Oklahoma State Science & Engineering Fair – 2011

Division II Place Winners

THIRD PLACE WINNER RECEIVE A MEDAL AND $25

Biochemistry, Medicine and Health
Ashley Hampton  9  Grove High School
Estrogen Interference: The effects of Tamoxifen and various estrogen replacement drugs on the regeneration rate of planarian

Behavioral and Social Science
Matthew Jeffries  9  Grove High School
Are You Lost? Sense of Direction vs. Lateral Dominance

Engineering
Kegan Allen  8  Grove Middle
Truss Mania

Earth and Space Science
Faith Innis  7
Thirsty Rocks

Environmental Science
Mary Thomas  8  Grove Middle
Are We Spoiling the Lake?

Mathematics and Computer Science
Donovan Steelman  7  Discovery School of Tulsa
FIND THE TOTAL NUMBER OF DIFFERENT WAY FROM POINT A TO B

Microbiology
Alyssa Raymond  8  Grove Middle
What's that in Your Salad?

Physical Sciences
Noah Cordova  8  Dove Science Academy

Zoology and Botany
Shelby Frazier  7  Westminster School
Soil vs. Fish: Do Plants grow faster while using Soil or Fish for Nutrients?
SECOND PLACE WINNERS RECEIVE A MEDAL AND $50

Biochemistry, Medicine and Health
Demetrius Faulks 7 Idabel Middle School
Criss Cross

Behavioral and Social Science
Ali Johnson 8 Idabel Middle School
Distraction Reaction: The 2nd year study of driver distraction caused by the use of cellular telephones

Engineering
Spencer Heald 7 Central Middle School
It's a Drag: A Study of Truck Aerodynamics

Earth and Space Science
Christopher Lindsay 8 Wagoner Middle School
How Low Can You Go: an experiment to determine the effect of decreased air pressure on skin’s normal bacteria during incubation

Environmental Science
Mishana Ellison 9 Latta Jr High
An Investigation into Factors Affecting the Rate of Oil Dispersion

Mathematics and Computer Science
Gideon Hallum 8 Muldrow Middle School
Out of Money

Microbiology
Gage Holleman 9 Cascia Hall Preparatory School
Evaluating the Antimicrobial Effect of Essential Oils on Selected Bacteria

Physical Sciences
Jacie Sellers 9 Latta Jr.High School
A Comparative Study on the Electromagnetic Radiation Output from Cell Phones

Zoology and Botany
McKalee Steen 7 Grove Middle School
Budding Out
FIRST PLACE WINNERS RECEIVE A MEDAL AND $75

Biochemistry, Medicine and Health
Erin Yen 7 Bishop John Carroll Catholic School
Family Fingerprints-Can You Tell? Does Heredity affect fingerprint characteristics?

Behavioral and Social Science
Tara Curb 7 Casady School
What is the Effect of Scented Markers vs. Colored Markers on Spelling Accuracy?

Engineering
Shane McClain 9
The Strength is in the Details

Earth and Space Science
Meahgan Duggan 9 Grove High School
Are Herbicides hurting our Beneficial Soil Organisms? Testing for toxic effects of Glyphosate & Flumioxazin on *Lumbricus terrestris* & *Bacillus subtilis*

Environmental Science
Kelly Shelts 9 Bartlesville Mid-High School
A Super-Charged Method to Inhibit the Growth of E. coli

Mathematics and Computer Science
Matt Hixon 9 Bartlesville Mid-High School
Knock Out Dropouts

Microbiology
Taylor Vazquez 9 Grove High School
Park the Plow. A comparative study of till vs. no-till soil on enumeration of soil bacteria and microbial biomass.

Physical Sciences
Enxhi Mustafaraj 7 Atoka McCall Middle School
Hot or Not: Comparing the emissivity of light for different colors, mediums, containers, and light bulbs.

Zoology and Botany
Hannah Pagels 9 Grove High School
Contraceptive Conundrum. A multigenerational study of exposure to birth control in *Drosophila melanogaster*
Best of Fair receives a plaque and $500
Meahgan Duggan 9 Grove High School
Are Herbicides hurting our Beneficial Soil Organisms? Testing for toxic effects of Glyphosate & Flumioxazin on *Lumbricus terrestris* & *Bacillus subtilis*

School Team Trophy Winners receive a trophy
Grove Middle School
Division I Place Winners

THIRD PLACE WINNERS RECEIVE A MEDAL AND $50

Biochemistry, Medicine and Health
Natalie Koster 10 Bartlesville High School (East Campus)
Power Balance: Fact or Fiction?

Behavioral and Social Science
Peter George 12 Southmoore High School
The Schism of Altruism

Engineering
Ezekiel Kindle 12 Westville High School
Flame Waves. Water Isn't the Only Thing That Can Extinguish Fire

Earth and Space Science
Willow Gahr 10 Aline-Cleo High School
A Little Bit of Sunshine

Environmental Science
Jenna Huling 11 Ada High School

Mathematics and Computer Science
Hollie Danker 11 Byng High School
Special Pythagorean Polygons

Microbiology
Casady Burns 10 Latta High School
A Study of Bacteria Susceptibility to Coliphage with Bacteria Amylase Treatment

Physical Sciences
Joseph Nguyen 10 Classen SAS
Sound Control

Zoology and Botany
Sandra Ho 12 Southmoore High School
Arrested Development: Affects of Insecticides on Embryogenesis
SECOND PLACE WINNERS RECEIVE A MEDAL AND $75

**Biochemistry, Medicine and Health**
Katelyn Cheatwood 12 Moore High School
A Happy Smile is a Happy Heart: The Effect of Dental Hygiene on Cardiac Health

**Behavioral and Social Science**
Daniel Lewis 12 Southmoore High
Musi-matics: Analyzing Musical Enhancement of Math Skills through the Developmental Years

**Engineering**
Sreeram Krishnan 10 Bartlesville Mid-High School
Vertical Axis Wind Turbines: Innovations to Improve Energy Production

**Earth and Space Science**
Brandon Cash 11 Southmoore High School
Identifying Correlations between the G2V Star’s Solar Fluxuations and Inter-Planetary Gravitational Fields

**Environmental Science**
Nick Shepherd 12 and Hilary Shyers 12 Miami High School
Tar Creek: Finding an Efficient and Cost-Effective Way to Remove the Heavy Metals from the Polluted Water of a Superfund Site

**Mathematics and Computer Science**
Mattie Dragoo 10 Muskogee High School
Do the Math: determining the affect of calculator usage on algebra skills

**Microbiology**
Claire Chandler 10 Latta High School
A Study of the Effects of UV Radiation on *Saccharomyces cerevisiae* and DNA Repair through Photoreactivation

**Physical Sciences**
Samuel Allison 11 Allison Homeschool
Refraction in Action: Refractive Indices: The Molecular Weight Connection

**Zoology and Botany**
Victoria Richter 10 Cascia Hall
Evaluating the effects of selected antioxidants on neuromuscular activity in *Drosophila melanogaster*
FIRST PLACE WINNERS RECEIVE A MEDAL AND $100

Biochemistry, Medicine and Health
Aspen Layman 12 Southmoore High School
Thwarting Narcolepsy: Unmasking the Culprit Behind this Elusive Disorder

Behavioral and Social Science
Emily Pham 10 Bartlesville Mid-High
Stop and Smell the Rosemary

Engineering
Micheal Spence 11 Bartlesville High School
Improving the WheelChair Ramp

Earth and Space Science
Brian Lea 10 Bartlesville Mid-High
Maximization of Green Energy

Environmental Science
Paige Parrack 12 Southmoore High School
Heavy Metal Bioremediation: A Second Year Study

Mathematics and Computer Science
Joseph Woodson 11 Home School
Determining the Optimal Combination of Trial Division and Fermat’s Factorization Method

Microbiology
Taylor Gaines 10 Miami High School
Methylxanthines: Determination of Synergistic and Antimicrobial Properties of Caffeine and its Metabolites against *Staphylococcus aureus* and *Pseudomonas aeruginosa*

Physical Sciences
Micah Dunkleberer 10 Alpha Omega Academy (Distant learning, home school)
The Effects of a High Fiber Diet Vs. The Effects of a Low Fiber Diet on the Amount of Food Eaten by an Adult Feline

Zoology and Botany
Ashley Sowder 12 Southmoore High School
Social Immunity of *Apis mellifera* as an Antimicrobial Indicator of CCD
Best of Fair receives a plaque and $500
Ashley Sowder    12    Southmoore High School
Social Immunity of *Apis mellifera* as an Antimicrobial Indicator of CCD

International Science & Engineering Fair Winner
Ashley Sowder    12    Southmoore High School
Social Immunity of *Apis mellifera* as an Antimicrobial Indicator of CCD

School Team Trophy Winners receive a trophy
Southmoore High School