# 2015 – Final Awards – ND State Science & Engineering Fair

#### **Senior Division Sweepstakes Winners**

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

The third place (sweepstakes 2<sup>nd</sup> 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 – 1<sup>st</sup> Place – Sweepstakes Winner

Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## Senior Division – 2<sup>nd</sup> Place – Sweepstakes Runner-Up

Lakin Mauch, Hankinson School District, "An Assessment of Drainage Systems in Richland County Corn Fields"

## Senior Division – 3<sup>rd</sup> Place – Sweepstakes Second Runner-Up

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

#### **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**

1<sup>st</sup> Place - Keenan Black, Black Homeschool Academy, "Train Illuminator"

- 2<sup>nd</sup> Place Cheyenne Liedle, Tioga School District, "Oink-ity Oink"
- 3rd Place Kelsey Guttormson, Tioga School District, "Hello My Name Is...Happy! Year 2"
- 4<sup>th</sup> Place Bailey Ann Hagen, Trenton School District, "Pine-terest"

## **North Central Region**

1<sup>st</sup> Place - Bryce Florence, Velva School District, "Cyanobacteria: Not Just "Green" in Color"

- 2<sup>nd</sup> Place Lanie Kunz, Berthold School District, "Brain Food: It's What's For Dinner"
- 3<sup>rd</sup> Place Roman Knudsvig, Berthold School District, "Diet Affects pH"

(1<sup>st</sup> Place Winner is the only presenter from region at ISEF)

### **Northeast Region**

1<sup>st</sup> Place - Wesley Kemp, Valley-Edinburg School District , "Sweet Success - Fueling our Future with Fermentation"

2<sup>nd</sup> Place - Sophia Nelson, Grand Forks Central High School , "Testing the Efficacy of Commercial Sports Drinks on Performance in Young Athletes"

3<sup>rd</sup> Place - Britney Freund, Lakota School District, "Wind Turbines"

(1<sup>st</sup> Place Winner is the only presenter from region at ISEF)

## **Southwest Central Region**

1<sup>st</sup> Place - Riley McLean, Bismarck St. Mary's School District, "Laparoscopic Post-Operative Pain"

2<sup>nd</sup> Place - Christopher Dean, Dickinson School District, "An Exploration of Antimatter by Observation of Alpha and Beta Decay Within Three Distinct Cloud Chamber Apparatuses"

3<sup>rd</sup> Place - Madison Goetzfridt, Mandan School District, "Antibiotic Resistance: The Need for Speeding up Nature's Microbe Machine"

4<sup>th</sup> Place - Adam Hulm, Strasburg School District, "Space it Out"

## **Southeast Central Region**

 $1^{\rm st}$  Place - Cole Ketterling, Wishek School District , "Application of Herbicides and Nitrogen on Glycine max"

2<sup>nd</sup> Place - Desa Sand, Ellendale School District, "Grazing for Rain"

3<sup>rd</sup> Place - Cassidy Walth, Wishek School District, "Audio Pareidolia"

4th Place - Casey Durheim, Ellendale School District, "Northern Exposure"

## **Southeast Region**

1<sup>st</sup> Place - Martin Krump, Hankinson School District, "The Comparative Assessment of Various Feeds on Capra hircus"

2<sup>nd</sup> Place - Branden Skjoiten, Hankinson School District, "The Study of Natural Decontamination Methods for Lake Water"

3<sup>rd</sup> Place - Wyatt Wilm, Hankinson School District, "The Aptitude of Humans to Reject Stimuli from Encompassing Surroundings"

(1<sup>st</sup> Place Winner is the only presenter from region at ISEF)

#### **Junior Division Sweepstakes Winners**

The first place (Sweepstakes) winner received a gold state plaque, a \$150 cash award from the University of North Dakota School of Graduate Studies, 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 \$100 cash award from the University of North Dakota Graduate Studies.

## Junior Division 1<sup>st</sup> Place – Sweepstakes Winner

Anna Dragseth, East Fairview, "Fighting Fusarium"

## Junior Division 2<sup>nd</sup> Place - Sweepstakes Runner-Up

Braden Prochnow, Hankinson School District, "Wound Care: Natural vs Commercial"

#### **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 - Andra Smith, Trinity Christian School District, "Lambert's Cosine Law"

- 2<sup>nd</sup> Place Jaycie Rau, East Fairview School District, "From Trash To Gas"
- 3rd Place Reese Nielson, Trenton School District, "What's In Your Water?"

4<sup>th</sup> Place - Destinee Mattern, Tioga School District, "Doggie Vision"

#### **North Central Region**

1<sup>st</sup> Place - Keaton Nelson, Leeds School District, "Hot or Cold"

- 2<sup>nd</sup> Place Cole Foster, Berthold School District, "Flying Fries"
- 3<sup>rd</sup> Place Noah Christman, Berthold School District, "Ice-B-Gone"
- 4<sup>th</sup> Place Kennedy Blackburn, Velva School District , "Ice Cubical"

#### **Northeast Region**

1<sup>st</sup> Place - Alyssa Kemp, Valley-Edinburg School District , "How a River Runs - A Study of Channelization"

2<sup>nd</sup> Place - Jaylie Woods, Park River School District, "Osmotic Effects"

3<sup>rd</sup> Place - Ryan Linstad, Lakota School District, "Under Pressure"

4<sup>th</sup> Place - Aidan Fire, Schroeder School District, "Rainbow Energy"

#### **Southwest Central Region**

1<sup>st</sup> Place - Abbigale Steeke, Scranton School District, "Let's Fix Sandy Soil"

2<sup>nd</sup> Place - Bryce Mutschelknaus, Grant County School District, "Surfactants vs Surface Tension"

3rd Place - Kaylee Werlinger, Linton School District, "Do Dogs Show Paw Preference?"

4<sup>th</sup> Place - Austyn Rafteseth, Grant County School District, "Holding the Ground"

### **Southeast Central Region**

1<sup>st</sup> Place - Yuliet Monatukwa, Ellendale School District, "Icky iPads"

- 2<sup>nd</sup> Place Calli Hauck, Ellendale School District, "Rowlgro Implant"
- 3<sup>rd</sup> Place Caleb Hauck, Ellendale School District, "Funky Fertilizer"
- 4<sup>th</sup> Place Kasi Holm, Ellendale School District, "Probiotics"

## **Southeast Region**

1<sup>st</sup> Place - Benjamin Krump, Hankinson School District, "A Comparison of Natural Fertilizers on the Native Prairie "
2<sup>nd</sup> Place - Chase Bladow, Hankinson School District, "A Comparison of Commercial and Potential Insecticides"
3<sup>rd</sup> Place - Cierra Trosen, Hankinson School District, "A Comparison of Various Toothpastes"
4<sup>th</sup> Place - Josianna Prochnow, Hankinson School District, "An Analysis of the Bacterial Contamination of Sausage"

# Agriculture/Soil Science

## **UND School of Graduate Studies**

Project Related to Agriculture 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Benjamin Krump, Hankinson School District, "A Comparison of Natural Fertilizers on the Native Prairie "

## **UND School of Graduate Studies**

Project Related to Agriculture 1 Winner: Senior Division: Monetary Award of \$100 And a Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation 1 Winner: Senior Division: A Cash Award of \$150 And a Certificate Lakin Mauch, Hankinson School District, "An Assessment of Drainage Systems in Richland County Corn Fields"

## North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation 1 Winner: Senior Division: A Cash Award of \$50 And a Certificate Cole Ketterling, Wishek School District, "Application of Herbicides and Nitrogen on Glycine max"

#### North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation 1 Winner: Junior Division: A Cash Award of \$150 And a Certificate Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

#### North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation 1 Winner: Junior Division: A Cash Award of \$50 And a Certificate Jeremy Liljenquist, Griggs County Central School District, "Bringing Saline and Sodic Soils to Life"

## Farmers Union Insurance - North Dakota

Project Related to Agriculture 2 Winners: Senior Division: A Cash Award of \$50 And a Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes" Adam Hulm, Strasburg School District, "Space it Out"

## Farmers Union Insurance - North Dakota

Project Related to Agriculture 2 Winners: Junior Division: A Cash Award of \$25 And a Certificate Chase Bladow, Hankinson School District, "A Comparison of Commercial and Potential Insecticides" Anna Dragseth, East Fairview School District, "Fighting Fusarium"

## Chemistry/Biochemistry

## **UND Department of Chemistry**

Project in the Chemistry Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Bradyn Lachenmeier, KC Tappen School District , "Wood You Rather?"

## **UND Department of Chemistry**

Project in the Chemistry Category 1 Wnner: Senior Division: Monetary Award of \$100 And a \$300 Scholarship And a Certificate Lakin Mauch, Hankinson School District, "An Assessment of Drainage Systems in Richland County Corn Fields"

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

Project in Clinical Chemistry 1 Winner: Senior Division: A Cash Award of \$100 And a Certificate Riley McLean, Bismarck St. Mary's School District, "Laparoscopic Post-Operative 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, A 5-in-1 Pen, And a Certificate Branden Skjoiten, Hankinson School District, "The Study of Natural Decontamination Methods for Lake Water"

## **NDSSEF** Association

Project in Biochemistry 1 Winner: Junior Division: A Cash Award of \$50 And A Certificate Benjamin Krump, Hankinson School District, "A Comparison of Natural Fertilizers on the Native Prairie "

## **NDSSEF** Association

Project in Biochemistry 1 Winner: Senior Division: A Cash Award of \$50 And A Certificate Wesley Kemp, Valley-Edinburg School District, "Sweet Success - Fueling our Future with Fermentation"

# Dentistry/Optometry

## **Optometric Foundation of North Dakota**

Project in Field of Vision and Eye Care 2 Winners: Senior Division: A Cash Award of \$50 And a Certificate Savanah Canen, Hebron School District, "Does Retinal Color Correspondence Have Any Correlation to Emotional State?" Wyatt Wilm, Hankinson School District, "The Aptitude of Humans to Reject Stimuli from Encompassing Surroundings"

## **Optometric Foundation of North Dakota**

Project in Field of Vision and Eye Care 2 Winners: Junior Division: A Cash Award of \$50 And a Certificate Andrew Valloff, Scranton School District, "Seeing Color" Lexi Gietzen, Glen Ullin School District, "Crossed Up"

## North Dakota Dental Foundation

Project Related to Dentistry 2 Winners: Junior Division: A Cash Award of \$50 And a Certificate Cierra Trosen, Hankinson School District, "A Comparison of Various Toothpastes" Keaton Nelson, Leeds School District, "Hot or Cold"

## North Dakota Dental Foundation

Project Related to Dentistry 2 Winners: Senior Division: A Cash Award of \$50 And a Certificate Kathryn Handeland, Trenton School District, "Backwash The Bacteria" Molly Holt, Scranton School District, "Got Milk?"

## Earth/Atmospheric Sciences

## **UND Department of Atmospheric Sciences**

Project in the Field of Atmospheric Science 1 Winner: Junior or Senior Division: Monetary Award of \$75 And a Certificate Ryan Muggli, Grant County School District, "Wind Power Is It Worth It?"

#### **UND Odegard School of Aerospace Sciences**

Project in Earth Science (Geology/Geography and Atmospheric Sciences) 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Brody LaRoque, Trenton School District, "Hot Pop"

#### **UND Odegard School of Aerospace Sciences**

Project in Earth Science (Geology/Geography and Atmospheric Sciences) 1 Winner: Senior Division: Monetary Award of \$150 And a Certificate Juliann Spilman, Mandan School District, "Comparing Lake Water Quality"

## **UND Department of Geography**

Project in the Geography Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Benjamin Krump, Hankinson School District, "A Comparison of Natural Fertilizers on the Native Prairie "

## **UND Department of Geography**

Project in the Geography Category 1 Winner: Senior Division: Monetary Award of \$50 And a \$250 Scholarship And a Certificate Desa Sand, Ellendale School District, "Grazing for Rain"

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

Project in Earth Science/Geology/ Geological Engineering 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

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

Project in Earth Science/Geology/ Geological Engineering 1 Winner: Senior Division: Monetary Award of \$100 And a \$500 Scholarship And a Certificate Juliann Spilman, Mandan School District, "Comparing Lake Water Quality"

#### 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 Desa Sand, Ellendale School District, "Grazing for Rain"

#### North Dakota Geological Society

Project in Field of Geology or Earth Science 1 Winner: Junior Division: A Cash Award of \$50 And a Certificate Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

#### 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, "Comparing Lake Water Quality"

#### **American Meteorological Society**

Project Related to Meteorology 2 Winners: Junior or Senior Division: A Certificate Brody LaRoque, Trenton School District, "Hot Pop" Ryan Muggli, Grant County School District, "Wind Power Is It Worth It?"

#### **Association For Women Geoscientists**

Project Related to Geosciences 1 Winner (Must Be A Female Exhibitor): Junior or Senior Division: A Certificate Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

#### National Oceanic & Atmospheric Administration

Project Related to Improved Understanding of the Earth's Processes 1 Winner: Junior Division: A Certificate And A Medallion Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

# 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 Sean Loken, Wishek School District, "Solar Engine Applications III" Eric Spilman, Mandan School District, "Thermoelectrics: Electricity of Heat" Keenan Black, Black Homeschool Academy, "Train Illuminator"

## **Otter Tail Power Company**

Project Related to Energy or Electricity 2 Winners: Junior Division: A Cash Award of \$50 And a Certificate Ryan Muggli, Grant County School District, "Wind Power Is It Worth It?" Brody LaRoque, Trenton School District, "Hot Pop"

## **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, "The Dimmer Duel: Amps Vs. Volts" Andra Smith, Trinity Christian School District, "Lambert's Cosine Law" Noelle Kohlmeier, Schroeder School District, "Alternative Heat Energy"

## **Xcel Energy**

Project Related to Energy or Electricity 3 Winners: Senior Division: A Cash Award of \$25 And a Certificate Sean Loken, Wishek School District, "Solar Engine Applications III" Eric Spilman, Mandan School District, "Thermoelectrics: Electricity of Heat" Gus Mantei, Velva School District, "Wasting Wood"

## MDU Resources Group, Inc.

Project Related to Energy or Electricity 3 Winners: Senior Division: A Cash Award of \$25 And a Certificate Eric Spilman, Mandan School District, "Thermoelectrics: Electricity of Heat" Sean Loken, Wishek School District, "Solar Engine Applications III" Wesley Kemp, Valley-Edinburg School District, "Sweet Success - Fueling our Future with Fermentation"

## MDU Resources Group, Inc.

Project Related to Energy or Electricity 3 Winners: Junior Division: A Cash Award of \$25 And a Certificate David Steinke, Hope-Page School District, "The Dimmer Duel: Amps Vs. Volts" Bradyn Lachenmeier, KC Tappen School District, "Wood You Rather?" Ryan Muggli, Grant County School District, "Wind Power Is It Worth It?"

# Engineering

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

Project Related to Engineering 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Brody LaRoque, Trenton School District, "Hot Pop"

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

Project Related to Engineering 1 Winner: Senior Division: Monetary Award of \$200 And a Certificate Riley McLean, Bismarck St. Mary's School District, "Laparoscopic Post-Operative Pain"

#### **IEEE Red River Valley Section**

Project in Electrical Engineering 1 Winner: Senior Division: Monetary Award of \$50 And a Certificate Sean Loken, Wishek School District, "Solar Engine Applications III"

#### **IEEE Red River Valley Section**

Project in Electrical Engineering 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Andra Smith, Trinity Christian School District, "Lambert's Cosine Law"

#### **Society of Automotive Engineers**

Project in Mobility Engineering 1 Winner: Junior Division: A Cash Award of \$100 And a Certificate Matt Koski, Lakota School District, "Does Varying Battery Voltage Affect The rpms of a Simple Motor with a Reed Switch"

#### **Society of Automotive Engineers**

Project in Mobility Engineering 1 Winner: Senior Division: A Cash Award of \$100 And a Certificate Alec Stroh, KC Tappen School District , "The Air Driven Motor"

#### **ASM Materials Education Foundation**

Project in Materials Engineering 1 Winner: Junior or Senior Division: A Medallion And A Certificate Lewis Goehring, Wishek School District , "Strength of Steel"

## Engineering (Chemical)

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

Project in the Chemical Engineering Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Bryce Mutschelknaus, Grant County School District, "Surfactants vs Surface Tension"

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

Project in the Chemical Engineering Category 1 Winner: Senior Division: Monetary Award of \$50 And a Certificate Wesley Kemp, Valley-Edinburg School District, "Sweet Success - Fueling our Future with Fermentation"

# Engineering (Civil)

## **UND Department of Civil Engineering**

Project in the Civil Engineering Category 1 Winner: Junior Division: Monetary Award of \$25 And a Certificate Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

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

Project in the Civil Engineering Category 1 Winner: Senior Division: Monetary Award of \$25 And a Certificate Phillip Steffan, Lakota School District, "Alternative Asphalt"

# Engineering (Electrical)

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

Project in the Electrical Engineering Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Ryan Muggli, Grant County School District, "Wind Power Is It Worth It?"

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

Project in the Electrical Engineering Category 1 Winner: Senior Division: Monetary Award of \$50 And a Certificate Keenan Black, Black Homeschool Academy , "Train Illuminator"

## Engineering (Mechanical)

## **UND Department of Mechanical Engineering**

Project in the Mechanical Engineering Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Cole Foster, Berthold School District, "Flying Fries"

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

Project in the Mechanical Engineering Category 1 Winner: Senior Division: Monetary Award of \$50 And a Certificate Eric Spilman, Mandan School District , "Thermoelectrics: Electricity of Heat"

# **Environmental Science**

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

Project in Energy or Environmental Science Categories 1 Winner: Senior Division: Monetary Award of \$100 And a Certificate Wesley Kemp, Valley-Edinburg School District, "Sweet Success - Fueling our Future with Fermentation"

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

Project in Energy or Environmental Science Categories 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Chase Bladow, Hankinson School District, "A Comparison of Commercial and Potential Insecticides"

## **Coalition For Conservation & Environmental Education**

Outstanding Environmenal Project 1 Winner: Senior Division: A Cash Award of \$50, A Large Purple Rosette Ribbon, And a Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## **Coalition For Conservation & Environmental Education**

Outstanding Environmenal Project 1 Winner: Junior Division: A Cash Award of \$50, A Large Purple Rosette Ribbon, And a Certificate Alyssa Kemp, Valley-Edinburg School District, "How a River Runs - A Study of Channelization"

## **Ricoh Corporation**

Project Related to Environmentally Friendly Businesses 1 Winner: Senior Division: A Certificate Desa Sand, Ellendale School District, "Grazing for Rain"

## **NDSSEF** Association

Project Related to Environmental Remediation 1 Winner: Junior Division: A Cash Award of \$50 And A Certificate Abbigale Steeke, Scranton School District, "Let's Fix Sandy Soil"

## **NDSSEF** Association

Project Related to Environmental Remediation 1 Winner: Senior Division: A Cash Award of \$50 And A Certificate Branden Skjoiten, Hankinson School District, "The Study of Natural Decontamination Methods for Lake Water"

# Human Nutrition/Nursing

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

Project in the Area of Nutrition and Food Science 1 Winner: Junior Division: Monetary Award of \$25 And a Certificate Steven Eddy, Oak Grove School District, "Comparing natural sugars and artificial sweeteners"

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

Project in the Area of Nutrition and Food Science 1 Winner: Senior Division: Monetary Award of \$50 And a \$250 Scholarship And a Certificate Cade Torola, Trenton School District, "Egg-cell-ent Diffusion"

## **UND College of Nursing & Professional Disciplines**

Project Related to Nursing 2 Winners: Junior Division: Monetary Award of \$100 And a Certificate Braden Prochnow, Hankinson School District, "Wound Care: Natural vs. Commercial" Megan Schiltz, Hankinson School District, "The Effects of Antacids on Acidity and Intestinal Bacteria"

## **UND College of Nursing & Professional Disciplines**

Project Related to Nursing 2 Winners: Senior Division: Monetary Award of \$200 And a Certificate Roman Knudsvig, Berthold School District, "Diet Affects pH" Martin Krump, Hankinson School District, "The Comparative Assessment of Various Feeds on Capra hircus"

## U.S. Department Of Health And Human Service

Project Promoting Healthy Life Style 1 Winner: Junior or Senior Division: A Certificate Riley McLean, Bismarck St. Mary's School District, "Laparoscopic Post-Operative Pain"

## **ISEF** Alumni

## **ISEF Alumni**

Project as Determined by ISEF Judges 1 Winner: Junior or Senior Division: A Cash Award of \$200 And a Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## ISEF Alumni

Project as Determined by ISEF Judges 1 Winner: Junior or Senior Division: A Cash Award of \$100 And a Certificate Kelsey Guttormson, Tioga School District, "Hello My Name Is...Happy! Year 2"

# Life Sciences

## **UNDSMHS** Department of Basic Sciences

Project in the Area of Life Sciences (Priority to Molecular Biology Project) 2 Winners: Junior Division: Monetary Award of \$50 And a Certificate Braden Prochnow, Hankinson School District, "Wound Care: Natural vs. Commercial" Megan Schiltz, Hankinson School District, "The Effects of Antacids on Acidity and Intestinal Bacteria"

## **UNDSMHS** Department of Basic Sciences

Project in the Area of Life Sciences (Priority to Molecular Biology Project) 2 Winners: Senior Division: Monetary Award of \$50 And a Certificate Wyatt Wilm, Hankinson School District, "The Aptitude of Humans to Reject Stimuli from Encompassing Surroundings" Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## **UND Department of Biology**

Project in the Biology Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Megan Schiltz, Hankinson School District, "The Effects of Antacids on Acidity and Intestinal Bacteria"

## **UND Department of Biology**

Project in the Biology Category 1 Winner: Senior Division: Monetary Award of \$100 And a \$300 Scholarship And a Certificate Wyatt Wilm, Hankinson School District, "The Aptitude of Humans to Reject Stimuli from Encompassing Surroundings"

## North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine 1 Winner: Senior Division: A Cash Award of \$100 And a Certificate Cheyenne Liedle, Tioga School District , "Oink-ity Oink"

## North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine 1 Winner: Senior Division: A Cash Award of \$75 And a Certificate Martin Krump, Hankinson School District, "The Comparative Assessment of Various Feeds on Capra hircus"

## North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine 1 Winner: Junior Division: A Cash Award of \$25 And a Certificate Kaylee Werlinger, Linton School District, "Do Dogs Show Paw Preference?"

## 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 Kaylee Werlinger, Linton School District, "Do Dogs Show Paw Preference?"

## Society for In Vitro Biology

Project in the Area of Tissue Culture 1 Winner: 11th Grader Division: A Certificate Colbey Steeke, Scranton School District , "What's a Sheep's Beat"

### **NDSSEF** Association

Project in Botany 1 Winner: Junior Division: A Cash Award of \$50 And A Certificate Anna Dragseth, East Fairview School District, "Fighting Fusarium"

### **NDSSEF** Association

Project in Botany 1 Winner: Senior Division: A Cash Award of \$50 And A Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## Mathematics/Computer Science

## **UND Department of Computer Science**

Project in the Computer Science Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Judah Hoerner, Hebron School District, "Hitboxes: How Size Affects Score"

## **UND Department of Computer Science**

Project in the Computer Science Category 1 Winner: Senior Division: Monetary Award of \$50 And a Certificate Kelsey Guttormson, Tioga School District, "Hello My Name Is...Happy! Year 2"

#### **UND Odegard School of Aerospace Sciences**

Project in the Computer Science Category 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Evan Follman, Leeds School District, "Solar Panels"

## **UND Odegard School of Aerospace Sciences**

Project in the Computer Science Category 1 Winner: Senior Division: Monetary Award of \$150 And a Certificate Cody Knudson, Hankinson School District, "The Effects of Digital Education vs. Traditional Education "

## **UND Department of Mathematics**

Project in the Mathematics Category 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Andra Smith, Trinity Christian School District, "Lambert's Cosine Law"

## **UND Department of Mathematics**

Project in the Mathematics Category 1 Winner: Senior Division: Monetary Award of \$100 And a \$500 Scholarship And a Certificate Wyatt Wilm, Hankinson School District, "The Aptitude of Humans to Reject Stimuli from Encompassing Surroundings"

## 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 III"

#### Mu Alpha Theta

Project Involving Modern Mathematics 1 Winner: Senior Division: A Certificate Riley McLean, Bismarck St. Mary's School District, "Laparoscopic Post-Operative Pain"

## Medicine/Health

#### **UNDSMHS** Department of Basic Sciences

Project Related to Medical or Health Sciences 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Lexi Gietzen, Glen Ullin School District, "Crossed Up"

#### **UNDSMHS** Department of Basic Sciences

Project Related to Medical or Health Sciences 1 Winner: Senior Division: Monetary Award of \$100 And a Certificate Cheyenne Liedle, Tioga School District, "Oink-ity Oink"

#### **UND Department of Pathology**

Project Related to Medical or Health Sciences 2 Winners: Junior Division: Monetary Award of \$100 And a Certificate Lexi Strong, Ellendale School District, "Dialing Bacteria" Haley Peterson, Trenton School District, "Benefits Of Sodium Alginate"

#### **UND Department of Pathology**

Project Related to Medical or Health Sciences 2 Winners: Senior Division: Monetary Award of \$100 And a Certificate Madison Goetzfridt, Mandan School District, "Antibiotic Resistance: The Need for Speeding up Nature's Microbe Machine" Martin Krump, Hankinson School District, "The Comparative Assessment of Various Feeds on Capra hircus"

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

Project Related to Medical or Health Sciences 1 Winner: Senior Division: Monetary Award of \$100 And a Certificate Riley McLean, Bismarck St. Mary's School District, "Laparoscopic Post-Operative Pain"

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

Project Related to Medical or Health Sciences 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Steven Eddy, Oak Grove School District, "Comparing natural sugars and artificial sweeteners"

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

Project Related to Medical or Health Sciences 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Braden Prochnow, Hankinson School District, "Wound Care: Natural vs. Commercial"

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

Project Related to Medical or Health Sciences 1 Winner: Senior Division: Monetary Award of \$200 And a Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

## 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, "Antibiotic Resistance: The Need for Speeding up Nature's Microbe Machine"

## North Dakota Society for Clinical Laboratory

Project Related to Laboratory Medicine 1 Winner: Senior Division: A Cash Award of \$50 And a Certificate Sophia Nelson, Grand Forks Central High School School District, "Testing the Efficacy of Commercial Sports Drinks on Performance in Young Athletes"

## North Dakota Society for Clinical Laboratory

Project Related to Laboratory Medicine 1 Winner: Junior Division: A Cash Award of \$50 And a Certificate Josianna Prochnow, Hankinson School District, "An Analysis of the Bacterial Contamination of Sausage"

## Microbiology/Pharmacology

## **UNDSMHS** Department of Basic Sciences

Project Related to Microbiology / Immunology or Infectious Disease (Priority to Microbiology Project)

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

Josianna Prochnow, Hankinson School District, "An Analysis of the Bacterial Contamination of Sausage"

Megan Schiltz, Hankinson School District, "The Effects of Antacids on Acidity and Intestinal Bacteria"

## **UNDSMHS** Department of Basic Sciences

Project Related to Microbiology / Immunology or Infectious Disease (Priority to Microbiology Project)

2 Winners: Senior Division: Monetary Award of \$100 And a Certificate

Martin Krump, Hankinson School District, "The Comparative Assessment of Various Feeds on Capra hircus"

Madison Goetzfridt, Mandan School District, "Antibiotic Resistance: The Need for Speeding up Nature's Microbe Machine"

## **UNDSMHS** Department of Basic Sciences

Project Related to Medical or Health Sciences (Priority to Pharmacology Project) 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Braden Prochnow, Hankinson School District, "Wound Care: Natural vs. Commercial"

### **UNDSMHS** Department of Basic Sciences

Project Related to Medical or Health Sciences (Priority to Pharmacology Project) 1 Winner: Senior Division: Monetary Award of \$100 And a Certificate Martin Krump, Hankinson School District, "The Comparative Assessment of Various Feeds on Capra hircus"

#### North Dakota Pharmacists Association

Project in Field of Pharmacology 1 Winner: Junior Division: A Cash Award of \$75 And a Certificate Braden Prochnow, Hankinson School District, "Wound Care: Natural vs. Commercial"

## North Dakota Pharmacists Association

Project in Field of Pharmacology 1 Winner: Senior Division: A Cash Award of \$100 And a Certificate Sophia Nelson, Grand Forks Central High School , "Testing the Efficacy of Commercial Sports Drinks on Performance in Young Athletes"

## Navy/Unique

## Navy

Project (All Categories Considered)
3 Winners: Senior Division: An Educational Recognition Award Valued at \$75, A Medallion, And a Certificate
Christopher Dean, Dickinson School District, "An Exploration of Antimatter by Observation of Alpha and Beta Decay Within Three Distinct Cloud Chamber Apparatuses"
Alexius Thorpe, Ellendale School District, "Computer or Human"
Eric Spilman, Mandan School District, "Thermoelectrics: Electricity of Heat"

#### Navy

Project (All Categories Considered) 3 Winners: Junior Division: A Medallion And a Certificate Ryan Muggli, Grant County School District, "Wind Power Is It Worth It?" Alexis Herda, Lakota School District, "How To Help Clean Up Oil Spills In The Ocean" Kellan Benson, Hankinson School District, "An Analysis of Observational Skills by Age and Gender"

## Physics/Astronomy

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

Project in the Physics Category 1 Winner: Junior Division: Monetary Award of \$100 And a Certificate Andra Smith, Trinity Christian School District, "Lambert's Cosine Law"

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

Project in the Physics Category 1 Winner: Senior Division: Monetary Award of \$100 And a \$500 Scholarship And a Certificate Eric Spilman, Mandan School District, "Thermoelectrics: Electricity of Heat"

## 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 Christopher Dean, Dickinson School District, "An Exploration of Antimatter by Observation of Alpha and Beta Decay Within Three Distinct Cloud Chamber Apparatuses"

#### 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 Aidan Fire, Schroeder School District, "Rainbow Energy"

#### **United States Metric Association**

Project Using Metric System for Measurements 5 Winners: Junior Division: A Certificate David Steinke, Hope-Page School District, "The Dimmer Duel: Amps Vs. Volts" Aidan Fire, Schroeder School District, "Rainbow Energy" Matt Koski, Lakota School District, "Does Varying Battery Voltage Affect The rpms of a Simple Motor with a Reed Switch" Andra Smith, Trinity Christian School District, "Lambert's Cosine Law" Brody LaRoque, Trenton School District, "Hot Pop"

## Social/Behavioral Sciences

## **UND Department of Psychology**

Project in the Psychology or Behavioral Science Category 2 Winners: Junior Division: Monetary Award of \$125 each And a Certificate Judah Hoerner, Hebron School District, "Hitboxes: How Size Affects Score" Riley Blackburn, Velva School District, "When You Go Noseblind"

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

Project in the Psychology or Behavioral Science Category 2 Winners: Senior Division: Monetary Award of \$125 each And a Certificate Sydney Pabian, Berthold School District, "Distractions and Reactions" Isabella Froehing, Wishek School District, "Effects of Positive Encouragement on Muscle Fatigue and Grip Strength"

#### **UND Department of Sociology**

Project in the Social Sciences Category 1 Winner: Junior Division: Monetary Award of \$75 And a Certificate Jade Steinkamp, Schroeder School District, "Dominant Sensitivity"

#### **UND Department of Sociology**

Project in the Social Sciences Category 1 Winner: Senior Division: Monetary Award of \$75 And a Certificate Savanah Canen, Hebron School District, "Does Retinal Color Correspondence Have Any Correlation to Emotional State?"

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

Project in the Fields of Social or Behavioral Science 1 Winner: Senior Division: Monetary Award of \$100 And a Certificate Sophia Nelson, Grand Forks Central High School District, "Testing the Efficacy of Commercial Sports Drinks on Performance in Young Athletes"

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

Project in the Fields of Social or Behavioral Science 1 Winner: Junior Division: Monetary Award of \$50 And a Certificate Claire Leach, Schroeder School District, "Color Perception"

#### **American Psychological Association**

Project Related to Psychology 1 Winner: Junior or Senior Division: A Certificate Lanie Kunz, Berthold School District , "Brain Food: It's What's For Dinner"

#### Virginia George Inheritance Fund

Project in the Fields of Social or Behavioral Science 1 Winner: Senior Division: Monetary Award of \$125 And a Certificate Kelsey Guttormson, Tioga School District, "Hello My Name Is...Happy! Year 2"

#### Virginia George Inheritance Fund

Project in the Fields of Social or Behavioral Science 1 Winner: Junior Division: Monetary Award of \$75 And a Certificate Branden Kline, Scranton School District, "Fake Faces"

#### Association of North Dakota Geographers

Project in the Field of Human-Environment Interaction 1 Winner: Senior Division: Monetary Award of \$125 And a Certificate Naomi Schmidt, Tioga School District, "Don't Judge A Book by Its Color"

## Sweepstakes

#### **UND Office of Research & Economic Development**

Project exhibiting Exceptional Creativity 1 Winner: Junior or Senior Division: Monetary Award of \$500 And a Certificate Keenan Black, Black Homeschool Academy , "Train Illuminator"

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

Outstanding Math or Science Project (Female) 1 Winner (must be a female exhibitor): Senior Division: Monetary Award of \$100 And a Certificate Mya Steinwehr, Hankinson School District, "A Comparative Study on Natural Pesticides for Potatoes"

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

Outstanding Math or Science Project (Female) 1 Winner (must be a female exhibitor): Junior Division: Monetary Award of \$50 And a Certificate Anna Dragseth, East Fairview School District, "Fighting Fusarium"

## Yale Science And Engineering Association

Project in Areas of Computer Science, Engineering, Physics, or Chemistry 1 Winner: Senior Division: A Medallion And A Certificate Sean Loken, Wishek School District, "Solar Engine Applications III"

## United States Air Force

### Air Force

Project That Has Applications Useful to Air Force 4 Winners: Junior or Senior Division: A Laptop Backpack, Rotating Flash Drive, Portable Earbuds, a 4 Port Hub, And a Certificate Jade Steinkamp, Schroeder School District, "Dominant Sensitivity" Claire Leach, Schroeder School District, "Color Perception" Kelsey Guttormson, Tioga School District, "Hello My Name Is...Happy! Year 2" Keenan Black, Black Homeschool Academy School District, "Train Illuminator"

## Water Quality

#### **American Water Works Association**

Project Related to Drinking Water Quality 1 Winner: Junior Division: A Cash Award of \$75 And a Certificate Carson Hatter, Trenton School District, "Water You Drinking"

#### **American Water Works Association**

Project Related to Drinking Water Quality 1 Winner: Senior Division: A Cash Award of \$75 And a Certificate Cassidy Tomaschy, Dickinson School District, "A Comparative Analysis of Low Cost Water Filtration Systems"

#### North Dakota Water Environment Association

Project Related to Water Quality 1 Winner: Senior Division: A Cash Award of \$75 And a Plaque Lakin Mauch, Hankinson School District, "An Assessment of Drainage Systems in Richland County Corn Fields"

#### North Dakota Water Environment Association

Project Related to Water Quality 1 Winner: Junior Division: A Cash Award of \$75 And a Plaque Jack Zorn, Griggs County Central School District, "Drain Pain: What is the Bacon Grease Doing?"

#### North Dakota Rural Water Systems Association

Project Related to Water Quality
1 Winner: Senior Division: A Cash Award of \$100 And a Certificate
Juliann Spilman, Mandan School District, "Comparing Lake Water Quality"
Water Environment Federation
Project Related to Water Quality or Water Conditions
1 Winner: Junior or Senior Division: A Certificate
Lakin Mauch, Hankinson School District, "An Assessment of Drainage Systems in Richland County Corn Fields"