

# LRSEF- General Award Script - High School

## Animal Sciences

### 3rd Place

Shisung Choi - Ballard High School Science & Engineering Fair  
The Effect of Fruits on the Trail of Red Harvester Ants

### 2nd Place

Lucy Biberman - Ballard High School Science & Engineering Fair  
Can Cichlids Survive a Horror Movie?

### 1st Place

Spencer Shumway - Ballard High School Science & Engineering Fair  
Can Bugs Learn?

## Behavioral and Social Sciences

### 3rd Place

Carly Schwartz - Ballard High School Science & Engineering Fair  
The Effect of Warping Words on the Stroop Effect

### 2nd Place

Abby Wright - Ballard High School Science & Engineering Fair  
Perceived Difficulty In Origami

### 1st Place

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

## Biochemistry

### 3rd Place

Mason Williams - Valley High School  
Drinking Coke-a-Cola

### 2nd Place

Daniah Elathamna - Ballard High School Science & Engineering Fair  
yeast reproduction in sugar substitutes

### 1st Place

Kendahl Broyles - Brown School Science Fair  
Evaluating the Efficiency of Carica Papaya and Allium Sativum Extracts on Bacterial Inhibition

## Biomedical and Health Sciences

### 3rd Place

Kassidy Waldrige, Sienna Stone - Valley High School  
Detecting Salt and Its Effects.

### 2nd Place

Ryan Valsted - Ballard High School Science & Engineering Fair  
The Effect of Sports on Students' Academic Performance

### 1st Place

Shanzeh Sayied - Kentucky Country Day  
The Efficacy of Camel Milk in Inhibiting Glucose Induced Cataracts

## Biomedical Engineering

### 2nd Place

Taylor Zagata, Reece Morgan - Eastern High  
Can canine help you focus better

**1st Place**

Vishaal Balamurugan - North Oldham High School  
Bioengineering Islet Cells using 3D-Bio Printing Technology for the Treatment of Type One Diabetes

**Cellular and Molecular Biology**

**3rd Place**

Chandrahaas Kona - North Oldham High School  
Cellular Mechanisms Make Our Immune System Robust

**2nd Place**

Edward Zhong - Kentucky Country Day  
The Interaction Between EL-4 Tumor Cells and Macrophages Stimulated with Beta-glucan Results in Increased Pro-Inflammatory Cytokine Production

**1st Place**

Analisa Conway - Assumption High School  
New Home Health Hazard: Exploring Flexible Flooring Cytotoxicity

**Chemistry**

**3rd Place**

Madelyn Steineker - North Oldham High School  
Too Much Fluoride In Drinking Water Is Dangerous

**2nd Place**

Rambod Edarehchi Gilani - Ballard High School Science & Engineering Fair  
How to extract more pectin from orange peel

**1st Place**

Kairav Kukkala - Ballard High School Science & Engineering Fair  
Surfactant Additives to Improve Paint Stain Resistance

**Computational Biology and Bioinformatics**

**1st Place**

Katie Dobson - Ballard High School Science & Engineering Fair  
The Effects of the Golden Ratio on Human Attraction

**Earth and Environmental Science**

**3rd Place**

Natalie Copeland - Brown School Science Fair  
A Model of the Neutralizing Capacity of Limestone Additives to Soil Subject to Acidified Water Runoff

**2nd Place**

Carly deDoming - Ballard High School Science & Engineering Fair  
Testing the effect of "green" detergents on plants

**1st Place**

Tanya Gupta, Natasha Gupta - Ballard High School Science & Engineering Fair  
TiO<sub>2</sub> Coated-Roofs: Mitigating UHI Effect and Reducing Ethanol Pollution via Photocatalysis (Year 2)

**Embedded Systems**

**2nd Place**

selena lopez, antonio aponte - Eastern High  
raspberry pi

**1st Place**

Elizabeth Jessie - Ballard High School Science & Engineering Fair  
Investigation of the Effect of CATV Wire Construction on Cell Phone Interference

**Energy: Chemical****3rd Place**

Aditi Tarkar - Ballard High School Science & Engineering Fair  
Can a device such as a phone be charged by body heat?

**2nd Place**

Dallas Miles - St. X Science Fair  
At Home Machine For Bio-diesel Production

**1st Place**

Sriram Satyavolu - Kentucky Country Day  
Optimization of Storage Capacity using Activated Carbon Fibers from Sustainable Agricultural Sources for Hydrogen

**Energy: Physical****3rd Place**

Christopher Eifler - St. X Science Fair  
Solar Updraft Tower

**2nd Place**

Emma Hixenbaugh - Ballard High School Science & Engineering Fair  
Which stroke, in swimming, does the kick provide the most speed and propulsion to the stroke?

**1st Place**

Nicholas Meredith - St. X Science Fair  
Geometric Arrangement of Solar Panels for Increased Power Output

**Engineering Mechanics****3rd Place**

Laziz Muradov - Ballard High School Science & Engineering Fair  
Building a Van De Graaff Generator for wireless energy transmission.

**2nd Place**

Rachel Spaulding - Eastern High  
Heat and Wind power

**1st Place**

Joshua Jacob - Saint Xavier High School  
Development of a Hybrid Direct Ink Writing 3D Printer: a Novel Approach to 3D Printing Multi-material Functional Devices and Flexible Electronics

**Environmental Engineering****2nd Place**

Zachary Jordan-Smith - Brown School Science Fair  
Differential Construction of Solar Cookers and the Effect on Heating Water

**1st Place**

William Schuhmann - Ballard High School Science & Engineering Fair  
A New Method of Surfactant Delivery Utilizing the Marangoni Effect and Possible Application to Oil Spill Recovery

**Materials Science****3rd Place**

Lillian Vittitow - Valley High School  
Heat vs. Gas

**2nd Place**

Brandon Greenwald - Ballard High School Science & Engineering Fair  
Burning Time of Different Residential Sidings

**1st Place**

Devon Verret - Ballard High School Science & Engineering Fair  
The Effect of Acids and Bases on Fibers

**Mathematics**

**3rd Place**

Noelle Ciasto - Ballard High School Science & Engineering Fair  
The Effects of Algebra 1 on Adults' Memory

**2nd Place**

Stanford Broadwater - St. X Science Fair  
The Sound of Music: Polynomial Approximations of Timbre

**1st Place**

Erik Taghizadeh - Ballard High School Science & Engineering Fair  
Can the Human Race and Civilization Survive into the Near Future?

**Microbiology**

**3rd Place**

Varian Campbell jr - Eastern High

**2nd Place**

Maya Stills - Valley High School  
Beautiful Bacteria

**1st Place**

Shria Narapaneni - Ballard High School Science & Engineering Fair  
The Effect of Home Remedies on Killing Bacteria

**Physics and Astronomy**

**3rd Place**

Joseph Jackson - St. X Science Fair  
Lunar Measurement Techniques With Modern Technology

**2nd Place**

Amy Brady - Brown School Science Fair  
Using a Digital Camera to Measure the Sky Glow of Various Locations

**1st Place**

Zachary Waring - Ballard High School Science & Engineering Fair  
Static discharge in clothing materials

**Plant Sciences**

**3rd Place**

Ana Gonzalez - Ballard High School Science & Engineering Fair  
The Effect of Coffee Grounds on Pea Plants

**2nd Place**

Kate Dillon - Ballard High School Science & Engineering Fair

The effect of Green Detergent on the Environment

**1st Place**

Carson Harral, Mark Johannemann - Ballard High School Science & Engineering Fair  
A Study of Aquaponics With Recreational and Industrial Fishes

**Systems Software**

**2nd Place**

Joey Hurley - Ballard High School Science & Engineering Fair  
Testing the code

**1st Place**

Aaron Ogburn - Ballard High School Science & Engineering Fair  
Overclocking Potential of Raspberry Pi

**Translational Medical Science**

**3rd Place**

Marie Kannapel - Valley High School  
Migraines vs The Environment

**2nd Place**

Shivani Nellore - North Oldham High School  
DNA Attached Droplets for Targeted Cancer Therapy

**1st Place**

Vaitheesh Jaganathan - Ballard High School Science & Engineering Fair  
CAN TENDER COCONUT WATER INHIBIT THE GROWTH OF HepG2 LIVER CANCER CELLS