner: Junior Division: Monetary award of $25 and a certificate
Molly Setchfield, Trinity Christian School District, "Oh What A Relief It Is"

**Department of Nutrition & Dietetics**
Project in Nutrition and Food Science
1 Winner: Senior Division: Monetary award of $50 and a $250 Nutrition scholarship and a certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"

**Hot Cakes Café Excellence in Science Award**
Project That Has Emphasis on Food Quality or Food Safety
1 Winner: Junior or Senior Division: A Cash Award of $25 And a Certificate
Emma Kratcha, Hankinson School District, "Using Natural Enhancements to Improve Quality and Quantity of Sweet Corn"

**ISEF Alumni**

**ISEF Alumni**
Project as Determined by ISEF Judges
1 Winner: Junior or Senior Division: A Cash Award of $200 And a Certificate

**ISEF Alumni**
Project as Determined by ISEF Judges
1 Winner: Junior or Senior Division: A Cash Award of $100 And a Certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"

**Life Sciences**

**Department of Biomedical Sciences**
Project in Area of Life Sciences (Molecular Biology Emphasis)
2 Winners: Junior Division: Monetary award of $50 and a certificate
Andrew Mehlhoff, Wing School District, "The Energy of Nuts"
Trevor Olderbak, Schroeder School District, "Got Plastic?"

**Department of Biomedical Sciences**
Project in Area of Life Sciences (Molecular Biology Emphasis)
2 Winners: Senior Division: Monetary award of $50 and a certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"
Monica Zent, Dickinson School District, "Effects of ND Road Dust on A. Thaliana: An Assay of Chlorophyll & Ascorbate Peroxidase"
Department of Biology
Project in Biology
1 Winner: Junior Division: Monetary award of $50 and a certificate
Emma Kratcha, Hankinson School District, "Using Natural Enhancements to Improve Quality and Quantity of Sweet Corn"

Department of Biology
Project in Biology
1 Winner: Senior Division: Monetary award of $100 and a $300 Biology scholarship and a certificate
Grant Schneider, Ashley School District, "Red Worm Recyclers"

North Dakota Veterinary Medical Association
Project Related to Veterinary Medicine
1 Winner: Senior Division: A Cash Award of $100 And a Certificate
Calli Hauck, Ellendale School District, "Does Age Matter?"

North Dakota Veterinary Medical Association
Project Related to Veterinary Medicine
1 Winner: Senior Division: A Cash Award of $75 And a Certificate
Abigail Larson, Tioga School District, "No Not the Trailer"

North Dakota Veterinary Medical Association
Project Related to Veterinary Medicine
1 Winner: Junior Division: A Cash Award of $25 And a Certificate
Jack VenHeuizen, Griggs County Central School District, "Effect of Color on Salt Intake in Bovine"

Auxiliary to the North Dakota Veterinary Medical Association
Project Related to Veterinary Medicine
1 Winner: Junior Division: A Cash Award of $50 And a Certificate
Rory Cozzens, East Fairview School District, "Does Light Affect The Amount of Egg Production?"

NDSSEF Association
Project in Botany
1 Winner: Junior Division: A Cash Award of $50 And A Certificate
Thomas Tiegs, Ellendale School District, "Potassium Rich Corn"

NDSSEF Association
Project in Botany
1 Winner: Senior Division: A Cash Award of $50 And A Certificate
Hannah Johnson, Grenora School District, "Plant Growth Regulators and Fungicides on Wheat"

Kingsbury Family
Outstanding Life Science Project
1 Winner: Junior or Senior Division: Monetary award of $25 and a plaque
Maezy Myers, Griggs County Central School District, "The Effect of Crop Runoff on Micro Organisms"
Mathematics/Computer Science

Intel Excellence In Computer Science
Project in Computer Science Category
1 Winner:  Senior Division: A Cash Award of $200 And A Certificate
Brian Sisk, St. Thomas School District , "How should you drive from now on?"

Mu Alpha Theta
Project Involving Modern Mathematics
1 Winner: Senior Division: A Certificate
Riley McLean, St. Mary's School District , "Are YOU What Your MOTHER Eats?"

Department of Computer Science
Project in Computer Science
1 Winner:  Junior Division: Monetary award of $50 and a certificate
Isaac Leopold, Inspire Innovation Lab School District , "Makey'ing a Game"

Department of Computer Science
Project in Computer Science
1 Winner:  Senior Division: Monetary award of $50 and a certificate
Isabelle Chambers, Inspire Innovation Lab School District , "Engineering a Device to Improve Vision via Photo Activation"

Department of Mathematics
Project in Mathematics
1 Winner:  Junior Division: Monetary award of $50 and a certificate
Owen Reilly, Schroeder School District , "Resistance is Futile"

Department of Mathematics
Project in Mathematics
1 Winner:  Senior Division: Monetary award of $100 and a $500 Mathematics scholarship and a certificate
Juliann Spilman, Mandan School District , "UV Treatman of Dental Appliances"

Medicine/Health

Department of Pathology/ND INBRE
Project in Medical or Health Sciences
1 Winner:  Junior Division: Monetary award of $50 and a certificate
Ashton Smith, Griggs County Central School District , "Breath of Life"

Department of Pathology/ND INBRE
Project in Medical or Health Sciences
1 Winner:  Senior Division: Monetary award of $100 and a certificate
Josianna Prochnow, Hankinson School District , "A Quantitative Analysis of the Presence and Absence of a Variety of Mold Groups"
School of Medicine & Health Sciences
Project in Medical or Health Sciences
1 Winner: Senior Division: Monetary award of $100 and a certificate
Isabelle Chambers, Inspire Innovation Lab School District, "Engineering a Device to Improve Vision via Photo Activation"

School of Medicine & Health Sciences
Project in Medical or Health Sciences
1 Winner: Senior Division: Monetary award of $50 and a certificate
Grace Hove, Trenton School District, "What Works Best?"

School of Medicine & Health Sciences
Project in Medical or Health Sciences
1 Winner: Junior Division: Monetary award of $100 and a certificate
Alexis Kempf, Ashley School District, "The Dirty Truth"

Department of Biomedical Sciences
Project in Medical or Health Sciences
1 Winner: Junior Division: Monetary award of $100 and a certificate
Ellie Brown, Griggs County Central School District, "Practice vs. Visualization"

Department of Biomedical Sciences
Project in Medical or Health Sciences
1 Winner: Senior Division: Monetary award of $100 and a certificate
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"

North Dakota Dental Foundation
Project Related to Dentistry
2 Winners: Junior Division: A Cash Award of $50 And a Certificate
Abigail Scheuring, Hankinson School District, "Antibacterial Effectiveness of Toothpaste"
Alexis Kempf, Ashley School District, "The Dirty Truth"

North Dakota Dental Foundation
Project Related to Dentistry
2 Winners: Senior Division: A Cash Award of $50 And a Certificate
Taytum Kreil, Trenton School District, "A Mouthful of Bacteria"
Juliann Spilman, Mandan School District, "UV Treatment of Dental Appliances"

North Dakota Academy of Family Physicians
Project Related to Medicine
1 Winner: Senior Division: A Cash Award of $50 And a Certificate
Megan Schiltz, Hankinson School District, "The Physical and Biological Effect of Diabetes on the Body"
North Dakota Society for Clinical Laboratory
Project Related to Laboratory Medicine
3 Winners: Senior Division: A Cash Award of $50 And a Certificate
Kathleen Schmidt, Ashley School District, "Identifying Protists"
Josianna Prochnow, Hankinson School District, "A Quantitative Analysis of the Presence and Absence of a Variety of Mold Groups"
Bryan Martinez, Trenton School District, "Nanosilver: Biohazard or Breakthrough"

North Dakota Society for Clinical Laboratory
Project Related to Laboratory Medicine
3 Winners: Junior Division: A Cash Award of $50 And a Certificate
Devika Jagadish, Schroeder School District, "Filthy Food's Frenzy"
JayCee Richter, Linton School District, "Skin So Soft"
Molly Setchfield, Trinity Christian School District, "Oh What A Relief It Is"

Microbiology/Pharmacology

Department of Biomedical Sciences
Project in Pharmacology/Immunology
1 Winner: Junior Division: Monetary award of $100 and a certificate
Abigail Scheuring, Hankinson School District, "Antibacterial Effectiveness of Toothpaste"

Department of Biomedical Sciences
Project in Pharmacology/Immunology
1 Winner: Senior Division: Monetary award of $100 and a certificate
Dylan Benson, Hankinson School District, "Effects of Household Remedies on Mold"

Department of Biomedical Sciences
Project in Microbiology/Infectious Disease
2 Winners: Junior Division: Monetary award of $50 and a certificate
Dylan Lachenmeier, KC Tappen School District, "Antimicrobial or Not!"
Maezy Myers, Griggs County Central School District, "The Effect of Crop Runoff on Microorganisms"

Department of Biomedical Sciences
Project in Microbiology/Infectious Disease
2 Winners: Senior Division: Monetary award of $100 and a certificate
Josianna Prochnow, Hankinson School District, "A Quantitative Analysis of the Presence and Absence of a Variety of Mold Groups"
Dylan Benson, Hankinson School District, "Effects of Household Remedies on Mold"
North Dakota Pharmacists Association
Project in Field of Pharmacology
1 Winner: Junior Division: A Cash Award of $75 And a Certificate
Ally Habib, Hankinson School District, "A Microbiological Analysis of Essential Oil Use"

North Dakota Pharmacists Association
Project in Field of Pharmacology
1 Winner: Senior Division: A Cash Award of $100 And a Certificate
Britney Freund, Lakota School District, "Is Nanosilver Affecting Organisms Living in Water?"

Military

Navy
Project (All Categories Considered)
3 Winners: Senior Division: An Educational Recognition Award Valued at $75, A Medallion, And a Certificate
Billy Hermes, Hankinson School District, "The Effects of Building Materials on WiFi Signal"
Andra Smith, Trinity Christian School District, "Sneaky Sounds"

Navy
Project (All Categories Considered)
3 Winners: Junior Division: A Medallion And a Certificate
Madeleine Sandberg, Schroeder School District, "Drone-ing On"
Ann Estvold, Lakota School District, "What Makes Steel Rust?"
Josiah Duckworth, JCCA School District, "The Strength of Bridges"

Air Force
Project That Has Applications Useful to Air Force
4 Winners: Junior or Senior Division: An Over-the-Should Sling Pack, Power Bank Charger, Dog Tag USB Flash Drive, A Dual USB Car Charger, a Blue Tooth Speaker, And a Certificate
Madeleine Sandberg, Schroeder School District, "Drone-ing On"
Billy Hermes, Hankinson School District, "The Effects of Building Materials on WiFi Signal"
Tavon Stadler, Griggs County Central School District, "Does a Vertical or Horizontal Axis Wind Turbine Produce the Most Electrical Output?"
Physics/Astronomy

**Department of Physics & Astrophysics**
Project in Physics & Astronomy
1 Winner: Junior Division: Monetary award of $100 and a certificate
Shane Waltner, Horse Creek School District, "This Little Light of Mine"

**Department of Physics & Astrophysics**
Project in Physics & Astronomy
1 Winner: Senior Division: Monetary award of $100 and a $500 Physics scholarship and a certificate

**North Dakota Physics Teachers**
Project in Area of Physics or Physical Science
1 Winner: Senior Division: A Cash Award of $20, T-Shirt, And a Certificate
Tanner Kempf, Ashley School District, "Wind Energy - The Power of Pulleys"

**North Dakota Physics Teachers**
Project in Area of Physics or Physical Science
1 Winner: Junior Division: A Cash Award of $20, T-Shirt, And a Certificate
Owen Reilly, Schroeder School District, "Resistance is Futile"

**United States Metric Association**
Project Using Metric System for Measurements
5 Winners: Junior or Senior Division: A Certificate
Tanner Kempf, Ashley School District, "Wind Energy - The Power of Pulleys"
Kaylee Kemp, Cavalier School District, "Rainbow Rays - The Effect of Colored Light on Respiration Rates of Yeast"
Owen Reilly, Schroeder School District, "Resistance is Futile"
Anne Kleven, Schroeder School District, "Easy Breezy"
Medora Brandner, Griggs County Central School District, "Does Spatter Matter"

Social/Behavioral Sciences

**Department of Psychology**
Project in Psychology or Behavioral Science
2 Winners: Junior Division: Monetary award of $100 each and a certificate
Angelica Alexandrow, Stony Creek School District, "Can People ID Artificial Smells From Real Smells?"
Blake Bernhardt, Wing School District, "The Cat's Meow"

**Department of Psychology**
Project in Psychology or Behavioral Science
2 Winners: Senior Division: Monetary award of $100 each and a certificate
Nokomis Poitra, Trenton School District, "Beauty and the Bully"
Grace Woodstead, Griggs County Central School District, "Pitch Switch"
Virginia George Inheritance Fund
Project in Social or Behavioral Science
1 Winner: Senior Division: Monetary award of $125 and a certificate
Allison Galbreath, KC Steele School District, "Recollect-ID"

Virginia George Inheritance Fund
Project in Social or Behavioral Science
1 Winner: Junior Division: Monetary award of $75 and a certificate
Jessa Heidrich, Strasburg School District, "Stretching Memory"

Association of North Dakota Geographers
Project in Human-Environment Interaction
1 Winner: Senior Division: Monetary award of $125 and a certificate
Bryan Martinez, Trenton School District, "Nanosilver: Biohazard or Breakthrough"

American Psychological Association
Project Related to Psychology
1 Winner: Junior or Senior Division: A Certificate
Ellie Brown, Griggs County Central School District, "Practice vs. Visualization"

Sweepstakes

Yale Science And Engineering Association
Project in Areas of Computer Science, Engineering, Physics, or Chemistry
1 Winner: Senior Division: A Medallion and A Certificate
Megan Schiltz, Hankinson School District, "The Physical and Biological Effect of Diabetes on the Body"

Water Quality

American Water Works Association
Project Related to Drinking Water Quality
1 Winner: Junior Division: A Cash Award of $75 and a Certificate
Macy Herda, Lakota School District, "From Contaminated to Clean"

American Water Works Association
Project Related to Drinking Water Quality
1 Winner: Senior Division: A Cash Award of $75 and a Certificate
Quinn Mellmer, Scranton School District, "Whoa, H2O"

North Dakota Water Environment Association
Project Related to Water Quality
1 Winner: Senior Division: A Cash Award of $75 and a Plaque
Alyssa Kemp, Cavalier School District, "Hydraulic Highways - An Investigation of Sub-surface Water Movement in Different Soil Types"
North Dakota Water Environment Association
Project Related to Water Quality
1 Winner: Junior Division: A Cash Award of $75 And a Plaque
Maezy Myers, Griggs County Central School District, "The Effect of Crop Runoff on Micro Organisms"

North Dakota Rural Water Systems Association
Project Related to Water Quality
1 Winner: Senior Division: A Cash Award of $100 And a Certificate
Alyssa Kemp, Cavalier School District, "Hydraulic Highways - An Investigation of Sub-surface Water Movement in Different Soil Types"

North Dakota Rural Water Systems Association
Project Related to Water Quality
5 Winners: Junior or Senior Division: A Cash Award of $50 and a certificate
Bryan Martinez, Trenton School District, "Nanosilver: Biohazard or Breakthrough"
Allison Roth, KC Tappen School District, "What's the Best Water Filter Design?"
Riley McLean, St. Mary's School District, "Are YOU What Your MOTHER Eats?"
Adeline Norgaard, Tioga School District, "Does Hydrogen Peroxide Equal Happy Plants"
Maezy Myers, Griggs County Central School District, "The Effect of Crop Runoff on Micro Organisms"

Water Environment Federation
Project Related to Water Quality or Water Conditions
1 Winner: Junior or Senior Division: A Certificate
Caleb Hauck, Ellendale School District, "Return of the Salty Soil"