

# 2016 FINAL AWARDS

## Senior Division Sweepstakes Winners

The first place (Marcus J. Friskop Sweepstakes) winner received a gold state plaque, a hooded sweatshirt, 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 Phoenix Arizona and will exhibit his/her project.

The second place (sweepstakes runner-up) winner received a gold state plaque, a hooded sweatshirt, 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 Phoenix Arizona 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 Phoenix Arizona and will exhibit his/her project.

### **Senior Division – 1st Place – Sweepstakes Winner**

Madison Goetzfridt, Mandan School District, "The Eye of the Beholder: Creating a New Prototype of a Medical Infusion Pump"

### **Senior Division – 2nd Place – Sweepstakes Runner-Up**

Riley McLean, St Mary's-Bismarck School District, "Can the Metastatic Potential of Cancer be Predicted?"

## **North Dakota State Science and Engineering Fair**

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

Josianna Prochnow, Hankinson School District, "A Bacterial Analysis of Hand Sanitization Products"

### **Senior Division Place Winners**

Projects that are selected as finalists received a gold plaque and a hooded sweatshirt and will advance to the ISEF in Phoenix Arizona in May and will exhibit their project.

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

### **Northwest Region**

1st Finalist: Nokomis Poitra, Trenton School District, "Survey Says"

2nd Finalist: Carson Hatter, Trenton School District, "The Energy In Trash"

3rd Finalist: Reese Nielson, Trenton School District, "Critters In Your Cooler"

1st Alternate: Kimberlie Gardea, Trenton School District, "Synthetic or Natural?"

2nd Alternate: Zachary Luallen, Tioga School District, "One Magnet To Bring Them All"

### **North Central Region**

1st Finalist: Roman Knudsvig, Berthold School District, "The Effects of Caffeine "

1st Alternate: Lanie Kunz, Berthold School District, "Diet and Attention Deficit Disorder"

2nd Alternate: Declan Ritterman, Leeds School District, "Exercise Your Brain"

## **North Dakota State Science and Engineering Fair**

### **Northeast Region**

1st Finalist: Alyssa Kemp, Cavalier School District, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

1st Alternate: Wesley Kemp, Valley-Edinburg School District, "Shake, Rattle and Wave - How Seismic Waves Affect Structures"

2nd Alternate: John Heuchert, St. Thomas School District, "Fruit Power"

### **Southwest Central Region**

1st Finalist: Eric Spilman, Mandan School District, "Capturing Waste Energy from ND Oil Field Flares" 2nd Finalist: Dale Spilman, Mandan School District, "Wind Tunnel Demonstration of Airfoil Drag Reduction"

1st Alternate: Savannah Canen, Hebron School District, "An Exploration of Dactylography: How Many Ridge Characteristics Do Family Members Share?"

2nd Alternate: Juliann Spilman, Mandan School District, "Shielding Effect of Particulates on UV Disinfection of Greywater"

### **Southeast Central Region**

1st Finalist: Paige Schmidt, Kidder Co. Tappen School District, "The Identification of Parasites in Bovine Feces"

2nd Finalist: Katie Schmidt, Ashley School District, "Where to Go?"

1st Alternate: Cassidy Walth, Wishek School District, "The Chromatic Adaption Project"

2nd Alternate: Desa Sand, Ellendale School District, "Saving the World One Ranch at a Time"

## **North Dakota State Science and Engineering Fair**

### **Southeast Region**

1st Finalist: Braden Prochnow, Hankinson School District, "The Antibacterial Potential of Conifer Chemical Extracts"

1st Alternate: Benjamin Krump, Hankinson School District, "Acomparison of Natural Fertilizers with Added Decomposers"

2nd Alternate: Martin Krump, Hankinson School District, "The Effects of Pasteurization on Capra hircus Milk"

### **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**

Isabelle Chambers, Fargo Homeschool School District, "Improving Vision in Pseudophakic Uvetis Patient vis Photoactivation"

### **Junior Division 2nd Place - Sweepstakes Runner-Up**

Broden Diederich, Schroeder School District, "Programmed To Go"

### **Junior Division Place Winners**

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

## **North Dakota State Science and Engineering Fair**

### **Northwest Region**

1st Place: Elijah Nible, Trinity Christian School District, "Fire To Wire"

2nd Place: Ethan Decker, Trinity Christian School District, "Oil Absorbents"

3rd Place: Andra Smith, Trinity Christian School District, "Stop In The Name Of Lenz"

4th Place: Josh Watson, Trinity Christian School District, "Creative Change"

### **North Central Region**

1st Place: Malorie Sabo, Leeds School District, "The Substance that is Most Efficient in a Hydraulic System is..."

2nd Place: Zoe Lauckner, Leeds School District, "How to Make Tough Cuts of Meat Tender"

3rd Place: John Fischer, Leeds School District, "Which Parachutes Fall Slowest"

### **Northeast Region**

1st Place: Zoe Jiran, Schroeder School District, "BPM vs BPM"

2nd Place: Ryan Linstad, Lakota School District, "Do Plants and Soil Types Alter the Effect of Erosion?" 3rd Place: Mike Erickson, Schroeder School District, "The Need for Speed"

4th Place: Christie Stayman, Schroeder School District, "Fit to Kill"

## **North Dakota State Science and Engineering Fair**

### **Southwest Central Region**

1st Place: Pamela Nash, Strasburg School District, "Do Video Games Help Your Brain?"

2nd Place: Daniel Schumacher, Linton School District, "Brain Teaser"

3rd Place: Keagan Marshall, Wing School District, "To Till or Not to Till"

4th Place: Alex Vander Vorste, Strasburg School District, "Fungicides or NA"

### **Southeast Central Region**

1st Place: Bradyn Lachenmeier, Kidder Co. Tappen School District, "The Heat Content of Wood"

2nd Place: Madelyn Schmidt, Kidder Co. Tappen School District, "The Effect of Eye-Hand Dominance on Free Throw Percentages"

3rd Place: Calli Hauck, Ellendale School District, "Dewormer Deluxe"

4th Place: Brandon Hahne, Ellendale School District, "Artesian Well vs. Surface Well Quality"

### **Southeast Region**

1st Place: Dylan Benson, Hankinson School District, "A Microbiological Analysis of Citrus"

2nd Place: Mandy Saxerud, Lisbon School District, "Candle Sense"

3rd Place Maezy Myers, Griggs County Central School District, "What's Growing on Your Smart Phone?"

4th Place: Abby Post, Hankinson School District, "The Impact of Marigolds on Garden Vegetables"

## **North Dakota State Science and Engineering Fair**

### **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, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

#### **North Dakota Soil Conservation District/Auxiliary**

Project Related to Soil Conservation

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

Tyler Blegen, Leeds School District, "Can Erosion be Stopped"

#### **North Dakota Soil Conservation District/Auxiliary**

Project Related to Soil Conservation

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

Hannah Fischer, Wing School District, "Soil Stabilizer"

#### **North Dakota Soil Conservation District/Auxiliary**

Project Related to Soil Conservation

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

Ethan Decker, Trinity Christian School District, "Oil Absorbents"

## **North Dakota State Science and Engineering Fair**

### **Farmers Union Insurance - North Dakota**

Project Related to Agriculture

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

Brendin Monge, Belfied School District, "Horse Hoof Growth"

Benjamin Krump, Hankinson School District, "Acomparison of Natural Fertilizers with Added Decomposers"

### **Farmers Union Insurance - North Dakota**

Project Related to Agriculture

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

Abby Post, Hankinson School District, "The Impact of Marigolds on Garden Vegetables"

Calli Hauck, Ellendale School District, "Dewormer Deluxe"

## **Chemistry/Biochemistry**

### **UND Department of Chemistry**

Project in Chemistry

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

Brody LaRoque, Trenton School District, "Pollution Conclusion"

### **UND Department of Chemistry**

Project in Chemistry

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

Braden Prochnow, Hankinson School District, "The Antibacterial Potential of Conifer Chemical Extracts"



## **North Dakota State Science and Engineering Fair**

### **American Association for Clinical Chemistry**

Project in Clinical Chemistry

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

Alexis Keller, Mandan School District, "Sunscreen Alternative"

### **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 5-in-1 Pen, And a Certificate

Kiana Schatz, Hebron School District, "Does Coffee Stain Teeth?"

### **NDSSEF Association**

Project in Biochemistry

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

Dylan Benson, Hankinson School District, "A Microbiological Analysis of Citrus"

Abby Post, Hankinson School District, "The Impact of Marigolds on Garden Vegetables"

### **NDSSEF Association**

Project in Biochemistry

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

Riley McLean, St Mary's-Bismarck School District, "Can the Metastatic Potential of Cancer be Predicted?"

## **North Dakota State Science and Engineering Fair**

### **Dentistry/Optomerty**

#### **North Dakota Dental Foundation**

Project Related to Dentistry

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

Kyrsten Sherlock, Griggs County Central School District, "Do Foods Cause bacteria in Your Mouth to Grow?"

Jade Schothauer, East Fairview School District, "Rethink What You Drink"

#### **North Dakota Dental Foundation**

Project Related to Dentistry

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

Kiana Schatz, Hebron School District, "Does Coffee Stain Teeth?"

Mya Vetter, Linton School District, "An Anaylsis of ND Medicinal Plants as Used by Native Americans"

#### **NDSSEF Association**

Project in Field of Vision and Eye Care

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

Cassidy Walth, Wishek School District, "The Chromatic Adaption Project"

#### **NDSSEF Association**

Project in Field of Vision and Eye Care

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

Heather Schwartz, Schroeder School District, "Colors Help"

## **North Dakota State Science and Engineering Fair**

### **Earth/Atmospheric Sciences**

#### **UND Department of Atmospheric Sciences**

Project in Atmospheric Sciences

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

Caleb Page, Trinity Christian School District, "How Geomagnetism Storms Affect WAAG & GPS"

#### **UND Department of Geography**

Project in Geography

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

Paul Hardy, East Fairview School District, "Ice Ice Baby"

#### **UND Department of Geography**

Project in Geography

1 winner: Senior Division: Monetary award of \$50 and a \$100 scholarship for Geography Major Student and a certificate

Alyssa Kemp, Cavalier School District, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

#### **UND Harold Hamm School of Geology & Geological Engineering**

Project in Geology/Geological Engineering

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

Elijah Nible, Trinity Christian School District, "Fire To Wire"

## **North Dakota State Science and Engineering Fair**

### **UND Harold Hamm School of Geology & Geological Engineering**

Project in Geology/Geological Engineering

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

Eric Spilman, Mandan School District, "Capturing Waste Energy from ND Oil Field Flares"

### **American Society of Photogrammetry and Remote Sensing, Heartland Region**

Project in the Field of Geospatial Mapping or Earth Science

1 Winner: Senior Division: Monetary Award of \$100 And a Certificate

Caleb Page, Trinity Christian School District, "How Geomagnetisium Storms Affect WAAG & GPS"

### **North Dakota Geological Society**

Project in Field of Geology or Earth Science

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

Ryan Linstad, Lakota School District, "Do Plants and Soil Types Alter the Effect of Erosion?"

### **North Dakota Geological Society**

Project in Field of Geology or Earth Science

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

Desa Sand, Ellendale School District, "Saving the World One Ranch at a Time"

## **North Dakota State Science and Engineering Fair**

### **American Meteorological Society**

Project Related to Meteorology

2 Winners: Junior or Senior Division: A Certificate

Caleb Page, Trinity Christian School District, "How Geomagnetisium Storms Affect WAAG & GPS" Paul Hardy, East Fairview School District, "Ice Ice Baby"

### **Association For Women Geoscientists**

Project Related to Geosciences

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

Bailey Hulm, Linton School District, "Volcanic Ash Concrete"

### **National Oceanic & Atmospheric Administration**

Project Related to Improved Understanding of the Earth's Processes

1 Winner: Junior Division: A Certificate And A Medallion

Hannah Fischer, Wing School District, "Soil Stabilizer"

### **NASA Earth System Science Award**

Project Related to Earth's Interconnected System

1 Winner: Junior or Senior Division: A Certificate

Caleb Page, Trinity Christian School District, "How Geomagnetisium Storms Affect WAAG & GPS"

## **North Dakota State Science and Engineering Fair**

### **Energy/Power/Electricity**

#### **UND Energy and Environmental Research Center**

Project in Energy, Power, and Electricity

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

Sean Loken, Wishek School District, "Solar Engine Applications IV"

#### **Otter Tail Power Company**

Project Related to Energy or Electricity

3 Winners: Senior Division: A Cash Award of \$50 And a Certificate

Rodrigo Martinez Jr., Kidder Co. Tappen School District, "The Effect of Mass and Charge Pressure on Projectile Range Part 2"

John Heuchert, St. Thomas School District, "Fruit Power"

Evan Follman, Leeds School District, "Solar Mirrors"

#### **Otter Tail Power Company**

Project Related to Energy or Electricity

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

Elijah Nible, Trinity Chrisitan School District, "Fire To Wire"

Brandon Morten, Lakota School District, "Which 6 Volt Battery Provides The Best Electrical Current to Power a Motor?"

## **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

David Steinke, Hope-Page School District, "LED Lights to the Test"

Ella Farida, Glen Ullin School District, "Batteries Made Cents"

Adam Swartz, Schroeder School District, "Tap It!"

### **Xcel Energy**

Project Related to Energy or Electricity

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

Alec Stroh, Kidder Co. Tappen School District, "Diesel and Gas Combo"

Nathan Elverud, Leeds School District, "Best Fan Setup"

Carson Hatter, Trenton School District, "The Energy In Trash"

## **Engineering**

### **UND School of Engineering & Mines**

Project in Engineering

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

Mandy Saxerud, Lisbon School District, "Candle Sense"

## **North Dakota State Science and Engineering Fair**

### **UND School of Engineering & Mines**

Project in Engineering

1 Winner: Senior Division: Monetary award of \$200 and a certificate

Alyssa Kemp, Cavalier School District, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

### **UND Department of Petroleum Engineering**

Project in Engineering

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

Eric Spilman, Mandan School District, "Capturing Waste Energy from ND Oil Field Flares"

### **UND College of Engineering & Mines**

Project in Engineering (Female)

1 Winner: Senior Division: A \$500 scholarship for female student in Engineering and a certificate Madison Goetzfridt, Mandan School District, "The Eye of the Beholder: Creating a New Prototype of a Medical Infusion Pump"

### **Society of Automotive Engineers**

Project in Mobility Engineering

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

Broden Diederich, Schroeder School District, "Programmed To Go"



## **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

Dale Spilman, Mandan School District, "Wind Tunnel Demonstration of Airfoil Drag Reduction"

### **ASM Materials Education Foundation**

Project in Materials Engineering

1 Winner: Junior or Senior Division: A Medallion And A Certificate

Rio Falcon, Trenton School District, "Drink It & Wear It"

## **Engineering (Chemical)**

### **UND Department of Chemical Engineering**

Project in Chemical Engineering

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

Makenna Binder, Kidder Co. Tappen School District, "Heat Content in Foods"

### **UND Department of Chemical Engineering**

Project in Chemical Engineering

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

Adam Fischer, Leeds School District, "Water Purity"

## **North Dakota State Science and Engineering Fair**

### **Engineering (Electrical)**

#### **Dr. Richard Schultz Award - UND Department of Electrical Engineering**

Project in Electrical Engineering

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

Adam Swartz, Schroeder School District, "Tap It!"

#### **Dr. Richard Schultz Award - UND Department of Electrical Engineering**

Project in Electrical Engineering

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

Sean Loken, Wishek School District, "Solar Engine Applications IV"

### **Engineering (Mechanical)**

#### **UND Department of Mechanical Engineering**

Project in Mechanical Engineering

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

John Fischer, Leeds School District, "Which Parachutes Fall Slowest"

#### **UND Department of Mechanical Engineering**

Project in Mechanical Engineering

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

Madison Goetzfridt, Mandan School District, "The Eye of the Beholder: Creating a New Prototype of a Medical Infusion Pump"

## **North Dakota State Science and Engineering Fair**

### **Environmental Science**

#### **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 Alyssa Kemp, Cavalier School District, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

#### **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 Abby Post, Hankinson School District, "The Impact of Marigolds on Garden Vegetables"

#### **Ricoh Corporation**

Project Related to Environmentally Friendly Businesses

1 Winner: Senior Division: A Certificate

Desa Sand, Ellendale School District, "Saving the World One Ranch at a Time"

#### **NDSSEF Association**

Project Related to Environmental Remediation

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

Brody LaRoque, Trenton School District, "Pollution Conclusion"

## **North Dakota State Science and Engineering Fair**

### **NDSSEF Association**

Project Related to Environmental Remediation

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

Tyler Blegen, Leeds School District, "Can Erosion be Stopped"

### **UND School of Engineering & Mines**

Project in Energy/Environmental Science

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

Eric Spilman, Mandan School District, "Capturing Waste Energy from ND Oil Field Flares"

### **UND School of Engineering & Mines**

Project in Energy/Environmental Science

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

Tavon Stadler, Griggs County Central School District, "How Wind Turbine Blade Size Affects the Amount of Energy Produced"

## **Human Nutrition/Nursing**

### **UND Department of Nutrition & Dietetics**

Project in Nutrition and Food Science

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

Zoe Lauckner, Leeds School District, "How to Make Tough Cuts of Meat Tender"

## **North Dakota State Science and Engineering Fair**

### **UND Department of Nutrition & Dietetics**

Project in Nutrition and Food Science

1 winner: Senior Division: Monetary award of \$50 and a \$250 scholarship and a certificate  
Martin Krump, Hankinson School District, "The Effects of Pasteurization on Capra hircus Milk"

### **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  
Reese Nielson, Trenton School District, "Critters In Your Cooler"

## **ISEF Alumni**

### **ISEF Alumni**

Project as Determined by ISEF Judges

1 Winner: Junior or Senior Division: A Cash Award of \$150 And a Certificate

Alyssa Kemp, Cavalier School District, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

### **ISEF Alumni**

Project as Determined by ISEF Judges

1 Winner: Junior or Senior Division: A Cash Award of \$150 And a Certificate

Sean Loken, Wishek School District, "Solar Engine Applications IV"

## **North Dakota State Science and Engineering Fair**

### **Life Sciences**

UND Department of Biomedical Sciences

Project in Area of Life Sciences (Priority to Molecular Biology Project)

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

Maezy Myers, Griggs County Central School District, "What's Growing on Your Smart Phone?"

Dylan Benson, Hankinson School District, "A Microbiological Analysis of Citrus"

### **UND Department of Biomedical Sciences**

Project in Area of Life Sciences (Priority to Molecular Biology Project)

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

Martin Krump, Hankinson School District, "The Effects of Pasteurization on Capra hircus Milk"

Mya Vetter, Linton School District, "An Analysis of ND Medicinal Plants as Used by Native Americans"

### **UND Department of Biology**

Project in Biology

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

Colton Beeson, Hankinson School District, "Effects of Unique Growth Stimulants on Garden Peas"

## **North Dakota State Science and Engineering Fair**

### **UND Department of Biology**

Project in Biology

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

Chase Bladow, Hankinson School District, "The Production of a Natural Potato Insecticide Derived from Capsaicin"

### **North Dakota Veterinary Medical Association**

Project Related to Veterinary Medicine

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

Brendin Monge, Belfied School District, "Horse Hoof Growth"

### **North Dakota Veterinary Medical Association**

Project Related to Veterinary Medicine

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

Paige Schmidt, Kidder Co. Tappen School District, "The Identification of Parasites in Bovine Feces"

### **North Dakota Veterinary Medical Association**

Project Related to Veterinary Medicine

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

Afton Shypkoski, Belfied School District, "Catalase Within an Animal"

## **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

Calli Hauck, Ellendale School District, "Dewormer Deluxe"

### **NDSSEF Association**

Project in Botany

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

Alex Vander Vorste, Strasburg School District, "Fungicides or NA"

### **NDSSEF Association**

Project in Botany

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

Jacob Hanson, Berthold School District, "The Practicality of Hydroponics"

## **Mathematics/Computer Science**

### **UND Department of Computer Science**

Project in Computer Science

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

Broden Diederich, Schroeder School District, "Programmed To Go"



## **North Dakota State Science and Engineering Fair**

### **UND Department of Computer Science**

Project in Computer Science

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

Evan Follman, Leeds School District, "Solar Mirrors"

### **UND Department of Mathematics**

Project in Mathematics

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

Mike Erickson, Schroeder School District, "The Need for Speed"

### **UND Department of Mathematics**

Project in Mathematics

1 winner: Senior Division: Monetary award of \$100 and a \$500 scholarship and a certificate Riley McLean, St Mary's-Bismarck School District, "Can the Metastatic Potential of Cancer be Predicted?"

### **Intel Excellence In Computer Science**

Project in Computer Science Category

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

Sean Loken, Wishek School District, "Solar Engine Applications IV"

## **North Dakota State Science and Engineering Fair**

### **Mu Alpha Theta**

Project Involving Modern Mathematics

1 Winner: Senior Division: A Certificate

Caleb Page, Trinity Christian School District, "How Geomagnetisium Storms Affect WAAG & GPS"

### **Medicine/Health**

#### **UND School of Medicine & Health Sciences**

Project in Medical or Health Sciences

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

Riley McLean, St Mary's-Bismarck School District, "Can the Metastatic Potential of Cancer be Predicted?"

#### **UND School of Medicine & Health Sciences**

Project in Medical or Health Sciences

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

Megan Jacobson, Schroeder School District, "Brain Fire and Brain Freeze"

#### **UND School of Medicine & Health Sciences**

Project in Medical or Health Sciences

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

Madelyn Schmidt, Kidder Co. Tappen School District, "The Effect of Eye-Hand Dominance on Free Throw Percentages"

## **North Dakota State Science and Engineering Fair**

### **UND Department of Biomedical Sciences**

Project in Medical or Health Sciences

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

Megan Kvernum, Trinity Christian School District, "Comparing Humalog & Novolog"

### **UND Department of Biomedical Sciences**

Project in Medical or Health Sciences

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

Alexis Keller, Mandan School District, "Sunscreen Alternative"

### **UND Pathology Department & ND IDeA Network of Biomedical Research Excellence**

Project in Medical or Health Sciences

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

Chase Bladow, Hankinson School District, "The Production of a Natural Potato Insecticide Derived from Capsaicin"

### **UND Pathology Department & ND IDeA Network of Biomedical Research Excellence**

Project in Medical or Health Sciences

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

Kasi Holm, Ellendale School District, "Probiotic"

## **North Dakota State Science and Engineering Fair**

### **North Dakota Academy of Family Physicians**

Project Related to Medicine

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

Madison Goetzfridt, Mandan School District, "The Eye of the Beholder: Creating a New Prototype of a Medical Infusion Pump"

### **North Dakota Society for Clinical Laboratory**

Project Related to Laboratory Medicine

3 Winners: Senior Division: A Cash Award of \$50 And a Certificate

Martin Krump, Hankinson School District, "The Effects of Pasteurization on Capra hircus Milk" Katelyn Nelsen, Leeds School District, "Slay the Strep"

Kimberlie Gardea, Trenton School District, "Synthetic or Natural?"

### **North Dakota Society for Clinical Laboratory**

Project Related to Laboratory Medicine

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

Maezy Myers, Griggs County Central School District, "What's Growing on Your Smart Phone?"

Dylan Benson, Hankinson School District, "A Microbiological Analysis of Citrus"

Tucker Schiele, Wing School District, "The Electrolyte Challenge"

## **North Dakota State Science and Engineering Fair**

### **Microbiology/Pharmacology**

#### **UND Department of Biomedical Sciences**

Project in Area of Life Sciences (Priority to Microbiology Project)

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

Dylan Benson, Hankinson School District, "A Microbiological Analysis of Citrus"

Maezy Myers, Griggs County Central School District, "What's Growing on Your Smart Phone?"

#### **UND Department of Biomedical Sciences**

Project in Area of Life Sciences (Priority to Microbiology Project)

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

Riley McLean, St Mary's-Bismarck School District, "Can the Metastatic Potential of Cancer be Predicted?"

Brock Theede, Hankinson School District, "The Production of a Natural Fungicide Derived from Family Lamiaceae"

#### **UND Department of Biomedical Sciences**

Project in Medical or Health Sciences (Priority to Pharmacology Project)

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

Dylan Benson, Hankinson School District, "A Microbiological Analysis of Citrus"

## **North Dakota State Science and Engineering Fair**

### **UND Department of Biomedical Sciences**

Project in Medical or Health Sciences (Priority to Pharmacology Project)

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

Riley McLean, St Mary's-Bismarck School District, "Can the Metastatic Potential of Cancer be Predicted?"

### **North Dakota Pharmacists Association**

Project in Field of Pharmacology

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

Maezy Myers, Griggs County Central School District, "What's Growing on Your Smart Phone?"

### **North Dakota Pharmacists Association**

Project in Field of Pharmacology

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

Josianna Prochnow, Hankinson School District, "A Bacterial Analysis of Hand Sanitization Products"

## **North Dakota State Science and Engineering Fair**

### **Navy**

#### **Navy**

Project (All Categories Considered)

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

Rodrigo Martinez Jr., Kidder Co. Tappen School District, "The Effect of Mass and Charge Pressure on Projectile Range Part 2"

Caleb Page, Trinity Christian School District, "How Geomagnetisium Storms Affect WAAG & GPS" Alec Stroh, Kidder Co. Tappen School District, "Diesel and Gas Combo"

#### **Navy**

Project (All Categories Considered)

3 Winners: Junior Division: A Medallion And a Certificate

Tucker Schiele, Wing School District, "The Electrolyte Challenge"

John Fischer, Leeds School District, "Which Parachutes Fall Slowest"

Madelyn Schmidt, Kidder Co. Tappen School District, "The Effect of Eye-Hand Dominance on Free Throw Percentages"

### **North Dakota Army National Guard**

#### **North Dakota Army National Guard**

Project That Has Applications Useful to North Dakota Army National Guard

1 Winner: Junior Division: A Duffle Bag With Assortment of Items

Isabelle Chambers, Fargo Homeschool School District, "Improving Vision in Pseudophakic Uvetis Patient vis Photoactivation"

## **North Dakota State Science and Engineering Fair**

### **North Dakota Army National Guard**

Project That Has Applications Useful to North Dakota Army National Guard

1 Winner: Junior Division: A Backpack With Assortment of Items

Elijah Nible, Trinity Chrisitan School District, "Fire To Wire"

North Dakota Army National Guard

Project That Has Applications Useful to North Dakota Army National Guard

1 Winner: Senior Division: A Duffle Bag With Assortment of Items

Branden Skjoiten, Hankinson School District, "A chemical and Plant Analysis of Lake Elsier"

### **North Dakota Army National Guard**

Project That Has Applications Useful to North Dakota Army National Guard

1 Winner: Senior Division: A Backpack With Assortment of Items

Joshua Clark, Mandan School District, "Affect of Music on an Athlete's Efficiency"



## **North Dakota State Science and Engineering Fair**

### **United States Air Force**

#### **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 Memory Drive, a Dual USB Car Charger, And a Certificate

Rodrigo Martinez Jr., Kidder Co. Tappen School District, "The Effect of Mass and Charge Pressure on Projectile Range Part 2"

Dale Spilman, Mandan School District, "Wind Tunnel Demonstration of Airfoil Drag Reduction" Tavon Stadler, Griggs County Central School District, "How Wind Turbine Blade Size Affects the Amount of Energy Produced"

Roman Knudsvig, Berthold School District, "The Effects of Caffeine "

### **Physics/Astronomy**

#### **UND Department of Physics & Astrophysics**

Project in Physics & Astronomy

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

Andra Smith, Trinity Christian School District, "Stop In The Name Of Lenz"

#### **UND Department of Physics & Astrophysics**

Project in Physics & Astronomy

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

Zachary Luallen, Tioga School District, "One Magnet To Bring Them All"

## **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

Caleb Page, Trinity Christian School District, "How Geomagnetisium Storms Affect WAAG & GPS"

### **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

Maximilian Reichert, Schroeder School District, "Stealing the Hope Diamond"

### **United States Metric Association**

Project Using Metric System for Measurements

5 Winners: Junior or Senior Division: A Certificate

Rodrigo Martinez Jr., Kidder Co. Tappen School District, "The Effect of Mass and Charge Pressure on Projectile Range Part 2"

Mandy Saxerud, Lisbon School District, "Candle Sense"

Malorie Sabo, Leeds School District, "The Substance that is Most Efficient in a

Hydraulic System is..." Mike Erickson, Schroeder School District, "The Need for Speed"

David Steinke, Hope-Page School District, "LED Lights to the Test"

## **North Dakota State Science and Engineering Fair**

### **Social/Behavioral Sciences**

#### **UND Department of Psychology**

Project in Psychology or Behavioral Science

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

Heather Schwartz, Schroeder School District, "Colors Help"

Jayden Sherrard, Griggs County Central School District, "Does Practice Make Perfect?"

#### **UND Department of Psychology**

Project in Psychology or Behavioral Science

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

Chantel Kessel, Belfield School District, "Natural or Nothing"

Kellan Benson, Hankinson School District, "Communication Methods' Influence on Reaction Speed"

#### **Virginia George Inheritance Fund**

Project in Social or Behavioral Science

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

Cassidy Walth, Wishek School District, "The Chromatic Adaption Project"

#### **Virginia George Inheritance Fund**

Project in Social or Behavioral Science

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

Kyrsten Sherlock, Griggs County Central School District, "Do Foods Cause bacteria in Your Mouth to Grow?"

## **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

Erin Jorgenson, Leeds School District, "Does Weather Affect your Mood"

### **American Psychological Association**

Project Related to Psychology

1 Winner: Junior or Senior Division: A Certificate

Bryce Goettle, Ashley School District, "Rotation Perception"

## **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

Eric Spilman, Mandan School District, "Capturing Waste Energy from ND Oil Field Flares"

## **Water Quality**

### **American Water Works Association**

Project Related to Drinking Water Quality

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

Brandon Hahne, Ellendale School District, "Artesian Well vs. Surface Well Quality"

## **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

Branden Skjoiten, Hankinson School District, "A chemical and Plant Analysis of Lake Elsier"

### **North Dakota Water Environment Association**

Project Related to Water Quality

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

Juliann Spilman, Mandan School District, "Shielding Effect of Particulates on UV Disinfection of Greywater"

### **North Dakota Water Environment Association**

Project Related to Water Quality

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

Keagan Marshall, Wing School District, "To Till or Not to Till"

### **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, "Dynamic River Dikes - A Study of the Effects of Channel Grade on Agricultural Dikes"

## **North Dakota State Science and Engineering Fair**

### **Water Environment Federation**

Project Related to Water Quality or Water Conditions

1 Winner: Junior or Senior Division: A Certificate

Desa Sand, Ellendale School District, "Saving the World One Ranch at a Time"