

2016 Maine State Science Fair Awards

March 16, 2016

Grand Awards

These students will represent Maine at the 2016 Intel International Science and Engineering Fair.

Intel ISEF 3rd Place

Sydney McDonald, Bangor High School

The design and analysis of an artificial muscle comprised of ionic-polymer metal composites

Intel ISEF 2nd Place

Paige Brown, Bangor High School

Constructing low-cost calcium alginate scaffolds for the reduction of pollutants in stormwater

Intel ISEF 1st Place

1st - Demetri Maxim, Gould Academy

Building human kidney tissue from pluripotent human stem cells: A promising new treatment for kidney disease

Category Awards

Animal and Plant Sciences

3rd - Sarah Marcotte, Bangor High School

Effects of road salt on White Pine tree health

2nd - James Prescott, Bangor High School

The effects of the amino acid content of pollen on the foraging habits of honey bees

1st - Mei Tian, Bangor High School

Testing the effectiveness of mycorrhizae in the remediation of soils

Behavioral and Social Sciences

3rd - Brooke Asherman, Greely High School

Visualization in sports

2nd - Kaici Aloupis and Emma England, Falmouth High School

The effects of music on comprehension performance

1st - Madelyn Adams and Meghan Dye, Falmouth High School

Behavioral factors and their impact on sleep quality

Biological Sciences and Engineering

3rd - Alejandro Ramos, Lincoln Academy

Tanausú

2nd - Sydney McDonald, Bangor High School

The design and analysis of an artificial muscle comprised of ionic-polymer metal composites

1st - Demetri Maxim, Gould Academy

Building human kidney tissue from pluripotent human stem cells: A promising new treatment for kidney disease

Biomedical and Health Sciences

3rd - Evan Wyman, Greely High School

Dental staining

2nd - Aubrey Sparrow, Washington Academy

Accuracy of home blood pressure monitors versus medical grade blood pressure monitors

1st - Lilly Waddell, Bangor High School

Testing the effectiveness of annual flu vaccines to corresponding flu outbreaks

Chemistry and Materials Science

3rd - Ibrahim Saleh, Greely High School

The effect of different stain removers on coffee stains

2nd - Noah Gagne, Bangor High School

Preserve paper towel comparison

1st - Conor O'Brien, Bangor High School

Group theory and square paths

Computer Science and Robotics

3rd - Brendan Martin, Bangor High School

The effects of artificial intelligence in game playing

2nd - Jason Millette, Dexter Regional High School

What is the most efficient and effective way to cool a computer

1st - Karan Godara, Falmouth High School

Designing data acquisition, management, and analysis software within Android

Earth and Environmental Sciences

3rd - David Rubin, Bangor High School

The impact of forest type on water quality in Maine lakes

2nd - Maggie Nolan, Greely High School

The effects of stormwater runoff and other pollutants on fresh water quality in Maine

1st - Hassan Qureshi and Clara Bradley, Bangor High School
Stormwater effects on water quality in Bangor streams

Energy and Transportation

3rd - Nicolas Giandrea, Greely High School
Recovery of waste energy using Peltier plates

2nd - Dwight Knightly, Bangor High School
Extending the duration of an organic battery

1st - Tyler Delargy, Bangor High School
The effects of car braking

Mechanical and Environmental Engineering

3rd - Samuel Bonnevie, Greely High School
Initial rocket propulsion via steam explosion

2nd - Emma Payne, Bangor High School
Designing and producing a biodegradable K-cup using cellulose nanofibers

1st - Paige Brown, Bangor High School
Constructing low-cost calcium alginate scaffolds for the reduction of pollutants in stormwater

Microbiology

3rd - Annabelle Williams, Greely High School
The effect of natural antibacterials on Moraxella catarrhalis

2nd - Madelaine Panici, Greely High School
Metals' effect on bacterial growth

1st - Corrigan Farnham, Greely High School
The effectiveness of disinfectants on bacterial quorum sensing communication

Physics, Astronomy, and Mathematics

3rd - Elyse Daub and Victoria Brissette-Rice, Bangor High School
How light pollution from Bangor, ME affects Acadia National Park

2nd - Conor Thompson, Bangor High School
Group theory and square paths

1st - William Reynolds, Bangor High School
Automated search and cataloging of supernovae

Special Awards

American Meteorological Society

Maddie Brookings and Reya Singh, Bangor High School

How to fix the effects of road salt on local streams

Sarah Montembeau and Sadie Humiston, R.W. Traip Academy
Local water health

American Psychological Association

Madelyn Adams and Meghan Dye, Falmouth High School
Behavioral factors and their impact on sleep quality

ASM Materials Education Foundation

Erica Desjardins, Bangor High School
Artistic science: Paint and viscosity

The Jackson Laboratory Future Innovator Award

Beatrice Buckley, The Watershed School
Remote sensing of street lighting levels

Conor O'Brien, Bangor High School
The effects of temperature on biosand filters

Jordan Bryant, Greely High School
Visual memory

Intel Award for Excellence in Computer Science

Karan Godara, Falmouth High School
Designing data acquisition, management, and analysis software within Android

Maine Mathematics and Science Alliance Award

Alejandro Ramos, Lincoln Academy
Tanausú

Mu Alpha Theta

Conor Thompson, Bangor High School
Group theory and square paths

National Aeronautic and Space Administration

David Rubin, Bangor High School
The impact of forest type on water quality in Maine lakes

National Oceanic and Atmospheric Administration

Elizabeth Robbins, Bangor High School
Macro invertebrates as bioindicators to assess stream health

Office of Naval Research

Mei Tian, Bangor High School
Testing the effectiveness of mycorrhizae in the remediation of soils

MaggieBeth Turcotte, Bangor High School
Observing Groombridge 1618 for a potential planetary system

Ricoh Americas Corporation

Mei Tian, Bangor High School
Testing the effectiveness of mycorrhizae in the remediation of soils

Yale Science and Engineering

Sydney McDonald, Bangor High School
The design and analysis of an artificial muscle comprised of ionic-polymer metal composites

Stockholm Junior Water Prize

Conor O'Brien, Bangor High School
The effect of temperature on biosand filters

Paige Brown, Bangor High School
Constructing low-cost calcium alginate scaffolds for the reduction of pollutants in stormwater

David Lavoie, Bangor High School
Live data mapping of storm water runoff using HTML and Google databases to show up-to-date graphs for each area for each condition and source amount given

US Air Force

Kaici Aloupis and Emma England, Falmouth High School
The effects of music on comprehension performance

Clara Bradley and Hassan Qureshi, Bangor High School
Stormwater effects on water quality in Bangor streams