# THE 57th ANNUAL OZARKS SCIENCE & ENGINEERING FAIR

HAMMONS STUDENT CENTER MISSOURI STATE UNIVERSITY

April 4, 2017 - April 6, 2017



# 2017 WINNERS

Sponsored By:

Missouri State University - College of Natural & Applied Sciences
Missouri State University Foundation
Associated Electric Cooperative, Inc.
Schneider Foundation
Cheryl & Rodney Wrinkle



# **MASTER OF CEREMONIES**

MICHELLE NORGREN EXECUTIVE DIRECTOR OZARKS SCIENCE & ENGINEERING FAIR

DR. TAMERA JAHNKE, DEAN
COLLEGE OF NATURAL AND APPLIED SCIENCES
MISSOURI STATE UNIVERSITY
PRESENTER OF AWARDS



# STEERING COMMITTEE MEMBERS

EXECUTIVE DIRECTOR:

DISPLAY & SAFETY:

ELEMENTARY FAIR:

MICHELLE NORGREN

KEN MCCRORY

LACEY GEIGER

LEMENTARY FAIR: LACEY GEIGER
HANNAH JULIAN

MEMBERS AT LARGE: SAMANTHA COOPER PLACEMENT AWARDS: BEN DALTON SPECIAL AWARDS: MICHELLE NORGREN

VOLUNTEERS:

SUE MCCRORY

DENISE VINTON

WEBMASTERS:

SUE MCCRORY

DENISE VINTON SOCIAL NETWORKING:

SUE MCCRORY

MICHELLE NORGREN



# **SCIENTIFIC REVIEW COMMITTEE**

DR. TOM TOMASI, CHAIR
DR. PAUL SCHWEIGER, 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: Cheryl and Rodney Wrinkle, Schneider Foundation & Associated Electric Cooperative, Inc. - includes plaques & trip to the Intel International Science & Engineering Fair for the Grand Prize Winners.)

GRAND PRIZE Olivia Kline

Establishment of a Permanent Cell Line of the

Native Pollinator *Bombus impatiens*:

Applications in Entomology, Animal Science,

and Nosema Research

Chris Reeves, Camdenton High School

GRAND PRIZE Kelli Alford

Phototactic Response of *Orconectes virilis* Chris Reeves, Camdenton High School

ist ALTERNATE Tara Poole

Transgenerational Effects of E-Liquid and

Nicotine on *C. elegans* 

Chris Reeves, Camdenton High School

2nd ALTERNATE Vincent Khor

The Effects of Extraocular Blue-Enriched LEDs

on Human Reaction Time

Chris Reeves, Camdenton High School

# **JUNIOR DIVISION GRAND PRIZE WINNERS**

(Plaque to each Junior Grand Prize Winner & Teacher)

GRAND PRIZE Kurtis Lammers

Effect of Coatings on Moving Through Sea Water

Timothy Hayes, Immaculate Conception

<u>ALTERNATE</u> Lauryn Justiss

What Materials Can Block a Wi-Fi Signal? Miriam Jump, St. Joseph Catholic Academy

# **MAJOR SPONSORS**

# MISSOURI STATE UNIVERSITY – COLLEGE OF NATURAL & APPLIED SCIENCES

## MISSOURI STATE UNIVERSITY FOUNDATION

# ASSOCIATED ELECTRIC COOPERATIVE, INC.

# SCHNEIDER FOUNDATION

### CHERYL AND RODNEY WRINKLE

# **2017 AWARDS AND SPONSORS**

AMERICAN CHEMICAL SOCIETY – OZARKS CHAPTER AMERICAN METEOROLOGICAL SOCIETY AMERICAN PSYCHOLOGICAL

ASSOCIATION

THE AMERICAN SOCIETY OF MAMMALOGISTS

THE ASM MATERIALS EDUCATIONAL SOCIETY

BAKER CHAIR OF INSURANCE/GAMMA IOTA SIGMA

THE LAWRENCE E. BANKS, JR., MEMORIAL AWARD

BROADCOM MASTERS

THE IRENE BRUNNER MEMORIAL AWARD GREATER OZARKS AUDUBON SOCIETY GREENE COUNTY RESOURCE

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MISSOURI STATE UNIVERSITY

DEPARTMENT OF BIOLOGY

MISSOURI STATE UNIVERSITY

DEPARTMENT OF GEOGRAPHY, GEOLOGY, PLANNING, AND

GEOSPATIAL SCIENCE

MISSOURI STATE UNIVERSITY
DEPARTMENT OF PHYSICS,
ASTRONOMY, AND MATERIALS
SCIENCE

THE LOU & NADINE MOORE MEMORIAL AWARD

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

OZARKS SCIENCE & ENGINEERING FAIR THE MARY JEAN PLASTER MEMORIAL AWARD

THE ROBERT W. PLASTER MEMORIAL AWARD

REGENERON SCIENCE TALENT SEARCH RICOH CORPORATION

THE REGIONAL FAIR DIRECTOR EMERITUS "SYLVIA SPEAR" AWARD

SCHNEIDER FOUNDATION

THE JAMES K. TICE MEMORIAL TEACHER AWARD

UNITED STATES AIR FORCE

UNITED STATES METRIC ASSOCIATION

UNITED STATES NAVY

WOMEN IN SCIENCE

YALE SCIENCE & ENGINEERING ASSOCIATION

# THE 2017 JUNIOR DIVISION



# PLACEMENT AWARD WINNERS!

# JUNIOR DIVISION PLACEMENT AWARDS

### **BEHAVIORAL AND SOCIAL SCIENCES**

1st Place: Taigan Calhoun Effects of Music on

Memory
Aleth Rogers
Norwood R-1

2<sup>nd</sup> Place: Ariana Garnica

Which Font is Most Memorable? Lynn Vogel St. Agnes

Alyssa Harrington Effect of Exposure/Time Under a Blanket on CO<sup>2</sup>

Levels

3<sup>rd</sup> Place: Jada Jones

Annabel Stenger

How Fast Can Your Heart

Race? Rob Powers The Summit

Sabrina Thornhill Stroop Effect Taylor Blankeship Mountain Grove

4th Place: Calla Yearta-Sothern

Are You Less Beautiful Than You Think? Rob Powers The Summit

Madison James Bryce Tiff

Gender Effect on Short

Term Memory Kailey Bridges

Marshfield Junior High

### **BIOCHEMISTRY**

1st Place: Giacomo Pennella

Ground Beef and Fat

Lynn Vogel St. Agnes

2<sup>nd</sup> Place: Ashton Contreras

Maggots and Meat Aleth Rogers Norwood R-1

### **BIOCHEMISTRY** (cont.)

3<sup>rd</sup> Place: Haylie Garrison

Manure and Biomass

Ryan Curtis Manes Elementary

### **BOTANY**

1st Place: Kami Housman

Kailey Taylor

Tomato, Tomahto: Effects

of Liquids Aaron Tillman

Marshfield Junior High

2<sup>nd</sup> Place: Allexus Walker

The Effects of the Type of Water on Plant Growth

Ryan Curtis Manes Elementary

3<sup>rd</sup> Place: Braeden Bounds

Little Cotyledon That

Could

April Thompson Pleasant View

4<sup>th</sup> Place: Audrey James

The Effects of Water Type on the Height of Marigolds

Aleth Rogers Norwood R-1

### **CHEMISTRY**

1st Place: Katlynn Ritchie

Coke and Mentos Taylor Blankenship Mountain Grove

2<sup>nd</sup> Place: Easton Siwek

The Battery Test Montye Mickelson

Forsyth

Grayci Keeling

The Effect of Temperature on LED Light Brightness

Aleth Rogers Norwood R-1

3<sup>rd</sup> Place: Kylee Bradshaw

Does Cooking Fruits Affect the Vitamin C

Levels? Aleth Rogers Norwood R-1

## **CHEMISTRY (cont.)**

3<sup>rd</sup> Place: Katelyn Germer

Pill Absorption Taylor Blankenship Mountain Grove

4<sup>th</sup> Place: Drue Coen

The Fizz in Soda Montye Mickelson

Forsyth

Willis Bearden Color Symphony Montye Mickelson

Forsyth

# **COMPUTER SCIENCE**

1st Place: Lauryn Justiss

What Materials Can Block

a Wi-Fi Signal? Miriam Jump

St. Joseph Academy

2<sup>nd</sup> Place: Vanessa Lampley

Encephalons Hacked

Aaron Tillman Marshfield Junior High

Marshileid Junior High

## EARTH & SPACE

1st Place: Justin Chadwell

Purification Method on Water Quality

Aleth Rogers Norwood R-1

2<sup>nd</sup> Place: Cameron Kelly

How Do Plants Affect

Erosion? Aleth Rogers Norwood R-1

3<sup>rd</sup> Place: Adrian Thomas

Do Warmer Seas Make Stronger Hurricanes? Taylor Blankenship Mountain Grove

# **ENGINEERING**

1ST Place: Cassie Chadwell

Yeti or Not? Aleth Rogers Norwood R-1

# JUNIOR DIVISION PLACEMENT AWARDS

**ENGINEERING** (cont.)

2<sup>nd</sup> Place: Jalen Drake

The Effect of Type of Material on Air Resistance

Aleth Rogers Norwood R-1

3<sup>rd</sup> Place: Baylee Nungesser

The Effect of Type of Shop Rag on Absorbency

Aleth Rogers Norwood R-1

4<sup>th</sup> Place: Ashlyn Grier

Daylon Kanengieter

Let It Rip Kailey Bridges

Marshfield Junior High

**ENVIRONMENTAL** 

1st Place: Morgan McClain

Vegetation Filtration Timothy Hayes

Immaculate Conception

2<sup>nd</sup> Place: Sierra Cornelison

Effect of Starch Plants on

Homogenous Ethanol

Production Aleth Rogers Norwood R-1

3<sup>rd</sup> Place: Tyden Ramey

Shapes Saving Trees Kailey Bridges

Marshfield Junior High

4th Place: Tyler Rockwood

Killer Cleaners Kailey Bridges

Marshfield Junior High

**MEDICINE & HEALTH** 

1st Place: Max McGowan

The Effect of a Power FX

Bracelet on Arm Resistance Aleth Rogers Norwood R-1

2<sup>nd</sup> Place: Kayla Rumley

Electrolyte Challenge: Orange Juice vs. Sports

Drink

Miriam Jump St. Joseph Academy **MEDICINE & HEALTH (cont.)** 

3rd Place: Brooklyn Crawford

Harper Coltrane Ruff Wounds Aaron Tillman

Marshfield Junior High

4th Place: August Thoms

Smile (If You Want To)

Aaron Tillman

Marshfield Junior High

**MICROBIOLOGY** 

1st Place: Evan Kilmer

Cleaners That Inhibit Bacterial Growth Lynn Vogel St. Agnes

2<sup>nd</sup> Place: Madison Rues

Five Second Rule Investigation Lynn Vogel St. Agnes

3<sup>rd</sup> Place: Paige Beggs

Do Antibacterial Wipes
Disinfect Shopping Cart

Handles?

Aleth Rogers Norwood R-1

**PHYSICS** 

1st Place: Kurtis Lammers

Effect of Coatings on Moving Through Sea

Water

Timothy Haves

Immaculate Conception

2<sup>nd</sup> Place: Christopher Edwards

The Effect of Amount of Fletching on Arrows' Flight Velocity Aleth Rogers Norwood R-1

3<sup>rd</sup> Place: Logan Crum

Hayden Curley Spinning the Ball Kailey Bridges

Marshfield Junior High

PHYSICS (cont.)

4<sup>th</sup> Place: Garrett Davault

Type of Nut vs. Energy

Produced Aleth Rogers

Norwood R-1

**ZOOLOGY** 

1st Place: Katie Rumfelt

The Effect of Different Kinds of Bird Seed on

Consumption
Ryan Curtis
Manes Elementary

2<sup>nd</sup> Place: Emily Sinning

Effect of Daylight Length on Egg Production Aleth Rogers Norwood R-1

3<sup>rd</sup> Place: Noah Whiten

Oyster Shells Make the

Difference Ryan Curtis Manes Elementary

4th Place: Alexander Coulter

Determining the Influence of Pollinator Habitat on Honey Production Miriam Jump

St. Joseph Academy

# THE 2017 SENIOR DIVISION



# PLACEMENT AWARD WINNERS!

# SENIOR DIVISION PLACEMENT AWARDS

**BEHAVIORAL AND SOCIAL SCIENCES** 

1st Place: Vincent Khor

The Effects of Extraocular Blue-Enriched LEDs on Human Reaction Time

Chris Reeves Camdenton

2<sup>nd</sup> Place: Kelli Alford

Phototactic Response of *Orconectes virilis* Chris Reeves Camdenton

3<sup>rd</sup> Place: Autumn Reeves

Ovulatory Signaling Using Visual Cues Chris Reeves Camdenton

4th Place: Molly Jones

Assessing Gender
Differences in Sound
Cognizance
Tara Bonebrake
Greenwood Lab

**BIOCHEMISTRY** 

1<sup>st</sup> Place: Jacob Kassing

Ethanol Production from Grass Tara Bonebrake Greenwood Lab

2<sup>nd</sup> Place: Katlyn Dedmon

Ibuprofen and Worms Tabitha Shaver

Hartville

3rd Place: Zach Flanders

Effect of Caffeine on

Ants

Tara Bonebrake Greenwood Lab

**BOTANY** 

1st Place: Mercedez Hanlon

Exploring the Potential of the Use of Plant-Extracted Essential

Oils

Chris Reeves Camdenton **CHEMISTRY** 

1st Place: Drew Van Hook

Superhydrophobic Coating for Anti-Icing of Power Lines Chris Reeves Camdenton

2<sup>nd</sup> Place: Cooper Short

Superhydrophobic Coating for Circuit

Boards Chris Reeves Camdenton

3<sup>rd</sup> Place: Lee Kitchem

Biomass Derived

Fuels Chris Reeves Camdenton

4th Place: Kenneth Khor

Arsenic Doped ZnO to Replace TiO<sub>2</sub> for Solar

Cells Chris Reeves Camdenton

**COMPUTER SCIENCE** 

1st Place: David Wells

Space From Shadow: Derivation of Lunar Crater Geometry Using Earth-Based Observations Jeffrey Wells Glendale

2<sup>nd</sup> Place: Paxton Poole

Mobile Approach to Track the Safety of Your Child via Geofencing Through the Application of Big

Mother Chris Reeves Camdenton

3<sup>rd</sup> Place: Anshul Soni

Statistical Analysis of Nutritional Value and Cost of Store Bought Replacement and Fast

Foods

Tara Bonebrake Greenwood Lab **COMPUTER SCIENCE (cont,)** 

4th Place: Katelyn Lee

Phalange Prints Tabitha Shaver Hartville

**ENGINEERING** 

1st Place: Pierce Taylor

The Effects of Varying LED Arrays on the Efficiency of a Light Fidelity Network Chris Reeves Camdenton

2<sup>nd</sup> Place: Zane Foulk

The Application of the Triboelectric Effect in Different Motions to Determine the Most Efficient Method of Harvesting Static Electricity Chris Reeves Camdenton

3<sup>rd</sup> Place: Michael Radlund

The Use of an

Engineered Uniformed Pinning System for Tornado Resistant Residential Construction Chris Reeves Camdenton

4th Place: Drew Ellefsen

**Exploring the Potential** 

Application of

Polymeric Aerogels for Use in Reducing the Acoustic Signature Created by an Airfoil Chris Reeves Camdenton

**ENVIRONMENTAL** 

1<sup>ST</sup> Place: Grace Hall

A Comparison of Enzymatic Carbon and Nitrogen Utilization Capacity of Microbial Communities Exposed

to Lespedeza

cuneeata and virginica

Chris Reeves Camdenton

# SENIOR DIVISION PLACEMENT AWARDS

### **ENVIRONMENTAL** (cont,)

### **MICROBIOLOGY**

2<sup>nd</sup> Place: Austin Collins

Oscar Stephens
William Craig
Carbon Scrubbing
Wind Turbine
Lindsay Dunning
Marion C. Early

3<sup>rd</sup> Place: Joshua Harmon

Exploring the Potential of Standoff Detection of Hazardous Material Soil Contaminations with Hyperspectral Imaging of Vegetation

Chris Reeves Camdenton

4th Place: Mikayla Allen

The Effect of

Environmental Toxins on Amyotropic Lateral

Sclerosis Adrick Miller Thayer

### **MEDICINE AND HEALTH**

1<sup>ST</sup> Place: Tara Poole

Transgenerational Effects of E-Liquid and Nicotine on *C. elegans* 

Chris Reeves Camdenton

2<sup>nd</sup> Place: Emily Zaretzky

The Feasibility Of A
Side-Glow Fiber Optic
Nitrogen Doped
Titanium DioxideSilicon Dioxide Photocatalyst For Fecal
Waste Applications
Chris Reeves
Camdenton

3<sup>rd</sup> Place: Brenden Barbour

Analysis of Heart Rate Variability to Detect Type I Diabetes Chris Reeves Camdenton 1st Place: Kallie Davis

Microcystis aeruginosa Growth and Toxin Production Chris Reeves Camdenton

2<sup>nd</sup> Place: Noah Taylor

Fuel Cells From Waste

Tabitha Shaver Hartville

3rd Place: Emily Abdalla

Bacterial Growth in

Pools

Tara Bonebrake Greenwood Lab

**ZOOLOGY** 

1<sup>st</sup> Place: Olivia Kline

Establishment of a Permanent Cell Line of the Native Pollinator Bombus impatiens: Applications in Entomology, Animal Science, and Nosema

Research Chris Reeves Camdenton

2<sup>nd</sup> Place: River Wise

Biological Inventory of Invertebrate Fauna of

Bridal Cave Chris Reeves Camdenton

3<sup>rd</sup> Place: Ashlynne Dickenson

What Makes the Calf Grow Faster: Milk Replacement or Whole

Milk?

Tabitha Shaver Hartville

# THE 2017 JUNIOR & SENIOR DIVISION



# SPECIAL AWARD WINNERS!

AMERICAN CHEMICAL SOCIETY -

**OZARKS CHAPTER** 

\$50 Cash Award

Katlynn Ritchie Junior Division:

Mountain Grove

Senior Division:

Cooper Short

Camdenton

AMERICAN METEOROLOGICAL SOCIETY

Certificate of Award

Junior Division: Adrian Thomas

Mountain Grove

AMERICAN PSYCHOLOGICAL **ASSOCIATION** 

Certificate of Award

Senior Division:

Vincent Khor

Camdenton

THE AMERICAN SOCIETY OF **MAMMOLOGISTS** 

Certificate of Award

Junior Division:

Elijah Bloom

Mountain Grove

THE AMERICAN SOCIETY FOR METALS MATERIALS EDUCATION FOUNDATION

Medallion, Award Certificate

Senior Division:

Drew Ellefson

Camdenton

**BAKER CHAIR OF INSURANCE/GAMMA IOTA SIGMA AWARD** 

\$50 Cash & Certificate of Achievement

Senior Division: Michael Radlund

Camdenton

**BROADCOM MASTERS** 

Certificate of Award and Advancement in National Level Competition with awards up to

\$25,000

Junior Division:

Taigan Calhoun

Norwood R-1

Giacomo Pennella

St. Agnes

Kami Housman Marshfield Junior High

Kailey Taylor

Marshfield Junior High

Katlynn Ritchie Mountain Grove

Lauryn Justiss

St. Joseph Academy

Justin Chadwell Norwood R-1

Cassie Chadwell Norwood R-1

Morgan McClain Immaculate Conception

Max McGowan Norwood R-1

Evan Kilmer St. Agnes

**Kurtis Lammers** Immaculate Conception

Katie Rumfelt Manes Elementary

THE IRENE BRUNNER MEMORIAL AWARD

\$25 Cash Award & Certificate

Junior Division: Lauryn Justiss

St. Joseph Academy

Kayla Rumley St. Joseph Academy **GREATER OZARK AUDUBON SOCIETY** "ENVIRONMENTAL AWARENESS AWARD"

One Year Membership in the National Audubon Society & Field Guide

Junior Division:

Senior Division:

John Brown St. Agnes

Leland Whitman

Camdenton

**GREENE COUNTY RESOURCE** MANAGEMENT "GROUNDWATER **GUARDIAN" AWARD** 

Certificate and Bonus Item

Junior Division: Morgan McClain

Immaculate Conception

INTEL EXCELLENCE IN COMPUTER SCIENCE AWARD

\$200 Cash Award & Certificate

Senior Division: **David Wells** 

Glendale

INTEL INTERNATIONAL SCIENCE AND **ENGINEERING FAIR AWARD** 

Certificate and Trip to INTEL ISEF

Senior Division: Olivia Kline

Camdenton

Kelli Alford Camdenton

**MASTER NATURALISTS ENVIRONMENTAL AWARD** 

\$50 Cash

Junior Division: Alexander Coulter

St. Joseph Academy

Senior Division: Olivia Kline

Camdenton

# MISSOURI DEPARTMENT OF CONSERVATION AWARD"

DVDs, Field Guides, and Materials

Junior Division: Alexander Coulter

St. Joseph Academy

Conservation CD, DVD, and Books

Senior Division: River Wise

Camdenton

Olivia Kline Camdenton

## MISSOURI SOCIETY OF PROFESSIONAL ENGINEERS, OZARKS CHAPTER, "FUTURE ENGINEER" AWARD

Cash Award

Junior Division: Ashlyn Grier

Marshfield Junior High

Daylon Kanengieter Marshfield Junior High

Gavin McGraw Norwood R-1

Senior Division: Pierce Taylor

Camdenton

Michael Radlund Camdenton

# MISSOURI STATE UNIVERSITY COLLEGE OF NATURAL AND APPLIED SCIENCES GRAND PRIZE AWARD

\$50 Cash Award

Junior Division: Kurtis Lammers

Immaculate Conception

Senior Division: Olivia Kline

Camdenton

Kelli Alford Camdenton

# MISSOURI STATE UNIVERSITY DEPARTMENT OF BIOLOGY

\$1,000 Work Study Award; Certificate to

student and Plaque to

Teacher

Senior Division: Grace Hall

Camdenton

MISSOURI STATE UNIVERSITY
DEPARTMENT OF GEOGRAPHY,
GEOLOGY, PLANNING AND GEOSPATIAL
SCIENCE AWARD

Subscription to National Geographic

Magazine

Junior Division: Cameron Kelly

Norwood R-1

# MISSOURI STATE UNIVERSITY DEPARTMENT OF PHYSICS, ASTRONOMY, AND MATERIALS SCIENCE

Book and Certificate of Award

Junior Division: Jason Rumfelt

Manes Elementary

Christopher Edwards

Norwood R-1

Kurtis Lammers

Immaculate Conception

# MISSOURI STATE UNIVERSITY SCHOLARSHIP AWARD

\$1,000 Scholarship to each Senior Division First Prize 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: Vincent Khor

Camdenton

Jacob Kassing Greenwood Lab

Mercedez Hanlon Camdenton

Drew Van Hook Camdenton

David Wells Glendale

# MISSOURI STATE UNIVERSITY SCHOLARSHIP AWARD (cont.)

Senior Division: Pierce Taylor

Camdenton

Grace Hall Camdenton

Tara Poole Camdenton

Kallie Davis Camdenton

Olivia Kline Camdenton

# LOU & NADINE MOORE MEMORIAL AWARD

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

Junior Division: Michaela Bledsoe

Marshfield

Katie Smith Marshfield

Michea Eyerman St. Agnes

### NASA EARTH SCIENCE AWARD

Certificate

Junior Division: Morgan McClain

Immaculate Conception

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AWARD

Letter, Certificate of Award, and NOAA Medallion

Senior Division: Drew Van Hook

Camdenton

### REGENERON SCIENCE TALENT SEARCH

Opportunity to Advance to National Competition with awards up to \$150,000

Senior Division: Ka

Kallie Davis Camdenton

Drew Van Hook Camdenton

Jacob Kassing Greenwood Lab

Olivia Kline Camdenton

Grace Hall Camdenton

# RICOH CORPORATION SUSTAINABLE DEVELOPMENT AWARD

Certificate of Award

Senior Division:

Austin Collins Marion C. Early

Oscar Stephens Marion C. Early

William Craig Marion C. Early

### SCHNEIDER FOUNDATION

\$200 Cash & Certificate

Junior Division:

Morgan McClain

Immaculate Conception

Katie Rumfelt Manes Elementary

Lauryn Justiss St. Joseph Academy

Taigan Calhoun Norwood R-1

Katlynn Ritchie Mountain Grove

## **SCHNEIDER FOUNDATION (cont.)**

\$500 Cash & Certificate

Senior Division:

Drew Van Hook

Camdenton

Grace Hall Camdenton

Pierce Taylor Camdenton

Olivia Kline Camdenton

Tara Poole Camdenton

### **UNITED STATES AIR FORCE**

Certificate of Award, Sling Pack, Powerbank Charger, Dog Tag USB Drive; Dual USB Car Charger

Senior Division:

Drew Ellefsen Camdenton

Kenneth Khor Camdenton

David Wells Glendale

Pierce Taylor Camdenton

### UNITED STATES METRIC ASSOCIATION

Certificate of Award

Senior Division:

Kallie Davis Camdenton

# UNITED STATES NAVAL SCIENCE AWARD

Certificate. Medallion

Junior Division:

Kurtis Lammers

Immaculate Conception

Lauryn Justiss St. Joseph Academy

Justin Chadwell Norwood R-1

Morgan McClain Immaculate Conception

## UNITED STATES NAVAL SCIENCE AWARD (cont.)

Medallion, Certificate, and \$50 Cash Award

Senior Division:

Kallie Davis Camdenton

Vincent Khor Camdenton

Drew Van Hook Camdenton

Pierce Taylor Camdenton

### **WOMEN IN SCIENCE**

Certificate of Award and \$25 Gift Certificate

Junior Division:

Lauryn Justiss

St. Joseph Academy

Senior Division:

Tara Poole Camdenton

# YALE SCIENCE & ENGINEERING ASSOCIATION AWARD

Certificate of Award

Senior Division:

Drew Van Hook

Camdenton

# 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

Chris Reeves Camdenton 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

> Aleth Rogers Norwood R-1

# THE REGIONAL FAIR DIRECTOR EMERITUS "SYLVIA SPEAR MEMORIAL AWARD"

\$25 Cash to a First Time Teacher

Kailey Bridges Marshfield Junior High

# THE JAMES K. TICE MEMORIAL TEACHER AWARD

This award of \$250 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 our coach, teacher, mentor, surrogate parent, and 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:

Ryan Curtis Manes Elementary

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

This award of \$250 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:

Tara Bonebrake Greenwood Laboratory School

# OZARKS SCIENCE & ENGINEERING FAIR JUNIOR DIVISION TEACHER AWARDS

This Certificate is awarded to the teachers of the Junior Division First Place Category winners. The recipients of the Junior Division Teacher Awards for 2017 are:

> Aleth Rogers Norwood R-1

Lynn Vogel St. Agnes

Aaron Tillman Marshfield Junior High

Taylor Blankenship Mountain Grove

Miriam Jump St. Joseph Catholic Academy

Timothy Hayes Immaculate Conception

> Ryan Curtis Manes Elementary

# OZARKS SCIENCE & ENGINEERING FAIR SENIOR DIVISION TEACHER AWARDS

This Certificate is awarded to the teachers of the Senior Division First Place Category winners. The recipients of the Senior Division Teacher Awards for 2017 are:

> Chris Reeves Camdenton High School

Tara Bonebrake Greenwood Laboratory School

> Jeffery Wells Glendale 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 2017 is:

Timothy Hayes Immaculate Conception

## OZARKS SCIENCE & ENGINEERING FAIR SENIOR DIVISION GRAND PRIZE ALTERNATES TEACHER AWARD

This award of a certificate is awarded to the teacher(s) of the Senior Division Grand Prize Alternates student projects. The recipients of the OSEF Foundation Senior Division Grand Prize Alternates Teacher Award for 2017 is:

Chris Reeves Camdenton High 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 2017 is:

Chris Reeves Camdenton High School



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 350 hours of volunteer time and effort were donated – our deepest thanks and appreciation especially to the following:

- Richard Burton's CIS 200 Students
- Citizenship and Service Learning Students
- Dr. Kathy Nordyke
- Dr. Courtney Pham's QBA Students
- Dr. Jill Black's Students
- Kappa Sigma, Mu-Rho Chapter
- Alpha Kappa Lambda, Beta Psi Chapter
- Dr. Lisa Reece's Chemistry Students
- Residence Life, Housing, and Dining Services
- STEM LLC Students
- Lacey Geiger's CIS 200 Students

In addition, approximately 70 judges from local colleges, companies and organizations donated their time and expertise Tuesday evening to judge the over 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 Rick Hale and the crew at Copy Products for their generous loan of a copier for the duration of the Fair, and Mike Murphy of the College of Natural and Applied Sciences' Electronic Support Services for the loan of printers for the duration of the Fair.

Finally, we especially want to acknowledge the generous donation contributed by Associated Electric Cooperative, Schneider Foundation, and Cheryl and Rodney Wrinkle toward the substantial travel expenses incurred by the Senior Division Grand Prize Winners for travel to the 2017 International Science & Engineering Fair on May 14 to May 19, 2017, in Los Angeles, CA.

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