Animal Sciences

3rd Place
Trisha Eedarapalli - Ballard High School Science & Engineering Fair
The Effect of Canine Saliva on Bacteria

2nd Place
Ibrahim Ashraf - Ballard High School Science & Engineering Fair
What Color Light are Fish More Attracted to?

1st Place
Casey Guzman - Ballard High School Science & Engineering Fair
What is the Average Intelligence of Rats?

Behavioral and Social Sciences

3rd Place
Khalida Raheem - Central Academy School
The Relationship between People and Laughter

2nd Place
Jason Ho - Saint Xavier High School, Louisville
Education in a 3-D Technological Environment

1st Place
Sarah Cecil - Ballard High School Science & Engineering Fair
How Reliable Are Eyewitness Testimonies?

Biochemistry

3rd Place
Kunik Dhawan, Joshua Eddings, Giovanni Axibal - Eastern High
Which plants work best with enzymes for decomposition into biofuels

2nd Place
Taylor Keen, Briaunna Anglin - Valley High School
Dissolving Pain Killers in the Stomach

1st Place
Mariann Sleimat - Ballard High School Science & Engineering Fair
Do teens that have or had caries take more time for pH to go back to normal than the teens that don't have caries

Biomedical and Health Sciences

3rd Place
Darian Neal - Central Academy School
Whitening Your Teeth

2nd Place
Eliana Head - Ballard High School Science & Engineering Fair
Does Short-term Aerobic Exercise Positively Affect Memory Recall Ability in Young Adults

1st Place
Isabel Wolf - Ballard High School Science & Engineering Fair
The Balance of Dancers vs Non-dancers
**Biomedical Engineering**

**2nd Place**
Claire Duck, Heather Sweet, Eliza Coulter Coulter - Eastern High
Can Cocoa be a preservative

**1st Place**
Hannah Martin - Ballard High School Science & Engineering Fair
Does Gender Play A Role In Risk For A Total Joint Replacement?

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**Cellular and Molecular Biology**

**3rd Place**
Tamiah Boston, Rachel Vittitow - Eastern High
vitamins and herbal supplements vs medicine- Can vitamins provide the same healing properties compared to aspirin?

**2nd Place**
Shivani Nellore - North Oldham High School
Some Cancer-Associated K-Ras Mutants can have Gain of Function Even When Bound to GDP

**1st Place**
Edward Zhong - Kentucky Country Day
Can Yeast Help Boost the Immune Response to Cancer

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**Chemistry**

**3rd Place**
Daniah Elathamna - Ballard High School Science & Engineering Fair
Comparing the sweetness of sugar and sugar substitutes

**2nd Place**
Madelyn Steineker - North Oldham High School
How much fluoride is absorbed in the mouth from drinking water?

**1st Place**
Kenny Morgan - Ballard High School Science & Engineering Fair
Quick Relief Bio-Availability of Pain Relievers

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**Computational Biology and Bioinformatics**

**3rd Place**
Jawad Saleem - Kentucky Country Day
Structure Activity Relationship Models for Hepatotoxicity

**2nd Place**
Emma Valsted - Ballard High School Science & Engineering Fair
Which Techniques Are the Most Accurate At Predicting the Weather Compared to an Actual Weather Forecast?

**1st Place**
Vishaal Balamurugan - North Oldham High School
Why my Bioengineered Human Islets Cures Diabetes: Bioinformatics and Biochemical approaches to identify mechanism.

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**Earth and Environmental Science**

**3rd Place**
Raymond Pfeiffer IV - Saint Xavier High School, Louisville
Investigation of the Health Risks for Restaurant Employees

**2nd Place**
Delaney Ballard - Ballard High School Science & Engineering Fair
The Impact of Dog Fecal Coliform on Nearby Waterways

1st Place
Kaden Grant - Ballard High School Science & Engineering Fair
Reducing Pollution from Light Fixtures through Efficiency and Shielding

Embedded Systems
2nd Place
Emily Richardson - Ballard High School Science & Engineering Fair
How Is Sound Produced From Vinyl Records?

1st Place
Patrick Yopp - Ballard High School Science & Engineering Fair
Smart Pipes

Energy: Chemical
3rd Place
Gabriel Skaggs, Nathaniel Skaggs, jaden outten - Eastern High
Chemical energy from Mud

2nd Place
Jayanshi Pathak - Ballard High School Science & Engineering Fair
Microbial Fuel Cells

1st Place
Shirlin Kingston - Ballard High School Science & Engineering Fair
Can The Efficiency Of Hydrogen Gas Production By Electrolysis Be Increased?

Energy: Physical
3rd Place
Arya Pallavarapu - Ballard High School Science & Engineering Fair
Solar powered charger

2nd Place
Adam Abayev - Ballard High School Science & Engineering Fair
Charge Funneling

1st Place
Collin Kemper - Saint Xavier High School, Louisville
Essential Features of Hyperloop Systems

Engineering Mechanics
3rd Place
Avery Smith - Ballard High School Science & Engineering Fair
Wind Resistance on a Mock Skyscraper

2nd Place
Joshua Jacob - Saint Xavier High School, Louisville
Development of a Hybrid Direct Write 3D Printer: a Novel One-Step Approach to Fabricating Multi-Layer Functional Devices and Flexible Electronics Through Reactive Inkjet Printing

1st Place
Rachel Spaulding - Eastern High
Solar Updraft Tower-Wind Turbine Hybrid: Optimizing Power Generation in Multifarious Climatic Conditions Using Computational Fluid Dynamics Analysis
Environmental Engineering

3rd Place
Hadley Jostsons - Ballard High School Science & Engineering Fair
The effect of water filtration systems on levels of Copper and Manganese in water.

2nd Place
Katie Bollinger - Ballard High School Science & Engineering Fair
Comparing Biodegradation of Wipes Marketed as “Flushable”

1st Place
Aidan Villegas - Eastern High
The Viability of Alternative Energy in the Indian Ocean

Materials Science

2nd Place
Allison Ogle - Ballard High School Science & Engineering Fair
Which Field Hockey Stick Construction Causes the Field Hockey Ball to Travel Farther?

1st Place
Elizabeth Jessie - Ballard High School Science & Engineering Fair
An Investigation of the Effect of Curing Temperature of Epoxy on Torsional Strength

Mathematics

3rd Place
Jedidiah Tillman - Eastern High
The Strengths of Electromagnets

2nd Place
Jada Graham - Ballard High School Science & Engineering Fair
Tic-Tac-Toe Analysis

1st Place
Cassidy Whited - Valley High School
Graphing Our Paths

Microbiology

3rd Place
Yafet Zewdie - Eastern High
Can we use Nanotechnology clean oil spills

2nd Place
William Wiley - Valley High School
Does Antibacterial Soap Work Better than Normal Soap?

1st Place
Lauren Cail - Ballard High School Science & Engineering Fair
Musical Pathogens

Physics and Astronomy

3rd Place
PJ Perry - Valley High School
Life on Other Planets

2nd Place
Eli Schramko - Ballard High School Science & Engineering Fair
The Effect of Temperature on a Tennis Ball
1st Place
Ryan Valsted - Ballard High School Science & Engineering Fair
The Effect of Lighting on the Dynamic Range and Texture of a Photo

Plant Sciences
3rd Place
Charlotte Brown, Melissa Flores, Andrea Gullens - Central Academy School
How Does Cigarette Smoke Affect Plant Growth?

2nd Place
Kaci McCarthy - Ballard High School Science & Engineering Fair
Electricity vs No Electricity: Lima Bean Plant Growth

1st Place
Tryphena Sithu - Brown School Science Fair
Symbiosis of Azospirillum brasilense and Three Selected Crops in a Hydroponic System

Robotics and Intelligent Machines
2nd Place
Zadie Kennedy, Andrew Delaney, Jacob Brown - Eastern High
The Bot

1st Place
Sasmi Heellage - Ballard High School Science & Engineering Fair
Building a Sensor Based Automated Irrigation System

Systems Software
2nd Place
Makayla Young, Diana Zivkovic - Eastern High
VVIC

1st Place
Vishnupriya Ramasamy - Ballard High School Science & Engineering Fair
Voice Technology For Speech or Hearing Impaired

Translational Medical Science
3rd Place
Gregory olds, Joseph Thompson, James Thompson - Eastern High
Nighttime food consumption producing childhood obesity vs methods to prevent over eating at night

2nd Place
Laura-Lynn Skaggs - Valley High School
The Shingles Cancer Correlation

1st Place
Vaitheesh Jaganathan - Ballard High School Science & Engineering Fair
CAN TENDER COCONUT WATER INHIBIT THE GROWTH OF DIFFERENT TYPES OF CANCER CELLS