

2019 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 Admissions and Financial Aid, 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 Admissions and Financial Aid, 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 Admissions and Financial Aid, 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

Emma Kratcha, Hankinson School District, "Using Soil Enhancements to Increase Zea mays Profitability in Limited Production Agricultural Areas"

Senior Division – 2nd Place – Sweepstakes Runner-Up

Shri Patel, Red River School District, "Epigenetic Targets in Longevity Control in *Drosophila melanogaster*"

North Dakota State Science and Engineering Fair

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

Abigail Post, Hankinson School District, "An Application of Titanium Dioxide Coatings to Reduce Nitrogen Oxides"

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: Brody LaRoque, Trenton School District, "A Safer Pipeline Design"

2nd Finalist: Mikayla Wolfe, Tioga School District, "(H₂O)h My!"

3rd Finalist: Bryan Martinez, Trenton School District, "Effects of Sodium in Nature"

1st Alternate: Cameron Taylor, Tioga School District, "Password Security"

2nd Alternate: Lydia Carr, Tioga School District, "What's Up With All Of These Negative Political Ads?"

Northeast Region

1st Finalist: Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification "

1st Alternate: Matt Koski, Lakota School District, "Which Organic Fertilizer is Most Effective Part III" 2nd Alternate: Macy Herda, Lakota School District, "Swimming In Acid"

North Dakota State Science and Engineering Fair

Southwest Central Region

1st Finalist: Halle Rivinius, Grant School District, "Fats"

2nd Finalist: Abbigale Steeke, Scranton School District, "The Public Perception On Meat Labeling"

1st Alternate: Madelyn Sauter, Grant School District, "Robotics in Agriculture"

2nd Alternate: Alexis Imholte & Sophia McLeish, Mandan School District, "Tendon Repair and Stitch Pattern"

Southeast Central Region

1st Finalist: Megan Beyer, Litchville-Marion School District, "KEVAN - Keven Efficient Videogame Plalying Artificial Neural Net"

2nd Finalist: Bryce Goettle, Ashley School District, "Electromagnetic Breaking: Efficiency Relative to Position"

1st Alternate: Alexis Kempf, Ashley School District, "Surviving with Solar"

2nd Alternate: Morgan Dutton, Kidder County School District, "Factors Affecting Dewormer Efficiency"

North Dakota State Science and Engineering Fair

Southeast Region

1st Finalist: Emerson Falk, Hankinson School District, "An Analysis of Microbial Reduction Methods for Lake Water"

2nd Finalist: Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

1st Alternate: Allison Habib, Hankinson School District, "A Chemical Analysis of Various Water Sources"

2nd Alternate: Braden Prochnow, Hankinson School District, "Can Spectroscopy Indicate Bacterial Quantities?"

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

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

Junior Division 2nd Place – Sweepstakes Runner-Up

Sophus Hammond, Valley Middle School, "The Art of Photogra-Tree"

North Dakota State Science and Engineering Fair

Junior Division Place Winners

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

Northwest Region

1st Place: Brock Sundhagen, Tioga School District, "Hydro Power"

2nd Place: Gracie Nutt, Tioga School District, "Do You Need a Helping Hand?"

3rd Place: Emma Taylor, Tioga School District, "Are You Brushing With Bacteria?"

4th Place: Riley Pederson, Tioga School District, "My Wonderous Rolling Wonder!"

Northeast Region

1st Place: Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition" 2nd Place: Preston Diedrich, Schroeder Middle School, "Dist-Sense"

3rd Place: Katie Swartz, Schroeder Middle School, "Beating Bacteria"

4th Place: Taylor Wilson, Schroeder Middle School, "Hot to Trot"

Southwest Central Region

1st Place: Riley Richter, Linton School District, "Can You Hear Me Now"

2nd Place: Merissa Meyer, Grant County School District, "Bye, Bye, Bacteria"

3rd Place: Layton Woodburty, Flasher School District, "Ice Shovel"

4th Place: Joseph Richter, Flasher School District, "Cell Phone Radiation"

North Dakota State Science and Engineering Fair

Southeast Central Region

1st Place: Marshall Lindgren, Ashley School District, "Egg Production"

2nd Place: Cora Schaunaman, Ashley School District, "Creep Feed of Mixed Ration"

3rd Place: Christopher Pfeifle, Ashley School District, "Organic vs. Commercial Mouthwash"

4th Place: Hannah Seefeld, Ellendale School District, "You Call This Living"

Southeast Region

1st Place: Brooklyn Bergemann, Lisbon School District, "Call? Or Text?"

2nd Place: Leah Saxberg, Griggs County Central School District, "Does Fertilizer Affect Soybeans?" 3rd Place: Piper Suhr, Griggs County Central School District, "The Effect of Caffeine on the Mind and Body"

4th Place: Bladow/Sheggerud Team, Hankinson School District, "Dirty Money"

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

Joshua Olson, Ellendale School District, "Light It Up!"

North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

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

Emma Kratcha, Hankinson School District, "Using Soil Enhancements to Increase Zea mays Profitability in Limited Production Agricultural Areas"

North Dakota State Science and Engineering Fair

North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

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

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"

North Dakota Soil Conservation District/Auxiliary

Project Related to Soil Conservation

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

Grace Mehlhoff, Wing School District, "Power of Erosion"

Farmers Union Insurance - North Dakota

Project Related to Agriculture

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

Madelyn Schmidt, Kidder County School District, "The Presence of Primary Plant Nutrient Levels in Soil After Methane Gas Production"

Laura Muggli, Grant School District, "Glyphosphate Across The State"

Farmers Union Insurance - North Dakota

Project Related to Agriculture

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

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

Alea Steinwand, Ellendale School District, "Trough Troubles"

North Dakota State Science and Engineering Fair

North Dakota Farm Bureau

Project Related to Agriculture

2 Winners: Senior Division: A Cash Award of \$25, And A Certificate

Abbigale Steeke, Scranton School District, "The Public Perception On Meat Labeling"

Samantha Ellison, Grant School District, "Average Daily Gainz"

North Dakota Farm Bureau

Project Related to Agriculture

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

Cora Schaunaman, Ashley School District, "Creep Feed of Mixed Ration"

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

Chemistry/Biochemistry

Department of Chemistry

Project in Chemistry

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

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"

North Dakota State Science and Engineering Fair

Department of Chemistry

Project in Chemistry

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

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification"

American Association for Clinical Chemistry

Project in Clinical Chemistry

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

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

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 Periodic Table Scroll Pen, and a Certificate

Allison Habib, Hankinson School District, "A Chemical Analysis of Various Water Sources"

NDSSEF Association

Project in Biochemistry

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

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

North Dakota State Science and Engineering Fair

NDSSEF Association

Project in Biochemistry

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

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

Earth/Atmospheric Sciences

Department of Atmospheric Sciences

Project in Atmospheric Sciences

1 Winner: Junior or Senior Division: Monetary Award of \$75 and a Certificate

Emma Pierce, Trenton School District, "It's Freezing"

Department of Geography

Project in Geography

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

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"

Department of Geography

Project in Geography

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

Mikayla Wolfe, Tioga School District, "(H2O)h My!"

North Dakota State Science and Engineering Fair

Harold Hamm School of Geology & Geological Engineering

Project in Geology/ Geological Engineering

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

Brock Sundhagen, Tioga School District, "Hydro Power"

Harold Hamm School of Geology & Geological Engineering

Project in Geology/ Geological Engineering

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

Brody LaRoque, Trenton School District, "A Safer Pipeline Design"

North Dakota Geological Society

Project in Field of Geology or Earth Science

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

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

North Dakota Geological Society

Project in Field of Geology or Earth Science

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

Emerson Falk, Hankinson School District, "An Analysis of Microbial Reduction Methods for Lake Water"

North Dakota State Science and Engineering Fair

American Meteorological Society

Project Related to Meteorology

2 Winners: Junior or Senior Division: A Certificate

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification "

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"

Association For Women Geoscientists

Project Related to Geosciences

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

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification "

National Oceanic & Atmospheric Administration

Project Related to Improved Understanding of the Earth's Processes

1 Winner: Junior Division: A Certificate And A Medallion

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"

NASA Earth System Science Award

Project Related to Earth's Interconnected Systems

1 Winner: Junior or Senior Division: A Certificate

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification "

North Dakota State Science and Engineering Fair

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

Alexis Kempf, Ashley School District, "Surviving with Solar"

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

Andrew Mehlhoff, Wing School District, "Steam Turbine Utilization Hydrogen Peroxide"

Otter Tail Power Company

Project Related to Energy or Electricity

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

Brock Sundhagen, Tioga School District, "Hydro Power"

Gracyn Holzer, Linton School District, "Do Cell Phones Radiate"

Xcel Energy

Project Related to Energy or Electricity

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

Joseph Richter, Flasher School District, "Cell Phone Radiation"

Alora Kroh & Emma Helbling, Mandan School District, "FR PPE Investigation"

Riley Richter, Linton School District, "Can You Hear Me Now"

North Dakota State Science and Engineering Fair

Xcel Energy

Project Related to Energy or Electricity

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

Tanner Kempf, Ashley School District, "Welding: Stick vs. MIG"

Spencer Rudningen, Grenora School District, "Forms of Rocket Fuel"

Madelyn Sauter, Grant School District, "Robotics in Agriculture"

Engineering

Department of Petroleum Engineering

Project in Engineering

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

Jackson Meidinger, Ashley School District, "Beans vs. Bakken"

College of Engineering and Mines

Project in Engineering

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

Jarin Monson, Griggs County Central School District, "Skin Prep Competition"

College of Engineering and Mines

Project in Engineering

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

Abigail Post, Hankinson School District, "An Application of Titanium Dioxide Coatings to Reduce Nitrogen Oxides"

North Dakota State Science and Engineering Fair

College of Engineering and Mines

Project in Engineering (Female Winner)

1 Winner: Senior Division: Monetary Award of \$100 and a \$500 Engineering Scholarship and a Certificate

Alexis Imholte & Sophia McLeish, Mandan School District, "Tendon Repair and Stitch Pattern"

Society of Automotive Engineers

Project in Mobility Engineering

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

Riley Pederson, Tioga School District, "My Wonderous Rolling Wonder!"

Society of Automotive Engineers

Project in Mobility Engineering

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

Abigail Post, Hankinson School District, "An Application of Titanium Dioxide Coatings to Reduce Nitrogen Oxides"

ASM Materials Education Foundation

Project in Materials Engineering

1 Winner: Junior or Senior Division: A Ribbon And a Certificate

Reagan Chambers, Woodhaven Academy, "Feasibility Study of a Three-Dimensional Printed Honeycomb Foundation"

North Dakota State Science and Engineering Fair

Engineering (Chemical)

Department of Chemical Engineering

Project in Chemical Engineering

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

Sophus Hammond, Valley Middle School, "The Art of Photogra-Tree"

Department of Chemical Engineering

Project in Chemical Engineering

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

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification "

Engineering (Civil)

Department of Civil Engineering

Project in Civil Engineering

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

Brady Pfaff-Christianson, Litchville-Marion School District, "BRIDGEBREAKER"

Department of Civil Engineering

Project in Civil Engineering

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

Brody LaRoque, Trenton School District, "A Safer Pipeline Design"

North Dakota State Science and Engineering Fair

Engineering (Electrical)

Dr. Richard Schultz Award - Department of Electrical Engineering

Project in Electrical Engineering

1 Winner: Junior Division: Monetary Award of \$50 and a Certificate Gracie Nutt, Tioga School District, "Do You Need a Helping Hand?"

Dr. Richard Schultz Award - Department of Electrical Engineering

Project in Electrical Engineering

1 Winner: Senior Division: Monetary Award of \$50 and a Certificate Alexis Kempf, Ashley School District, "Surviving with Solar"

Engineering (Mechanical)

Department of Mechanical Engineering

Project in Mechanical Engineering

1 Winner: Junior Division: Monetary Award of \$50 and a Certificate Layton Woodburty, Flasher School District, "Ice Shovel"

Department of Mechanical Engineering

Project in Mechanical Engineering

1 Winner: Senior Division: Monetary Award of \$50 and a Certificate Tanner Kempf, Ashley School District, "Welding: Stick vs. MIG"

North Dakota State Science and Engineering Fair

Environmental Sciences

College of Engineering and Mines

Project in Energy/Environmental Science

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

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification"

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, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification"

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 Grace Mehlhoff, Wing School District, "Power of Erosion"

Ricoh Corporation

Project Related to Environmentally Friendly Businesses

1 Winner: Senior Division: A Certificate

Brody LaRoque, Trenton School District, "A Safer Pipeline Design"

North Dakota State Science and Engineering Fair

NDSSEF Association

Project Related to Environmental Remediation

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

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"

NDSSEF Association

Project Related to Environmental Remediation

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

Bryan Martinez, Trenton School District, "Effects of Sodium in Nature"

Human Nutrition/Food Science

Hot Cakes Café & Lodging

Project That Has Emphasis on Food Quality or Food Safety

1 Winner: Junior or Senior Division: A Cash Award of \$25, T-Shirt, And a Certificate

Halle Rivinius, Grant School District, "Fats"

NDSSEF Association

Project Related to Human Nutrition or Food Science

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

Ashtyn Auch, Schroeder Middle School, "Pop Quiz"

Hannah Seefeld, Ellendale School District, "You Call This Living"

North Dakota State Science and Engineering Fair

NDSSEF Association

Project Related to Human Nutrition or Food Science

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

Abbigale Steeke, Scranton School District, "The Public Perception On Meat Labeling"

Halle Rivinius, Grant School District, "Fats"

ISEF Alumni

ISEF Alumni

Project as Determined by ISEF Judges

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

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification"

ISEF Alumni

Project as Determined by ISEF Judges

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

Alexis Imholte & Sophia McLeish, Mandan School District, "Tendon Repair and Stitch Pattern"

Life Sciences

Department of Biomedical Sciences

Project in Area of Life Sciences (Molecular Biology Emphasis)

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

Sophus Hammond, Valley Middle School, "The Art of Photogra-Tree"

Cora Schaunaman, Ashley School District, "Creep Feed of Mixed Ration"

North Dakota State Science and Engineering Fair

Department of Biomedical Sciences

Project in Area of Life Sciences (Molecular Biology Emphasis)

2 Winners: Senior Division: Monetary Award of \$50 each and a Certificate

Shri Patel, Red River School District, "Epigenetic Targets in Longevity Control in *Drosophila melanogaster*"

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

Department of Biology

Project in Biology

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

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

Department of Biology

Project in Biology

1 Winner: Senior Division: Monetary Award of \$100 and a \$300 Biology Scholarship and a Certificate Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

Kingsbury Family

Outstanding Life Science Project

1 Winner: Junior or Senior Division: Monetary Award of \$25 and a Plaque

Gracyn Holzer, Linton School District, "Do Cell Phones Radiate"

North Dakota State Science and Engineering Fair

North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine

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

Morgan Dutton, Kidder County School District, "Factors Affecting Dewormer Efficiency"

North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine

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

Lindsey Vachal, Tioga School District, "Cattle Growth Implants"

North Dakota Veterinary Medical Association

Project Related to Veterinary Medicine

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

Lily Steeke, Scranton School District, "Livestock Handling Facilities"

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

Cora Schaunaman, Ashley School District, "Creep Feed of Mixed Ration"

North Dakota State Science and Engineering Fair

NDSSEF Association

Project in Botany

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

Gavin Kratcha, Hankinson School District, "The Effects of Micronutrients on Glycine max"

NDSSEF Association

Project in Botany

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

Emma Kratcha, Hankinson School District, "Using Soil Enhancements to Increase Zea mays Profitability in Limited Production Agricultural Areas"

Mathematics/Computer Science

Intel Excellence In Computer Science

Project in Computer Science Category

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

Megan Beyer, Litchville-Marion School District, "KEVAN - Keven Efficient Videogame Plalying Artificial Neural Net"

Mu Alpha Theta

Project Involving Modern Mathematics

1 Winner: Senior Division: A Certificate

Alexis Kempf, Ashley School District, "Surviving with Solar"

North Dakota State Science and Engineering Fair

Department of Computer Science

Project in Computer Science

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

Gracie Nutt, Tioga School District, "Do You Need a Helping Hand?"

Department of Computer Science

Project in Computer Science

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

Blake Bernhardt, Wing School District, "Exposing Vulnerabilities In Websites Through SQL Injection"

Department of Mathematics

Project in Mathematics

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

Gracie Nutt, Tioga School District, "Do You Need a Helping Hand?"

Department of Mathematics

Project in Mathematics

1 Winner: Senior Division: Monetary Award of \$100 and a \$500 Mathematics Scholarship and a Certificate

Bryce Goettle, Ashley School District, "Electromagnetic Breaking: Efficiency Relative to Position"

North Dakota State Science and Engineering Fair

Medicine/Health

ND IDeA Network of Biomedical Research Excellence

Project in Medical or Health Sciences

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

Ellie Brown, Griggs County Central School District, "Time is of the Essence"

ND IDeA Network of Biomedical Research Excellence

Project in Medical or Health Sciences

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

Abigail Post, Hankinson School District, "An Application of Titanium Dioxide Coatings to Reduce Nitrogen Oxides"

School of Medicine & Health Sciences

Project in Medical or Health Sciences

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

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

School of Medicine & Health Sciences

Project in Medical or Health Sciences

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

Nicole Schmidt, Ashley School District, "The Effects of ACL Tears"

North Dakota State Science and Engineering Fair

School of Medicine & Health Sciences

Project in Medical or Health Sciences

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

Joseph Richter, Flasher School District, "Cell Phone Radiation"

Department of Biomedical Sciences

Project in Pharmacology/Immunology

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

Ashtyn Auch, Schroeder Middle School, "Pop Quiz"

Department of Biomedical Sciences

Project in Pharmacology/Immunology

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

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome"

North Dakota Dental Foundation

Project Related to Dentistry

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

Tayzie Cox, Tioga School District, "Sticky Situations"

Christopher Pfeifle, Ashley School District, "Organic vs. Commercial Mouthwash"

North Dakota State Science and Engineering Fair

North Dakota Dental Foundation

Project Related to Dentistry

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

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome " Taytum Kreil, Trenton School District, "Toothy Bacteria"

North Dakota Academy of Family Physicians

Project Related to Medicine

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

Alexis Imholte & Sophia McLeish, Mandan School District, "Tendon Repair and Stitch Pattern"

North Dakota Society for Clinical Laboratory

Project Related to Laboratory Medicine

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

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome " Braden Prochnow, Hankinson School District, "Can Spectroscopy Indicate Bacterial Quantities?"

Alexis Imholte & Sophia McLeish, Mandan School District, "Tendon Repair and Stitch Pattern"

North Dakota State Science and Engineering Fair

North Dakota Society for Clinical Laboratory

Project Related to Laboratory Medicine

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

Jada Bonogofsky, Flasher School District, "Germs! Germs! Everywhere?"

Ashtyn Auch, Schroeder Middle School, "Pop Quiz"

Kennedy Vagts, Tioga School District, "Animals pH"

North Dakota Pharmacists Association

Project in Field of Pharmacology

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

Ashtyn Auch, Schroeder Middle School, "Pop Quiz"

North Dakota Pharmacists Association

Project in Field of Pharmacology

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

Kasandra Hulm, Strasburg School District, "Antibiotics Vs. Essential Oils"

Microbiology

Department of Biomedical Sciences

Project in Microbiology/Infectious Disease

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

Alea Steinwand, Ellendale School District, "Trough Troubles"

Christopher Pfeifle, Ashley School District, "Organic vs. Commercial Mouthwash"

North Dakota State Science and Engineering Fair

Department of Biomedical Sciences

Project in Microbiology/Infectious Disease

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

Kaity Hove, Trenton School District, "Bacteria Destroyers"

Isabelle Chambers, Woodhaven Academy, "A New Method to Study Human Microbiome "

Department of Biomedical Sciences

Project in Medical or Health Sciences

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

Rylee Stearns, Trenton School District, "Are Hospitals Clean?"

Department of Biomedical Sciences

Project in Medical or Health Sciences

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

McKayla DeWitz, Kidder County School District, "Don't Put Your Money Where Your Mouth Is!"

North Dakota State Science and Engineering Fair

Military

Navy

Project (All Categories Considered)

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

Alyssa Kemp, Cavalier School District, "Saving our Seas - A Solid Solution to Reducing Carbon Dioxide and Ocean Acidification "

Andrew Mehlhoff, Wing School District, "Steam Turbine Utilization Hydrogen Peroxide"

Madison Wilson, Scranton School District, "Diesel Winterization"

Navy

Project (All Categories Considered)

3 Winners: Junior Division: A Medallion And a Certificate

Rylee Stearns, Trenton School District, "Are Hospitals Clean?"

Carlee Fuchs, Flasher School District, "Up in Flames"

Joseph Richter, Flasher School District, "Cell Phone Radiation"

North Dakota State Science and Engineering Fair

Air Force

Project That Has Applications Useful to Air Force

4 Winners: Junior or Senior Division: An Over-the-Shoulder Sling Pack, Power Bank Charger, Dog Tag USB Flash Drive, A Dual USB Car Charger, And a Certificate

Tymer Boldt, Flasher School District, "Driving On Air"

Spencer Rudningen, Grenora School District, "Forms of Rocket Fuel"

Megan Beyer, Litchville-Marion School District, "KEVAN - Keven Efficient Videogame Playing Artificial Neural Net"

Gracyn Holzer, Linton School District, "Do Cell Phones Radiate"

North Dakota Army National Guard

Project That Has Applications Useful to North Dakota Army National Guard

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

Piper Suhr, Griggs County Central School District, "The Effect of Caffeine on the Mind and Body"

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

Alora Kroh & Emma Helbling, Mandan School District, "FR PPE Investigation"

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

Cameron Taylor, Tioga School District, "Password Security"

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: Senior Division Runner-Up: A Backpack With Assortment of Items

Bailee Pierce, Scranton School District, "How Casein Affects You"

Physics/Astronomy

Department of Physics & Astrophysics

Project in Physics & Astronomy

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

Preston Diedrich, Schroeder Middle School, "Dist-Sense"

Department of Physics & Astrophysics

Project in Physics & Astronomy

1 Winner: Senior Division: Monetary Award of \$100 and a \$500 Physics Scholarship and a Certificate Andrew Mehlhoff, Wing School District, "Steam Turbine Utilization Hydrogen Peroxide"

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

Bryce Goettle, Ashley School District, "Electromagnetic Breaking: Efficiency Relative to Position"

North Dakota State Science and Engineering Fair

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

Zachary St. Aubin, Ashley School District, "This is Tense"

United States Metric Association

Project Using Metric System for Measurements

5 Winners: Junior Division: A Certificate

Brooklyn Bergemann, Lisbon School District, "Call? Or Text?"

Zachary St. Aubin, Ashley School District, "This is Tense"

Joseph Richter, Flasher School District, "Cell Phone Radiation"

Braden Schlatter, Glen Ullin School District, "You Nailed It"

Preston Diedrich, Schroeder Middle School, "Dist-Sense"

Social/Behavioral Sciences

Department of Psychology

Project in Psychology or Behavioral Science

2 Winners: Junior Division: Monetary Award of \$100 and a Certificate

Asia Bercherl, Griggs County Central School District, "Eyewitness Accuracy"

Ellie Brown, Griggs County Central School District, "Time is of the Essence"

North Dakota State Science and Engineering Fair

Department of Psychology

Project in Psychology or Behavioral Science

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

Lydia Carr, Tioga School District, "What's Up With All Of These Negative Political Ads?"

Kebba Beach, Ashley School District, "Dream On"

Virginia George Inheritance Fund

Project in Social or Behavioral Science

1 Winner: Senior Division: Monetary Award of \$125 and a Certificate

Abbigale Steeke, Scranton School District, "The Public Perception On Meat Labeling"

Virginia George Inheritance Fund

Project in Social or Behavioral Science

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

Piper Suhr, Griggs County Central School District, "The Effect of Caffeine on the Mind and Body"

American Psychological Association

Project Related to Psychology

1 Winner: Junior or Senior Division: A Certificate

Elizabeth Sherbrooke, Hankinson School District, "The Effect of Distraction Methods on Focusing to Complete a Task"

North Dakota State Science and Engineering Fair

Sweepstakes

Yale Science And Engineering Association

Project in Areas of Computer Science

1 Winner: Senior Division: A Medallion And A Certificate

Brody LaRoque, Trenton School District, "A Safer Pipeline Design"

Water Quality

American Water Works Association

Project Related to Drinking Water Quality

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

Alea Steinwand, Ellendale School District, "Trough Troubles"

American Water Works Association

Project Related to Drinking Water Quality

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

Mikayla Wolfe, Tioga School District, "(H2O)h My!"

North Dakota Water Environment Association

Project Related to Water Quality

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

Emerson Falk, Hankinson School District, "An Analysis of Microbial Reduction Methods for Lake Water"

North Dakota State Science and Engineering Fair

North Dakota Water Environment Association

Project Related to Water Quality

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

Kathryn Schneider, Ashley School District, "Bye-Bye, Blue-Green Algae"

North Dakota Rural Water Systems Association

Project Related to Water Quality

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

Allison Habib, Hankinson School District, "A Chemical Analysis of Various Water Sources"

Water Environment Federation

Project Related to Water Quality or Water Conditions

1 Winner: Junior or Senior Division: A Certificate

Kaylee Kemp, Cavalier School District, "Say it Ain't Snow - Investigating Acid Deposition"