

2017 FINAL AWARDS

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

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”

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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

North Dakota State Science and Engineering Fair

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

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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?"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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 State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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?"

North Dakota State Science and Engineering Fair

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?"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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?"

North Dakota State Science and Engineering Fair

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 State Science and Engineering Fair

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?"

North Dakota State Science and Engineering Fair

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?"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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 State Science and Engineering Fair

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 State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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 State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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"

North Dakota State Science and Engineering Fair

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 State Science and Engineering Fair

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"