

OZARKS SCIENCE & ENGINEERING FAIR

HAMMONS STUDENT CENTER
MISSOURI STATE UNIVERSITY

April 3, 4, & 5, 2007



2007 WINNERS

Sponsored By:

Missouri State University
Associated Electric Cooperative, Inc.

Schneider Foundation

Positronic Industries

Missouri Society of Professional Engineers – Ozark Chapter



MASTER OF CEREMONIES

MICHELLE NORGRN
EXECUTIVE DIRECTOR
OZARKS SCIENCE & ENGINEERING FAIR

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



OSEF COMMITTEE MEMBERS

EXECUTIVE DIRECTOR:
EXECUTIVE ASSISTANT:
SPECIAL AWARDS:

PLACEMENT AWARDS:
PUBLICITY:

AWARD CEREMONY:
CORPORATE DISPLAYS:
SCIENCE DAY:
WEB PAGE DEVELOPMENT:
VOLUNTEERS:

DISPLAY & SAFETY:
ELEMENTARY FAIR:

MICHELLE NORGRN
COURTNEY PHILLIPS
CHERYL SCHAEFER
SAMANTHA SCHAEFER
NATHAN WINDEL
SANDY BROERMAN
KATHY SHADE
COURTNEY PHILLIPS
MICHELLE NORGRN
SUE MCCRORY
ROCHELLE MCCRORY
SAMANTHA SCHAEFER
HUGH BREWER
ROCHELLE MCCRORY



SCIENTIFIC REVIEW COMMITTEE

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



MAJOR SPONSORS

MISSOURI STATE UNIVERSITY

ASSOCIATED ELECTRIC COOPERATIVE, INC.

SCHNEIDER FOUNDATION

POSITRONIC INDUSTRIES

MISSOURI SOCIETY OF PROFESSIONAL ENGINEERS – OZARK CHAPTER

2007 AWARD SPONSORS

AMERICAN CHEMICAL SOCIETY – OZARK
SECTION

AMERICAN PSYCHOLOGICAL ASSOCIATION

AMERICAN SOCIETY OF MAMMALOGISTS

THE ASM INTERNATIONAL FOUNDATION

ARCHER ENGINEERING

ASSOCIATION FOR WOMEN GEOSCIENTISTS

BAKER CHAIR OF INSURANCE/GAMMA IOTA
SIGMA

CITY UTILITIES OF SPRINGFIELD

CITY OF SPRINGFIELD – SOLID WASTE
MANAGEMENT DIVISION

COMMUNITY FOUNDATION OF THE OZARKS

CONCO COMPANIES

DISCOVERY CHANNEL

FERRELL-DUNCAN

DRURY UNIVERSITY

EVANGEL UNIVERSITY

EXPANDING YOUR HORIZONS: WOMEN IN
SCIENCE

GREATER OZARKS AUDUBON SOCIETY

GREENE COUNTY RESOURCE MANAGEMENT
DEPARTMENT

HERBERT HOOVER PRESIDENTIAL LIBRARY
ASSOCIATION

HORAN & BECKER

INTEL

INTERNATIONAL SOCIETY OF OPTICAL
ENGINEERS

IRENE BRUNER MEMORIAL AWARD

MISSOURI DEPARTMENT OF CONSERVATION

MISSOURI STATE UNIVERSITY COLLEGE OF
NATURAL & APPLIED SCIENCES

MISSOURI STATE UNIVERSITY DEPARTMENT OF
BIOLOGY

MISSOURI STATE UNIVERSITY DEPARTMENT OF
COMMUNICATION SCIENCES &

DISORDERS

MISSOURI STATE UNIVERSITY SOCIETY OF
PHYSICS STUDENTS

THE LOU & NADINE MOORE MEMORIAL
AWARD

MU ALPHA THETA MATHEMATICS HONOR
SOCIETY

NATIONAL SOCIETY OF PROFESSIONAL
ENGINEERS

OZARKS SCIENCE & ENGINEERING FAIR
FOUNDATION

OZARKS TECHNICAL & COMMUNITY COLLEGE

POSITRONIC INDUSTRIES

THE REGIONAL FAIR DIRECTOR EMERITUS
“SYLVIA SPEAR” AWARD

RICOH CORPORATION

SCHNEIDER FOUNDATION

SMITH-GLYNN-CALLOWAY FOUNDATION

SOUTHWEST MISSOURI SOLAR ENERGY
ASSOCIATION

SOCIETY OF MANUFACTURING ENGINEERS
SPRINGFIELD/GREENE COUNTY

ENVIRONMENTAL ADVISORY BOARD
TROPHIES, ETC.

UNITED STATES AIR FORCE

UNITED STATES ARMY

UNITED STATES NAVY/MARINE CORPS

UNITED STATES DEPARTMENT OF HEALTH &
HUMAN SERVICES

UNITED STATES METRIC ASSOCIATION

WALLACE WEBER MEMORIAL AWARD

WATER ENVIRONMENT FEDERATION

WATERSHED COMMITTEE OF THE OZARKS

YALE SCIENCE & ENGINEERING ASSOCIATION



The Ozarks Science & Engineering Fair Steering Committee would like to extend a very special Thank You and acknowledgement to Head Football Coach Terry Allen, Assistant Coach-Defensive Line Derrick LeBlanc & the Missouri State Football Bears for their generous donation of time and effort in setting up and dismantling the Fair.



Go Bears!



**SENIOR DIVISION GRAND PRIZE WINNERS
AND ALTERNATES**

**(Grand Prize Awards Sponsored by: 3M Corporation, Positronic Industries &
Associated Electric Cooperative, Inc., & includes plaques for the Grand Prize
Winners and Teachers.)**

GRAND PRIZE Miles Barnhart
Impacts of Fluoxetine on Embryonic Development
Greenwood Laboratory School
M. C. Barnhart

GRAND PRIZE Andy Morris
Vegetable Oil as Oil Spill Cleanup
Mansfield High School
Pam Probert

1st ALTERNATE Taylor Aiken
Dhurrin Production in Sorghum halapense
Greenwood Laboratory School
Todd VanGorden

2nd ALTERNATE Brittany Keeling
Bryce Matlock
Herbal Remedies on Two Bacteria
Mansfield High School
Pam Probert

**JUNIOR DIVISION GRAND PRIZE WINNERS
AND ALTERNATE**

**(The Junior Division Grand Prize Award is Sponsored by Conco Companies: it includes a \$75
Cash Award & Plaque for the Grand Prize Winner & Teacher, plus a \$75 Cash Award for the
Grand Prize Alternate & Teacher.)**

GRAND PRIZE Taylor Barth & Emily Dodd
Germination Simulation On The Space Station
Marshfield Junior High
Aaron Tillman

ALTERNATE Jamie Blaine
The Little Sac River Weathers the Four Seasons
Pleasant View Middle School
Darlene Henne

THE 2007 JUNIOR
DIVISION



PLACEMENT AWARD
WINNERS!

JUNIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

- 1st Place: Andy Hill
First Impressions
St. Agnes Middle School
Lynn Vogel
- 2nd Place: Clarissa Gutierrez
Think Before You Dial
St. Agnes Middle School
Lynn Vogel
- Erica Johnson
The Effect of Color on the
Nervous System
St. Joseph Middle School
Kathryn Keller
- 3rd Place: Andy Curtis
Photo Memory
St. Joseph Middle School
Kathryn Keller
- Thomas Brockman
The Effect of Temperature on the
Distance a Golf Ball Travels
Immaculate Conception
Heather Cook
- 4th Place: Chaz Rose
Who Should Win the Heisman
Immaculate Conception
Heather Cook
- Katie Mulkey
It's All in the Stars
Billings Middle School
Carolyn Mulkey

BIOCHEMISTRY

- 1st Place: Kendra Woolman
Effects of Magnesium Nitrate on
the Germination and Growth of
Bean Seeds
Mansfield Middle School
Jon Hinsley
- 2nd Place: Matt Haley
Suds and Duds
St. Agnes Middle School
Lynn Vogel
- 3rd Place: Allison Whiteman
Mouth Watering
Hickory Hills
Rebecca Jamieson-Pugh

BIOCHEMISTRY (cont.)

- 4th Place: Andrea Parker
Do Homemade Cleaners Work
Better than Commercial Cleaners
Immaculate Conception
Heather Cook

BOTANY

- 1st Place: Stefan Mitchell
Wood Failure Analysis
St. Agnes Middle School
Lynn Vogel
- 2nd Place: Gabbi Idos
Global Warming and How it
Affects the Way We Farm
Cherokee Middle School
Jackie Hutcherson
- Ben Straus
Pumpkin Puzzlers
St. Agnes Middle School
Lynn Vogel
- 3rd Place: Meggie Bullard
What Color Is It?
Immaculate Conception
Heather Cook
- Rachel Adams
Planted Pollution
Immaculate Conception
Heather Cook
- 4th Place: Rebekah McTeer
Tobacco Juice, Fertilizer, Water:
Which Enhances Plant Growth
Pleasant View
Darlene Henne

- Nikki Zorsch
The Effect of Ethylene &
Propylene Glycol on the Integrity
of Beet Cell Membrane
Mansfield Middle School
Jon Hinsley

CHEMISTRY

- 1st Place: Stuart Jump
Are Nitrates in Your Local Rivers
St. Joseph Middle School
Kathryn Keller

CHEMISTRY (cont.)

- 2nd Place: Anne Russell
Which Orange Juice Has the
Most Vitamin C
The Summit Prep School
Laura Stroup
- 2nd Place: Riley Bailey
Chemical Reactions Are Cool!
Immaculate Conception
Heather Cook
- 3rd Place: Cerisa Doyle
Orange Grows
St. Agnes Middle School
Lynn Vogel
- Colin Baker
Will it Rust
Immaculate Conception
Heather Cook
- 4th Place: Kris Herring
See A Penny Pick it Up
Pipkin Middle School
Andrea Cox
- Matthew Ford
Cleaners in Class Rooms
Immaculate Conception
Heather Cook

EARTH AND SPACE SCIENCES

- 1st Place: Taylor Barth
Emily Dodd
Germination Simulation on the
Space Station
Marshfield Junior High
Aaron Tillman
- 2nd Place: Lee Viorel
What's the Weather?
St. Agnes Middle School
Lynn Vogel
- 3rd Place: Tyran Vestel
Spotty Reception
Pleasant View
Darlene Henne
- 4th Place: Savannah Harter
Dallas Legan
Does Black Dirt Have More
Porosity Than Red Clay?
Billings Middle School
Carolyn Mulkey

JUNIOR DIVISION PLACEMENT AWARDS

ENGINEERING

1st Place: Rebecca Mayus
Fuel of the Future
Immaculate Conception
Heather Cook

2nd Place: Andrew Daus
Does the Speed You Go Affect
the Gas Mileage You Get?
Immaculate Conception
Heather Cook

Monica Bird
Keep on Burnin'!
St. Agnes Middle School
Lynn Vogel

3rd Place: Lexis Sherman
Various Vent Design and Cord
Length on Parachute Descent
Mansfield Middle School
Jon Hinsley

4th Place: Katie Renkoski
Inflation Duration: Air vs. Nitrogen
St. Agnes Middle School
Lynn Vogel

ENVIRONMENTAL SCIENCES

1st Place: Jamie Blaine
The Little Sac River Weathers the
Four Seasons
Pleasant View
Darlene Henne

2nd Place: Taylor Lower
How Much Weight Does Your
Wood Hold?
St. Joseph Middle School
Kathryn Keller

3rd Place: Connor Jenisch
John Edwards
Let's Get Fired Up!
Billings Middle School
Carolyn Mulkey

Ryan Bunselmeyer
Eutrophication and Algae Growth
Pleasant View
Darlene Henne

4th Place: Nick Gori
Burning Down the House
Immaculate Conception
Heather Cook

ENVIRONMENTAL SCIENCES (cont.)

4th Place: Cara Johnson
The Effect of Gravity on Living
Organisms
St. Joseph Middle School
Kathryn Keller

MATHEMATICS

1st Place: Micheal DeVoss
I-26 Again
St. Agnes Middle School
Lynn Vogel

2nd Place: Devine Merz
Do You Know Your Math?
St. Agnes Middle School
Lynn Vogel

3rd Place: Caitlin Green
Math and Music: Beat By Beat
St. Joseph Middle School
Kathryn Keller

4th Place: Nick Tonjuk
How is Electronic Information
Sent through Light?
Immaculate Conception
Heather Cook

MEDICINE AND HEALTH

1st Place: Riley Perryman
Living in a Material World
St. Agnes Middle School
Lynn Vogel

2nd Place: Bailey Mittman
Breakfast of Champions
The Summit Prep School
Laura Stroup

3rd Place: James Burke
Fruit Preservation
Immaculate Conception
Heather Cook

Mallory Pickens
Leaky Problems
St. Agnes Middle School
Lynn Vogel

4th Place: Megan Haller
Are All Potato Chips Equally
Greasy
Immaculate Conception
Heather Cook

MEDICINE AND HEALTH (cont.)

4th Place: Erin Quinn
Ewww – Greasy Pizza
Immaculate Conception
Heather Cook

MICROBIOLOGY

1st Place: Becca Baldwin
A Comparison of Oral Bacteria
St. Joseph Middle School
Kathryn Keller

2nd Place: Rachel Scott
The Solution to Contact Solutions
Immaculate Conception
Heather Cook

3rd Place: Jessye Maurer
Serving up Sickness
Cherokee Middle School
Jackie Hutcherson

4th Place: Thomas Gray
Germs or No Germs
St. Joseph Middle School
Kathryn Keller

PHYSICS

1st Place: Julia Bumberry
Junk Food Fuel
Immaculate Conception
Heather Cook

2nd Place: Jessica Bowman
Fun with Sounds Part II
Immaculate Conception
Heather Cook

Blake Bremer
Static Attack
St. Agnes Middle School
Lynn Vogel

3rd Place: Caroline Ukkena
The Speed of the Spin
Immaculate Conception
Heather Cook

Evan Haley
Insulation Investigation
St. Agnes Middle School
Lynn Vogel

JUNIOR DIVISION PLACEMENT AWARDS

PHYSICS (cont.)

4th Place: Alexandria Linder
Effects of Soda on Reaction in
Mentos
Skyline Middle School
Lannie Hinote

Evan Willhite
Effects of Type of Salt on
Gobstoppers
Skyline Middle School
Lannie Hinote

ZOOLOGY

1st Place: Katie Hanson
The Effects of Hydrogen
Peroxide on the Behavior and
Activity of Bloodworms
Mansfield Middle School
Jon Hinsley

2nd Place: Jed Lawson
Fishin' for Answers
Pleasant View
Darlene Henne

3rd Place: Megan Pinney
If You Give a Dog a Football . . .
St. Agnes Middle School
Lynn Vogel

4th Place: Avery Day
What They Eat - Will It Heat?
Marshfield Junior High
Kim Potter

THE 2007 SENIOR DIVISION



PLACEMENT AWARD WINNERS!

SENIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

- 1st Place: Jeni Dixon
The Effects of Video Games
on Human Aggression
Hartville High School
Tabitha Shaver
- 2nd Place: Chelsea House
A Comparison of Apparent
Ball Size and
Baseball/Softball Playing
Experience
Mansfield High School
Pam Probert
- Sari Higgins
Can You Hear Me
Now...Crash!
Hillcrest High School
Kim Redinger
- 3rd Place: Kelsey Kleier
To Sleep or Not to Sleep
Hillcrest High School
Jennifer Saylor
- 4th Place: Lindsey Heistermann
Most Popular Car and Engine
for 14 & 15 Year Olds
Hillcrest High School
Jennifer Saylor

BIOCHEMISTRY

- 1st Place: Bailey Irvin
Human Saliva pH Levels
Hillcrest High School
Kim Redinger
- 2nd Place: Abigael Tinlin
To Break Down or Not to
Break Down: Enzymes are in
Question
Hillcrest High School
Kim Redinger
- 3rd Place: Julia Allen
Heavy Metal and Peroxide
Reaction
Mansfield High School
Pam Probert
- 4th Place: Colby Salchow
Most Effective Skin Cleanser
Hillcrest High School
Jennifer Saylor

BOTANY

- 1st Place: Tron Sherman
Effects of Kinetin on Species
of Tomato
Mansfield High School
Pam Probert
- 2nd Place: Taylor Aiken
Dhurrin Production in
Sorghum Halapense
Greenwood Lab School
Todd VanGorden
- 3rd Place: Chelsey Choate
Plant Growth in Organic Soil
or Not?
Hillcrest High School
Kim Redinger
- 4th Place: Chad Kabage
James Wright
Solution Concentration and
Hydroponics
Mansfield High School
Pam Probert

CHEMISTRY

- 1st Place: Andrew Glover
Practical Hydrogen Production
Kickapoo High School
Rick Snyder
- 2nd Place: Karasyn Lindsey
What was I Drinking?
Hillcrest High School
Kim Redinger
- 3rd Place: Chesley Williamson
Which Has Better Quality: Tap
or Bottled Water?
Hillcrest High School
Kim Redinger

EARTH/SPACE SCIENCE

- 1st Place: Katie Click
Ground Penetrating Radar
Profiles of Haviland Crater,
KS
Kickapoo High School
Rick Snyder
- 2nd Place: Matt Carra
Effect of Soil Compaction on
Liquefaction
Kickapoo High School
Rick Snyder

EARTH/SPACE SCIENCE (cont.)

- 3rd Place: Sarah Byrd
Crater Collapse with
Emphasis on Faulting
Kickapoo High School
Rick Snyder

ENGINEERING

- 1st Place: Chase Brewer
Stuck on Duct Tape
Thayer High School
Peggy Veach
- 2nd Place: Andy Morris
Vegetable Oils as Oil Spill
Cleanup
Mansfield High School
Pam Probert
- 3rd Place: Canin Christell
Robot Navigation
Christell Home School
Todd Christell
- 4th Place: Devin Parrish
Water Proofing Material and
Styrofoam
Hillcrest High School
Jennifer Saylor

ENVIRONMENTAL SCIENCES

- 1st Place: Miles Barnhart
Impacts of Fluoxetine on
Embryonic Development
Greenwood Lab School
M.C. Barnhart
- 2nd Place: Aaron Baker
The Use of Waste Materials
as Building Insulation
Hartville High School
Tabitha Shaver
- 3rd Place: Alice Haseltine
Microencapsulated KCl:
Problem?
Greenwood Lab School
Todd VanGorden
- 4th Place: Evan Shaver
The Production of Gas from
Manure
Hartville High School
Tabitha Shaver

SENIOR DIVISION PLACEMENT AWARDS

ENVIRONMENTAL SCIENCES (cont.)

4th Place: Kati Sherman
PEG 400 and Brassicas Seed
Mansfield High School
Pam Probert

MATHEMATICS

1st Place: Nolan Goth
Three Body Program
Greenwood Lab School
Todd VanGorden

2nd Place: Kristin Campbell
Distance and Angle of Blood
Spatter
Mansfield High School
Pam Probert

3rd Place: Becca Petty
Fibonacci Anyone?
Hillcrest High School
Jennifer Saylor

4th Place: Bobby Cubellis
Over-clocking and Computer
Performance
Mansfield High School
Pam Probert

MEDICINE AND HEALTH

1st Place: Toby Shelhamer
Water Soluble Vitamins on the
Stability of Resveratrol
Mansfield High School
Pam Probert

2nd Place: Taryn Ellis
Fluid Intake on a Mouse's
Endurance Performance
Greenwood Lab School
Todd VanGorden

3rd Place: Joey Neal
The Effects of Simulated
Stomach Environment on 3
Different Types of
Acetaminophen
Mansfield High School
Pam Probert

MICROBIOLOGY

1st Place: Brittany Keeling
Bryce Matlock
Herbal Remedies on Two
Bacteria
Mansfield High School
Pam Probert

2nd Place: Dallas Massey
pH Variances on Potential E.
coli Growth
Mansfield High School
Pam Probert

3rd Place: Sammy Phillips
How Safe is the 5 Second
Rule?
Hillcrest High School
Kim Redinger

4th Place: Erin Pitts
Microwaves and Number of
Bacteria
Hartville High School
Tabitha Shaver

PHYSICS

1st Place: Jacqueline Moncada
Various Shampoos on Hair
Strength
Hartville High School
Tabitha Shaver

2nd Place: Jordan Turner
Humidity and Baseball
Distance
Hillcrest High School
Jennifer Saylor

3rd Place: Joshua Fletcher
Guns and Sound
Hillcrest High School
Jennifer Saylor

4th Place: Jonny Barton
You Heard What? From How
Far?
Hillcrest High School
Kim Redinger

ZOOLOGY

1st Place: Taryn Cole
OTC Medication on Daphnia
Seymour High School
Marta Erdos

2nd Place: Rudy Fotsch
Chondrichthyes Reaction to
Electric Field
Parkview High School
Stephanie Blake

3rd Place: Misti Fetters-Carter
To Which Scent will You Go
Hillcrest High School
Kim Redinger

4th Place: Anisha Rimal
Exhibition of Cow Stress
under Ultrasound
Central High School
Arbindra Rimal

THE 2007
JUNIOR & SENIOR
DIVISION



SPECIAL AWARD
WINNERS!

SPECIAL AWARDS

AMERICAN CHEMICAL SOCIETY, OZARKS SECTION

The Ozark ACS Junior Division Award of \$50 Cash and a Certificate Award

Junior Division: Riley Bailey
Chemical Reactions Are Cool!
Immaculate Conception

The Ozark ACS Senior Division Award of \$100 Cash and a Certificate Award

Senior Division: Andrew Glover
Practical Hydrogen Production
Kickapoo High School

AMERICAN PSYCHOLOGICAL ASSOCIATION AND TEACHERS OF PSYCHOLOGY IN SECONDARY SCHOOLS

Certificate of Award

Senior Division: Caitlin Masterson
Spelling Performance of 1st Graders
Greenwood Lab School

AMERICAN SOCIETY OF MAMMALOGISTS

Certificates of Award

Junior Division: Avery Day
What They Eat – Will It Heat?
Marshfield Junior High

Senior Division: Connie Quirk
A Comparison of Body Measurements
Mansfield High School

Anisha Rimal
Exhibitions of Cow Stress Under Ultrasound
Central High School

THE ASM INTERNATIONAL FOUNDATION

Certificate of Award

Senior Division: Stephanie Urrutia
Bridge Power
Hillcrest High School

THE ARCHER ENGINEERS AWARD

\$35 Cash Award

Senior Division: Chase Brewer
Stuck on Duct Tape
Thayer High School

THE ASSOCIATION OF WOMEN GEOSCIENTISTS

Certificate of Recognition

Senior Division: Katie Click
Ground Penetrating Radar Profiles of Haviland Crater, KS
Kickapoo High School

BAKER CHAIR OF INSURANCE/GAMMA IOTA SIGMA AWARD

\$25 Cash and Certificate of Achievement (to each if partners)

Senior Division: Sara Cady
Paige Farrell
Michael Cook
Different Car Emergency Vehicle Systems
Greenwood Lab School

IRENE BRUNER MEMORIAL AWARD

\$25 Cash and Certificate (if given to partners, cash prize will be divided equally)

Junior Division: Meggie Bullard
What Color is it?
Immaculate Conception

Olivia Hurd
aMAZEing Plants
St. Agnes Middle School

CITY OF SPRINGFIELD – SOLID WASTE DIVISION

Recycled Plastic Soda Bottle T-Shirt

Junior Division: Carson Shaefer
Effect of Temperature Change on Rate of Compost Decomposition
Immaculate Conception

CITY OF SPRINGFIELD – SOLID WASTE DIVISION (cont.)

Senior Division: Aaron Baker
The Use of Waste Materials as Building Insulation
Hartville High School

Evan Shaver
The Production of Gas from Manure
Hartville High School

CITY UTILITIES OF SPRINGFIELD

\$200 Cash Award

Junior Division: Stuart Jump
Are Nitrates in Your Local Rivers?
St. Joseph Middle School

Senior Division: Erin Cady
Kate Mattax
Water Quality Testing in Springfield
Greenwood Lab School

CONSTELLATION CLUB – TROPHIES ETC. "GALAXY EXPLORERS" AWARD

Plaque & \$50 Cash

Junior Division: Taylor Barth
Emily Dodd
Germination Simulation on the Space Station
Marshfield Junior High

Senior Division: Matthew Carra
Effect of Soil Composition on Liquefaction
Kickapoo High School

Katie Click
Ground Penetrating Radar Profiles of Haviland Crater, KS
Kickapoo High School

SPECIAL AWARDS

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE

2007 DCYSC Entry Booklet, 2007 DCYSC Certificate of Recognition, and 2007 DCYSC Lapel Pin

Junior Division: Andy Hill
St. Agnes Middle School

Clarissa Gutierrez
St. Agnes Middle School

Erica Johnson
St. Joseph Middle School

Stefan Mitchell
St. Agnes Middle School

Gabbi Idos
Cherokee Middle School

Ben Straus
St. Agnes Middle School

Kendra Woolman
Mansfield Middle School

Matt Haley
St. Agnes Middle School

Stuart Jump
St. Joseph Middle School

Anne Russell
The Summit Prep School

Riley Bailey
Immaculate Conception

Taylor Barth
Emily Dodd
Marshfield Junior High

Lee Viorel
St. Agnes Middle School

Rebecca Mayus
Immaculate Conception

Andrew Dans
Immaculate Conception

Monica Bird
St. Agnes Middle School

Jamie Blaine
St. Agnes Middle School

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE (cont.)

Junior Division: Taylor Lower
St. Joseph Middle School

Connor Jenisch
Billings Middle School

John Edwards
Billings Middle School

Michael DeVoss
St. Agnes Middle School

Devin Merz
St. Agnes Middle School

Riley Perryman
St. Agnes Middle School

Bailey Mittman
The Summit Prep School

Becca Baldwin
St. Joseph Middle School

Rachel Scott
Immaculate Conception

Julia Bumberry
Immaculate Conception

Jessica Bowman
Immaculate Conception

Blake Bremer
St. Agnes Middle School

Katie Hanson
Mansfield Middle School

Jed Lawson
Pleasant View

DRURY UNIVERSITY

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

Senior Division: Jeni Dixon
Video Games and Human Aggression
Hartville High School
Tabitha Shaver

Bailey Irvin
Human Saliva pH Levels
Hillcrest High School
Kim Redinger

DRURY UNIVERSITY (cont.)

Senior Division: Tron Sherman
Effects of Kinetin on Species of Tomato
Mansfield High School
Pam Probert

Andrew Glover
Practical Hydrogen Production
Kickapoo High School
Rick Snyder

Katie Click
Ground Penetrating Radar Profiles of Haviland Crater, KS
Kickapoo High School
Rick Snyder

Chase Brewer
Stuck on Duct Tape
Thayer High School
Peggy Veatch

Miles Barnhart
Impacts of Fluoxetine on Embryonic Development
Greenwood Lab School
M. C. Barnhart

Nolan Goth
Three Body Program
Greenwood Lab School
Todd VanGorden

Toby Shelhamer
Water Soluble Vitamins on Stability of Resveratrol
Mansfield High School
Pam Probert

Brittany Keeling
Bryce Matlock
Herbal Remedies on Two Bacteria
Mansfield High School
Pam Probert

Jacqueline Moncada
Various Shampoos on Hair Strength
Hartville High School
Tabitha Shaver

SPECIAL AWARDS

DRURY UNIVERSITY (cont.)

Senior Division: Taryn Cole
OTC Medication on
Daphnia
Seymour High School
Marta Erdos

*6 Hours Undergraduate Credit to the Senior
High Grand Prize Award Winners*

Senior Division: Andy Morris
Vegetable Oil as Oil Spill
Cleanup
Mansfield High School
Pam Probert

Senior Division: Miles Barnhart
Impacts of Fluoxetine on
Embryonic Development
Greenwood Lab School
M. C. Barnhart

EVANGEL UNIVERSITY

*\$1,500 Scholarship to each Senior Division
First Place Winner, as entering Freshmen*

Senior Division: Jeni Dixon
Video Games and Human
Aggression
Hartville High School
Tabitha Shaver

Bailey Irvin
Human Saliva pH Levels
Hillcrest High School
Kim Redinger

Tron Sherman
Effects of Kinetin on
Species of Tomato
Mansfield High School
Pam Probert

Andrew Glover
Practical Hydrogen
Production
Kickapoo High School
Rick Snyder

Katie Click
Ground Penetrating
Radar Profiles of Haviland
Crater, KS
Kickapoo High School
Rick Snyder

EVANGEL UNIVERSITY (cont.)

Senior Division: Chase Brewer
Stuck on Duct Tape
Thayer High School
Peggy Veatch

Miles Barnhart
Impacts of Fluoxetine on
Embryonic Development
Greenwood Lab School
M. C. Barnhart

Nolan Goth
Three Body Program
Greenwood Lab School
Todd VanGorden

Toby Shelhamer
Water Soluble Vitamins
on Stability of Resveratrol
Mansfield High School
Pam Probert

Brittany Keeling
Bryce Matlock
Herbal Remedies on Two
Bacteria
Mansfield High School
Pam Probert

Jacqueline Moncada
Various Shampoos on
Hair Strength
Hartville High School
Tabitha Shaver

Taryn Cole
OTC Medication on
Daphnia
Seymour High School
Marta Erdos

EXPANDING YOUR HORIZONS: WOMEN IN SCIENCE

Book & Certificate of Award

Junior Division: Ashley Marmouget
Got Juice or Acid?
St. Agnes Middle School

Kate Skrade
Hands Spread Disease:
Wash Them
Immaculate Conception

EXPANDING YOUR HORIZONS: WOMEN IN SCIENCE (cont.)

Gift Card, Bookmark & Certificate of Award

Junior Division: Jamie Blaine
The Little Sac River
Weathers the Four
Seasons
Pleasant View

Anne Russell
Which Orange Juice has
the Most Vitamin C?
The Summit Prep School

GREATER OZARKS AUDUBON SOCIETY

*Environmental Awareness Award;
Membership and Field Guide*

Junior Division: Tori Scott
The Bird Feeder Mystery
Clever Middle School

THE GREENE COUNTY GROUNDWATER GUARDIAN AWARD (sponsored by the GREENE COUNTY RESOURCE MANAGEMENT DEPARTMENT)

Plaque and Tickets to Wonders of Wildlife

Junior Division: Ryan Bunselmeyer
Algae Growth: Its Effects
on Eutrophication of Plant
Life
Pleasant View

HERBERT HOOVER PRESIDENTIAL LIBRARY ASSOCIATION "YOUNG ENGINEER AWARD"

Certificate of Award and Medal

Senior Division: Rebecca Freeman
Carbonated Beverage as
Corrosion Inhibitor
Mansfield High School

HORAN & BECKER MEDICAL SCIENCE AWARD (sponsored by HORAN & BECKER, DDS, AFFILIATED ORAL SURGEONS)

\$100 Health Science Award

Senior Division: Katelyn Long
Sugar Drinks on the Blood
Sugar
Hartville High School

SPECIAL AWARDS

INTEL EXCELLENCE IN COMPUTER SCIENCE AWARD

\$200 Cash and Certificate of Award

Senior Division: Nolan Goth
Three Body Program
Greenwood Lab School

INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERS

Certificate of Award

Senior Division: Beth Cantu
Wint-O-Green Sparks
Hillcrest High School

IN VITRO BIOLOGY

Certificate of Award

Senior Division: Joey Neal
The Effects of Simulated
Stomach Environment on
3 Types of
Acetaminophen
Mansfield High School

MISSOURI DEPARTMENT OF CONSERVATION

Plaque, Field Guide & DVD

Junior Division: Jed Lawson
Fishin' for Answers
Pleasant View

Senior Division: Blake Conaway
Dormancy Breaking in
Three Seeds
Mansfield High School

MISSOURI STATE UNIVERISTY DEPARTMENT OF BIOLOGY

Certificates to student and plaques to teachers

Junior Division: Thomas Gray
Germs or No Germs
St. Joseph Middle School

Gabbi Idos
Global Warming and How
it Affects the Way We
Farm
Cherokee Middle School

MISSOURI STATE UNIVERISTY DEPARTMENT OF BIOLOGY (cont.)

Junior Division: Jed Lawson
Fishin' for Answers
Pleasant View

Taylor Lower
How Much Weight Does
Your Wood Hold?
St. Joseph Middle School

Riley Perryman
Living in a Material World
St. Agnes Middle School

Senior Division: Miles Barnhart
Impacts of Fluoxetine on
Embryonic Development
Greenwood Lab School

Chelsey Choate
Plant Growth in Organic
Soil or Not
Hillcrest High School

Rudy Fotsch
Chrondrichthyes Reaction
to Electric Field
Parkview High School

Senior Division: Brittany Keeling
Bryce Matlock
Herbal Remedies on Two
Bacteria
Mansfield High School

\$1,000 Work/Study Award

Senior Division: Tron Sherman
Effects of Kinetin on
Species of Tomato
Mansfield High School

MISSOURI STATE UNIVERSITY COLLEGE OF NATURAL AND APPLIED SCIENCES

\$50 Cash Award

Junior Division: Taylor Barth
Emily Dodd
Germination Simulation
on the Space Station
Marshfield Junior High

MISSOURI STATE UNIVERSITY COLLEGE OF NATURAL AND APPLIED SCIENCES (cont.)

Senior Division: Andy Morris
Vegetable Oil as Oil Spill
Cleanup
Mansfield High School

Miles Barnhart
Impacts of Fluoxetine on
Embryonic Development
Greenwood Lab School

MISSOURI STATE UNIVERSITY DEPARTMENT OF COMMUNICATION SCIENCES & DISORDERS AWARD

Certificate of Award

Senior Division: Sari Higgins
Can You Here Me
Now?...Crash!
Hillcrest High School

Kristin Earls
Lung Capacity
Thayer High School

Justin Haseltine
Chris Adamson
Todd H'Doubler
Now You Hear It, Now
You Don't
Greenwood Lab School

Caitlin Masterson
Spelling Performance of
1st Graders
Greenwood Lab School

MISSOURI STATE UNIVERSITY SOCIETY OF PHYSICS STUDENTS

Subscription to "Scientific American" Magazine

Senior Division: Jonny Barton
You Hear What? From
How Far?
Hillcrest High School

Beth Cantu
Wint-O-Green Sparks
Hillcrest High School

Joshua Fletcher
Guns and Sounds
Hillcrest High School

SPECIAL AWARDS

MISSOURI STATE UNIVERSITY SOCIETY OF PHYSICS STUDENTS (cont.)

Senior Division: Jacqueline Moncada
Various Shampoos on
Hair Strength
Hartville High School

Tyler Page
String Number and
Length on Parachutes
Mansfield High School

Jordan Turner
Humidity and Baseball
Distance
Hillcrest High School

LOU & NADINE MOORE MEMORIAL AWARD

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

Junior Division: Rebekka Divine
Morgan Cook
How Do You Measure
Up?
Billings Middle School

Chad Kremer
The Pressure of
Homework
St Agnes Middle School

MU ALPHA THETA NATIONAL MATHEMATICS HONOR SOCIETY

Certificate of Award

Senior Division: Nolan Goth
Three Body Program
Greenwood Lab School

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Certificate of Award

Senior Division: Devin Parrish
Water Proofing Materials
and Styrofoam
Hillcrest High School

OZARKS TECHNICAL COMMUNITY COLLEGE

T-shirt

Senior Division: Jeni Dixon
Hartville High School

Bailey Irvin
Hillcrest High School

Tron Sherman
Mansfield High School

Andrew Glover
Kickapoo High School

Katie Click
Kickapoo High School

Chase Brewer
Thayer High School

Miles Barnhart
Greenwood Lab School

Nolan Goth
Greenwood Lab School

Toby Shelhamer
Mansfield High School

Brittany Keeling
Bryce Matlock
Mansfield High School

Jacqueline Moncada
Hartville High School

Taryn Cole
Seymour High School

RICOH CORPORATION "SUSTAINABLE DEVELOPMENT" AWARD

Poster & Certificate of Award

Senior Division: Evan Shaver
The Production of Gas
from Manure
Hartville High School

SCHNEIDER FOUNDATION (in cooperation with the Community Foundation of the Ozarks)

\$200 Cash and Certificates

Junior Division: Taylor Barth
Emily Dodd
Germination Simulaton on
the Space Station
Marshfield Junior High

Riley Perryman
Living in a Material World
St. Agnes Middle School

Stefan Mitchell
Wood Failure Analysis
St. Agnes Middle School

Kendra Woolman
Effects of Magnesium
Nitrates on the
Germination and Growth
of Bean Seeds
Mansfield Middle School

Rebecca Mayus
Fuel of the Future
Immaculate Conception

\$500 Cash & Certificate

Senior Division: Jeni Dixon
Video Games & Human
Aggression
Hartville High School
Tabitha Shaver

Miles Barnhart
The Effects of Fluoxetine
on Embryonic
Development
Greenwood Lab School

Brittany Keeling
Bryce Matlock
Herbal Remedies on Two
Bacteria
Mansfield High School

Andy Morris
Vegetable Oil as Oil Spill
Cleanup
Mansfield High School

Andy Glover
Practical Hydrogen
Production
Kickapoo High School

SPECIAL AWARDS

THE SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATION AWARD

\$200 Cash Award

Senior Division: Taryn Cole
OTC Medication on
Daphnia
Seymour High School

Brittany Keeling
Bryce Matlock
Herbal Remedies on Two
Bacteria
Mansfield High School

Karasyn Lindsey
What Was I Drinking?
Hillcrest High School

Joey Neal
The Effects of Simulated
Stomach Environment on
3 Types of
Acetaminophen
Mansfield High School

Abigael Tinlin
To Break Down or Not to
Break Down: Enzymes
Are in Question
Hillcrest High School

SOCIETY OF MANUFACTURING ENGINEERS

Palm Pilots

Junior Division: Monica Bird
Keep on Burnin'!
St. Agnes Middle School

Senior Division: Canin Christell
Robot Navigation
Christell Home School

SOUTHWEST MISSOURI SOLAR ENERGY ASSOCIATION

Certificate of Award

Junior Division: Katie Renkoski
Inflation Duration: Air vs.
Nitrogen
St. Agnes Middle School

Senior Division: Sarah Story
Trying to Beat the
Unwanted Heat
Hillcrest High School

SOUTHWEST MISSOURI SOLAR ENERGY ASSOCIATION (cont.)

Certificate of Award & Casio Calculator

Junior Division: Rebecca Mayus
Fuel of the Future
Immaculate Conception

Senior Division: Andrew Glover
Practical Hydrogen
Production
Kickapoo High School

UNITED STATES AIR FORCE

Padfolio, USB/Flash drive, PDA, pen/pencil set & Certificate of Award

Senior Division: Canin Christell
Robot Navigation
Christell Home School

Katherine Holst
Comparison of Fertilizers
and Watering Methods on
Beans
Greenwood Lab School

Ryan Veatch
"Sugar Free" – Really?
Thayer High School

UNITED STATES ARMY – Excellence in Engineering

Certificate of Award & Shirt

Senior Division: Stephanie Urrutia
Bridge Power
Hillcrest High School

UNITED STATES ARMY – Excellence in Environmental Science

Certificate of Award & Shirt

Senior Division: Aaron Baker
Waste Materials as
Building Insulation
Hartville High School

UNITED STATES ARMY – Excellence in Life Science

Certificate of Award & Shirt

Senior Division: Anisha Rimal
Exhibitions of Cow Stress
Under Ultrasound
Central High School

UNITED STATES ARMY – Excellence in Mathematics/Computer Science

Certificate of Award & Shirt

Senior Division: Nolan Goth
Three Body Program
Greenwood Lab School

UNITED STATES ARMY – Excellence in Physical Science

Certificate of Award & Shirt

Senior Division: Joshua Fletcher
Guns and Sound
Hillcrest High School

UNITED STATES ARMY – Grand Prize

Bronze Medallion

Senior Division: Anisha Rimal
Exhibitions of Cow Stress
Under Ultra Sound
Central High School

UNITED STATES METRIC ASSOCIATION

Certificate of Award

Senior Division: Karasyn Lindsey
What am I Drinking?
Hillcrest High School

UNITED STATES NAVY/MARINE CORPS

Medal & Certificate of Award

Junior Division: Julia Bumberry
Junk Food Fuel
Immaculate Conception

Kris Herring
See a Penny Pick it Up
Pipkin Middle School

SPECIAL AWARDS

UNITED STATES NAVY/MARINE CORPS (cont.)

Junior Division: Connor Jenisch
John Edwards
What Alternatives to
Wood Work Best?
Billings Middle School

Rebekah McTeer
Tobacco Juice, Fertilizer,
Water: Which Enhances
Plant Growth
Pleasant View

Stefan Mitchell
Wood Failure Analysis
St. Agnes Middle School

Zac Randolph
Probiotics: Effect on
Columbia Livia Squabs
Pleasant View

*Medal, \$50 Gift Certificate & Certificate of
Award*

Senior Division: Rebecca Carter
The Effect of Color on
Memory
Thayer High School

Josh Dorcy
Glyphosate on Brine
Shrimp Development
Mansfield High School

Mitchell Jenkins
Most Effective Ice Melters
Hillcrest High School

Sammy Phillips
How Safe is the 5 Second
Rule?
Hillcrest High School

Tron Sherman
Effects of Kinetin on
Species of Tomato
Mansfield High School

Ryan Veatch
"Sugar Free" – Really?
Thayer High School

UNITED STATES DEPARTMENT OF HEALTH & HUMAN SERVICES

Certificate of Award

Senior Division: Sari Higgins
Can You Hear Me Now . .
. Crash!
Hillcrest High School
Kim Redinger

WALLACE WEBER MEMORIAL AWARD FOR BOTANY

*\$25 Cash & Certificate of Award for
Outstanding Botany Project*

Junior Division: Nikki Zorsch
The Effects of Ethylene
and Propylene Glycol on
the Integrity of Beet Cell
Membranes
Mansfield Middle School

WATER ENVIRONMENT FEDERATION/STOCKHOLM WATER PRIZE

*Certificate of Award, Advancement to State
Level Competition*

Senior Division: Miles Barnhart
Impacts of Fluoxetine on
Embryonic Development
Greenwood Lab School

WATERSHED COMMITTEE OF THE OZARKS

\$50 Cash Award

Junior Division: Jamie Blaine
The Little Sac River
Weathers the Four
Seasons
Pleasant View

Senior Division: Nick Allen
Well Water Quality
Thayer High School

YALE SCIENCE & ENGINEERING ASSOCIATION, INC.

Award Certificate

Senior Division: Andy Morris
Vegetable Oils as Oil Spill
Cleanup
Mansfield High School

DR. GARY A. KELL AWARD, sponsored by Ferrell-Duncan Clinics

*This award of \$500 is awarded to the Junior
High or Middle School Teacher who
sponsored the most students winning
placement awards. Half of the award is for
the teacher personally and half will be used
for the purchase of research equipment for
his/her classroom. The recipient of the Kell
Award for 2007 is:*

Heather Cook
Immaculate Conception

THE REGIONAL FAIR DIRECTOR EMERITUS "SYLVIA SPEAR NEW TEACHER AWARD"

\$25 Cash to a First Time Teacher.

Laura Stroup
The Summit Prep School

POSITRONIC INDUSTRIES TEACHER AWARD

*This cash award of \$75 is awarded to the
Teacher, Junior High, Middle School or Senior
High, with the most total entries. The
recipient of the Positronic Award for 2007 is:*

Heather Cook
Immaculate Conception

SPECIAL AWARDS

OZARKS SCIENCE & ENGINEERING FAIR FOUNDATION JUNIOR DIVISION GRAND PRIZE TEACHER AWARD

This award of a book of abstracts and a plaque is awarded to the teacher(s) of the Junior Division Grand Prize student project. The recipient of the OSEF Foundation Junior Division Grand Prize Teacher Award for 2007 is:

Aaron Tillman

OZARKS SCIENCE & ENGINEERING FAIR FOUNDATION SENIOR DIVISION GRAND PRIZE TEACHER AWARD

This award of a book of abstracts and 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 2007 are:

Pam Probert
M. C. Barnhart

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 to the following:

- Beta Beta Beta Biological Honor Society
- Dr. Georgianna Saunders' BIO 100 Class
- Michelle Hulett's CIS 205 Class
- Missouri State University Biology Department
- Missouri State University Football Team & Coaches (Go BEARS!)
- Missouri State University Pre-Medical Society
- Missouri State University Wrestling Club
- Sue McCrory's CIS 101 Classes

In addition, nearly 200 judges from local colleges, companies and organizations donated their time and expertise Tuesday evening to judge the approximately 500 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 Maschino's for their generous donation of 52 umbrella bases, to Robinett Business Systems for their generous donation of a desktop copier, and Alltel for the donation of several cell phones for the duration of the Fair.

In addition, we would like to recognize Allen Rents for their continuing 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 Positronic Industries toward the substantial travel expenses incurred by the Senior Division Grand Prize Winners for travel to the 2007 International Science & Engineering Fair in Albuquerque, New Mexico.

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