

THE 53rd ANNUAL OZARKS SCIENCE & ENGINEERING FAIR

HAMMONS STUDENT CENTER
MISSOURI STATE UNIVERSITY

April 2 – April 4, 2013



2013 WINNERS

Sponsored By:

Missouri State University – College of Natural & Applied Sciences

Missouri State University Foundation

Associated Electric Cooperative, Inc.

Schneider Foundation

Positronic Industries

F & H Food Equipment Company

Have Breakfast with The Grand Prize Winners!

The primary fundraising activity for the Ozarks Science & Engineering Fair is the annual Breakfast. The Grand Prize Winners will present their winning projects, and the First Place Winners in both divisions will also be in attendance.

We invite everyone to support the Fair and its ongoing efforts to promote science education and research among K-12 students by purchasing tickets to the Fundraising Breakfast.

Date: April 17, 2013

Time: 7 AM – 8 AM

Location: Bond Learning Center at the Darr Agricultural Center
2401 S. Kansas Expressway
Springfield, MO 65807

Tickets: \$25.00 per person

To purchase tickets, contact Michelle Norgren by email at MichelleNorgren@missouristate.edu or by phone 417-837-2513.



MASTER OF CEREMONIES

MICHELLE NORRGREN
EXECUTIVE DIRECTOR
OZARKS SCIENCE & ENGINEERING FAIR

DR. TAMERA JAHNKE, DEAN
COLLEGE OF NATURAL & APPLIED SCIENCES
PRESENTER OF AWARDS



OSEF COMMITTEE MEMBERS

EXECUTIVE DIRECTOR:
ADMINISTRATIVE ASSISTANT:
DISPLAY & SAFETY:
ELEMENTARY FAIR:
PLACEMENT AWARDS:
SPECIAL AWARDS:

VOLUNTEERS:

WEBMASTERS:

SOCIAL NETWORKING:

MICHELLE NORRGREN
JULIANNA NORRGREN
KEN MCCRORY
NATALIE WHITAKER
WENDY EVANS
CHERYL SCHAEFER WRINKLE
SAMANTHA COOPER
SHELLEY LIETZAU-MOURER
NATALIE WHITAKER
LACEY GEIGER
EMILY GRAY
SUE MCCRORY
WENDY EVANS
SUE MCCRORY



SCIENTIFIC REVIEW COMMITTEE

DR. TOM TOMASI, CHAIR
DR. JACK STEIERT, MICROBIOLOGY
BRIAN HIGH, CHEMISTRY
DR. MATTHEW FANETTI, HUMAN BEHAVIOR
DR. MICHAEL PFANDER, DVM, NONHUMAN VERTEBRATES



SENIOR DIVISION GRAND PRIZE WINNERS & ALTERNATES

(Grand Prize Awards Sponsored by: F & H Food Equipment Company, Jordan Valley Innovation Center, Positronic Industries, Schneider Foundation & Associated Electric Cooperative, Inc. - includes plaques & trip to the Intel International Science & Engineering Fair for the Grand Prize Winners.)

GRAND PRIZE

Vinnie Marco
Cheating Sight: The Effect of Electronic Glasses on
Obstacle Navigation
Tabitha Shaver, Hartville High School

GRAND PRIZE

Samantha Huckabee
The Effect of R-Alpha Lipoic Acid on Edelfosine's Ability
to Toxically Kill *S. cerevisiae*
Peggy Veatch, Thayer High School

GRAND PRIZE

Shay Jackson
Accumulation of Cadmium Contamination
Pam Probert, Mansfield High School

(Grand Prize Alternate Awards sponsored by the Ozarks Science & Engineering Fair; includes \$100 Cash Award.)

1st ALTERNATE

Blaine Dennis
Interactions of Lead and a Peroxidase Reaction
Pam Probert, Mansfield High School

2nd ALTERNATE

Clay Smith
Effect of *E. coli* on the Regeneration of Planaria
Pam Probert, Mansfield High School

JUNIOR DIVISION GRAND PRIZE WINNERS

Sponsored by the Ozarks Science & Engineering Fair

(\$75 & plaque to each Junior Grand Prize Winner & Teacher; \$75 to each Junior Grand Prize Alternate & Teacher)

GRAND PRIZE

Cedar Lohraff
Marvelous Manures!
Charlton Dunkel, Waynesville Middle School

ALTERNATE

Claire Workman
The Eyes Have It
Laura Stroup, The Summit Preparatory Academy

MAJOR SPONSORS

MISSOURI STATE UNIVERSITY – COLLEGE OF NATURAL & APPLIED SCIENCES

MISSOURI STATE UNIVERSITY FOUNDATION

ASSOCIATED ELECTRIC COOPERATIVE, INC.

SCHNEIDER FOUNDATION

POSITRONIC INDUSTRIES

F & H FOOD EQUIPMENT COMPANY

2013 AWARDS AND SPONSORS

AMERICAN CHEMICAL SOCIETY – OZARK
SECTION

AMERICAN METEOROLOGICAL SOCIETY

AMERICAN PSYCHOLOGICAL ASSOCIATION

AMERICAN SOCIETY OF MAMMALOGISTS

THE ASM INTERNATIONAL FOUNDATION

THE ASM MATERIALS EDUCATIONAL SOCIETY

ASSOCIATION OF WOMEN GEOSCIENTISTS

BAKER CHAIR OF INSURANCE/GAMMA IOTA
SIGMA

THE LAWRENCE E. BANKS, JR., MEMORIAL
AWARD

THE IRENE BRUNER MEMORIAL AWARD

CITY OF SPRINGFIELD – SOLID WASTE
DIVISION

COMMUNITY FOUNDATION OF THE OZARKS

CREATIVE RESEARCH FOR IN VITRO BIOLOGY

DRURY UNIVERSITY

EXPANDING YOUR HORIZONS: WOMEN IN
SCIENCE

GREATER OZARKS AUDUBON SOCIETY

GREENE COUNTY RESOURCE MANAGEMENT
DEPARTMENT

INTEL

MISSOURI DEPARTMENT OF CONSERVATION

MISSOURI MASTER NATURALISTS –
SPRINGFIELD CHAPTER

MISSOURI SOCIETY OF PROFESSIONAL
ENGINEERS – OZARKS CHAPTER

MISSOURI SOLAR ENERGY ASSOCIATION

MISSOURI STATE UNIVERSITY COLLEGE OF
NATURAL & APPLIED SCIENCES

MISSOURI STATE UNIVERSITY DEPARTMENT OF
BIOLOGY

MISSOURI STATE UNIVERSITY DEPARTMENT OF
PHYSICS, ASTRONOMY & MATERIALS
SCIENCE

MISSOURI STATE UNIVERSITY DEPARTMENT OF
TECHNOLOGY & CONSTRUCTION
MANAGEMENT

THE LOU & NADINE MOORE MEMORIAL
AWARD

MU ALPHA THETA MATHEMATICS HONOR
SOCIETY

NATIONAL OCEANIC & ATMOSPHERIC
ADMINISTRATION

NATIONAL SOCIETY OF PROFESSIONAL
ENGINEERS

OZARKS SCIENCE & ENGINEERING FAIR

THE MARY JEAN PLASTER MEMORIAL AWARD

THE ROBERT W. PLASTER MEMORIAL AWARD

POSITRONIC INDUSTRIES

RICOH CORPORATION

THE REGIONAL FAIR DIRECTOR EMERITUS
“SYLVIA SPEAR” AWARD

SCHNEIDER FOUNDATION

SMITH-GLYNN-CALLOWAY FOUNDATION

STOCKHOLM JUNIOR WATER PRIZE

THE JAMES K. TICE MEMORIAL TEACHER
AWARD

UNITED STATES AIR FORCE

UNITED STATES ARMY

UNITED STATES METRIC ASSOCIATION

UNITED STATES SURGEON GENERAL

YALE SCIENCE & ENGINEERING ASSOCIATION

THE 2013 JUNIOR DIVISION



PLACEMENT AWARD WINNERS!

JUNIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

- 1st Place: Lauren Anderson
Text, Drive and Die
Lynn Vogel
St. Agnes Middle School
- 2nd Place: Katie Cardoza
Fiction, Facts, and Fonts
Laura Stroup
Summit Prep Academy
- 3rd Place: Harry Kime
Prices Over Preference
Laura Stroup
Summit Prep Academy
- 4th Place: Isaiah Whiteley
Does the BPM Affect the
Genre and Its Popularity
Laura Stroup
Summit Prep Academy

BOTANY

- 1st Place: Scott Moore
Effect of Light Source on
Plant Growth
Rebecca Tate
Freedom Elementary
- 2nd Place: Annelise Swords
"Water" You Using?
Laura Stroup
Summit Prep Academy
- 3rd Place: Pate Schultz
The Effect of Hydrogen
Peroxide on Seeds
Debra Burgard
Manes R-5
- 4th Place: Larissa Ellis
The Effect of Energy
Drinks on Plant Growth
Debra Burgard
Manes R-5

CHEMISTRY

- 1st Place: Seth Kamykowski
Levels of Carbohydrates
in Different Varieties of
Milk
Miriam Jump
St. Joseph Academy
- 2nd Place: Eli Jones
Super Tonic Water
Debra Burgard
Manes R-5
- 3rd Place: Gabrielle Riegel
Is the Vitamin C Content
in Tomatoes Greater
Before or After They Are
Genetically Modified?
Laura Stroup
Summit Prep Academy
- 4th Place: Sean Gutowski
The Effects of Acid Rain
on Mollusk Shells
Tim Harrison
6th Grade Center

COMPUTERS & MATH

- 1ST Place: Emma Donegan
Drew Robertson
Matt Robertson
Let The First Man Win
Patrice Parson
Pershing Middle School
- 2nd Place: Dawson Schaad
Which Web Browser Is
Fastest
Laura Stroup
Summit Prep Academy
- 3rd Place: Joshua Morrissey
Which Cell Phone Service
Is Faster: AT&T or
Verizon?
Laura Stroup
Summit Prep Academy

EARTH & SPACE SCIENCE

- 1ST Place: Krystina Zabek
A Plant a Day Keeps the
Nitrates Away
Jerry Thornsberry
Waynesville Middle

EARTH & SPACE SCIENCE (cont.)

- 2nd Place: Hannah Adank
From Dirt to Light
Charlton Dunkel
Waynesville Middle
- 3rd Place: Jason Willhite
The Effect of the Type of
Rock on Oil Absorption
Debra Burgard
Manes R-5
- 4th Place: Libby Lourwood
Solar Panel Power
Laura Stroup
Summit Prep Academy

ENGINEERING

- 1st Place: Owen Misterovich
Airfoil Testing
Laura Stroup
Summit Prep Academy
- 2nd Place: Stephen Kielhofner
Rocket Science
Lynn Vogel
St. Agnes Middle School
- 3rd Place: Alex Thuro
Power of the Future
Timothy Hayes
Immaculate Conception
- 4th Place: Alathia Keith
The Splish Splash of
Water Power
Rashel Bussard
Clever Middle School

ENVIRONMENTAL SCIENCES

- 1st Place: Cedar Lohraff
Marvelous Manures!
Charlton Dunkel
Waynesville Middle
- 2nd Place: Chase Towell
The Effect of Charging
Time on Discharging Time
Debra Burgard
Manes R-5
- 3rd Place: Corrie Carnahan
Do in H₂O
Rashel Bussard
Clever Middle School

JUNIOR DIVISION PLACEMENT AWARDS

ENVIRONMENTAL SCIENCES (cont.)

4th Place: Anna Cozzi
What Are the Effects of
Acid Rain on
Germination?
Miriam Jump
St. Joseph Academy

MEDICINE & HEALTH

1st Place: Elaina Roede
Bad to the Bone
Lynn Vogel
St. Agnes Middle School

2nd Place: Alondra Longoria
What Ophthalmic Lenses
Best Absorb UV Light?
Miriam Jump
St. Joseph Academy

3rd Place: Eyerman Ahrianna
The Color Factor
Lynn Vogel
St. Agnes School

4th Place: Andrew DeVoss
Are You Taller Than a
Middle Schooler?
Lynn Vogel
St. Agnes Middle School

MICROBIOLOGY

1st Place: Claire Workman
The Eyes have It!
Laura Stroup
Summit Prep Academy

2nd Place: Claire Zuch
Shopping for Bacteria
Laura Stroup
Summit Prep Academy

3rd Place: Miakayla Dodds
The Effect of a
Disinfectant on Microbial
Growth
Debra Burgard
Manes R-5

PHYSICS

1st Place: Andrew Olson
Water Hazard
Lynn Vogel
St. Agnes Middle School

PHYSICS (cont.)

2nd Place: Dakota Walker
The Effect of Draw Weight
on Arrow Speed
Debra Burgard
Manes R-5

Amelia Curtis
Seismic Vibrations
Rashel Bussard
Clever Middle School

3rd Place: Logan George
Carried Away
Lynn Vogel
St. Agnes Middle School

Austin Kroenke
Pictures with Loui
Rebecca Tate
Freedom Elementary

ZOOLOGY

1st Place: Lora Wright
It's as Simple as Black
and White
Rashel Bussard
Clever Middle School

2nd Place: Sam Schomaker
Fish Food Frenzy
Lynn Vogel
St. Anges Middle School

3rd Place: Dustin Willhite
In the Mood For
Something Good
Debra Burgard
Manes R-5

4th Place: Josh Smith
Cat Play!
Laura Stroup
Summit Prep Academy

THE 2013 SENIOR DIVISION



PLACEMENT AWARD WINNERS!

SENIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

- 1st Place: Kelley Davison
Effects of Backlit E-Readers on Reading Comprehension
Denise Vinton
Greenwood Lab School
- 2nd Place: Amber White
The Effect of Visual, Auditory & Kinesthetic Learning on Academic Performance
Peggy Veatch
Thayer High School
- 3rd Place: Zachary Smith
Environmental Factors Which Affect GPA
Christina Shepherd
Nixa High School
- 4th Place: Morgan Stone
The Effects of Distractions on Memory
Peggy Veatch
Thayer High School

BIOCHEMISTRY

- 1st Place: Blaine Dennis
Interactions of Lead and a Peroxidase Reaction
Pam Probert
Mansfield High School
- 2nd Place: Brooke Davis
How Does Neodymium Magnetism Affect Regeneration of Planarians
Christina Shepherd
Nixa High School
- 3rd Place: Amanda Parker
How the Brightness of Light Affects the Behavior of Brine Shrimp
Christina Shepherd
Nixa High School

BOTANY

- 1st Place: Dustin Reed
Garret Mendes
Effects of Cotyledon Chipping on the Growth of Corn Seeds
Pam Probert
Mansfield High School
- 2nd Place: John Shull
Stetson Dedmond
Shock and Awe Tomatoes: The Effect of Electrical Current on Solanum lycopersicum
Tabitha Shaver
Hartville High School
- 3rd Place: Thomas Persinger
The Effects of a Magnetic Field on Plant Growth
Jim Flora
Pleasant Hope High School
- 4th Place: Grace Park
The Effect of Electricity on Plants
Christina Shepherd
Nixa High School

CHEMISTRY

- 1st Place: Benjamin Liu
Increasing the Efficiency of Cu₂O/ZnO p-n Heterojunctions
Lifeng Dong
Central High School
- 2nd Place: Nicklaus Martin
The Effect of pH Altering Fertilizers Used in Agriculture on Water
Peggy Veatch
Thayer High School
- 3rd Place: Nicholas Baxter
Biodegradability of Casein Plastic
Christina Shepherd
Nixa High School

EARTH SCIENCE

- 1st Place: Shay Jackson
Accumulation of Cadmium Contamination
Pam Probert
Mansfield High School
- 2nd Place: Maran Attwooll
Stopping Tsunamis
Christina Shepherd
Nixa High School
- 3rd Place: Megan Gerzen
The Effects of Oceans on Crater Size and Morphology: An Analogue to Mars
Richard Snyder
Kickapoo High School

ENGINEERING

- 1st Place: Vinnie Marco
Cheating Sight: The Effect of Electronic Glasses on Obstacle Navigation
Tabitha Shaver
Hartville High School
- 2nd Place: Brooke Lannutti
Green Building: Which Technique Works Best?
Christina Shepherd
Nixa High School
- 3rd Place: Dylan Twombly
The Desalination of Water Using Low Grade Heat Systems With a High Output of Clean Drinkable Water
Christina Shepherd
Nixa High School
- 4th Place: Kaleb Barker
Homes: The New Hydroelectric Unit
Christina Shepherd
Nixa High School

SENIOR DIVISION PLACEMENT AWARDS

ENVIRONMENTAL

- 1st Place: Melissa Edwards
Effects of Lead on
Photosynthetic Content
Pam Probert
Mansfield High School
- 2nd Place: Meredith Medley
Soil Toxicity Effects on
Earth Worms
Christina Shepherd
Nixa High School
- 3rd Place: Kyle Maples
Methane Madness
Christina Shepherd
Nixa High School
- 4th Place: Alex Jackson
The Effect of Water Type
on Plant Growth
Christina Shepherd
Nixa High School

MATH & COMPUTERS

- 1st Place: Joseph Walegir
A Prime Study of Prime
Numbers
Christina Shepherd
Nixa High School
- 2nd Place: Tristan Delcoure
Chris Delcoure
Can I Add Realism to the
Game Minecraft?
Christina Shepherd
Nixa High School
- 3rd Place: Mason Priest
A Newer and More
Advanced Way to
Determine an NBA Player's
Efficiency
Denise Vinton
Greenwood Lab School
- 4th Place: Barrett Young
The Rise and Fall of
Nations
Christina Shepherd
Nixa High School

MEDICINE AND HEALTH

- 1st Place: Samantha Huckabee
The Effect of R-Alpha
Lipoic Acid on Edelfosine's
Ability to Toxically Kill S.
cerevisiae
Peggy Veatch
Thayer High School
- 2nd Place: Clay Smith
The Effect of E. coli on the
Regeneration of Planaria
Pam Probert
Mansfield High School
- 3rd Place: Ellee Schmidt
Sensory Connections
Within the Occipital Cortex:
Do the Blind Have
Enhanced Auditory
Senses?
Christina Shepherd
Nixa High School
- 4th Place: Brice Williams
Zach Keith
Cold as Ice: Comparison of
Common Cold Pack
Therapies
Tabitha Shaver
Hartville High School

MICROBIOLOGY

- 1st Place: Brianna Steiert
The Antimicrobial
Properties of Spices in
Curry
Denise Vinton
Greenwood Lab School
- 2nd Place: Kristyn Robling
Mold Growth Prevention
Christina Shepherd
Nixa High School
- 3rd Place: Madeline Simer
The Effect of Acid Rain on
Bacteria
Peggy Veatch
Thayer High School
- 4th Place: Sophie Endacott
The Effects of Mold on
Bacteria
Christina Shepherd
Nixa High School

PHYSICS

- 1st Place: Logan Tyler
A Paintball's Ballistics
Christina Shepherd
Nixa High School
- 2nd Place: Chase Allen
Do More Expensive Golf
balls Really Travel Farther?
Christina Shepherd
Nixa High School
- 3rd Place: Tristan Shepherd
How Does the Tip of a
Bullet Affect the Accuracy
of The Shot?
Christina Shepherd
Nixa High School
- 4th Place: Caleb Morlan
The Effect of Basketball
Skin on Shooting
Percentage
Denise Vinton
Greenwood Lab School

ZOOLOGY

- 1st Place: Sarah Gilmer
Isopod Pressure Adaptation
Christina Shepherd
Nixa High School
- 2nd Place: A. J. Buford
Shade Piper
Is It Worth It? Do Deer
Attractants Really Work
Better Than Baits?
Tabitha Shaver
Hartville High School
- 3rd Place: June Olson
How Do Food Supplements
Affect Weight of Juvenile
Mice?
Christina Shepherd
Nixa High School

**THE 2013
JUNIOR & SENIOR
DIVISION**



**SPECIAL AWARD
WINNERS!**

SPECIAL AWARDS

AMERICAN CHEMICAL SOCIETY, OZARKS SECTION

\$100 Cash and Certificate of Award

Junior Division: Gabrielle Riegel
Summit Prep Academy

AMERICAN METEOROLOGICAL SOCIETY

Certificate of Award

Senior Division: Madeline Simer
Thayer High School

AMERICAN PSYCHOLOGICAL ASSOCIATION

Certificate of Award

Senior Division: Isaiah Whiteley
Summit Prep Academy

AMERICAN SOCIETY OF MAMMALOGISTS

Certificate of Award

Junior Division: Lora Wright
Clever Middle School

Senior Division: Aaron Buford
Shade Piper
Hartville High School

THE AMERICAN SOCIETY FOR METALS MATERIALS EDUCATION FOUNDATION

Medallion and Certificate of Award

Senior Division: Rebecca Altic
Pleasant Hope HS

THE ASSOCIATION OF WOMEN GEOSCIENTISTS

Certificate of Merit

Junior Division: Hannah Adank
Waynesville Middle

BAKER CHAIR OF INSURANCE/GAMMA IOTA SIGMA AWARD

\$50 Cash & Certificate of Achievement

Senior Division: Maran Attwooll
Nixa High School

IRENE BRUNER MEMORIAL AWARD

\$30 Cash & Certificate of Award

Junior Division: Lauren Messenger
Summit Prep Academy

CITY OF SPRINGFIELD – SOLID WASTE DIVISION

Certificate and Recycled T-Shirt from plastic bottles

Junior Division: Cedar Lohraff
Waynesville Middle

Senior Division: Madison Lemon
Nixa High School

CREATIVE RESEARCH FOR IN VITRO BIOLOGY “IN VITRO BIOLOGY AWARD”

Certificate of Award and Recognition in National Newsletter

Senior Division: Savannah Phifer
Mansfield High School

DRURY UNIVERSITY

3 Hours Undergraduate Credit to each Senior High First Place Award Winner

Senior Division: Kelley Davison
Greenwood Lab School

Blaine Dennis
Mansfield High School

Dustin Reed
Mansfield High School

Garret Mendes
Mansfield High School

Benjamin Liu
Central High School

Shay Jackson
Mansfield High School

Vinnie Marco
Hartville High School

Melissa Edwards
Mansfield High School

Joseph Walegir
Nixa High School

DRURY UNIVERSITY (cont.)

Senior Division: Samantha Huckabee
Thayer High School

Brianna Steiert
Greenwood Lab School

Logan Tyler
Nixa High School

Sarah Gilmer
Nixa High School

ENVIRONMENTAL SOLUTION AWARD (SPRINGFIELD CHAPTER OF THE MISSOURI MASTER NATURALISTS)

\$50 Cash and Certificate of Award

Junior Division: Cedar Lohraff
Waynesville Middle

Senior Division: Melissa Edwards
Mansfield High School

Kyle Maples
Nixa High School

EXPANDING YOUR HORIZONS: WOMEN IN SCIENCE

Certificate of Award and \$25 Gift Card

Junior Division: Emily Bolls
St. Agnes Middle School

Senior Division: Blaine Dennis
Mansfield High School

GREATER OZARK AUDOBON SOCIETY “ENVIRONMENTAL AWARENESS AWARD”

One Year Membership in the National Audobon Society & Field Guide

Junior Division: Sean Gutowski
The 6th Grade Center

Senior Division: Madeline Simer
Thayer High School

SPECIAL AWARDS

GREENE COUNTY RESOURCE MANAGEMENT "GROUNDWATER GUARDIAN" AWARD

A Plaque, Tickets to Fantastic Caverns & The Discovery Center, and a Mineral

Junior Division: Anna Cozzi
St. Joseph Academy

INTEL "EXCELLENCE IN COMPUTER SCIENCE" AWARD

Certificate of Award & \$200 Cash (to be mailed)

Senior Division: Kelley Davison
Greenwood Lab

MISSOURI DEPARTMENT OF CONSERVATION

Field Guides & Plaque

Junior Division: Matthew Talty
St. Joseph Academy

Senior Division: Aaron Buford
Shade Piper
Hartville High School

MISSOURI SOCIETY OF PROFESSIONAL ENGINEERS, OZARKS CHAPTER

\$100 Cash Award & Certificate

Junior Division: Jacob Gray
St. Joseph Academy

Emily Bolls
St. Agnes Middle School

Senior Division: Vinnie Marco
Hartville High School

Daisy Wagon
Pleasant Hope HS

MISSOURI SOLAR ENERGY

Solar Calculator and Certificate of Award

Junior Division: Libby Lourwood
Summit Prep Academy

Jacob Gray
St. Joseph Academy

MISSOURI STATE UNIVERSITY COLLEGE OF NATURAL AND APPLIED SCIENCES

\$50 Cash Award

Junior Division: Cedar Lohraff
Waynesville Middle

Senior Division: Samantha Huckabee
Thayer High School

Shay Jackson
Mansfield High School

Vinnie Marco
Hartville High School

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY

Certificates to students & plaques to teachers

Junior Division: Scott Moore
Freedom Elementary

Cedar Lohraff
Waynesville Middle

Elaina Roeder
St. Agnes Middle School

Claire Zuch
Summit Prep Academy

Josh Smith
Summit Prep Academy

Senior Division: John Shull
Hartville High School

Stetson Dedmond
Hartville High School

Melissa Edwards
Mansfield High School

Samantha Huckabee
Thayer High School

Brianna Steiert
Greenwood Lab School

Sarah Gilmer
Nixa High School

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY (cont.)

\$1,000 Work Study Award

Senior Division: Samantha Huckabee
Thayer High School

MISSOURI STATE UNIVERSITY DEPARTMENT OF PHYSICS, ASTRONOMY & MATERIALS SCIENCE

Book and Certificate of Award

Junior Division: John Gambon
St. Joseph Academy

Senior Division: Chase Allen
Nixa High School

MISSOURI STATE UNIVERSITY DEPARTMENT OF TECHNOLOGY AND CONSTRUCTION MANAGEMENT

Certificate of Award & \$100 Cash

Senior Division: Madison Lemon
Nixa High School

LOU & NADINE MOORE MEMORIAL AWARD

\$50 Cash Award to the top Junior Division & Senior Division projects covering Education or Special Needs

Junior Division: Katie Cardoza
Summit Prep Academy

Senior Division: Tyler Demster
St. Agnes Middle School

MU ALPHA THETA NATIONAL MATHEMATICS HONOR SOCIETY

Certificate of Award

Senior Division: Joseph Walegir
Nixa High School

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Certificate of Award, Letter of Congratulations & Medallion

Senior Division: Dylan Twombly
Nixa High School

SPECIAL AWARDS

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS "INNOVATIVE ENGINEERING" AWARD

Certificate of Award & Lapel Pin

Senior Division: Vinnie Marco
Hartville High School

OZARKS TECHNICAL COMMUNITY COLLEGE

Water Bottles, Memo pads, and Pens to All Senior Division First Place Winners

Senior Division: Kelley Davison
Greenwood Lab School

Blaine Dennis
Mansfield High School

Dustin Reed
Mansfield High School

Garret Mendes
Mansfield High School

Benjamin Liu
Central High School

Shay Jackson
Mansfield High School

Vinnie Marco
Hartville High School

Melissa Edwards
Mansfield High School

Joseph Walegir
Nixa High School

Samantha Huckabee
Thayer High School

Brianna Steiert
Greenwood Lab School

Logan Tyler
Nixa High School

Sarah Gilmer
Nixa High School

RICOH CORPORATION

Certificate of Award

Senior Division: Daisy Wagnon
Pleasant Hope

SCHNEIDER FOUNDATION

\$200 Cash & Certificate

Junior Division: Emily Barnes
St. Agnes Middle School

Cedar Lohraff
Waynesville Middle

Emma Donegan
Pershing Middle School

Drew Robertson
Pershing Middle School

Matt Robertson
Pershing Middle School

Seth Kamykowski
St. Joseph Academy

Claire Workman
Summit Prep Academy

\$500 Cash & Certificate

Senior Division: Dustin Reed
Mansfield High School

Garrett Mendes
Mansfield High School

Blaine Dennis
Mansfield High School

Vinnie Marco
Hartville High School

Shay Jackson
Mansfield High School

Samantha Huckabee
Thayer High School

SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATION

\$100 Cash Award & Certificate

Senior Division: Brianna Steiert
Greenwood Lab School

Savannah Phifer
Mansfield High School

Clay Smith
Mansfield High School

\$200 Cash Award & Certificate

Senior Division: Samantha Huckabee
Thayer High School

STOCKHOLM JUNIOR WATER PRIZE

Certificate & Promotion to State Competition

Senior Division: Dylan Twombly
Nixa High School

Kaleb Barker
Nixa High School

Nicklaus Martin
Thayer High School

UNITED STATES AIR FORCE

Certificate of Award, Backpack, Digital Desk Clock/Calculator, Pen and Holder

Senior Division: Clay Smith
Mansfield High School

Nicklaus Martin
Thayer High School

Maran Attwooll
Nixa High School

June Olson
Nixa High School

UNITED STATES ARMY – Excellence In Engineering

Certificate of Award & Messenger Bag

Senior Division: Daisy Wagnon
Pleasant Hope

Thank You

The Ozarks Science & Engineering Fair Foundation and Steering Committee would like to recognize those volunteers, both individuals and organizations, without whom this event would not be possible. This week alone, over 600 hours of volunteer time and effort were donated – our deepest thanks and appreciation especially to the following:

- Dr. Myra Hughes' BIO 210 Class
- Mrs. Sue McCrory's CIS 101 Class
- Mr. Harry Shea's CSC 101 Class
- Ms. Tara Herring's BIO 102 Class
- Sigma Kappa
- Dr. Cheryl Wrinkle's PHY 101 and PHY 123 Classes
- Dr. Michelle Bowe's BIO 334 Class
- Gamma Iota Sigma
- Alpha Kappa Lambda
- Dr. Jill Black's GRY 240 Class
- Phi Kappa Alpha Beta
- Missouri State University Department of Physics, Astronomy & Materials Science
- Alpha Sigma Alpha
- Board of Governors Scholarship Recipients
- Alpha Delta Pi
- Baker Chair of Insurance

In addition, over 200 judges from local colleges, companies and organizations donated their time and expertise Tuesday evening to judge the approximately 250 projects at this year's Fair. We cannot recognize them all by name, but their efforts are greatly appreciated.

We would also like to extend a very special Thank You to Copy Products for their generous donation of a copier for the duration of the Fair.

In addition, we would like to recognize General Rental for their support of the Fair by providing a substantial number of the folding tables used during the Fair, and A-Z Rentals for their continuing support of the Fair by providing the decorations for the Award Ceremony.

Finally, we especially want to acknowledge the generous donation contributed by Positronic Industries, Associated Electric Cooperative, Schneider Foundation, and F & H Food Equipment Company toward the substantial travel expenses incurred by the Senior Division Grand Prize Winners for travel to the 2013 International Science & Engineering Fair in Phoenix, Arizona.

Volunteers are the lifeblood of an event of this magnitude. Without you, we could not continue the Fair's tradition of excellence. Thank you!

SPECIAL AWARDS

UNITED STATES ARMY – Excellence in Environmental Science

Certificate of Award & Messenger Bag

Senior Division: Taylor Fuselier
Thayer High School

UNITED STATES ARMY – Excellence in Life Sciences

Certificate of Award & Messenger Bag

Senior Division: Oren Redus
Thayer High School

UNITED STATES ARMY – Excellence in Mathematics/Computer Science

Certificate of Award & Messenger Bag

Senior Division: Barrett Young
Nixa High School

UNITED STATES ARMY – Excellence in Physical Sciences

Certificate of Award & Messenger Bag

Senior Division: Logan Tyler
Nixa High School

UNITED STATES ARMY – Award of Excellence

Bronze Medallion

Senior Division: Oren Redus
Thayer High School

UNITED STATES METRIC ASSOCIATION

Certificate of Award

Senior Division: Benjamin Liu
Central High School

THE UNITED STATES SURGEON GENERAL'S "SPECIAL SCIENCE AWARD"

Certificate of Award and Medal

Senior Division: Ellee Schmitt
Nixa High School

YALE SCIENCE & ENGINEERING ASSOCIATION AWARD

Certificate of Award

Senior Division: Vinnie Marco
Hartville High School

THE ROBERT W. PLASTER MEMORIAL EXCELLENCE IN TEACHING AWARD

\$1,000 Cash Award to the Teacher with the most Placement Awards in the Senior Division

Christina Shepherd
Nixa High School

THE MARY JEAN PLASTER MEMORIAL EXCELLENCE IN TEACHING AWARD

\$1,000 Cash Award to the Teacher with the Most Placement Awards in the Junior Division

Laura Stroup
Summit Preparatory Academy

THE REGIONAL FAIR DIRECTOR EMERITUS "SYLVIA SPEAR MEMORIAL AWARD"

\$25 Cash to a First Time Teacher

April Meltabarger
Pleasant View Middle School

THE POSITRONIC TEACHER AWARD

\$75 Cash Award

This cash award goes to the teacher (Junior or Senior Division) who has the most total entries at the Fair:

Christina Shepherd
Nixa High School

THE JAMES K. TICE MEMORIAL TEACHER AWARD

This award of \$100 cash and a certificate has been established in memory of James K. Tice, whose constant support and encouragement of Missouri's teachers and students changed so many lives.

Mr. Tice served for many years as a teacher, principal and superintendent of K-12 schools. Even after he retired from public education, Mr. Tice continued his tireless dedication to improving educational opportunities for everyone. He was devoted to creating learning communities, by integrating current and emerging technologies into the classroom.

Mr. Tice was a coach, a teacher, a mentor, a surrogate parent, and a friend. He never failed to say "I appreciate you". It is our hope that the recipient of this award also hears "We appreciate you".

The recipient of this year's award is:

Jerry Thornsberry
Waynesville Middle School

THE LAWRENCE E. BANKS, JR., MEMORIAL TECHNOLOGY FOR TEACHERS AWARD

This award of \$50 cash and a certificate has been established in memory of Lawrence E. Banks, Jr., the former Dean of the Missouri State University College of Natural and Applied Sciences and a long-time friend and supporter of the Fair.

Dr. Banks was dedicated to education in the state of Missouri and was a strong proponent of innovative educational projects at the K-12 level as well as higher education. In 2000, he received the Science Teachers' of Missouri Distinguished Service Award in recognition of his tireless support and commitment to science education.

In memory of Dr. Banks' enthusiasm and interest in technology, the recipient of this award is encouraged to integrate technology in their classroom.

The recipient of this year's award is:

Patrice Parson
Pershing Middle School

SPECIAL AWARDS

OZARKS SCIENCE & ENGINEERING FAIR JUNIOR DIVISION TEACHER AWARDS

This award of a Certificate of Award and a ticket to the Fair Recognition Breakfast is awarded to the teachers of the Junior Division First Place Category winners. The recipients of the Junior Division Teacher Awards for 2013 are:

Lynn Vogel
Rebecca Tate
Miriam Jump
Patrice Parson
Jerry Thornsberry
Laura Stroup
Charlton Dunkel
Rashel Bussard

OZARKS SCIENCE & ENGINEERING FAIR SENIOR DIVISION TEACHER AWARDS

This award of a Certificate of Award and a ticket to the Fair Recognition Breakfast is awarded to the teachers of the Senior Division First Place Category winners. The recipients of the Senior Division Teacher Awards for 2013 are:

Denise Vinton
Pam Probert
Lifeng Dong
Tabitha Shaver
Christina Shepherd
Peggy Veatch

OZARKS SCIENCE & ENGINEERING FAIR JUNIOR DIVISION GRAND PRIZE TEACHER AWARD

This award of a plaque is awarded to the teacher of the Junior Division Grand Prize student project. The recipient of the OSEF Foundation Junior Division Grand Prize Teacher Award for 2013 is:

Charlton Dunkel
Waynesville Middle School

OZARKS SCIENCE & ENGINEERING FAIR SENIOR DIVISION GRAND PRIZE TEACHER AWARD

This award of a plaque is awarded to the teacher(s) of the Senior Division Grand Prize student projects. The recipients of the OSEF Foundation Senior Division Grand Prize Teacher Award for 2013 is:

Pam Probert
Mansfield High School

Peggy Veatch
Thayer High School

Tabitha Shaver
Hartville High School