# **2012 FINAL AWARDS**

# **Senior Division Sweepstakes Winners**

The first place (sweepstakes) winner received a gold state plaque, a hooded sweatshirt, a \$500 cash award and a \$3,000 scholarship to the University of North Dakota and will advance to the ISEF in Pittsburgh Pennsylvania in May and will exhibit his/her project.

The second place (sweepstakes runner-up) winner received a silver state plaque, a hooded sweatshirt, a \$250 cash award and a \$2,500 scholarship to the University of North Dakota and will advance to the ISEF in Pittsburgh Pennsylvania in May and will exhibit his/her project.

The third place (sweepstakes 2nd runner-up) winner received a state plaque, a hooded sweatshirt and a \$150 cash award and will advance to the ISEF in Pittsburgh Pennsylvania in May and will exhibit his/her exhibit.

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

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

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

Dre Steinwehr, Hankinson School District, "The Impct of Fungicides on Corn Growth and Ethanol Production"

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

Tanner Coppin, Hankinson School District, "An Inquisition of Natural and Commercial Insecticides on Wheat"

# **Senior Division Place Winners**

All first and second place winners received a gold plaque and a hooded sweatshirt and will advance to the ISEF in Pittsburgh Pennsylvania in May and will exhibit their project.

All third and fourth place winners received a silver plaque and are alternates to the ISEF in Pittsburgh Pennsylvania in May but will not exhibit their project unless a first or second place winner cannot attend.

### **Northwest Region**

1st Place - Jasmine Kreft, Trinity Christian School District, "Unlocking The Potential"

2nd Place - Blaine Durward, Trenton School District, "Eco System Solution"

3rd Place - Brooklyn Hurley, Trenton School District, "The Inhibitory Effects Of Native American Plants"

4th Place - Kelsey Guttormson, Tioga School District, "Disturbing Thoughts"

### **North Central Region**

1st Place - Preston Miller, Sawyer School District, "Does PVC Size Limit Geyser Height"

2nd Place - Isaiah Bender, Sawyer School District, "What's the Most Flammable"

3rd Place - Valerie Olson, Sawyer School District, "What Color Are Your Socks?"

(1st Place winner is the only presenter from region at ISEF.)

### **Northeast Region**

1st Place - Vahid Fazel-Rezai, Red River School District, "Swap to Sort: Analysis fo the Winnability of a Function-Based Game"

2nd Place - Abbie Sondeland, Valley/Edinburg School District, "The Tell-Tale Heart of Daphnia" 3rd Place - Mariah Kinneberg, Dakota Prairie School District, "Composer's Second Signature"

(1st Place winner is the only presenter from region at ISEF.)

### **Southwest Central Region**

1st Place - Kristi Goldade, Strasburg School District, "Colors That Fly"

2nd Place - Tani White, Simle School District, "How Do I Look?"

3rd Place - Kellie Tougas, Strasburg School District, "Environmental Effects on the Detection of Lead at Bullet Impact Sites"

(1st Place winner is the only presenter from region at ISEF.)

### **Southeast Central Region**

1st Place - Tyler Toepke-Floyd, Wishek School District, "It's All in the Fuel"

2nd Place - Benjamin Schuler, Wishek School District, "Light Speed III"

3rd Place - Taylor Ketterling, Wishek School District, "Does Tissue Sampling Increase Profit II"

4th Place - Brenna Ketterling, Wishek School District, "Soybeans: Yield vs. Profit"

# **Southeast Region**

1st Place - Grady Mauch, Hankinson School District, "The Effects of the Aster Family on Sugar Beet Production"

2nd Place - Kelsey Gaukler, Hankinson School District, "The Chemical and Microbial Analysis of Well Water"

3rd Place - Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

4th Place - Taylor Zimprich, Griggs County Central School District, "Fibromayalgia vs. Weather"

# **Junior Division Sweepstakes Winners**

The first place (Sweepstakes) winner received a gold state plaque and a \$100 cash award from the North Dakota State Science and Engineering Fair Association.

The second place (Sweepstakes Runner-Up) winner received a silver state plaque and a \$50 cash award from the North Dakota State Science and Engineering Fair Association.

### **Junior Division 1st Place - Sweepstakes Winner**

Carter Mauch, Hankinson School District, "The Pesticidal Properties of the Goosefoot Family"

# Junior Division 2nd Place - Sweepstakes Runner-Up

Paige Buck, Hankinson School District, "Effects of Fishmeal on the Growth of Gallus domesticus"

# **Junior Division Place Winners**

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

# **Northwest Region**

1st Place - Dusti Seidel, Trenton School District, "Sleep Vs. Stress"

2nd Place - Wyatt McCreary, Trinity Christian School District, "Electrical Power"

3rd Place - Emilee Falcon, Trenton School District, "Retain The Insane"

4th Place - Madysen Houle, Trenton School District, "House Invaders"

### **North Central Region**

1st Place - Jayden Walsh, Sawyer School District, "Hacky Sack Catapult"

2nd Place - Mara Roteliuk, Sawyer School District, "Crystal Creations"

3rd Place - Krista Lagge, Sawyer School District, "Floating Egg"

### **Northeast Region**

1st Place - Taylor Anderson, Lakota School District, "Want a Job? Get a Haircut!"

2nd Place - Jake Sturges, Schroeder, GF School District, "Are Fingerprints Inherited?"

3rd Place - Nathan Steffan, Lakota School District, "Gelled Up?"

4th Place - Nicole Landsem, Adams/Edmore School District, "Soil vs Hydroponics"

### **Southwest Central Region**

1st Place - Dale Spilman, Mandan School District, "Comparison of Glued Bridge Joints"

2nd Place - Jessica Edinger, Grant County School District, "Photography and Emotions"

3rd Place - Kaitlyn Binstock, Wing School District, "Plants Galore"

4th Place - Andrew Hulm, Strasburg School District, "Exhaust Pipe Fires"

# **Southeast Central Region**

1st Place - Hunter Pinke, Wishek School District, "How Insulation Traps and Holds Heat"

2nd Place - Eva Byerley, Ellendale School District, "Misleading Medicine"

3rd Place - Cole Ketterling, Wishek School District, "Which Fertilizer is the Most Important to Wheat"

4th Place - Sean Loken, Wishek School District, "GBSE Technology"

#### **Southeast Region**

1st Place - Brennen Boll, Hankinson School District, "A Comparative Study of Commercial and Herbal Toothpaste"

2nd Place - Wyatt Wilm, Hankinson School District, "The Relevancy of Hand Soaps in Today's Society"

3rd Place - Mya Steinwehr, Hankinson School District, "The Production of a Natural Fungicide Derived From Flowers"

4th Place - Betsy Asp, Hankinson School District, "The Inhibitory Properties of Herbs on Pathogenic Bacteria"

# **Aerospace Science**

# **American Society of Photogrammetry and Remote Sensing**

Best Project in the Field of Geospatial or Earth Science

1 Winner: Junior Division: Received a cash award of \$100 and a certificate Kaitlyn Binstock, Wing School District, "Plants Galore"

# **American Society of Photogrammetry and Remote Sensing**

Best Project in the Field of Geospatial or Earth Science

1 Winner: Senior Division: Received a cash award of \$100 and a certificate Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

# **Agriculture**

#### **UND Graduate School**

Project Related to Agriculture

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

Tanner Coppin, Hankinson School District, "An Inquisition of Natural and Commercial Insecticides on Wheat"

### **UND Graduate School**

Project Related to Agriculture

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

Carter Mauch, Hankinson School District, "The Pesticidal Properties of the Goosefoot Family"

## North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

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

Dre Steinwehr, Hankinson School District, "The Impct of Fungicides on Corn Growth and Ethanol Production"

# North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

1 Winner: Senior Division: Received a \$25 Cash Award and a Certificate

Taylor Ketterling, Wishek School District, "Does Tissue Sampling Increase Profit II"

### North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

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

Mya Steinwehr, Hankinson School District, "The Production of a Natural Fungicide Derived From Flowers"

# North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

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

Paige Buck, Hankinson School District, "Effects of Fishmeal on the Growth of Gallus domesticus"

# **Farmers Union Insurance - North Dakota**

Project Related to Agriculture

2 Winners: Senior Division: Received a Cash Award Of \$50 and a Certificate

Grady Mauch, Hankinson School District, "The Effects of the Aster Family on Sugar Beet Production"

Tanner Coppin, Hankinson School District, "An Inquisition of Natural and Commercial Insecticides on Wheat"

# **Farmers Union Insurance - North Dakota**

Project Related to Agriculture

2 Winners: Junior Division: Received a Cash Award Of \$25 and a Certificate

Mya Steinwehr, Hankinson School District, "The Production of a Natural Fungicide Derived From Flowers"

Betsy Asp, Hankinson School District, "The Inhibitory Properties of Herbs on Pathogenic Bacteria"

# **Arts and Sciences**

# **Association of North Dakota Geographers**

Project in the Field of Social Science

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

MaKayla Koski, Wing School District, "If You're Happy and You Know It..."

### **UND Department of Geography**

Project in the Geography Category

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

Trevor Lausch, Griggs County Central School District, "Comparing Soil Samples"

### **UND Department of Geography**

Project in the Geography Category

1 Winner: Senior Division: Received a cash award of \$50 and a \$250 scholarship and a certificate Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

# **UND Department of Sociology**

Project in the Social Science Category

1 Winner: Senior Division: Received a cash award of \$150 and a certificate

Mariah Kinneberg, Dakota Prairie School District, "Composer's Second Signature"

# **UND Department of Sociology**

Project in the Social Science Category

1 Winner: Junior Division: Received a cash award of \$150 and a certificate

Mikaela Kujanson, Oak Grove School District, "Distracted Driving"

# **Biochemistry**

# North Dakota State Science and Engineering Fair Association

Project in Field of Biochemistry

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

Abbie Sondeland, Valley/Edinburg School District, "The Tell-Tale Heart of Daphnia"

### North Dakota State Science and Engineering Fair Association

Project in Field of Biochemistry

1 Winner: Senior Division: Received a Cash Award of \$25 and a Certificate

Tanner Coppin, Hankinson School District, "An Inquisition of Natural and Commercial Insecticides on Wheat"

### North Dakota State Science and Engineering Fair Association

Project in Field of Biochemistry

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

Betsy Asp, Hankinson School District, "The Inhibitory Properties of Herbs on Pathogenic Bacteria"

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

Project in Field of Biochemistry

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

Paige Buck, Hankinson School District, "Effects of Fishmeal on the Growth of Gallus domesticus"

# **Biology, Life Science, Animal Science, Plant Science**

# **UND Department of Biochemistry and Molecular Biology**

Project in the Area of Life Sciences

2 Winners: Junior Division: Received a cash award of \$50 and a certificate

Betsy Asp, Hankinson School District, "The Inhibitory Properties of Herbs on Pathogenic Bacteria" Paige Buck, Hankinson School District, "Effects of Fishmeal on the Growth of Gallus domesticus"

# **UND Department of Biochemistry and Molecular Biology**

Project in the Area of Life Sciences

2 Winners: Senior Division: Received a cash award of \$100 and a certificate

Kristian Myrdal, Valley/Edinburg School District, "The Effect of Dust on the Development Brassica rapa"

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

### **UND Department of Biology**

Project in the Biology Category

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

Carter Mauch, Hankinson School District, "The Pesticidal Properties of the Goosefoot Family"

# **UND Department of Biology**

Project in the Biology Category

1 Winner: Senior Division: Received a cash award of \$100 and a \$300 scholarship and a certificate Tanner Coppin, Hankinson School District, "An Inquisition of Natural and Commercial Insecticides on Wheat"

### **Business Administration**

### **UND Department of Technology**

Project in Technology Category

1 Winner: Junior or Senior Division: Received a cash award of \$50 and a certificate Dre Steinwehr, Hankinson School District, "The Import of Fungicides on Corn Growth and Ethanol Production"

# **Chemistry**

### **UND Department of Chemistry**

Project in the Chemistry Category

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

Alyssa Mutschelknaus, Grant County School District, "Fire and Air"

### **UND Department of Chemistry**

Project in the Chemistry Category

1 Winner: Senior Division: Received a cash award of \$100 and a \$300 scholarship and a certificate Dre Steinwehr, Hankinson School District, "The Import of Fungicides on Corn Growth and Ethanol Production"

Iota Sigma Pi (Honor Society For Women Chemists)

# **Project in the Chemistry Category**

1 Winner (must be a female exhibitor): Junior or Senior Division: Received a cash award of \$50 and a certificate

Shayna Dvorak, Dickinson School District, "The Comparative Analysis of the Isolation of Cinnamaldehyde Through the Methods of Solvent Extraction and Steam Distillation"

## **American Association of Clinical Chemists**

Project in Clinical Chemistry

1 Winner: Senior Division: Received a Cash Award Of \$100 and a Certificate
Kelsey Gaukler, Hankinson School District, "The Chemical and Microbial Analysis of
Well Water"

# **American Chemical Society - Red River Valley Section**

Project in Field of Chemistry

1 Winner: Junior or Senior Division: Received a \$100 Barnes and Noble Gift Card a Certificate and a 5-In-1 Pen

Dre Steinwehr, Hankinson School District, "The Impct of Fungicides on Corn Growth and Ethanol Production"

# **Dentistry**

### **North Dakota Dental Association**

Project Related to Dentistry

2 Winners: Junior Division: Received a Cash Award Of \$50 and a Certificate

Brennen Boll, Hankinson School District, "A Comparative Study of Commercial and Herbal Toothpaste"

Emilee Falcon, Trenton School District, "Retain The Insane"

### **North Dakota Dental Association**

Project Related to Dentistry

2 Winners: Senior Division: Received a Cash Award Of \$50 and a Certificate

Autumn Hove, Trenton School District, "Bacteria Busters"

Brooklyn Hurley, Trenton School District, "The Inhibitory Effects Of Native American Plants"

# **Energy, Power, Electricity**

### **Ottertail Power Company**

Project Related to Energy or Electricity

3 Winners: Senior Division: Received a Cash Award Of \$50 and a Certificate

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

Rylan Setness, Park River School District, "Ethanol Efficiency"

Jasmine Kreft, Trinity Christian School District, "Unlocking The Potential"

### **Ottertail Power Company**

Project Related to Energy or Electricity

2 Winners: Junior Division: Received a Cash Award Of \$50 and a Certificate

Eric Spilman, Mandan School District, "Study of Electric to Light Methods"

Evan Welsh, Schroeder, GF School District, "The Effects of Blocking your Computer's Air Vent's Air Flow"

### **Xcel Energy**

Project Related to Energy or Electricity

3 Winners: Junior Division: Received a Cash Award Of \$25 and a Certificate

Eric Spilman, Mandan School District, "Study of Electric to Light Methods"

Evan Welsh, Schroeder, GF School District, "The Effects of Blocking your Computer's Air Vent's Air Flow"

Sean Loken, Wishek School District, "GBSE Technology"

# **Xcel Energy**

Project Related to Energy or Electricity

3 Winners: Senior Division: Received a Cash Award Of \$25 and a Certificate

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

Dre Steinwehr, Hankinson School District, "The Impct of Fungicides on Corn Growth and Ethanol Production"

Mary Skjervheim, Adams/Edmore School District, "Wind Turbines"

### MDU Resources Group, Inc.

Project Related to Energy or Electricity

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

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

Tyler Toepke-Floyd, Wishek School District, "It's All in the Fuel"

Alexander Spilman, Mandan School District, "Sampling Microwave Oven Populations"

# MDU Resources Group, Inc.

Project Related to Energy or Electricity

3 Winners: Junior Division: Received a \$25 Cash Award and a Certificate

Eric Spilman, Mandan School District, "Study of Electric to Light Methods"

Evan Welsh, Schroeder, GF School District, "The Effects of Blocking your Computer's Air Vent's Air Flow"

Aaron Bechtle, Wishek School District, "Magnet Power"

# **Engineering**

# **UND Department of Chemical Engineering**

Project in the Chemical Engineering Category

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

Mara Roteliuk, Sawyer School District, "Crystal Creations"

# **UND Department of Chemical Engineering**

Project in the Chemical Engineering Category

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

Kellie Tougas, Strasburg School District, "Environmental Effects on the Detection of Lead at Bullet Impact Sites"

# **UND Department of Civil Engineering**

Project in the Civil Engineering Category

1 Winner: Junior Division: Received a cash award of \$25 and a certificate

Dale Spilman, Mandan School District, "Comparison of Glued Bridge Joints"

### **UND Department of Civil Engineering**

Project in the Civil Engineering Category

1 Winner: Senior Division: Received a cash award of \$25 and a certificate

Sam Ravnaas, Mandan School District, "Thorium Reactors: A "Theoretical" Solution to

Our Economical Energy Problems"

### **UND Department of Electrical Engineering**

Project in the Electrical Engineering Category

2 Winners: Junior Division: Received a cash award of \$50 and a certificate Eric Spilman, Mandan School District, "Study of Electric to Light Methods" Sean Loken, Wishek School District, "GBSE Technology"

# **UND Department of Electrical Engineering**

Project in the Electrical Engineering Category

4 Winners: Senior Division: Received a cash award of \$100 and a certificate

Alexander Spilman, Mandan School District, "Sampling Microwave Oven Populations"

Trent Mattern, Strasburg School District, "Extending Wifi"

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

Mary Skjervheim, Adams/Edmore School District, "Wind Turbines"

# **UND Department of Mechanical Engineering**

Project in the Mechanical Engineering Category

1 Winner: Junior Division: Received a cash award of \$50 and a certificate Zach

Reinholdt, Trinity Christian School District, "Battle Of The Woods"

# **UND Department of Mechanical Engineering**

Project in the Mechanical Engineering Category

1 Winner: Senior Division: Received a cash award of \$50 and a certificate Jim Barrett,

Kidder Co. Tappen School District, "Pressure Extinguisher"

### **ASM Materials Education Foundation**

Project in Materials Engineering

1 Winner: Junior or Senior Division: Received a Medallion and a Certificate

Hunter Pinke, Wishek School District, "How Insulation Traps and Holds Heat"

## **National Society of Professional Engineers**

Project in Engineering Category

1 Winner: Junior or Senior Division: Received a Certificate and Lapel Pin

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

### **Society of Automotive Engineers**

Project in Mobility Engineering

1 Winner: Junior Division: Received a Cash Award Of \$100 and a Certificate

Nathan Steffan, Lakota School District, "Gelled Up?"

# **Society of Automotive Engineers**

Project in Mobility Engineering

1 Winner: Senior Division: Received a Cash Award Of \$100 and a Certificate

Lisa Yang, Dickinson School District, "Effects of Spin Stabilization on the Altitude of

Model Rockets"

# **Environment**

# **UND School of Engineering & Mines**

Project in Energy or Environmental Science Categories

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

Jasmine Kreft, Trinity Christian School District, "Unlocking The Potential"

# **UND School of Engineering & Mines**

Project in Energy or Environmental Science Categories

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

Seth Jansen, Montpelier School District, "Whole Lot of Shakin' Going On"

### **Ricoh Corporation**

Project Related to Environmentally Friendly Businesses

1 Winner: Senior Division: Received a Certificate

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

### **Coalition for Conservation & Environmental Education**

Outstanding Environmental Project

1 Winner: Senior Division: Received a \$50 Cash Award a Large Purple Rosette Ribbon and a Certificate

Tanner Coppin, Hankinson School District, "An Inquisition of Natural and Commercial Insecticides on Wheat"

### **Coalition for Conservation & Environmental Education**

Outstanding Environmental Project

1 Winner: Junior Division: Received a \$50 Cash Award a Large Purple Rosette Ribbon and a Certificate

Brittany Dixon, Oak Grove School District, "Pollutant Effects on Daphnia"

# **Geosciences and Meteorology**

# **UND Department of Geology and Geological Engineering**

Project in the Geosciences Category

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

Lora Horner, Wishek School District, "Radiation"

# **UND Department of Geology and Geological Engineering**

Project in the Geosciences Category

1 Winner: Senior Division: Received a cash award of \$100 and a \$250 scholarship and a certificate Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

# **UND Department of Atmospheric Sciences**

Project in the Field of Atmospheric Science

1 Winner: Junior or Senior Division: Received a cash award of \$50 and a certificate

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

# **American Meteorological Society**

Project Related to Meteorology

2 Winners: Junior or Senior Division: Received a Certificate

Roseanna Johnson, Trenton School District, "Ultraviolet Bacterial Protection"

Taylor Zimprich, Griggs County Central School District, "Fibromayalgia vs. Weather"

#### **Association for Women Geoscientists**

Project Related to Geosciences

1 Winner (Must Be a Female Exhibitor): Junior or Senior Division: Received a Certificate Brooklyn Vollmer, Wing School District, "Soil on Steroids"

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

Project Related to Improved Understanding of the Earth's Processes

1 Winner: Junior Division: Received a Certificate and a Medallion

Branden Skjoiten, Hankinson School District, "Lake Water Quality...Do you really want to go for a swim?"

### **North Dakota Geological Society**

Project in Field of Geology or Earth Science

1 Winner: Junior Division: Received a Cash Award Of \$50 and a Certificate

Branden Skjoiten, Hankinson School District, "Lake Water Quality...Do you really want to go for a swim?"

### North Dakota Geological Society

Project in Field of Geology or Earth Science

1 Winner: Senior Division: Received a Cash Award Of \$50 and a Certificate

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

### American Meteorological Society (Lake Agassiz Chapter)

Project of Outstanding Achievement for Ability and Creativity in an Atmospheric Science Exhibit 1 Winner: Junior Division: Received a Certificate

Branden Skjoiten, Hankinson School District, "Lake Water Quality...Do you really want to go for a swim?"

# **American Meteorological Society (Lake Agassiz Chapter)**

Project of Outstanding Achievement for Ability and Creativity in an Atmospheric Science Exhibit 1 Winner: Senior Division: Received a Certificate

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

# **Human Development and Family Science**

# **North Dakota Academy of Family Physicians**

Project Related to Medicine

1 Winner: Senior Division: Received a Cash Award Of \$50 and a Certificate

Jennifer Riemann, Hankinson School District, "The Usage of Wildflowers as Natural
Perservatives"

# **Human Nutrition**

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

Project in the Area of Nutrition and Food Science

1 Winner: Junior Division: Received a cash award of \$25 and a certificate

Riley McLean, Cathedral School District, "Eggs!"

### **UND Department of Nutrition & Dietetics/College of Nursing**

Project in the Area of Nutrition and Food Science

1 Winner: Senior Division: Received a cash award of \$50 and a \$250 scholarship and a certificate Jennifer Riemann, Hankinson School District, "The Usage of Wildflowers as Natural Perservatives"

### **North Dakota Dietetic Association**

Project Related to Science of Human Nutrition

1 Winner: Senior Division: Received a Savings Bond Valued At \$100 and a Certificate Abbie Sondeland, Valley/Edinburg School District, "The Tell-Tale Heart of Daphnia"

### **North Dakota Dietetic Association**

Project Related to Science of Human Nutrition

1 Winner: Junior Division: Received a Savings Bond Valued At \$50 and a Certificate Logan Kramer, Strasburg School District, "Lactose Carbohydrates in Milk"

### **North Dakota Dietetic Association**

Project Related to Science of Human Nutrition

1 Winner: Senior Division: Received a Savings Bond Valued At \$50 and a Certificate Eva Byerley, Ellendale School District, "Misleading Medicine"

#### **North Dakota Dietetic Association**

Project Related to Science of Human Nutrition

1 Winner: Junior Division: Received a Savings Bond Valued At \$100 and a Certificate Martin Krump, Hankinson School District, "An Analysis in Cheese Production Using Cow and Goat Milk"

### **ISEF Alumni**

### **ISEF Alumni**

Project As Determined By ISEF Judges

1 Winner: Junior or Senior Division: Received a Cash Award Of \$200 and a Certificate Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

### **ISEF Alumni**

Project As Determined By ISEF Judges

1 Winner: Junior or Senior Division: Received a Cash Award Of \$100 and a Certificate Dre Steinwehr, Hankinson School District, "The Import of Fungicides on Corn Growth and Ethanol Production"

# Laboratory Medicine, Microbiology, Medicine, and Health

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

Project Related to Medical or Health Sciences

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

Tony Krautbauer, Hankinson School District, "The Effects of Acid Reducers on the pH of Stomach Acid and the Growth of E. coli"

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

Project Related to Medical or Health Sciences

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

Kate Fox, Wing School District, "How Singing Affects Vital Signs"

### **UND Department of Anatomy**

Project Related to Medical or Health Sciences

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

Mya Steinwehr, Hankinson School District, "The Production of a Natural Fungicide

Derived From Flowers"

### **UND Department of Anatomy**

Project Related to Medical or Health Sciences

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

Abbie Sondeland, Valley/Edinburg School District, "The Tell-Tale Heart of Daphnia"

### **UND Department of Microbiology / Immunology**

Project Related to Microbiology / Immunology or Infectious Disease

2 Winners: Junior Division: Received a cash award of \$50 and a certificate

Jayce Moor, Lakota School District, "Heat it Up"

Betsy Asp, Hankinson School District, "The Inhibitory Properties of Herbs on Pathogenic

Bacteria"

### **UND Department of Microbiology / Immunology**

Project Related to Microbiology / Immunology or Infectious Disease

2 Winners: Senior Division: Received a cash award of \$100 and a certificate

Jennifer Riemann, Hankinson School District, "The Usage of Wildflowers as Natural
Perservatives" Blaine Durward, Trenton School District, "Eco System Solution"

# **UND Department of Pathology**

Project Related to Medical or Health Sciences

2 Winners: Junior Division: Received a cash award of \$100 and a certificate

Brennen Boll, Hankinson School District, "A Comparative Study of Commercial and
Herbal Toothpaste"

Natalie Duppong, Glen Ullin School District, "Are You Hooked?"

### **UND Department of Pathology**

Project Related to Medical or Health Sciences

2 Winners: Senior Division: Received a cash award of \$100 and a certificate

Hayley Fingarson, Valley/Edinburg School District, "Immortal Under the Edge of the

Knife" Kelsey Gaukler, Hankinson School District, "The Chemical and Microbial Analysis
of Well Water"

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

Project Related to Laboratory Medicine

1 Winner: Senior Division: Received a Cash Award Of \$25 and a Certificate

Tayson O'Hara, Hankinson School District, "The Bacteriostatic Tendencies of Tree

Bark"

# **North Dakota Society for Clinical Laboratory**

Project Related to Laboratory Medicine

1 Winner: Junior Division: Received a Cash Award Of \$25 and a Certificate

Madison Sanders, Trinity Christian School District, "The Best Method Of Hand Washing"

# **Mathematics and Computer Science**

# **UND Department of Computer Science**

Project in the Computer Science Category

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

Jarom Musgrove, Schroeder, GF School District, "Stealthy Aircraft"

# **UND Department of Computer Science**

Project in the Computer Science Category

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

Vahid Fazel-Rezai, Red River School District, "Swap to Sort: Analysis fo the Winnability of a Function-Based Game"

### **UND Department of Mathematics**

Project in the Mathematics Category

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

Hunter Pinke, Wishek School District, "How Insulation Traps and Holds Heat"

### **UND Department of Mathematics**

Project in the Mathematics Category

1 Winner: Senior Division: Received a cash award of \$100 and a \$500 scholarship and a certificate Vahid Fazel-Rezai, Red River School District, "Swap to Sort: Analysis fo the Winnability of a Function-Based Game"

# **UND College of Arts & Sciences**

Outstanding Math or Science Project

1 Winner (must be a female exhibitor): Senior Division: Received a cash award of \$100 and a certificate

Mariah Kinneberg, Dakota Prairie School District, "Composer's Second Signature"

# **UND College of Arts & Sciences**

Outstanding Math or Science Project

1 Winner (must be a female exhibitor): Junior Division: Received a cash award of \$50 and a certificate

Alexandra Hoff, Schroeder, GF School District, "Building Strength Geodesic Domes vs Regular Building"

### **Intel Excellence in Computer Science**

Project in Computer Science Category

1 Winner: Senior Division: Received a Cash Award Of \$200 and a Certificate

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

### Mu Alpha Theta

**Project Involving Modern Mathematics** 

1 Winner: Senior Division: Received a Certificate

Benjamin Schuler, Wishek School District, "Light Speed III"

### **United States Metric Association**

Project Using Metric System For Measurements

5 Winners: Junior Division: Received a Certificate

Noelle Hove, Trenton School District, "Fruity DNA"

Jacob Nelson, Trenton School District, "Water Hydraulics"

Mara Roteliuk, Sawyer School District, "Crystal Creations"

Alexandra Hoff, Schroeder, GF School District, "Building Strength Geodesic Domes vs Regular Building"

Shawn Postovit, Tioga School District, "Expansion"

### **Yale Science and Engineering Association**

Project in Areas of Computer Science

1 Winner: Senior Division: Received a Medallion and a Certificate

Kyra Campbell, Trenton School District, "The Uncanny Valley"

### **American Statistical Association (RR Valley)**

Project That Best Used Statistical Methods & Reasoning

1 Winner: Junior Division: Received a Cash Award Of \$25 and a Certificate

Jacob Nelson, Trenton School District, "Water Hydraulics"

# **Optometry**

# **North Dakota Optometric Association**

Project in Field of Optometry

2 Winners: Senior Division: Received a Cash Award Of \$50 and a Certificate

Katelyn Fastnacht, Ellendale School District, "Banish Biofilms"

Sarah Lynch, Trinity Christian School District, "Seeing Colors"

### **North Dakota Optometric Association**

Project in Field of Optometry

2 Winners: Junior Division: Received a Cash Award Of \$50 and a Certificate

Mikaela Kujanson, Oak Grove School District, "Distracted Driving"

Jessica Edinger, Grant County School District, "Photography and Emotions"

# Pharmacology, Pharmacy, Nursing

### **UND Department of Pharmacology, Physiology & Therapeutics**

Project Related to Medical or Health Sciences

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

Wyatt Wilm, Hankinson School District, "The Relevancy of Hand Soaps in Today's

Society"

### **UND Department of Pharmacology, Physiology & Therapeutics**

Project Related to Medical or Health Sciences

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

Molly Ketterling, Grant County School District, "Bioformatics: The Perfect Union of

Computer Science and Medicine"

# **UND College of Nursing**

Project Related to Nursing, Nutrition or Social Work

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

Abbie Sondeland, Valley/Edinburg School District, "The Tell-Tale Heart of Daphnia"

### **UND College of Nursing**

Project Related to Nursing, Nutrition or Social Work

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

Eva Byerley, Ellendale School District, "Misleading Medicine"

### **North Dakota Pharmacists Association**

Project in Field of Pharmacology

1 Winner: Junior Division: Received a Cash Award Of \$75 and a Certificate

Betsy Asp, Hankinson School District, "The Inhibitory Properties of Herbs on Pathogenic

Bacteria"

### **North Dakota Pharmacists Association**

Project in Field of Pharmacology

1 Winner: Senior Division: Received a Cash Award Of \$100 and a Certificate

Sadie Sondeland, Valley/Edinburg School District, "Don't Doubt the Doctor's Dose: The

Effect of Dosage on Antibiotic Resistance"

# **Physics and Physical Science**

# **UND Department of Physics**

Project in the Physics Category

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

Hunter Pinke, Wishek School District, "How Insulation Traps and Holds Heat"

# **UND Department of Physics**

Project in the Physics Category

1 Winner: Senior Division: Received a cash award of \$100 and a \$500 scholarship and a certificate Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

# **North Dakota Physics Teachers**

Project in Area of Physics or Physical Science

1 Winner: Senior Division: Received a \$50 Savings Bond and a Certificate

Benjamin Schuler, Wishek School District, "Light Speed III"

### **North Dakota Physics Teachers**

Project in Area of Physics or Physical Science

1 Winner: Junior Division: Received a \$50 Savings Bond and a Certificate

Jarom Musgrove, Schroeder, GF School District, "Stealthy Aircraft"

# **Psychology and Behavioral Sciences**

# Virginia George Inheritance Fund

Project in the Field of Behavioral Science

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

Ethan Johnson, Hope/Page School District, "Pay Attention!"

### **Virginia George Inheritance Fund**

Project in the Field of Behavioral Science

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

Taylor Anderson, Lakota School District, "Want a Job? Get a Haircut!"

### **UND Department of Psychology**

Project in the Psychology or Behavioral Science Category

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

Gavin LaPlant, Griggs County Central School District, "Using Pavlov's Law to Solve a Problem"

## **UND College of Arts & Sciences**

Project in the Fields of Social or Behavioral Science

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

Kelsey Guttormson, Tioga School District, "Disturbing Thoughts"

### **UND College of Arts & Sciences**

Project in the Fields of Social or Behavioral Science

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

Mikaela Kujanson, Oak Grove School District, "Distracted Driving"

# **American Pyscological Association**

Project Related to Psychology

1 Winner: Junior or Senior Division: Received a Certificate

Ethan Johnson, Hope/Page School District, "Pay Attention!"

# **Tissue Culture**

### Society for In Vitro Biology

Project in the Area of Tissue Culture

1 Winner: 11th Grader Division: Received a Certificate

Max Freed, Trinity Christian School District, "Homeopathic Staph Killer"

# **U.S.** Air Force

### **United States Air Force**

Project That Has Applications Useful to Air Force

4 Winners: Junior or Senior Division: Received a Victory Sport Bag, a Sonic Sound Speaker, a Junior Tech Organizer, and a Certificate

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

Dre Steinwehr, Hankinson School District, "The Impct of Fungicides on Corn Growth and Ethanol Production"

Kristian Myrdal, Valley/Edinburg School District, "The Effect of Dust on the Development Brassica rapa"

Jasmine Kreft, Trinity Christian School District, "Unlocking The Potential"

# U.S. Army

### **United States Army**

Project in the Engineering Categories

1 Winner: Senior Division: Received a Certificate In a Presentation Folder & a \$50 Savings Bond

Mary Skjervheim, Adams/Edmore School District, "Wind Turbines"

### **United States Army**

Project in the Environmental Science Categories

1 Winner: Senior Division: Received a Certificate In a Presentation Folder & a \$50 Savings Bond

Blaine Durward, Trenton School District, "Eco System Solution"

### **United States Army**

Project in Mathematics/Computer Categories

1 Winner: Senior Division: Received a Certificate In a Presentation Folder & a \$50 Savings Bond

Marley Click, Linton School District, "Do They Fit?"

# **United States Army**

Project in the Life Sciences Categories

1 Winner: Senior Division: Received a Certificate In a Presentation Folder & a \$50 Savings Bond

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

# **United States Army**

Project in All of the ISEF Categories

1 Winner: Senior Division: Received a Certificate In a Presentation Folder a \$100 Savings Bond and a Silver Medallion for Science Excellence

Caleb Meyer, Hope/Page School District, "Wind: A New Spin On Things"

# **U.S. Navy**

# **United States Navy**

Project (All Categories Considered)

3 Winners: Senior Division: Received An Educational Recognition Award Valued At \$75 a Medallion and a Certificate

Kelsey Gaukler, Hankinson School District, "The Chemical and Microbial Analysis of Well Water" Tayson O'Hara, Hankinson School District, "The Bacteriostatic Tendencies of Tree Bark"

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

### **United States Navy**

Project (All Categories Considered)

3 Winners: Junior Division: Received a Medallion and a Certificate

Paige Schmidt, Kidder Co. Tappen School District, "Artificially Inseminated or Bull Bred"

Shae Lynn Johnson, Griggs County Central School District, "Does Winter Feed Choices Affect Spring Fertilizer Values?"

Brooklyn Vollmer, Wing School District, "Soil on Steroids"

# **Veterinary Medicine**

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

Project Related to Veterinary Medicine

1 Winner: Senior Division: Received a Cash Award Of \$100 and a Certificate

Kristi Goldade, Strasburg School District, "Colors That Fly"

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

Project Related to Veterinary Medicine

1 Winner: Senior Division: Received a Cash Award Of \$75 and a Certificate

Sadie Sondeland, Valley/Edinburg School District, "Don't Doubt the Doctor's Dose: The

Effect of Dosage on Antibiotic Resistance"

# **North Dakota Veterinary Medical Association**

Project Related to Veterinary Medicine

1 Winner: Junior Division: Received a Cash Award Of \$25 and a Certificate

Paige Buck, Hankinson School District, "Effects of Fishmeal on the Growth of Gallus

domesticus"

# North Dakota Veterinary Medical Assn. Auxiliary

Project Related to Veterinary Medicine

1 Winner: Junior Division: Received a Cash Award Of \$50 and a Certificate

Paige Schmidt, Kidder Co. Tappen School District, "Artificially Inseminated or Bull Bred"

# **Water Quality**

#### **Water Environment Federation**

Project Related to Water Quality or Water Conditions

1 Winner: Junior or Senior Division: Received a Certificate

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

### **American Water Works Association**

Project Related to Drinking Water Quality

1 Winner: Junior Division: Received a Cash Award Of \$75 and a Certificate

Lakin Mauch, Hankinson School District, "An Inquiry Into the Contamination Levels of Well Water"

### **American Water Works Association**

Project Related to Drinking Water Quality

1 Winner: Senior Division: Received a Cash Award Of \$75 and a Certificate

Kelsey Gaukler, Hankinson School District, "The Chemical and Microbial Analysis of Well Water"

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

Project Related to Water Quality

1 Winner: Senior Division: Received a Cash Award Of \$75 and a Plague

Gage Metzen, Hankinson School District, "Impact of Field Drainage Tile on River Water Quality"

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

Project Related to Water Quality

1 Winner: Junior Division: Received a Cash Award Of \$75 and a Plaque

Brittany Dixon, Oak Grove School District, "Pollutant Effects on Daphnia"

# North Dakota Rural Water Systems Association

Project Related to Water Quality

1 Winner: Senior Division: Received a Cash Award Of \$100 and a Plaque

Kelsey Gaukler, Hankinson School District, "The Chemical and Microbial Analysis of Well Water"