

2017 – Final Awards – ND State Science & Engineering Fair

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 Dakota 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

Eric Spilman, Mandan School District , “Waste Heat Recovery to Reduce Engine Emissions”

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

Josianna Prochnow, Hankinson School District , "A Quantitative Analysis of the Presence and Absence of a Variety of Mold Groups”

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”

2nd Finalist: Andra Smith, Trinity Christian School District, “Sneaky Sounds”

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

1st Finalist: Wesley Kemp, Cavalier School District, “Benford’s Law vs the Boom – A Statistical Analysis of North Dakota Population – 1980 to 2015”

1st Alternate: Alyssa Kemp, Cavalier School District, “Hydraulic Highways – An Investigation of Sub-surface Water Movement in Different Soil Types”

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 Finalist: Addie Schnabel, Ashley School District, “Does Water pH Affect Plant Growth?”

2nd Finalist: Tanner Kempf, Ashley School District, “Wind Energy – The Power of Pulleys”

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

2nd Alternate: Bradyn Lachenmeier, Kidder County Tappen School District, “The Amount of Available Heat Energy Within Different Crop Residues and Forage Products”

Southeast Region

1st Finalist: Dylan Benson, Hankinson School District, “Effects of Household Remedies on Mold”

1st Alternate: Billy Hermes, Hankinson School District, “The Effects of Building Materials on WiFi Signal”

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”
- 2nd Place: Adeline Norgaard, Tioga School District, “Does Hydrogen Peroxide Equal Happy Plants”
- 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”
- 3rd Place: Angie Vetter, Linton School District, “Luck of the Draw”
- 4th Place: Blake Bernhardt, “Wing School District, “The Cat’s Meow”

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?”
- 4th Place: Danielle Gilstad, “Ashley School District, “The Effectiveness of Different Brands of Hand Sanitizers”

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

Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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
Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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 Bridgery 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

Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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

Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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 Treatment 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 Micro Organisms"

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"

Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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-Shoulder 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?"

Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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
Eric Spilman, Mandan School District , "Waste Heat Recovery to Reduce Engine Emissions"

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"