

2018 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 Pittsburgh Pennsylvania 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 Pittsburgh Pennsylvania 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 Pittsburgh Pennsylvania and will exhibit his/her project.

Senior Division – 1st Place – Sweepstakes Winner

Abigail Post, Hankinson School District, "Air Quality: A Quantitative Approach to Small and Large Particles "

North Dakota State Science and Engineering Fair

Senior Division – 2nd Place – Sweepstakes Runner-Up

Juliann Spilman, Mandan School District, "Enhanced Biofilter Control of CAFO Air Emissions"

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

Alyssa Kemp, Cavalier School District, "Buffering the Bloom – The Effect of Agricultural Buffer Zones on Pond Eutrophication"

Senior Division Place Winners

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

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

Northwest Region

1st Finalist: Abigail Larson, Tioga School District, "A Better Way to Wean"

2nd Finalist: Hannah Johnson, Grenora School District, "Are Plant Growth Regulators Always Effective When Treating Wheat?"

3rd Finalist: Mikayla Wolfe, Tioga School District, "Whistle While You Work It"

1st Alternate: Katia Gibeau, Trenton School District, "Water Watch"

2nd Alternate: Arabella Andersen, Grenora School District, "Power of Suggestion"

North Dakota State Science and Engineering Fair

Northeast Region

1st Finalist: Britney Freund, Lakota School District, "Under Which Conditions do Planaria Regenerate Fastest?"

1st Alternate: Matt Koski, Lakota School District, "Which Organic Fertilizer Is Most Efficient ... Phase 2"

2nd Alternate: Wesley Kemp, Cavalier School District, "True or False and ABC -The Mathematics Behind Multiple Choice "

Southwest Central Region

1st Finalist: Pamela Nash, Strasburg School District, "Does Mental Practice Make Perfect?"

2nd Finalist: Mya Vetter, Linton School District, "Bat Consumption of Ostrinia Nubilalis, European Corn Borer"

1st Alternate: Abbigale Steeke, Scranton School District, "Feed Intake and Efficiency of Beef Cattle" 2nd Alternate: Avery Roth, Grant County School District, "Do environmental changes alter or impact the sex of a beef calf from a natural breeding?"

Southeast Central Region

1st Finalist: Kathleen Schmidt, Ashley School District, "Belly Button Bacteria"

2nd Finalist: Addie Schnabel, Ashley School District, "Nitrogen Fixation Biological vs. Synthetic Agents"

1st Alternate: Tanner Kempf, Ashley School District, "Wind Energy: DC Motor vs. Alternator"

2nd Alternate: Nicole Schmidt, Ashley School District, "Antibiotic vs. Bacteria"

North Dakota State Science and Engineering Fair

Southeast Region

1st Finalist: Emerson Falk, Hankinson School District, "An Antibacterial and Antifungal Comparison of Countertop Disinfectants "

1st Alternate: Hayden German, Hankinson School District, "The Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

2nd Alternate: Josianna Prochnow, Hankinson School District, "Monitoring Mold and Mycotoxin Exposure Through the Duration of Corn Harvest"

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, "Determining the Effects of Seed Size and Additives on Crusting and Compaction"

Junior Division 2nd Place – Sweepstakes Runner-Up

Halle Rivinius, Grant County School District, "Which environmental area will result in the most microbial growth?"

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 School District, "I'm Going to Let it Shine"

2nd Place: Angelica Alexandrou, Stony Creek School District, "To Game or Not to Game"

3rd Place: Isaiah Zochert, Tioga School District, "Water Filtration"

4th Place: Dani Berry, East Fairview School District, "Let it Grow"

Northeast Region

1st Place: Jaden Chine, Schroeder Middle School District, "Dehydration Station"

2nd Place; Nauman Farid, Schroeder Middle School District, "Silence Is Golden"

3rd Place: Sophus Hammond, Cayden Reed, Valley Middle School District, "A.N.T.S."

4th Place: Kaylee Kemp, Cavalier School District, "Don't Tread on Me. An Investigation on Athletic Shoe Tread Design and the Coefficient of Friction"

Southwest Central Region

1st Place: Derek Vetter, Linton School District, "Super Soil"

2nd Place: Blake Bernhardt, Wing School District, "Alternative Centrifuges"

3rd Place: Bailee Pierce, Scranton School District, "Nothing but Net"

4th Place: Alora Kroh, Emma Helbling, Mandan School District, "Will Hydroponic Plants Develop Faster"

North Dakota State Science and Engineering Fair

Southeast Central Region

1st Place: Jackson Meidinger, Ashley School District, "Writing with Bacteria"

2nd Place: Hannah Seefeld, Ellendale School District, "What's in Your Soil?"

3rd Place: Marshall Lindgren, Ashley School District, "Flushing Ewes"

4th Place: Katrina Gojkovich, Ashley School District, "Do Plants Have Favorite Colors?"

Southeast Region

1st Place: Jaxon Gronnenberg, Griggs County Central School District, "Escherichia coli Bacteria Resistance to Antibiotics"

2nd Place: Aaron Moser, Griggs County Central School District, "Effects of Circumstance on Regeneration "

3rd Place: Jack VenHuizen, Griggs County Central School District, "Comparison of Bovine Phenotype and Genotype"

4th Place: Jacob Wolf, Oak Grove Lutheran School District, "Protecting Athletes in Football"

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, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

North Dakota State Science and Engineering Fair

North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

1 Winner: Senior Division: A Cash Award of \$50 and a Certificate

Addie Schnabel, Ashley School District, "Nitrogen Fixation Biological vs. Synthetic Agents"

North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

1 Winner: Junior Division: A Cash Award of \$150 and a Certificate

Hannah Seefeld, Ellendale School District, "What's in Your Soil?"

North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

1 Winner: Junior Division: A Cash Award of \$50 and a Certificate

Derek Vetter, Linton School District, "Super Soil"

Farmers Union Insurance - North Dakota

Project Related to Agriculture

2 Winners: Senior Division: A Cash Award of \$50 and a Certificate

Juliann Spilman, Mandan School District, "Enhanced Biofilter Control of CAFO Air Emissions" Abbigale Steeke, Scranton School District, "Feed Intake and Efficiency of Beef Cattle"

North Dakota State Science and Engineering Fair

Farmers Union Insurance - North Dakota

Project Related to Agriculture

2 Winners: Junior Division: A Cash Award of \$25 and a Certificate

Lindsey Vachal, Tioga School District, "Grow, Grow, Grow"

Alivia Erickson, Griggs County Central School District, "Effect of Sulfur on Plants"

North Dakota Farm Bureau

Project Related to Agriculture

2 Winners: Junior Division: A Cash Award of \$25 and a Certificate

Jack VenHuizen, Griggs County Central School District, "Comparison of Bovine Phenotype and Genotype"

Emma Kratcha, Hankinson School District, "Determining the Effects of Seed Size and Additives on Crusting and Compaction"

North Dakota Farm Bureau

Project Related to Agriculture

2 Winners: Senior Division: A Cash Award of \$25 and a Certificate

Josianna Prochnow, Hankinson School District, "Monitoring Mold and Mycotoxin Exposure Through the Duration of Corn Harvest"

Benjamin Krump, Hankinson School District, "A Quality Analysis of Meats from Various Beef Breeds"

North Dakota State Science and Engineering Fair

Chemistry/Biochemistry

Department of Chemistry

Project in Chemistry

1 winner: Junior Division: Monetary award of \$50 and a certificate

Clara Green, Camille Finney, Cloe Haakenson, Valley Middle School District, "Air Pollution is Getting Closer To Home"

Department of Chemistry

Project in Chemistry

1 winner: Senior Division: Monetary award of \$100 and a certificate

Addie Schnabel, Ashley School District, "Nitrogen Fixation Biological vs. Synthetic Agents"

American Association for Clinical Chemistry

Project in Clinical Chemistry

1 Winner: Senior Division: A Cash Award of \$100 and a Certificate

Aubrey Henson, Tioga School District, "Stronger than Pain"

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, an Ultimate Geek Pen, and a Certificate

Andrew Mehlhoff, Wing School District, "DeNova Synthesis of Chlamydomonas Rienhardtii"

North Dakota State Science and Engineering Fair

NDSSEF Association

Project in Biochemistry

1 Winner: Junior Division: A Cash Award of \$50 and A Certificate

Aaron Moser, Griggs County Central School District, "Effects of Circumstance on Regeneration"

NDSSEF Association

Project in Biochemistry

1 Winner: Senior Division: A Cash Award of \$50 and A Certificate

Kathryn Slavick, Mandan School District, "Effects of Breakfast Foods on Hunger and Calorie Consumption with Consideration of Blood Glucose Levels"

Earth/Atmospheric Sciences

Department of Atmospheric Sciences

Project in Atmospheric Sciences

1 winner: Junior or Senior Division: Monetary award of \$75 and a certificate

Abigail Post, Hankinson School District, "Air Quality: A Quantitative Approach to Small and Large Particles"

Department of Geography

Project in Geography

1 winner: Junior Division: Monetary award of \$50 and a certificate

Baxter Sand, Ashley School District, "Forage Clippings"

North Dakota State Science and Engineering Fair

Department of Geography

Project in Geography

1 winner: Senior Division: Monetary award of \$50 and a certificate

Laura Muggli, Grant County School District, "How much glyphosate can be detected in wheat areas that have been desiccated?"

Harold Hamm School of Geology & Geological Engineering

Project in Geology/ Geological Engineering

1 winner: Junior Division: Monetary award of \$100 and a certificate

Emma Kratcha, Hankinson School District, "Determining the Effects of Seed Size and Additives on Crusting and Compaction"

Harold Hamm School of Geology & Geological Engineering

Project in Geology/ Geological Engineering

1 winner: Senior Division: Monetary award of \$100 and a certificate

Tanner Kempf, Ashley School District, "Wind Energy: DC Motor vs. Alternator"

North Dakota Geological Society

Project in Field of Geology or Earth Science

1 Winner: Junior Division: A Cash Award of \$50 and a Certificate

Derek Vetter, Linton School District, "Super Soil"

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

Juliann Spilman, Mandan School District, "Enhanced Biofilter Control of CAFO Air Emissions"

American Meteorological Society

Project Related to Meteorology

2 Winners: Junior or Senior Division: A Certificate

Jacob Russell, Ellendale School District, "Solar Vexing"

Clara Green, Camille Finney, Cloe Haakenson, Valley Middle School District, "Air Pollution is Getting Closer To Home"

Association For Women Geoscientists

Project Related to Geosciences

1 Winner (Must Be A Female Exhibitor): Junior or Senior Division: A Certificate

Emma Kratcha, Hankinson School District, "Determining the Effects of Seed Size and Additives on Crusting and Compaction"

National Oceanic & Atmospheric Administration

Project Related to Improved Understanding of the Earth's Processes

1 Winner: Junior Division: A Certificate and A Medallion

Kyra Goeb, Trenton School District, "Death Rays"

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

Alyssa Kemp, Cavalier School District, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

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

Sarah Farmer, Trenton School District, "Burning Biofuels"

Tanner Kempf, Ashley School District, "Wind Energy: DC Motor vs. Alternator"

Grant Schneider, Ashley School District, "Fidgeting for Electricity"

Otter Tail Power Company

Project Related to Energy or Electricity

2 Winners: Junior Division: A Cash Award of \$50 and a Certificate

John Vandeberg, Saphire Boehm, Chris Stahlmen, Valley Middle School District, "Motor Of The Future"

Sophus Hammond, Cayden Reed, Valley Middle School District, "A.N.T.S."

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

John Vandeberg, Sapphire Boehm, Chris Stahlmen, Valley Middle School District, "Motor Of The Future"

Lucas Martinez, KC Tappen School District, "A Battery That Makes Cents"

Kayedenn Rivinius, Grant County School District, "How do you cool a house using water?"

Xcel Energy

Project Related to Energy or Electricity

3 Winners: Senior Division: A Cash Award of \$25 and a Certificate

David Steinke, Hope School District, "Full Steam Ahead"

Alexis Kempf, Ashley School District, "Solar Situation"

Grant Schneider, Ashley School District, "Fidgeting for Electricity"

UND Energy and Environmental Research Center

Project in Energy, Power, and Electricity

1 Winner: Senior Division: Monetary award of \$100 and a certificate

Juliann Spilman, Mandan School District, "Enhanced Biofilter Control of CAFO Air 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

Nauman Farid, Schroeder Middle School School District, "Silence Is Golden"

College of Engineering and Mines

Project in Engineering

1 Winner: Senior Division: Monetary award of \$100 and a certificate

Hayden German, Hankinson School District, "The Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

College of Engineering and Mines

Project in Engineering (Female Winner)

1 Winner: Senior Division: Monetary award of \$100 and a \$500 UND Engineering scholarship and a certificate

Juliann Spilman, Mandan School District, "Enhanced Biofilter Control of CAFO Air Emissions"

Society of Automotive Engineers

Project in Mobility Engineering

1 Winner: Junior Division: A Cash Award of \$100 and a Certificate

Taden Robinson, Stony Creek School District, "Tire with the Most Grab"

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

Dylan Peterson, Hankinson School District, "The Effects of Weight Distribution on Trailer Handling"

Department of Petroleum Engineering

Project in Engineering

1 winner: Senior Division: Monetary award of \$50 and a certificate

Sarah Farmer, Trenton School District, "Burning Biofuels"

Engineering (Chemical)

Department of Chemical Engineering

Project in Chemical Engineering

1 winner: Junior Division: Monetary award of \$50 and a certificate Kyra Goeb, Trenton School District, "Death Rays"

Department of Chemical Engineering

Project in Chemical Engineering

1 winner: Senior Division: Monetary award of \$50 and a certificate Joshua Olson, Ellendale School District, "Plant Power!"

North Dakota State Science and Engineering Fair

Engineering (Civil)

Department of Civil Engineering

Project in Civil Engineering

1 winner: Junior Division: Monetary award of \$25 and a certificate

Quinn Roehl, Valley Middle School School District, "Shelter for Refugees"

Department of Civil Engineering

Project in Civil Engineering

1 winner: Senior Division: Monetary award of \$25 and a certificate

Ben Hulm, Strasburg School District, "Bridge Busting"

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

Shane Waltner, Horse Creek School District, "I'm Going to Let it Shine"

Dr. Richard Schultz Award - Department of Electrical Engineering

Project in Electrical Engineering

1 winner: Senior Division: Monetary award of \$50 and a certificate

Alexis Kempf, Ashley School District, "Solar Situation"

North Dakota State Science and Engineering Fair

IEEE Red River Valley Section

Project in Electrical Engineering

1 Winner: Senior Division: Monetary award of \$50 and a certificate

Tanner Kempf, Ashley School District, "Wind Energy: DC Motor vs. Alternator"

IEEE Red River Valley Section

Project in Electrical Engineering

1 Winner: Junior Division: Monetary award of \$50 and a certificate

John Vandenberg, Sapphire Boehm, Chris Stahlmen, Valley Middle School District, "Motor Of The Future"

Engineering (Mechanical)

Department of Mechanical Engineering

Project in Mechanical Engineering

1 winner: Junior Division: Monetary award of \$50 and a certificate

Sophus Hammond, Cayden Reed, Valley Middle School District, "A.N.T.S."

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 Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

North Dakota State Science and Engineering Fair

Environmental Sciences

College of Engineering and Mines

Project in Energy/Environmental Science

1 Winner: Senior Division: Monetary award of \$100 and a certificate

Alyssa Kemp, Cavalier School District, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

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 Mya Vetter, Linton School District, "Bat Consumption of Ostrinia Nubilalis, European Corn Borer"

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 Katrina Gojkovich, Ashley School District, "Do Plants Have Favorite Colors?"

Ricoh Corporation

Project Related to Environmentally Friendly Businesses

1 Winner: Senior Division: A Certificate

Tiffany Engelhart, Ashley School District, "GMO vs. Non-GMO"

North Dakota State Science and Engineering Fair

NDSSEF Association

Project Related to Environmental Remediation

1 Winner: Junior Division: A Cash Award of \$50 and A Certificate

Allison Engelhart, Ashley School District, "Manure vs. Fertilizer"

NDSSEF Association

Project Related to Environmental Remediation

1 Winner: Senior Division: A Cash Award of \$50 and A Certificate

Alyssa Kemp, Cavalier School District, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

Human Nutrition/Nursing

Department of Nutrition & Dietetics

Project in Nutrition and Food Science

1 winner: Junior Division: Monetary award of \$25 and a certificate

Bjorn Eide, Oak Grove Lutheran School District, "Teens Addicted to their Phones"

Department of Nutrition & Dietetics

Project in Nutrition and Food Science

1 winner: Senior Division: Monetary award of \$50 and a \$250 UND Nutrition scholarship and a certificate

Kathleen Schmidt, Ashley School District, "Belly Button Bacteria"

North Dakota State Science and Engineering Fair

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

Benjamin Krump, Hankinson School District, "A Quality Analysis of Meats from Various Beef Breeds"

ISEF Alumni

ISEF Alumni

Project as Determined by ISEF Judges

1 Winner: Junior or Senior Division: A Cash Award of \$200 And a Certificate

Alyssa Kemp, Cavalier School District, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

ISEF Alumni

Project as Determined by ISEF Judges

1 Winner: Junior or Senior Division: A Cash Award of \$100 and a Certificate

Juliann Spilman, Mandan School District, "Enhanced Biofilter Control of CAFO Air Emissions"

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 each and a certificate

Caleb Edland, Griggs County Central School District, "The Food Preference of White Tail Deer" Aaron Moser, Griggs County Central School District, "Effects of Circumstance on Regeneration "

Department of Biomedical Sciences

Project in Area of Life Sciences (Molecular Biology Emphasis)

2 winners: Senior Division: Monetary award of \$50 each and a certificate

Braden Prochnow, Hankinson School District, "Extraction Methods Used to Improve the Antibacterial Potential of Peppers"

Mya Vetter, Linton School District, "Bat Consumption of Ostrinia Nubilalis, European Corn Borer"

Department of Biology

Project in Biology

1 winner: Junior Division: Monetary award of \$50 and a certificate

Aaron Moser, Griggs County Central School District, "Effects of Circumstance on Regeneration "

North Dakota State Science and Engineering Fair

Department of Biology

Project in Biology

1 winner: Senior Division: Monetary award of \$100 and a \$300 UND Biology scholarship and a certificate

Josianna Prochnow, Hankinson School District, "Monitoring Mold and Mycotoxin Exposure Through the Duration of Corn Harvest"

North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine

1 Winner: Senior Division: A Cash Award of \$100 and a Certificate

Abbigale Steeke, Scranton School District, "Feed Intake and Efficiency of Beef Cattle"

North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine

1 Winner: Senior Division: A Cash Award of \$75 and a Certificate

Benjamin Krump, Hankinson School District, "A Quality Analysis of Meats from Various Beef Breeds"

North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine

1 Winner: Junior Division: A Cash Award of \$25 and a Certificate

Kara Siemieniewski, Lidgerwood School District, "Cows and Bacteria"

North Dakota State Science and Engineering Fair

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

Jack VenHuizen, Griggs County Central School District, "Comparison of Bovine Phenotype and Genotype"

NDSSEF Association

Project in Botany

1 Winner: Junior Division: A Cash Award of \$50 and A Certificate

Katrina Gojkovich, Ashley School District, "Do Plants Have Favorite Colors?"

NDSSEF Association

Project in Botany

1 Winner: Senior Division: A Cash Award of \$50 and A Certificate

Hannah Johnson, Grenora School District, "Are Plant Growth Regulators Always Effective When Treating Wheat?"

Kingsbury Family

Outstanding Life Science Project

2 Winners: Junior or Senior Division: Monetary award and a plaque

Kara Siemieniewski, Lidgerwood School District, "Cows and Bacteria"

Alyssa Kemp, Cavalier School District, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

North Dakota State Science and Engineering Fair

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

Megan Beyer, Litchville-Marion School District, "How Safe is Your Password?"

Mu Alpha Theta

Project Involving Modern Mathematics

1 Winner: Senior Division: A Certificate

Abigail Post, Hankinson School District, "Air Quality: A Quantitative Approach to Small and Large Particles "

Department of Computer Science

Project in Computer Science

1 winner: Junior Division: Monetary award of \$50 and a certificate

Kaylee Kemp, Cavalier School District, "Don't Tread on Me. An Investigation on Athletic Shoe Tread Design and the Coefficient of Friction"

Department of Computer Science

Project in Computer Science

1 winner: Senior Division: Monetary award of \$50 and a certificate

Hayden German, Hankinson School District, "The Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

North Dakota State Science and Engineering Fair

Department of Mathematics

Project in Mathematics

1 winner: Junior Division: Monetary award of \$50 and a certificate

Emma Kratcha, Hankinson School District, "Determining the Effects of Seed Size and Additives on Crusting and Compaction"

Department of Mathematics

Project in Mathematics

1 winner: Senior Division: Monetary award of \$100 and a \$500 UND Mathematics scholarship and a certificate

Wesley Kemp, Cavalier School District, "True or False and ABC -The Mathematics Behind Multiple Choice "

Medicine/Health

Department of Pathology/ND INBRE

Project in Medical or Health Sciences

1 winner: Junior Division: Monetary award of \$50 and a certificate

Blake Bernhardt, Wing School District, "Alternative Centrifuges"

Department of Pathology/ND INBRE

Project in Medical or Health Sciences

1 winner: Senior Division: Monetary award of \$100 and a certificate

Kathleen Schmidt, Ashley School District, "Belly Button Bacteria"

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 \$100 and a certificate

Emerson Falk, Hankinson School District, "An Antibacterial and Antifungal Comparison of Countertop Disinfectants "

School of Medicine & Health Sciences

Project in Medical or Health Sciences

1 Winner: Senior Division: Monetary award of \$50 and a certificate

Abigail Post, Hankinson School District, "Air Quality: A Quantitative Approach to Small and Large Particles "

School of Medicine & Health Sciences

Project in Medical or Health Sciences

1 Winner: Junior Division: Monetary award of \$100 and a certificate

Aaron Moser, Griggs County Central School District, "Effects of Circumstance on Regeneration "

Department of Biomedical Sciences

Project in Pharmacology/Immunology

1 winner: Junior Division: Monetary award of \$100 and a certificate

Bailee Rudolph, Ashley School District, "Is Antibacterial Soap More Efficient?"

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

Aubrey Henson, Tioga School District, "Stronger than Pain"

Medicine/Health

North Dakota Dental Foundation

Project Related to Dentistry

1 Winner: Junior Division: A Cash Award of \$50 and a Certificate

Kara Siemieniewski, Lidgerwood School District, "Cows and Bacteria"

North Dakota Dental Foundation

Project Related to Dentistry

1 Winner: Senior Division: A Cash Award of \$50 and a Certificate

Benjamin Krump, Hankinson School District, "A Quality Analysis of Meats from Various Beef Breeds"

North Dakota Academy of Family Physicians

Project Related to Medicine

1 Winner: Senior Division: A Cash Award of \$50 and a Certificate

Abigail Post, Hankinson School District, "Air Quality: A Quantitative Approach to Small and Large Particles "

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

Braden Prochnow, Hankinson School District, "Extraction Methods Used to Improve the Antibacterial Potential of Peppers"

Laura Muggli, Grant County School District, "How much glyphosate can be detected in wheat areas that have been desiccated?"

Kathleen Schmidt, Ashley School District, "Belly Button Bacteria"

North Dakota Society for Clinical Laboratory

Project Related to Laboratory Medicine

3 Winners: Junior Division: A Cash Award of \$50 and a Certificate

Blake Bernhardt, Wing School District, "Alternative Centrifuges"

Bailee Rudolph, Ashley School District, "Is Antibacterial Soap More Efficient?"

Jaxon Gronnenberg, Griggs County Central School District, "Escherichia coli Bacteria Resistance to Antibiotics"

Microbiology/Pharmacology

Department of Biomedical Sciences

Project in Microbiology/Infectious Disease

2 winners: Junior Division: Monetary award of \$50 each and a certificate

Jackson Meidinger, Ashley School District, "Writing with Bacteria"

Jayden White Owl, Trenton School District, "Musical Bacteria"

North Dakota State Science and Engineering Fair

Department of Biomedical Sciences

Project in Microbiology/Infectious Disease

2 winners: Senior Division: Monetary award of \$100 each and a certificate

Kathleen Schmidt, Ashley School District, "Belly Button Bacteria"

Allison Habib, Hankinson School District, "The Effectiveness of Essential Oil Brands on Bacteria and Mold Growth"

Department of Biomedical Sciences

Project in Medical or Health Sciences

1 winner: Junior Division: Monetary award of \$100 and a certificate

Halle Rivinius, Grant County School District, "Which environmental area will result in the most microbial growth?"

Department of Biomedical Sciences

Project in Medical or Health Sciences

1 winner: Senior Division: Monetary award of \$100 and a certificate

Braden Prochnow, Hankinson School District, "Extraction Methods Used to Improve the Antibacterial Potential of Peppers"

North Dakota Pharmacists Association

Project in Field of Pharmacology

1 Winner: Junior Division: A Cash Award of \$75 and a Certificate

Aaron Moser, Griggs County Central School District, "Effects of Circumstance on Regeneration "

North Dakota State Science and Engineering Fair

North Dakota Pharmacists Association

Project in Field of Pharmacology

1 Winner: Senior Division: A Cash Award of \$100 and a Certificate

Aubrey Henson, Tioga School District, "Stronger than Pain"

Military

Navy

Project (All Categories Considered)

3 Winners: Senior Division: An Educational Recognition Award Valued at \$75, A Medallion, And a Certificate

Hayden German, Hankinson School District, "The Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

Abigail Post, Hankinson School District, "Air Quality: A Quantitative Approach to Small and Large Particles "

Jacob Russell, Ellendale School District, "Solar Vexing"

Navy

Project (All Categories Considered)

3 Winners: Junior Division: A Medallion And a Certificate

Sophus Hammond, Cayden Reed, Valley Middle School District, "A.N.T.S."

Emma Taylor, Tioga School District, "Wonders of Water Quality"

Danielle Gilstad, Ashley School District, "#Filter"

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

Hayden German, Hankinson School District, "The Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

Jacob Russell, Ellendale School District, "Solar Vexing"

Sophus Hammond, Cayden Reed, Valley Middle School District, "A.N.T.S."

Danielle Gilstad, Ashley School District, "#Filter"

Physics/Astronomy

Department of Physics & Astrophysics

Project in Physics & Astronomy

1 winner: Junior Division: Monetary award of \$100 and a certificate

Kaylee Kemp, Cavalier School District, "Don't Tread on Me. An Investigation on Athletic Shoe Tread Design and the Coefficient of Friction"

Department of Physics & Astrophysics

Project in Physics & Astronomy

1 winner: Senior Division: Monetary award of \$100 and a \$500 UND Physics scholarship and a certificate

Dylan Peterson, Hankinson School District, "The Effects of Weight Distribution on Trailer Handling"

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

Joshua Olson, Ellendale School District, "Plant Power!"

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

Caleb Cowart, Schroeder Middle School School District, "Think Fast!"

United States Metric Association

Project Using Metric System for Measurements

5 Winners: Junior or Senior Division: A Certificate

Kaylee Kemp, Cavalier School District, "Don't Tread on Me. An Investigation on Athletic Shoe Tread Design and the Coefficient of Friction"

Alyssa Kemp, Cavalier School District, "Buffering the Bloom - The Effect of Agricultural Buffer Zones on Pond Eutrophication"

Maddox Pierce, Scranton School District, "Let's Bounce"

Allison Habib, Hankinson School District, "The Effectiveness of Essential Oil Brands on Bacteria and Mold Growth"

Makenna Binder, KC Steele School District, "How Does the Material Composition of a Wind Turbine's Blade Affect the Voltage it Produces?"

North Dakota State Science and Engineering Fair

Social/Behavior Sciences

Department of Psychology

Project in Psychology or Behavioral Science

2 winners: Junior Division: Monetary award of \$100 each and a certificate

Bjorn Eide, Oak Grove Lutheran School District, "Teens Addicted to their Phones" Angie Vetter, Linton School District, "The Secret of Music"

Department of Psychology

Project in Psychology or Behavioral Science

2 winners: Senior Division: Monetary award of \$100 each and a certificate

Sophia Wolla, Tioga School District, "Does Happiness Correlate with Self Esteem " Makayla Berg, Tioga School District, "With or Without Color?"

Virginia George Inheritance Fund

Project in Social or Behavioral Science

1 Winner: Senior Division: Monetary award of \$125 and a certificate

Pamela Nash, Strasburg School District, "Does Mental Practice Make Perfect?"

Virginia George Inheritance Fund

Project in Social or Behavioral Science

1 Winner: Junior Division: Monetary award of \$75 and a certificate

Dericka Akes, Valley Middle School School District, "Social Ain't Social"

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 Arabella Andersen, Grenora School District, "Power of Suggestion"

American Psychological Association

Project Related to Psychology

1 Winner: Junior or Senior Division: A Certificate

Leandra Schmidt, Flasher School District, "Why are Teens Stressed?"

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

Hayden German, Hankinson School District, "The Most Effective Design For Reducing Mass While Maintaining Strength In Trusses"

Water Quality

American Water Works Association

Project Related to Drinking Water Quality

1 Winner: Junior Division: A Cash Award of \$75 and a Certificate

Isaiah Zochert, Tioga School District, "Water Filtration"

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

Katia Gibeau, Trenton School District, "Water Watch"

North Dakota Water Environment Association

Project Related to Water Quality

1 Winner: Senior Division: A Cash Award of \$75 and a Plaque

Hunter Gallagher, Ashley School District, "Eroding Away the I-94 Corridor"

North Dakota Water Environment Association

Project Related to Water Quality

1 Winner: Junior Division: A Cash Award of \$75 and a Plaque

Derek Vetter, Linton School District, "Super Soil"

North Dakota Rural Water Systems Association

Project Related to Water Quality

1 Winner: Senior Division: A Cash Award of \$100 and a Certificate

Katia Gibeau, Trenton School District, "Water Watch"

North Dakota State Science and Engineering Fair

Water Environment Federation

Project Related to Water Quality or Water Conditions

1 Winner: Junior or Senior Division:

Clara Green, Camille Finney, Cloe Haakenson, Valley Middle School District, "Air Pollution is Getting Closer To Home"