

THE 54th ANNUAL OZARKS SCIENCE & ENGINEERING FAIR

HAMMONS STUDENT CENTER
MISSOURI STATE UNIVERSITY

April 1 – April 3, 2014



2014 WINNERS

Sponsored By:

Missouri State University – College of Natural & Applied Sciences
Missouri State University Foundation
Associated Electric Cooperative, Inc.
Schneider Foundation
F & H Food Equipment Company



MASTER OF CEREMONIES

MICHELLE NORNGREN
EXECUTIVE DIRECTOR
OZARKS SCIENCE & ENGINEERING FAIR

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



OSEF COMMITTEE MEMBERS

EXECUTIVE DIRECTOR:	MICHELLE NORNGREN
ADMINISTRATIVE ASSISTANT:	EMILY GRAY
DISPLAY & SAFETY:	KEN MCCRORY
ELEMENTARY FAIR:	JP PRY
OSEF BREAKFAST:	EMILY GRAY
PLACEMENT AWARDS:	WENDY EVANS
SPECIAL AWARDS:	CHERYL WRINKLE
	SAMANTHA COOPER
VOLUNTEERS:	SUE MCCRORY
	JP PRY
	NATALIE WHITAKER
WEBMASTERS:	SUE MCCRORY
	WENDY EVANS
SOCIAL NETWORKING:	SUE MCCRORY



SCIENTIFIC REVIEW COMMITTEE

DR. TOM TOMASI, CHAIR
DR. JACK STEIERT, MICROBIOLOGY
BRIAN HIGH, CHEMISTRY
DR. CARLY YADON, 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, Schneider Foundation & Associated Electric Cooperative, Inc. - includes plaques & trip to the Intel International Science & Engineering Fair for the Grand Prize Winners.)

GRAND PRIZE Benjamin Liu, Zhenhua Dong, Zhenya Dong
Fabrication and Characterization of All Solid State Dye Sensitive Solar Cells
Lifeng Dong, Central High School

GRAND PRIZE Blaine Dennis
Interference of Lactose Breakdown
Pam Probert, Mansfield High School

GRAND PRIZE Chase Herman
Enhancing Nutrient Values of *Gryllobates sigillatus* for Future Food Sustainability
Christina Shepherd, Nixa High School

(Grand Prize Alternate Awards sponsored by the Ozarks Science & Engineering Fair.)

1st ALTERNATE Alicia Bonner
The Effect of Fluoride on the Development of *Rattus norvegicus*
Peggy Veatch, Thayer High School

2nd ALTERNATE Rilee Hardcastle
Not Nice Ice Baby: The Effects of Topical Analgesic Menthol on the Epidermis of *Sus domesticus*
Tabitha Shaver, Hartville High School

JUNIOR DIVISION GRAND PRIZE WINNERS

Sponsored by the Ozarks Science & Engineering Fair

(Plaque to each Junior Grand Prize Winner & Teacher)

GRAND PRIZE Joseph Garrison
Effect of Color on Distance a Solar Car Travels
Debra Burgard, Manes R-5

ALTERNATE Evan Mason
Toilet Paper Terror
Laura Stroup, The Summit Preparatory Academy

MAJOR SPONSORS

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2014 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

INTEL
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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
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

OZARKS TECHNICAL COMMUNITY COLLEGE
THE MARY JEAN PLASTER MEMORIAL AWARD

THE ROBERT W. PLASTER MEMORIAL AWARD
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 METRIC ASSOCIATION

UNITED STATES SURGEON GENERAL
YALE SCIENCE & ENGINEERING ASSOCIATION



College of Natural & Applied Sciences **CNAS**



MAJORS TO CHOOSE FROM

- Biology
- Chemistry
- Computer Science
- Geography
- Geology
- Geospatial Sciences
- Geotourism
- Hospitality & Restaurant Administration
- Mathematics
- Physics
- Planning
- Tourism Planning & Development
- Wildlife Conservation & Management



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For Students from the following counties in Missouri:
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DR. XINGPING SUN, ASSOCIATE DEAN
DR. DANIEL BECKMAN, ASSOCIATE DEAN

www.cnas.missouristate.edu
417-836-5249

THE 2014 JUNIOR DIVISION



PLACEMENT AWARD WINNERS!

JUNIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

- 1st Place: Megana Swords
Don't Drive Intoxicated
Laura Stroup
Summit Preparatory
- 2nd Place: Britni Jones
Claire Zuch
Help Me! I Can't Spell!
Laura Stroup
Summit Preparatory
- 3rd Place: Serenity Eyerman
Do You See What I Hear?
Lynn Vogel
St. Agnes
- 4th Place: Maddy Joplin
Just Dance
Laura Stroup
Summit Preparatory

BIOLOGY

- 1st Place: Emma Riemenschneider
Guacamole Anyone?
April Meltabarger
Pleasant View
- 2nd Place: Maria VanPelt
How Does Temperature
of Food Affect Our Taste?
Miriam Jump
St. Joseph
- 3rd Place: Mahiya Ellils
The Effect of Ethylene on
Ripening Fruit
Debra Burgard
Manes R-5
- 4th Place: Haily Collins
Ready, Set, Rot!
Lynn Vogel
St. Agnes

BOTANY

- 1st Place: Haylie Garrison
The Effect of Bulb
Wattage on Plant Growth
Debra Burgard
Manes R-5

BOTANY (cont.)

- 2nd Place: Savannah Sadler
The Effect of Zodiac
Signs on Seed
Germination
Debra Burgard
Manes R-5
- 3rd Place: Chase Towell
The Effect of Different
Liquids on Plant Growth
Debra Burgard
Manes R-5
- 4th Place: Victoria Sanchez
The Coil Wired Plant
Summit Preparatory
Laura Stroup

CHEMISTRY

- 1st Place: David Shimizu
Got Milk?
Laura Stroup
Summit Preparatory
- 2nd Place: Elizabeth Morrissey
Salty Surprise
Laura Stroup
Summit Preparatory
- 3rd Place: Mya Washam
Crystal Growth
Laura Stroup
Summit Preparatory
- 4th Place: Isabella Warner
Bake Off
Laura Stroup
Summit Preparatory

COMPUTERS

- 1st Place: Jacob Koppang
iPhone Gaming
Laura Stroup
Summit Preparatory
- 2nd Place: Owen Misterovich
Smooth Video
Laura Stroup
Summit Preparatory

EARTH & SPACE SCIENCE

- 1st Place: Tim Harrington
The Effect of Vegetation
on the Amount of Erosion
Debra Burgard
Manes R-5
- 2nd Place: Kody Skaggs
The Effect of Well Depth
on the Water's pH
Debra Burgard
Manes R-5
- 3rd Place: Elayna Caulliete
The Effect of Ocean
Acidity on Seashells
Debra Burgard
Manes R-5
- 4th Place: Eric Gibson
To Fly or Not To Fly
Lynn Vogel
St. Agnes

ENGINEERING

- 1st Place: Joseph Garrison
Effect of Color on
Distance a Solar Car
Travels
Debra Burgard
Manes R-5
- 2nd Place: John Gambon
Does Temperature Have
an Effect on Battery Life?
Miriam Jump
St. Joseph
- 3rd Place: Julius Gerologa
The Effect of Water
Wheel Size on
Hydropower
Debra Burgard
Manes R-5
- 4th Place: Seth Harrington
The Effect of Wheel
Diameter on Speed of a
Car
Debra Burgard
Manes R-5

JUNIOR DIVISION PLACEMENT AWARDS

ENVIRONMENTAL SCIENCES

- 1st Place: Nathan Zabek
Saving the Roubidoux
Timothy Harrison
Waynesville
- 2nd Place: Corrie Carnahan
Dissolved Oxygen in
Water
Robin Hilton
Clever
- 3rd Place: Annice Cotter
Law and Order: Amphipod
Unit
Lynn Vogel
St. Agnes
- 4th Place: Joseph Tetlow
Flower Growth: Survivor
Laura Stroup
Summit Preparatory

MEDICINE & HEALTH

- 1st Place: Seth Kamykowski
Saturated Fat Levels in
Different Types of
Cooking Oils
Miriam Jump
St. Joseph
- 2nd Place: Bethany Moore
Vitamin C Myth
Laura Stroup
Summit Preparatory
- 3rd Place: Lindsey Murphy
You Can't Eat Just One
Lynn Vogel
St. Joseph
- 4th Place: Alondra Longoria
What Pain Reliever Has
Faster Dissolution Rate
Miriam Jump
St. Joseph

MICROBIOLOGY

- 1st Place: Evan Mason
Toilet Paper Terror
Laura Stroup
Summit Preparatory

MICROBIOLOGY (cont.)

- 2nd Place: Addison Lawrence
Is It Worth Drinking
Sugary Drinks?
Laura Stroup
Summit Preparatory
- 3rd Place: Libby Lourwood
Germ Killer
Laura Stroup
Summit Preparatory
- 4th Place: Anna Cozzi
Which Toothpaste Is The
Most Effective Against
Bacteria?
Miriam Jump
St. Joseph

PHYSICS

- 1st Place: Alan Ramsey
The Price of Precisions
Laura Stroup
Summit Preparatory
- 2nd Place: Eileen Liang
Melting Ice
Laura Stroup
Summit Preparatory
- 3rd Place: Spencer Jones
What Insulation?
Laura Stroup
Summit Preparatory
- 4th Place: Benjamin Riley
Dropping Like a Brick!
Timothy Harrison
Waynesville

ZOOLOGY

- 1st Place: Corbin Lathrom
The Effect of Goldfish on
Aquatic Plant Growth
Debra Burgard
Manes R-5
- 2nd Place: David Caulliette
The Effect of Age on an
Egg's Permeability
Debra Burgard
Manes R-5

ZOOLOGY (cont.)

- 3rd Place: Chris Cardone
Can the Pony Out Pull
The Donkey?
Lynn Vogel
St. Agnes
- 4th Place: Kate Rumpfelt
A Cat's Response to
Different Sounds
Debra Burgard
Manes R-5



Many careers in the sciences may require more than a bachelor's degree. At MSU you can start working on your graduate degree while finishing your bachelor's by enrolling in an **Accelerated Master's Program!**

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Master of Science, Plant Science



For more information, please visit <http://graduate.missouristate.edu/acceleratedprograms.htm>

Graduate College

901 S. National Ave., Springfield, MO 65897

(417) 836-5335

Missouri State
UNIVERSITY

THE 2014 SENIOR DIVISION



PLACEMENT AWARD WINNERS!

SENIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

1st Place: David Engleman
The Effect of Font Size
on Reading
Comprehension Skills
Denise Vinton
Greenwood Lab

2nd Place: Kimber Stout
The Relationship
Between Facial
Proportions and
Beauty
Pam Probert
Mansfield

3rd Place: Addy Sporleder
Tasting With Nose
Christina Shepherd
Nixa

4th Place: Katerine Lance
Phantom Sensation
Christina Shepherd
Nixa

BIOCHEMISTRY

1st Place: Chase Herman
Enhancing Nutrient
Values of *Grylodes*
sigillatus for Future
Food Sustainability
Christina Shepherd
Nixa

2nd Place: Garret Mendes
Effects of an
Alleopathic Toxin on
Various Species
Pam Probert
Mansfield

3rd Place: Ronnie Warren
The Effects of
pogomyrmex barbatus
Christina Shepherd
Nixa

4th Place: Kaitlyn Jones
Would a Low
Frequency
Electromagnetic Field
Inhibit the Growth of
Algae?
Christina Shepherd
Nixa

BOTANY

1st Place: Leila Ismaio
How Do Different
Types of Air Pollution
Affect Plant Growth
Christina Shepherd
Nixa

2nd Place: Amy Sellers
Increasing the Iron
Content in Spinach for
Use in Treating Iron
Deficiencies in Third
World Countries
Peggy Veatch
Thayer

3rd Place: Calli Titsworth
Effect of Agitation on
Germination
Pam Probert
Mansfield

4th Place: Isabella Bernalewski
The Effect of
Environment on Plant
Growth
Christina Shepherd
Nixa

CHEMISTRY

1st Place: Benjamin Liu
Zhenhua Dong
Zhenyu Dong
Fabrication and
Characterization of All
Solid State Dye
Sensitive Solar Cells
Lifeng Dong
Central

2nd Place: Ashley Cancino
Rachel Perez
Effects of Sodium
Bicarbonate and
Potassium
Bicarbonate on the
Flammability of Acrylic
Paint
Peggy Veatch
Thayer

CHEMISTRY (cont.)

3rd Place: Courtney Kirkland
Kristen Wallace
Madison Box
The Effects of Solvent
Degreaser on Cell
Membranes
Pam Probert
Mansfield

4th Place: Sierra Duran
I Thought It Said C:
The Effects of Faulty
Testing and Labeling
Practices on
Consumer Perception
of Orange Juice
Tabitha Shaver
Hartville

COMPUTERS/MATH

1st Place: Tayler Cain
Identification of Native
Missouri Trees using
Fractal Analysis
Pam Probert
Mansfield

2nd Place: Courtney Dimitt
The Accuracy of
Common Fingerprint
Development Methods
Christina Shepherd
Nixa

EARTH SCIENCE

1st Place: Keeley Rogers
The Effectiveness of
Using the Shallow
Seismic Method on
Fossil Bearing
Sediment in a Cave
Environment
Peggy Veatch
Thayer

2nd Place: Jordan Lebahn
Effects of Plant
Density on Production
of Biomass
Pam Probert
Mansfield

SENIOR DIVISION PLACEMENT AWARDS

EARTH SCIENCE (cont.)

3rd Place: Austin Dilley
The Effect of Air,
Water and Soil
Pollution on Raphanus
sativus
Christina Shepherd
Nixa

4th Place: Margaret Wright
Engineering a More
Cost Effective and
Efficient Tornado
Warning System
Christina Shepherd
Nixa

Jonathan Dasal
The Effect of the Type
of House Material on
the Stability of a
House
Christina Shepherd
Nixa

ENGINEERING

1st Place: Clay Smith
Development of a
Canola Based
Adhesive
Pam Probert
Mansfield

2nd Place: Madelyn Stroder
Chlamydomonas
Reinhardtii Alternate
Energy Apparatus
Denise Vinton
Greenwood Lab

3rd Place: Vinnie Marco
Mind over Muscle:
Bypassing the Spinal
Cord and Nervous
System for Artificial
Muscle Control
Tabitha Shaver
Hartville

4th Place: Tylor Koenigsfeld
The Best Blade
Christina Shepherd
Nixa

ENVIRONMENTAL

1st. Place: McKenzie Adamson
Makenzie Tripp
Effects of Wind
Density on Stoma
Integrity
Pam Probert
Mansfield

2nd Place: Ashton Hall
Natural and Synthetic
Sorbents Used in the
Recovery of Oil
Christina Shepherd
Nixa

Jessie Freeland
The More Practical
Solution
Christina Shepherd
Nixa

3rd Place: Jordan Sportsman
The Effect of
Fertilizers on the
Population of Daphnia
magna
Christina Shepherd
Nixa

4th Place: Allison Garrett
Water Purification
Christina Shepherd
Nixa

MEDICINE AND HEALTH

1st Place: Blaine Dennis
Interference of Lactose
Breakdown
Pam Probert
Mansfield

2nd Place: Rilee Hardcastle
Not Nice Ice Baby:
The Effects of Topical
Analgesic Menthol on
the Epidermis of Sus
domesticus
Tabitha Shaver
Hartville

MEDICINE AND HEALTH (cont.)

3rd Place: Haley Earls
Aleasha Clark
The Effects of
Manganese (II) Oxide
and Manganese (1)
Chloride on the
Oxidation of Dopamine
Peggy Veatch
Thayer

4th Place: Andrew Rivera
Athletic Ankle Support
Christina Shepherd
Nixa

MICROBIOLOGY

1st Place: Ann Sistrunk
The Effects of
Antimicrobial Filtration
in Surgical Masks on
the Reduction of the
Growth of Respiratory
Bacteria
Denise Vinton
Greenwood Lab

2nd Place: Taylor Fuselier
Antimicrobial Effect of
Capsaicin
Peggy Veatch
Thayer

3rd Place: Charles Neely
The Effect of Gaspod
Mucus on Bacterial
Growth
Christina Shepherd
Nixa

4th Place: Taylor Fleischman
The Effect of Different
Disinfectants on How
They Kill Escherichia
coli
Christina Shepherd
Nixa

SENIOR DIVISION PLACEMENT AWARDS

PHYSICS

- 1st Place: Courtney Whitlock
The Effects of Texture
on a Soccer Ball's
Flight Speed
Denise Vinton
Greenwood Lab
- 2nd Place: Cody Hightower
Getting Loud: The
Effects of Multiple
Voice Coils on
Maximum
Loudspeaker Volume
Tabitha Shaver
Hartville
- 3rd Place: Jake Brooks
The Effect of the Type
of Sound Insulation on
Decibel Levels
Christina Shepherd
Nixa
- 4th Place: Makenzie McCrite
Water Movement by
Osmosis with ETG and
PPG
Pam Probert
Mansfield

ZOOLOGY

- 1st Place: Alicia Bonner
The Effect of Fluoride
on the Development of
Rattus norvegicus
Peggy Vatch
Thayer
- 2nd Place: Emily Riley
The Use of
Ichnofossils and True
Form Fossils in a Cave
Environment to Help
Predict the
Predator/Prey Ratio of
the Pleistocene
Peggy Veatch
Thayer
- 3rd Place: Daniel Lewis
Effects of Aspartame
on Two Water Species
Pam Probert
Mansfield

**THE 2014
JUNIOR & SENIOR
DIVISION**



**SPECIAL AWARD
WINNERS!**

SPECIAL AWARDS

AMERICAN CHEMICAL SOCIETY, OZARKS SECTION

\$100 Cash and Certificate of Award

Senior Division: Sierra Duran
Hartville

AMERICAN METEOROLOGICAL SOCIETY

Certificate of Award

Junior Division: Eric Gibson
St. Agnes

AMERICAN PSYCHOLOGICAL ASSOCIATION

Certificate of Award

Senior Division: Autumn George
Nixa

AMERICAN SOCIETY OF MAMMALOGISTS

Certificate of Award

Junior Division: Kate Rumfelt
Manes R-5

Senior Division: Alicia Bonner
Thayer

THE AMERICAN SOCIETY FOR METALS MATERIALS EDUCATION FOUNDATION

Medallion and Certificate of Award

Senior Division: Madelyn Stroder
Greenwood Lab

THE ASSOCIATION OF WOMEN GEOSCIENTISTS

Certificate of Merit

Senior Division: Keeley Rogers
Thayer High School

BAKER CHAIR OF INSURANCE/GAMMA IOTA SIGMA AWARD

\$50 Cash & Certificate of Achievement

Senior Division: Margaret Wright
Nixa

BROADCOM MASTERS

Certificate and Advancement in National Level Competition

Junior Division: Megana Swords
Summit Preparatory

Emma Riemenschneider
Pleasant View

Haylie Garrison
Manes R-5

David Shimizu
Summit Preparatory

Jacob Koppang
Summit Preparatory

Tim Harrington
Manes R-5

Joseph Garrison
Manes R-5

Nathan Zabek
Waynesville

Seth Kamykowski
St. Joseph

Evan Mason
Summit Preparatory

Alan Ramsey
Summit Preparatory

Corbin Lathrom
Manes R-5

IRENE BRUNER MEMORIAL AWARD

\$20 Cash & Certificate of Award

Junior Division: Mariah VanPelt
St. Joseph

Emma Riemenschneider
Pleasant View

CITY OF SPRINGFIELD – ENVIRONMENTAL SERVICES AWARD

Certificate and Recycled T-Shirt from plastic bottles

Junior Division: Jason Willhite
Manes R-5

Samuel Burton
Manes R-5

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

Certificate of Award and Recognition in National Newsletter

Senior Division: Taylor Fuselier
Thayer

DRURY UNIVERSITY

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

Senior Division: David Engleman
Greenwood Lab

Chase Herman
Nixa

Leila Ismaio
Nixa

Benjamin Liu
Central

Zhenhua Dong
Central

Zhenyu Dong
Central

Taylor Cain
Mansfield

Keeley Rogers
Thayer

Clay Smith
Mansfield

McKenzie Adamson
Mansfield

SPECIAL AWARDS

DRURY UNIVERSITY (cont.)

Senior Division: Makenzie Tripp
Mansfield

Blaine Dennis
Mansfield

Ann Sistrunk
Greenwood Lab

Courtney Whitlock
Greenwood Lab

Alicia Bonner
Thayer

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

\$50 Cash

Junior Division: Nathan Zabek
Waynesville

Senior Division: Ashton Hall
Nixa

EXPANDING YOUR HORIZONS: WOMEN IN SCIENCE

Certificate of Award and \$25 Gift Card

Junior Division: Anna Cozzi
St. Joseph

Senior Division: Hannah Dunbar
Nixa

GREATER OZARK AUDOBON SOCIETY "ENVIRONMENTAL AWARENESS AWARD"

*One Year Membership in the National
Audobon Society & Field Guide*

Junior Division: Nathan Zabek
Waynesville

INTEL "EXCELLENCE IN COMPUTER SCIENCE" AWARD

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

Senior Division: Tayler Cain
Mansfield

MISSOURI SOLAR ENERGY

Solar Calculator and Certificate of Award

Junior Division: Joseph Garrison
Manes R-5

Senior Division: Benjamin Liu
Central

Zhenhua Dong
Central

Zhenyu Dong
Central

MISSOURI STATE UNIVERSITY COLLEGE OF NATURAL AND APPLIED SCIENCES

\$50 Cash Award

Junior Division: Joseph Garrison
Manes R-5

Senior Division: Benjamin Liu
Central

Zhenhua Dong
Central

Zhenyu Dong
Central

Blaine Dennis
Mansfield

Chase Herman
Nixa

MISSOURI STATE UNIVERSITY COLLEGE OF NATURAL AND APPLIED SCIENCE SCHOLARSHIP AWARD

*\$1,000 Scholarship to each Senior Division
First Place Winner if they decide to attend
Missouri State University full-time (if the
winning category project is a team, the
scholarship is shared).*

Senior Division: David Engleman
Greenwood Lab

Chase Herman
Nixa

Leila Ismaio
Nixa

Benjamin Liu
Central

Zhenhua Dong
Central

Zhenyu Dong
Central

Tayler Cain
Mansfield

Keeley Rogers
Thayer

Clay Smith
Mansfield

McKenzie Adamson
Mansfield

Makenzie Tripp
Mansfield

Blaine Dennis
Mansfield

Ann Sistrunk
Greenwood Lab

Courtney Whitlock
Greenwood Lab

Alicia Bonner
Thayer

SPECIAL AWARDS

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY – BOTANY AWARD

Certificates to students & plaques to teachers

Junior Division: Christopher Bohannon
Waynesville

Senior Division: Nofal Zubair
Greenwood Lab

Will Sistrunk
Greenwood Lab

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY – ENVIRONMENTAL SCIENCE AWARD

Certificates to students & plaques to teachers

Junior Division: Nathan Zabek
Waynesville

Senior Division: Ashton Hall
Nixa

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY – MEDICINE & HEALTH AWARD

Certificates to students & plaques to teachers

Junior Division: Bethany Moore
Summit Preparatory

Senior Division: Rilee Hardcastle
Hartville

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY – MICROBIOLOGY AWARD

Certificates to students & plaques to teachers

Junior Division: Evan Mason
Summit Preparatory

Senior Division: Ann Sistrunk
Greenwood Lab

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY – ZOOLOGY AWARD

Certificates to students & plaques to teachers

Junior Division: Corbin Lathrom
Manes R-5

Senior Division: Emily Riley
Thayer

MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY

\$1,000 Work Study Award

Senior Division: Ann Sistrunk
Greenwood Lab

MISSOURI STATE UNIVERSITY DEPARTMENT OF PHYSICS, ASTRONOMY & MATERIALS SCIENCE

*Certificate and Subscription to Discovery
Magazine*

Junior Division: Eileen Liang
Summit Preparatory

Certificate and Book

Junior Division: Alan Ramsey
Summit Preparatory

*Certificate and Subscription to Popular
Science*

Senior Division: Jake Brooks
Nixa

*Certificate and Subscription to Scientific
American*

Senior Division: Cody Hightower
Hartville

Certificate and Book

Senior Division: Courtney Whitlock
Greenwood Lab

LOU & NADINE MOORE MEMORIAL AWARD

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

Junior Division: Austin Shrum
Waynesville

Joshua Morrissey
Summit Preparatory

Blake Nieman
Summit Preparatory

MU ALPHA THETA NATIONAL MATHEMATICS HONOR SOCIETY

Certificate of Award

Senior Division: Chase Herman
Nixa

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION “TAKING THE PULSE OF THE PLANET” AWARD

*Certificate of Award, Letter of Congratulations
& Lapel Pin*

Senior Division: Margaret Wright
Nixa

SPECIAL AWARDS

OZARKS TECHNICAL COMMUNITY COLLEGE

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

Senior Division: David Engleman
Greenwood Lab

Chase Herman
Nixa

Leila Ismaio
Nixa

Benjamin Liu
Central

Zhenhua Dong
Central

Zhenyu Dong
Central

Taylor Cain
Mansfield

Keeley Rogers
Thayer

Clay Smith
Mansfield

McKenzie Adamson
Mansfield

Makenzie Tripp
Mansfield

Blaine Dennis
Mansfield

Ann Sistrunk
Greenwood Lab

Courtney Whitlock
Greenwood Lab

Alicia Bonner
Thayer

RICOH CORPORATION

Certificate of Award

Senior Division: Jessie Frelander
Nixa

SCHNEIDER FOUNDATION

\$200 Cash & Certificate

Junior Division: Megana Swords
Summit Preparatory

Emma Riemenschneider
Pleasant View

Nathan Zabek
Wayneville

Evan Mason
Summit Preparatory

Joseph Garrison
Manes R-5

\$500 Cash & Certificate

Senior Division: Blaine Dennis
Mansfield

Alicia Bonner
Thayer

Chase Herman
Nixa

Clay Smith
Mansfield

Keeley Rogers
Thayer

SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATION

\$100 Cash Award & Certificate

Junior Division: Seth Kamykowski
St. Joseph

Senior Division: Haley Earls
Thayer

Rilee Hardcastle
Hartville

\$200 Cash Award & Certificate

Senior Division: Blaine Dennis
Mansfield

STOCKHOLM JUNIOR WATER PRIZE

Certificate & Promotion to International Competition

Senior Division: Makenzie McCrite
Mansfield

UNITED STATES METRIC ASSOCIATION

Certificate of Award

Junior Division: Joseph Garrison
Debra Burgard

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

Certificate of Award and Medal

Senior Division: Luke Ellickson
Greenwood Lab

YALE SCIENCE & ENGINEERING ASSOCIATION AWARD

Certificate of Award and Medallion

Senior Division: Clay Smith
Mansfield

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

SPECIAL AWARDS

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
The Summit Preparatory Academy

THE REGIONAL FAIR DIRECTOR EMERITUS "SYLVIA SPEAR MEMORIAL AWARD"

\$25 Cash to a First Time Teacher

Kelly Hammarlund
Cherokee Middle 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:

Timothy Harrison
Waynesville 6th Grade Center

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

This award of \$100 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:

Christina Shepherd
Nixa High School

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 2014 are:

Laura Stroup
The Summit Preparatory Academy

April Meltaberger
Pleasant View Middle School

Debra Burgard
Manes R-5

Timothy Harrison
Waynesville

Miriam Jump
St. Joseph Catholic Academy

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 2014 are:

Denise Vinton
Greenwood Lab

Christina Shepherd
Nixa High School

Lifeng Dong
Central High School

Pam Probert
Mansfield High School

Peggy Veatch
Thayer High School

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 2014 is:

Debra Burgard
Manes R-5

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 2014 is:

Lifeng Dong
Central High School

Pam Probert
Mansfield High School

Christina Shepherd
Nixa High School

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. Georgiana Saunders' BIO 102 Class
- Dr. Jessica Sewald's BIO 121 Class
- Mrs. Tina Tamme Hopper's BIO 121 and BIO 122 Classes
- Dr. Myra Hughes' BIO 210 Class
- Mrs. Sue McCrory's CIS 101 Class
- Mr. Harry Shea's CSC 101 Class
- Dr. Cheryl Wrinkle's PHY 101 Class
- Dr. Judith Meyer's GRY 108 Class
- Alpha Chi Omega
- Alpha Delta Pi
- Alpha Sigma Alpha
- Gamma Phi Beta
- Phi Eta Sigma
- Delta Zeta
- Sigma Kappa

In addition, over 200 judges from local colleges, companies and organizations donated their time and expertise Tuesday evening to judge the approximately 200 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.

Finally, we especially want to acknowledge the generous donation contributed by 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 2014 International Science & Engineering Fair on May 11 – 16, 2014, in Los Angeles, California.

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