

OZARKS SCIENCE & ENGINEERING FAIR

HAMMONS STUDENT CENTER
SOUTHWEST MISSOURI STATE UNIVERSITY

April 6, 7 & 8, 2004



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2004 AWARD SPONSORS

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UNITED STATES METRIC ASSOCIATION

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**SENIOR DIVISION GRAND PRIZE WINNERS
AND ALTERNATES**

(Grand Prize Awards Sponsored by: Kraft Foods, Inc., Positronic Industries, 3M Corporation, E&V Engineers, ESC Consulting Engineers, and F&H Industries, Clariant, and Associated Electric Cooperative, Inc., and includes plaques for the Grand Prize Winners and Teachers.)

GRAND PRIZE Keenan Rose
Heavy Metal Levels in Stream Sediments
Glendale High School
Charles Rey

GRAND PRIZE Claire Clothiaux
A Comparison of Two Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

FIRST ALTERNATE Amanda Jones
The Effects of Recluse Toxins on Cells in Planeria
Hartville HS
Glen Boyer

SECOND ALTERNATE Julie Hutton
Impact of Salicylic Acid on Symbiotic Relationships
Mansfield HS
Pam Probert

**JUNIOR DIVISION GRAND PRIZE WINNERS
AND ALTERNATE**

(The Junior Division Grand Prize Award is Sponsored by Conco Companies, and includes a \$75.00 Cash Award and Plaque for the Grand Prize Winner and Teacher, and a \$75.00 Cash Award for the Grand Prize Alternate and Teacher.)

GRAND PRIZE Curran Merrigan
What's Stomata With You?
Immaculate Conception
Elaine Marzolla

ALTERNATE Kendra Weatherford
How Sweet It Is! Effect of Sweeteners on *Drosophila melanogaster*
Pleasant View MS
Darlene Henne

**THE 2004 JUNIOR
DIVISION**



**PLACEMENT AWARD
WINNERS!**

JUNIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

- 1st Place: Kassie Hyde
What Does That Say?
Marshfield JH
Aaron Tillman
- 2nd Place: Ashley Clements
Do People Remember Audio or
Visual Information Better?
Pipkin MS
Andrea Cox
- Brady Yates
Memory vs. Gender
Pleasant View MS
Darlene Henne
- 3rd Place: Lindsey Johnson
Number Memory
Cherokee MS
Colleen Merrigan
- Millie Tice
Jessica Rund
The Effect of Domestic Animals
on Human Health
Cherokee MS
Jennifer Cvitak

Honorable Mention:

- Kaylyn McCune
Cna U Reed Thsi?
Marshfield JH
Aaron Tillman
- Rachel Ball
Getting Sleepy?
St. Agnes MS
Lynn Vogel

BIOCHEMISTRY

- 1st Place: Katie Finch
See How Much Vitamin C
St. Agnes MS
Lynn Vogel
- 2nd Place: Alexandria Starnes
Jenna Briggs
Hatching Brine Shrimp
Reed MS
Harold Isaak
- Kaitlin Yocum
Taste Trial
St. Agnes MS
Lynn Vogel

BIOCHEMISTRY (cont.)

- 3rd Place: Samantha Long
Kristal Oerding
Wrap It Up
Marshfield JH
Aaron Tillman
- Bethany Bradford
Daphnia and Sweeteners = Heart
Rate
Reed MS
Robbie Kroll
- Honorable Mention:*
Alexandra Pivac
How Much Protein Do You Eat?
Immaculate Conception
Elaine Marzolla
- Alex Bartow
Aaron Sloan
Sweet Yeast
Marshfield JH
Aaron Tillman

BOTANY

- 1st Place: Curran Merrigan
What's Stomata With You?
Immaculate Conception
Elaine Marzolla
- 2nd Place: Wesley Dowler
Allelopathy in Plants?
Cherokee MS
Mary Ann Kopp
- Claire Baker
Seed Tanning
Cherokee MS
Jackie Hutcherson
- 3rd Place: Philip Clothiaux
A Comparison of Colors of
Chlorophyll, Seasonally
Greenwood Lab
Dave Davison
- Andrew Leger
Quick Relief For Sick Plants
Immaculate Conception
Elaine Marzolla

Honorable Mention:

- Leah Barber
Nichole Patterson
Walnut Weigh Down
Marshfield JH
Kimberly Potter

BOTANY (cont.)

Honorable Mention:

- Ashley Wilson
Veggies "R" Fashion
Pleasant View MS
Darlene Henne

CHEMISTRY

- 1st Place: Rory Ruzicka
Thirsty Paper Towels
Immaculate Conception
Elaine Marzolla
- 2nd Place: Rebecca Adams
The pHower of Fruit
Immaculate Conception
Elaine Marzolla
- Brent Drury
A Sticky Situation
Immaculate Conception
Elaine Marzolla
- David DeVoss
A Shocking Hair Experience
St. Agnes MS
Lynn Vogel
- 3rd Place: Brittany Adams
Katie Espy
What's The Fizz In Your Pop?
Marshfield JH
Aaron Tillman
- Lindsey Lehman
The Power of Plastic Wrap
St. Agnes MS
Lynn Vogel
- Molly Taylor
The Bug Is On Fire
St. Agnes MS
Lynn Vogel
- Honorable Mention:*
Meghan Arnall
Corrosion Explosion!
Immaculate Conception
Elaine Marzolla
- Andrew Miller
Looking At Iron In Breakfast
Cereal
Greenwood Lab
Dave Davison
- Geoffrey Havens
The Shocking Truth
St. Agnes MS
Lynn Vogel

JUNIOR DIVISION PLACEMENT AWARDS

COMPUTER SCIENCE

1st Place: Clayton Rothschild
Digital Video Compression
Cherokee MS
Mary Kopp

2nd Place: Sebastian Karuppan
Ka-King! Computer Processor vs.
Memory
Immaculate Conception
Elaine Marzolla

3rd Place: Eric Belshoff
Reduce Your Computer Start-Up
Time
Cherokee MS
Jackie Hutcherson

Honorable Mention:

Keegan Krontil
Do Computers Put Out More
Electromagnetic Energy Than Or
Now?
St. Joseph MS
Kathryn Keller

EARTH AND SPACE SCIENCES

1st Place: Chase Eck
Holey Rocks
St. Agnes MS
Lynn Vogel

2nd Place: Sean Camey
So What Is the Weather Going to
Be Today?
St. Agnes MS
Lynn Vogel

ENGINEERING

1st Place: Seth Greer
Which Missouri Crop Makes The
Most Ethanol Fuel?
Marshfield JH
Aaron Tillman

2nd Place: Mary Kathryn Byrne
Effects of Water and Light
Variables on the Efficiency of a
Hydrogen Fuel Cell
Mary Byrne

Andrew Griesemer
Getting a Kick
Immaculate Conception
Elaine Marzolla

ENGINEERING (cont.)

3rd Place: Cassie Ballard
Color Crazy
Marshfield JH
Kimberly Potter

Darien Howell
Effect of Temperature on
Batteries
Cherokee MS
Jackie Hutcherson

Honorable Mention:

Michael Derlicki
Why is the Concorde the Fastest
Passenger Aircraft?
St. Agnes MS
Lynn Vogel

Jacob Wardein
Build A Better Mousetrap
St. Agnes MS
Lynn Vogel

ENVIRONMENTAL SCIENCES

1st Place: Tyler Bennett
Water, Water, Water
Cherokee MS
Jackie Hutcherson

2nd Place: Chris Mantei
Gone With The Wind: Lead
Concentrations in Soils at Traffic
Intersections
St. Agnes MS
Lynn Vogel

Connor Eck
Radiation Nation
St. Agnes MS
Lynn Vogel

3rd Place: Marilyn Moore
Effect of Airflow on Automobile
Engine Power
Cherokee MS
Jennifer Cvitak

Julie Putnam
Natural Filtration for 2,500
Sinkholes
Pleasant View MS
Darlene Henne

ENVIRONMENTAL SCIENCES (cont.)

Honorable Mention:

Chad Markey
Got Fuel?
Cherokee MS
Jackie Hutcherson

Shelby Setzer
Algae Munchers
Cherokee MS
Jackie Hutcherson

MATHEMATICS

1st Place: Kevin Harmon
Who is the Greatest Quarterback
of All Time?
St. Agnes MS
Lynn Vogel

2nd Place: Jeremy Dressler
Free Throws Win Games
Clever MS
Melissa Warren

3rd Place: Julian Koenig
Rule #69: The Team Who Scores
First Wins
St. Agnes MS
Lynn Vogel

Honorable Mention:

Elizabeth Dhondt
The Five Platonic Solids
Spokane MS
Margaret LaCavera

MEDICINE AND HEALTH

1st Place: Kendra Weatherford
How Sweet It Is! Effect of
Sweeteners on *Drosophila*
melanogaster
Pleasant View MS
Darlene Henne

2nd Place: Ivan Camejo
Polar Brain
St. Agnes MS
Lynn Vogel

Brad Cook
Electrify Your Thirst
Cherokee MS
Jackie Hutcherson

3rd Place: Hilary Hammond
Splash Splash Splash
Cherokee MS
Jackie Hutcherson

JUNIOR DIVISION PLACEMENT AWARDS

MEDICINE AND HEALTH (cont.)

3rd Place: Cody Graham
Run or Fun: Heart Rate on
Various Types of Equipment
Cherokee MS
Jackie Hutcherson

Honorable Mention:

Daniel Tettamble
Pump It Up
St. Agnes MS
Lynn Vogel

Natalie VanPelt
Which Antacid Neutralizes Acid
the Best?
Immaculate Conception
Elaine Marzolla

MICROBIOLOGY

1st Place: Toryana Vestal
The Search for a "Killer" Cleaner
Pleasant View MS
Darlene Henne

2nd Place: Amanda Conway
Expiration Date: Got Bacteria?
Cherokee MS
Jackie Hutcherson

3rd Place: Ethan McPhatter
Is My Shower Clean?
Pleasant View MS
Darlene Henne

Honorable Mention:

David Simon
To Drink or Not to Drink?
Cherokee MS
Jackie Hutcherson

PHYSICS

1st Place: Daniel Pasquale
How Can You Measure the
Speed of Sound?
St. Joseph MS
Kathryn Keller

2nd Place: Jason Kester
Austin Reed
The Physics of Bowling
Cherokee MS
Jennifer Cvitak

Joshua Windsor
Let There Be Light!
Pleasant View MS
Darlene Henne

PHYSICS (cont.)

2nd Place: Erin Hargis
The "Egg"ceptionally "Egg"citing
"Egg"periment
St. Agnes MS
Lynn Vogel

Tony Marzolla
Cold as Ice
St. Joseph MS
Kathryn Keller

3rd Place: Erica Freiert
Skateboard Theory
Cherokee MS
Colleen Merrigan

Kevin Schneider
#1 Ball in Golf?
Immaculate Conception
Elaine Marzolla

Breanna Daniels
Lynette Felks
Red Light, Green Light, Go!
Hollister MS
Dwayne Felks

Alexis Diekemper
Does It Absorb?
Immaculate Conception
Elaine Marzolla

Honorable Mention:

Claire Lukachick
Strength of Color
St. Agnes MS
Lynn Vogel

Hamilton Blocker
Golf Ball Frenzy
Cherokee MS
Jackie Hutcherson

Justin Fraker
Kelby Phelps
Hit the Long Ball
Marshfield JH
Aaron Tillman

Scott Day
Speed Racer
Cherokee MS
Jackie Hutcherson

ZOOLOGY

1st Place: Amanda Seale
Can Pythons Sense Odor?
Skyline MS
Lannie Hinote

2nd Place: Angela Thuro
Piggy Palace
Immaculate Conception
Elaine Marzolla

3rd Place: Matt Cody
Cricket Sauna
Cherokee MS
Jackie Hutcherson

Honorable Mention:

Ashton Peck
Equus Caballas, Do You Hear
What I Hear?
Pleasant View MS
Darlene Henne

**THE 2004 SENIOR
DIVISION**



**PLACEMENT AWARD
WINNERS!**

SENIOR DIVISION PLACEMENT AWARDS

BEHAVIORAL AND SOCIAL SCIENCES

1st Place: Megan Keith
Appearance and Social
Judgments
Greenwood Lab School
Hugh Brewer

2nd Place: Britton Lutz
Effect of Various Types of
Music on the Activity of
Hamsters
Central High School
Karen Reed

3rd Place: Valerie Dixon
Does Age Affect Memory
Capacity: Phase II
Thayer HS
Peggy Veatch

Honorable Mention:

Aaron Henry
What's Your Color? Phase II
Thayer HS
Peggy Veatch

BIOCHEMISTRY

1st Place: Casey Freeman
Experimental Use of Herbicide
as Growth Stimulant
Hartville HS
Glen Boyer

2nd Place: Richard Gentry
The Detoxification of Alkaloids
Using Kaolin Clay in Gryllus
Pennsylvanicus
Seymour HS
Grant Boyer

3rd Place: Jamie Crider
Reducing Fat Content in Meat
with a NaOH Solution
Hartville HS
Luke Boyer

Honorable Mention:

Elizabeth Massey
The Control of Bacteria by
Amphibian Produced Dermal
Chemicals
Hartville HS
Glen Boyer

BOTANY

1st Place: Emily Frederick
"Gall"-darnit: Biocontrol of A.
tumefaciens
Greenwood Lab School
Hugh Brewer

2nd Place: Sunni Moyer
Use of Gelatin Coatings to
Resist Low Moisture
Germination
Hartville HS
Glen Boyer

3rd Place: Kristin Quick
Effects of Nutrient Stress on
Fluctuating Asymmetry
Mansfield HS
Pam Probert

CHEMISTRY

1st Place: Tyler Williams
Testing Water Absorbing
Polymers as an Aid in Fighting
Fires
Hartville HS
Glen Boyer

2nd Place: Stuart Conner
Cholinesterase Inhibitors:
Effects on Pogonomyrex
Glendale HS
Charles Rey

3rd Place: Dennis Spisak
Economic Hydrogen
Greenwood Lab School
Hugh Brewer

Honorable Mention:

Jared Claxton
Experimental Magnesium
Coating to Reduce Oxidation
Hartville HS
Glen Boyer

COMPUTER SCIENCE

1st Place: Charlie Rosenbury
Fractal Computations Through
a Distributed Network
Glendale HS
Fred Fotsch

2nd Place: William Vandergrift
Using an RS-232 Port for
Remote PC Data Control
Hartville HS
Glen Boyer

COMPUTER SCIENCE (cont.)

3rd Place: Jordan Bowles
Design of a Software
Algorithm
Glendale HS
Charles Rey

EARTH/SPACE SCIENCE

1st Place: Cody Elliott
The Effects of Pre-plant 2, 4-D
on Growth of Cotton
Mansfield HS
Pam Probert

2nd Place: Christina Smith
Experimental Use of Tire
Shreds as a Soil Enhancer
Hartville HS
Glen Boyer

3rd Place: Whitney Mitchell
Do Solar Flares Affect the
Earth's Magnetic Field?
Karla Shiveley
Billings HS

Honorable Mention:

Amanda Gage
Testing Weather Patterns on
a Flat Earth
Seymour HS
Grant Boyer

ENGINEERING

1st Place: Joseph Anderson
Shielding Defibrillator Patients
From an EMF
Glendale HS
Charles Rey

2nd Place: Robert Busiek
Noninvasive Glucose Testing
for Diabetics
Greenwood Lab School
Hugh Brewer

3rd Place: Cassie Sanders
Effects of Coating Treatments
on Rate of Corrosion
Mansfield HS
Pam Probert

Honorable Mention

Brandon Moore
Water Filtration Systems for
Wood Stoves
Hartville HS
Luke Boyer

SENIOR DIVISION PLACEMENT AWARDS

ENVIRONMENTAL SCIENCES (this category sponsored by Kraft Foods, Inc.)

1st Place: Keenan Rose
Heavy Metal Levels in Stream Sediments
Glendale HS
Charles Rey

2nd Place: Kim Holloway
Jessy Desormo
Insulated Ceramic Paint
Central HS
Nova Mrad

3rd Place: Molly Starkey
Analysis of the Effect of Land Use on Concentrations of Escherichia Coli in the Springfield Aquifer in Northern Greene County, MO
Pleasant Hope HS
Gail Emrie

Honorable Mention:

Amanda Nold
Impact of Stream Bank Stability on Epifaunal Substrate and Benthic Macro-invertebrates in the North Dry Sac
Pleasant Hope HS
Gail Emrie

MATHEMATICS

1st Place: Shane Algieri
The Mathematical Equation for Superworms
Greenwood Lab School
Hugh Brewer

2nd Place: Josh Shaver
A Formula That Can Predict Structural Fracture
Hartville HS
Luke Boyer

3rd Place: Jessica Biekert
Incorporating the Golden Ratio in Man-Made Structures
Hartville HS
Luke Boyer

MEDICINE AND HEALTH

1st Place: Claire Clothiaux
A Comparison of Two Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

2nd Place: Daniel Greene
Bacterial Indicators in Herbal Medications
Greenwood Lab School
Hugh Brewer

3rd Place: Christine Crain
The Effects of Nasal Spray on the Cardiovascular Rate of Daphnia
Hartville HS
Glen Boyer

Honorable Mention:

Catherine Smith
Linda Hagen
Inhibition of Yeast Growth and Its Link to Candida Albicans
Central HS
Linda Schmutz

Joni Dixon
Effects of Ingested Meat Tenderizers on Microbes
Hartville HS
Glen Boyer

MICROBIOLOGY

1st Place: Julie Hutton
Impact of Salicylic Acid on Symbiotic Relationships
Mansfield HS
Pam Probert

2nd Place: Shannon Storey
Fight Blight Right
Greenwood Lab School
Hugh Brewer

3rd Place: Racquel Jones
Respiratory Bacteria in Grasshoppers vs. Death Rate
Hartville HS
Glen Boyer

Honorable Mention:

Brad Pitts
The Effects of Microwaves on Microbial Growth
Hartville HS
Luke Boyer

PHYSICS

1st Place: Zach Seagrave
Force, Friction, and Feet
Greenwood Lab School
Hugh Brewer

2nd Place: Kaleen Long
Muffins – Grease It Up?
Greenwood Lab School
Hugh Brewer

3rd Place: Chris Doria
Why Water Injection
Greenwood Lab School
Hugh Brewer

Honorable Mention:

Ehren Schroeder
Does Sound Proofing Work?
Greenwood Lab School
Hugh Brewer

ZOOLOGY

1st Place: Dustin Frieda
Kindel McIlroy
Alteration of Circadian Rhythms
Central HS
Karen Reed

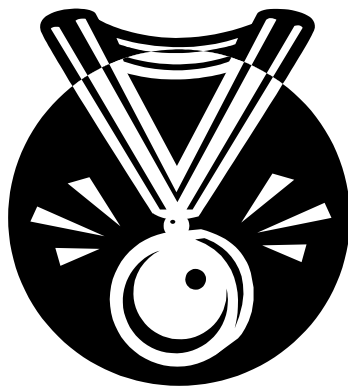
2nd Place: Amanda Jones
The Effects of Recluse Toxins on Cells in Planeria
Hartville HS
Glen Boyer

3rd Place: Carrisann Gabler
Lindsey Courtney
The Effectiveness of Over-The-Counter Energy Pills
Central HS
Karen Reed

Honorable Mention:

Marie Pesek
Amanda Frey
The Effect of Caffeine on the Motor Skills of Hamsters
Central HS
Karen Reed

**THE 2004
JUNIOR & SENIOR
DIVISION**



**SPECIAL AWARD
WINNERS!**

SPECIAL AWARDS

AEROSPACE SUMMIT – CONSTELLATION CLUB – TROPHIES ETC.

Small Plaque & \$50 Cash

Junior Division: Andrew Ford
Riding on Air
Immaculate Conception
Elaine Marzolla

Jessica Kratz
A Rocket Parachute
Shape, Size & Material:
Do They Matter?
Immaculate Conception
Elaine Marzolla

Ben Haldiman
What Is A Hovercraft?
Springfield Lutheran
Josh Wanner

Large Plaque & \$50 Cash

Senior Division: Nikkie Meltaberger
Can Solar Energy Make
Music?
Billings HS
Karla Shiveley

AMERICAN CHEMICAL SOCIETY, OZARKS SECTION

Gift Certificates

Junior Division: Rebecca Adams
The pHower of Fruit
Immaculate Conception
Elaine Marzolla

Matthew Oelschlaeger
Sugar vs. Sugar
Substitutes
St. Agnes MS
Lynn Vogel

Senior Division: Stuart Conner
Cholinesterase Inhibitors:
Effects on Pogonomyrex
Glendale HS
Charles Rey

Tyler Williams
Testing Water Absorbing
Polymers as an Aid in
Fighting Fires
Hartville HS
Glen Boyer

AMERICAN METEOROLOGICAL SOCIETY

Certificate of Outstanding Achievement

Junior Division: Lauren Pruitt
Chirping Thermometers
Immaculate Conception
Elaine Marzolla

Senior Division: Whitney Mitchell
Do Solar Flares Affect the
Earth's Magnetic Field?
Billings HS
Karla Shiveley

AMERICAN PSYCHOLOGICAL ASSOCIATION AND TEACHERS OF PSYCHOLOGY IN SECONDARY SCHOOLS

Certificate of Award

Senior Division: Aaron Henry
What's Your Color?
Thayer HS
Peggy Veatch

AMERICAN SOCIETY OF MAMMALOGISTS

Certificates of Award

Junior Division: Ashton Peck
Equus Caballas, Do You
Hear What I hear?
Pleasant View MS
Darlene Henne

Senior Division: Carrisann Gabler
Lindsey Courtney
The Effectiveness of
Over-The-Counter Energy
Pills
Central HS
Karen Reed

THE ASM INTERNATIONAL FOUNDATION

Award Certificate and Medallion

Senior Division: Chris Doria
Why Water Injection
Greenwood Lab School
Hugh Brewer

THE ASSOCIATION OF WOMEN GEOSCIENTISTS

Certificate of Recognition

Senior Division: Sarah Helsley
Effect of Landfill Leach on
Gasconade River
Hartville HS
Glen Boyer

BAKER CHAIR OF INSURANCE/GAMMA IOTA SIGMA AWARD

\$25 Cash and Certificate of Achievement

Senior Division: Joseph Anderson
Shielding Defibrillator
Patients From an EMF
Glendale HS
Charles Rey

Jared Mason
Experimentation of
Ground Stakes on Areas
Prone to Mudslides
Seymour HS
Grant Boyer

IRENE BRUNER MEMORIAL AWARD

\$50 Cash and Certificate

Junior Division: Sarah Boone
Flower Fading
St. Agnes MS
Lynn Vogel

CITY OF SPRINGFIELD – SOLID WASTE DIVISION

Recycled Plastic Soda Bottle T-Shirt

Junior Division: Kelle Hutcherson
Paint Thinner: Liquid
Poison
Cherokee MS
Jackie Hutcherson

Molly Jones
Rachel Kadan
Trash Talk
Hollister MS
Jeff Ellison

SPECIAL AWARDS

CITY UTILITIES OF SPRINGFIELD

\$200 Cash

Junior Division: Julie Putnam
Natural Filtration for 2,500
Sinkholes
Pleasant View MS
Darlene Henne

Senior Division: Mary Ward
The Timing of the
Repelling Magnet and Its
Effect on the Electric
Motor
Kickapoo HS
Jill Palmer

COMMUNITY HOSPICE OF AMERICA

\$25 Gift Cards

Junior Division: Kendra Weatherford
How Sweet It Is! Effect of
Sweeteners on
Drosophila melanogaster
Pleasant View MS
Darlene Henne

Senior Division: Jeremy Johnson
Vascular Plaque Build Up
vs. Angle of Vessel
Hartville HS
Glen Boyer

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE

*2004 DCYSC Entry Booklet, 2004 DCYSC
Certificate of Recognition, and 2004 DCYSC
Lapel Pin*

Junior Division: Kassie Hyde
What Does That Say?
Marshfield JH
Aaron Tillman

Ashley Clements
Do People Remember
Audio or Visual
Information Best?
Pipkin MS
Andrea Cox

Brady Yates
Memory vs. Gender
Pleasant View MS
Darlene Henne

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE (cont.)

Katie Finch
See How Much Vitamin C
St. Agnes MS
Lynn Vogel

Alexandria Starnes
Jenna Briggs
Hatching Brine Shrimp
Reed MS
Harold Isaak

Kaitlin Yocum
Taste Trial
St. Agnes MS
Lynn Vogel

Curran Merrigan
What's Stomata With
You?
Immaculate Conception
Elaine Marzolla

Wesley Dowler
Jon Vogt
Allelopathy in Plants?
Cherokee MS
Mary Ann Kopp

Claire Baker
Seed Tanning
Cherokee MS
Jackie Hutcherson

Rory Ruzicka
Thirsty Paper Towels
Immaculate Conception
Elaine Marzolla

Rebecca Adams
The pHower of Fruit
Immaculate Conception
Elaine Marzolla

Brent Drury
A Sticky Situation
Immaculate Conception
Elaine Marzolla

David DeVoss
A Shocking Hair
Experience
St. Agnes MS
Lynn Vogel

Clayton Rothschild
Digital Video
Compression
Cherokee MS
Mary Ann Kopp

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE (cont.)

Sebastian Karuppan
Ka-King! Computer
Processor vs. Memory
Immaculate Conception
Elaine Marzolla

Chase Eck
Holey Rocks
St. Agnes MS
Lynn Vogel

Sean Camey
So What is the Weather
Going to be Today?
St. Agnes MS
Lynn Vogel

Seth Greer
Which Missouri Crop
Makes the Most Ethanol
for Fuel?
Marshfield JH
Aaron Tillman

Mary Kathryn Byrne
Effects of Water and Light
Variables on the
Efficiency of a Hydrogen
Fuel Cell
Mary Byrne

Andrew Griesemer
Getting a Kick
Immaculate Conception
Elaine Marzolla

Tyler Bennett
Water, Water, Water
Cherokee MS
Jackie Hutcherson

Chris Mantei
Gone With The Wind:
Lead Concentrations in
Soils at Traffic
Intersections
St. Agnes MS
Lynn Vogel

Connor Eck
Radiation Nation
St. Agnes MS
Lynn Vogel

SPECIAL AWARDS

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE (cont.)

Kevin Harmon
Who is the Greatest
Quarterback of All Time?
St. Agnes MS
Lynn Vogel

Jeremy Dressler
Free Throws Win Games
Clever MS
Melissa Warren

Kendra Weatherford
How Sweet It Is! Effect of
Sweeteners on
Drosophila melanogaster
Pleasant View MS
Darlene Henne

Ivan Camejo
Polar Brain
St. Agnes MS
Lynn Vogel

Brad Cook
Electrify Your Thirst
Cherokee MS
Jackie Hutcherson

Toryana Vestal
The Search for a "Killer"
Cleaner
Pleasant View MS
Darlene Henne

Amanda Conway
Expiration Date
Cherokee MS
Jackie Hutcherson

Daniel Pasquale
How Can You Measure
the Speed of Sound?
St. Joseph MS
Kathryn Keller

Jason Kester
Austin Reed
The Physics of Bowling
Cherokee MS
Jennifer Cvitak

Joshua Windsor
Let There Be Light!
Pleasant View MS
Darlene Henne

THE DISCOVERY CHANNEL YOUNG SCIENTIST CHALLENGE (cont.)

Erin Hargis
The "Egg"ceptionally
"Egg" citing
"Egg" speriment
St. Agnes MS
Lynn Vogel

Tony Marzolla
Cold As Ice
St. Joseph MS
Kathryn Keller

Angela Thuro
Piggy Palace
Immaculate Conception
Elaine Marzolla

Amanda Seale
Can Pythons Sense
Odors?
Skyline MS
Lannie Hinote

DRURY UNIVERSITY

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

Senior Division: Megan Keith
Appearance and Social
Judgments
Greenwood Lab School
Hugh Brewer

Casey Freeman
Experimental Use of
Herbicide as Growth
Stimulant
Hartville HS
Glen Boyer

Emily Frederick
"Gall"-darnit: Biocontrol of
A. tumefaciens
Greenwood Lab School
Hugh Brewer

Tyler Williams
Testing Water Absorbing
Polymers as an Aid in
Fighting Fires
Hartville HS
Glen Boyer

DRURY UNIVERSITY (cont.)

Charlie Rosenbury
Fractal Computation
Through a Distributed
Network
Glendale HS
Fred Fotsch

Cody Elliott
The Effects of Pre-Plant
2, 4-D on Growth of
Cotton
Mansfield HS
Pam Probert

Joseph Anderson
Shielding Defibrillator
Patients From an EMF
Glendale HS
Charles Rey

Keenan Rose
Heavy Metal Levels in
Stream Sediments
Glendale HS
Charles Rey

Shane Algieri
The Mathematical
Equation for Superworms
Greenwood Lab School
Hugh Brewer

Claire Clothiaux
A Comparison of Two
Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

Julie Hutton
Impact of Salicylic Acid on
Symbiotic Relationships
Mansfield HS
Pam Probert

Zach Seagrave
Force, Friction and Feet
Greenwood Lab School
Hugh Brewer

Dustin Frieda
Kindel McIlroy
Alteration of Circadian
Rhythms
Central HS
Karen Reed

SPECIAL AWARDS

DRURY UNIVERSITY (cont.)

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

Senior Division: Keenan Rose
Heavy Metal Levels in Stream Sediments
Glendale HS
Charles Rey

Claire Clothiaux
A Comparison of Two Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

EASTMAN-KODAK PHOTOGRAPHY AWARD

Kodak digital 35mm one-use camera for student and teacher, plus Certificate of Award

Senior Division: Emily Frederick
"Gall"-darnit: Biocontrol of *A. tumefaciens*
Greenwood Lab School
Hugh Brewer

EVANGEL UNIVERSITY

\$1,500 Scholarship to each Senior Division First Place Winner

Senior Division: Megan Keith
Appearance and Social Judgments
Greenwood Lab School
Hugh Brewer

Casey Freeman
Experimental Use of Herbicide as Growth Stimulant
Hartville HS
Glen Boyer

Emily Frederick
"Gall"-darnit: Biocontrol of *A. tumefaciens*
Greenwood Lab School
Hugh Brewer

Tyler Williams
Testing Water Absorbing Polymers as an Aid in Fighting Fires
Hartville HS
Glen Boyer

EVANGEL UNIVERSITY (cont.)

Charlie Rosenbury
Fractal Computation Through a Distributed Network
Glendale HS
Fred Fotsch

Cody Elliott
The Effects of Pre-Plant 2, 4-D on Growth of Cotton
Mansfield HS
Pam Probert

Joseph Anderson
Shielding Defibrillator Patients From an EMF
Glendale HS
Charles Rey

Keenan Rose
Heavy Metal Levels in Stream Sediments
Glendale HS
Charles Rey

Shane Algieri
The Mathematical Equation for Superworms
Greenwood Lab School
Hugh Brewer

Claire Clothiaux
A Comparison of Two Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

Julie Hutton
Impact of Salicylic Acid on Symbiotic Relationships
Mansfield HS
Pam Probert

Zach Seagrave
Force, Friction and Feet
Greenwood Lab School
Hugh Brewer

Dustin Frieda
Kindel McIlroy
Alteration of Circadian Rhythms
Central HS
Karen Reed

EVANGEL UNIVERSITY (cont.)

\$2,500 Scholarship to each Senior Division Grand Prize Winner

Senior Division: Keenan Rose
Heavy Metal Levels in Stream Sediments
Glendale HS
Charles Rey

Claire Clothiaux
A Comparison of Two Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

EXCELLENCE IN FOOD SCIENCE AWARD (sponsored by Melinda Untiedt, Pampered Chef Consultant)

\$50 Cash Award and \$50 Pampered Chef Gift Certificate for Parent/Guardian

Junior Division: Alex Zumwalt
Oops! I Dropped It Again
St. Agnes MS
Lynn Vogel

EXPANDING YOUR HORIZONS: WOMEN IN SCIENCE

Women in Science Book, Women In Science Bookmark, and Certificate

Junior Division: Mary Kathryn Byrne
Effects of Water and Light Variables on the Efficiency of a Hydrogen Fuel Cell
Mary Byrne

Shelby Setzer
Algae Munchers
Cherokee MS
Jackie Hutcherson

Caitlin Sandwell
Choices
St. Agnes MS
Lynn Vogel

SPECIAL AWARDS

GREATER OZARKS AUDUBON SOCIETY

One Year's Membership in National Audubon Society, Peterson's Eastern Birds Field Guide, and patch

Junior Division: Neal Pinkerton
The Ruby-Throated Hummingbird: Nature's Food Critic
Immaculate Conception
Elaine Marzolla

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

Award Certificate and Environmental Activity Participation

Junior Division: Kelle Hutcherson
Paint Thinner: Liquid Poison
Cherokee MS
Jackie Hutcherson

DR. JEFFREY S. HEARD DENTISTRY AWARD

\$25 Cash for the Dental Field

Senior Division: Claire Clothiaux
A Comparison of Two Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

HERBERT HOOVER PRESIDENTIAL LIBRARY ASSOCIATION "YOUNG ENGINEER AWARD"

Certificate of Award and Medallion

Senior Division: Robert Busiek
Noninvasive Glucose Testing for Diabetics
Greenwood Lab School
Hugh Brewer

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

\$100 Health Science Award

Senior Division: Catherine Smith
Linda Hagen
Inhibition of Yeast Growth and Its Link to Candida Albicans
Central HS
Laura Schmutz

THE INTEL ENVIRONMENTAL HEALTH AND SAFETY AWARD

\$200 Cash Award plus Certificate of Award

Senior Division: Amanda Nold
Impact of Stream Bank Stability on Epifaunal Substrate and Benthic Macro-invertebrates in the North Dry Sac
Pleasant Hope HS
Gail Emrie

INTEL EXCELLENCE IN COMPUTER SCIENCE AWARD

\$200 Cash and Certificate of Award

Senior Division: William Vandergrift
Using an RS-232 Port for Remote PC Data Control
Hartville HS
Glen Boyer

INTEL EXCELLENCE IN ENVIRONMENTAL SCIENCE AWARD

\$200 Cash & Certificate of Award

Senior Division: Amanda Nold
Impact of Stream Bank Stability on Epifaunal Substrate and Benthic Macro-invertebrates in the North Dry Sac
Pleasant Hope HS
Gail Emrie

THE 2004 KRAFT AWARD (sponsored by Kraft Foods, Inc.)

\$50 Cash (if given to partners, each partner will receive \$50)

Senior Division: Amanda Nold
Impact of Stream Bank Stability on Epifaunal Substrate and Benthic Macro-invertebrates in the North Dry Sac
Pleasant Hope HS
Gail Emrie

Emily Frederick
"Gall"-darnit: Biocontrol of *A. tumefaciens*
Greenwood Lab School
Hugh Brewer

Racquel Jones
Respiratory Bacteria in Grasshoppers vs. Death Rate
Hartville HS
Glen Boyer

Zach Seagrave
Force, Friction and Feet
Greenwood Lab School
Hugh Brewer

MARTIAL ARTS USA

\$75 Cash and free month of Tae Kwon Do membership

Junior Division: Shawn Bilyeu
Hand to Hand Smoking
Spokane MS
Nancy Coffelt

MISSOURI DEPARTMENT OF CONSERVATION

2nd Place Certificate, Wildlife book, and Frog & Toad Audio Tape

Junior Division: Neal Pinkerton
The Ruby-Throated Hummingbird: Nature's Food Critic
Immaculate Conception
Elaine Marzolla

SPECIAL AWARDS

MISSOURI DEPARTMENT OF CONSERVATION (cont.)

Senior Division: Amanda Nold
Impact of Stream Bank
Stability on Epifaunal
Substrate and Benthic
Macro-invertebrates in the
North Dry Sac
Pleasant Hope HS
Gail Emrie

*1st Place Plaque, Field Guides, and
Conservation CD*

Junior Division: Matt Cook
Cricket Sauna
Cherokee MS
Jackie Hutcherson

Senior Division: Amy Kellogg
An Analysis of the
Relationship Between
Riparian Zone, Water
Chemistry, and Benthic
Macro-invertebrates in the
North Dry Sac
Pleasant Hope HS
Gail Emrie

MISSOURI OPTOMETRIC ASSOCIATION, AUXILIARY

\$100 Cash and Plaque

Junior Division: Knial Piper
Do Video Games Affect
Hand-Eye Coordination?
Immaculate Conception
Elaine Marzolla

MISSOURI SOCIETY OF PROFESSIONAL ENGINEERS, Ozarks Chapter

\$125 Cash

Senior Division: William Flynn
Experimental Techniques
of Propeller Encasement
Hartville HS
Glen Boyer

MISSOURI SOCIETY OF PROFESSIONAL ENGINEERS, Ozarks Chapter (cont.)

\$75 Cash

Junior Division: Jacob Wardein
Build a Better Mousetrap
St. Agnes MS
Lynn Vogel

MISSOURI SOLAR ENERGY ASSOCIATION

Certificates of Award

Junior Division: Breanna Daniels
Lynette Felks
Red Light, Green Light,
Go!
Hollister MS
Dwayne Felks

Senior Division: Nikki Meltaberger
Can Solar Energy Make
Music?
Billings HS
Karla Shiveley

Kayla Hoover
Funneling Wind Currents
Halfway HS
Rodney Delmont

Certificates of Award & Calculators

Junior Division: Hannah Finch
Here Comes the Sun!
St. Agnes MS
Lynn Vogel

Senior Division: Dow Clayton
Experimental Production
of a Solar/Chemical
Heater
Hartville HS
Glen Boyer

LOU & NADINE MOORE MEMORIAL AWARD

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

Junior Division: Kirtana Viswanathan
Sugar Babies
St. Agnes MS
Lynn Vogel

Sara Rodriguez
Noise + Work = No
Concentration?
Pipkin MS
Andrea Cox

MU ALPHA THETA NATIONAL MATHEMATICS HONOR SOCIETY

Certificate of Award & Letter for Teacher

Senior Division: Shane Algieri
The Mathematical
Equation for Superworms
Greenwood Lab School
Hugh Brewer

NATIONAL ASSOCIATION OF CORROSION ENGINEERS (NACE)

NACE International Certificate of Merit Award

Senior Division: Cassie Sanders
Effects of Coating
Treatments on Rate of
Corrosion
Mansfield HS
Pam Probert

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

*Pin, Poster, 1 year's Subscription to
Engineering Times, and Certificate of Award*

Junior Division: Michael Derlicki
Why is the Concorde the
Fastest Passenger
Aircraft?
St. Agnes MS
Lynn Vogel

OZARK AREA PHARMACEUTICAL ASSOCIATION

\$75 Cash

Junior Division: Andrew Miller
Looking at Iron in
Breakfast Cereal
Greenwood Lab School
Dave Davison

Natalie VanPelt
Which Antacid Neutralizes
Acid the Best?
Immaculate Conception
Elaine Marzolla

\$75 Cash

Senior Division: Daniel Greene
Bacterial Indicators in
Herbal Medications
Greenwood Lab School
Hugh Brewer

SPECIAL AWARDS

OZARK AREA PHARMACEUTICAL ASSOCIATION (cont.)

Catherine Smith
Linda Hagen
Inhibition of Yeast Growth
and Its Link to Candida
Albicans
Central HS
Laura Schmutz

OZARK AREA PSYCHOLOGICAL ASSOCIATION

A Second Place Plaque

Junior Division: Kassie Hyde
What Does That Say?
Marshfield JH
Aaron Tillman

Senior Division: Britton Lutz
Effect of Various Types of
Music on the Activity of
Hamsters
Central HS
Karen Reed

A First Place Plaque

Junior Division: Knial Piper
Do Video Games Affect
Hand-Eye Coordination?
Immaculate Conception
Elaine Marzolla

Senior Division: Megan Keith
Appearance and Social
Judgments
Greenwood Lab School
Hugh Brewer

POSITRONIC INDUSTRIES RESEARCH AWARD

Certificates of Award and Desk Clocks to Students

Junior Division: Zeb Wallace
Michael Rensch
Billings JH

Kylie Seymour
Marshfield JH

Emily Rhodes
Immaculate Conception

Sarah Pate
Marshfield JH

POSITRONIC INDUSTRIES RESEARCH AWARD (cont.)

Veronica Hurd
Hickory Hills MS

Rose Cadle
St. Agnes MS

Eric Camejo
St. Agnes MS

Oliva Harris
Cherokee MS

Samantha Mittman
Cherokee MS

Erin Keiser
Immaculate Conception

Will Hawes
Immaculate Conception

Hannah Hall
St. Agnes MS

Rachel Francka
St. Agnes MS

Andy Wilson
Cherokee MS

Karesse Wilkey
Leah Cardwell
Samantha Wiseman
Reed MS

Joe Dillstrom
St. Agnes MS

Jean Luna
Cherokee MS

Tasha Ponder
Cherokee MS

Abbie Mills
Hickory Hills MS

Haden Browning
Immaculate Conception

Sarah Bowman
Immaculate Conception

Sesily Matthews
Immaculate Conception

POSITRONIC INDUSTRIES RESEARCH AWARD (cont.)

Jordan Butler
Cody Kerr
Hollister MS

Riley Ankram
Halfway JH

Katie Loethen
Immaculate Conception

Casey May
Marshfield JH

Clayton Rothschild
Cherokee MS

Christine Montello
St. Joseph MS

Megan Huges
St. Agnes MS

Matthew Yaktine
Hickory Hills MS

Laura Swink
Cherokee MS

Sarah Story
Karinna Carter
Reed MS

Kelle Hutcherson
Cherokee MS

Thomas Payne
Immaculate Conception

Molly Jones
Rachel Kadan
Hollister MS

Tyler Bennett
Cherokee MS

Ryan Batson
Immaculate Conception

Bryson Hanson
Cherokee MS

Abby Smothers
Cherokee MS

Zac Pittman
Cherokee MS

SPECIAL AWARDS

POSITRONIC INDUSTRIES RESEARCH AWARD (cont.)

Amy Norval
Cherokee MS

Melissa Kibby
Halfway JH

Emily Marie Kessler
Immaculate Conception

Sean Kelly
St. Agnes MS

Kurtis Grothoff
St. Agnes MS

Alyssa Holland
Cherokee MS

Alex Zumwalt
St. Agnes MS

Bryant Donelson
St. Agnes MS

Kelly Toner
Kamber Brown
Cherokee MS

Samuel Palmer
Cherokee MS

Zachary Cochran
Cherokee MS

Erin Squires
Cherokee MS

Michael Wolski
Cherokee MS

Kimberly Pope-Roth
Hickory Hills MS

Mauri Waneka
Immaculate Conception

Nicholas Schultz
Immaculate Conception

Erich Huffard
St. Joseph MS

Angela Stone
Cherokee MS

Devon Bench
Pleasant View MS

POSITRONIC INDUSTRIES RESEARCH AWARD (cont.)

Neal Pinkerton
Immaculate Conception

Mandy Zinke
Morgan Kohls
Springfield Lutheran MS

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

\$250 Cash and Certificates

Junior Division: Curran Merrigan
What's Stomata With
You?
Immaculate Conception
Elaine Marzolla

Rory Ruzicka
Thirsty Paper Towels
Elaine Marzolla
Immaculate Conception

Clayton Rothschild
Digital Video
Compression
Cherokee MS
Mary Ann Kopp

Chase Eck
Holey Rocks
St. Agnes MS
Lynn Vogel

Kendra Weatherford
How Sweet It Is! Effect of
Sweeteners on
Drosophila Melanogaster
Pleasant View MS
Darlene Henne

\$500 Cash

Senior Division: Casey Freeman
Experimental Use of
Herbicide as Growth
Stimulant
Hartville HS
Glen Boyer

Joseph Anderson
Shielding Defibrillator
Patients From an EMF
Glendale HS
Charles Rey

Keenan Rose
Heavy Metal Levels in
Stream Sediments
Glendale HS
Charles Rey

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

Claire Clothiaux
A Comparison of Two
Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

Amanda Jones
The Effects of Recluse
Toxins on Cells in
Planeria
Hartville HS
Glen Boyer

THE SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATION AWARD

\$50 Cash

Junior Division: Kirtana Viswanathan
Sugar Babies
St. Agnes MS
Lynn Vogel

Kendra Weatherford
How Sweet It Is! Effect of
Sweeteners on
Drosophila melanogaster
Pleasant View MS
Darlene Henne

Rachel Looker
Sugar Rush
Cherokee MS
Linda Crowe

Martin Nguyen
Unlucky Births
St. Agnes MS
Lynn Vogel

Senior Division: Claire Clothiaux
A Comparison of Two
Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

Melissa Thornton
What Saved My Life?
Thayer HS
Peggy Veatch

\$100 Cash

Junior Division: Ivan Camejo
Polar Brain
St. Agnes MS
Lynn Vogel

SPECIAL AWARDS

THE SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATION AWARD (cont.)

Senior Division: Daniel Greene
Bacterial Indicators in
Herbal Medications
Greenwood Lab School
Hugh Brewer

Christine Crain
The Effects of Nasal
Spray on the
Cardiovascular Rate of
Daphnia
Hartville HS
Glen Boyer

SOCIETY OF MANUFACTURING ENGINEERS

Palm Pilots

Junior Division: Jacob Wardein
Build a Better Mousetrap
St. Agnes MS
Lynn Vogel

Seth Greer
Which Missouri Crop
Makes the Most Ethanol
for Fuel?
Marshfield JH
Aaron Tillman

Senior Division: Robert Busiek
Noninvasive Glucose
Testing for Diabetics
Greenwood Lab School
Hugh Brewer

SMSU DEPARTMENT OF BIOLOGY

Certificates to student and plaques to teachers

Junior Division: Curran Merrigan
What's Stomata With
You?
Immaculate Conception
Elaine Marzolla

Tyler Bennett
Water, Water, Water
Cherokee MS
Jackie Hutcherson

Kendra Weatherford
How Sweet It Is! Effect of
Sweeteners on
Drosophila melanogaster
Pleasant View MS
Darlene Henne

SMSU DEPARTMENT OF BIOLOGY (cont.)

Toryana Vestal
The Search for a "Killer"
Cleaner
Pleasant View MS
Darlene Henne

Neal Pinkerton
The Ruby-Throated
Hummingbird – Nature's
Food Critic
Immaculate Conception
Elaine Marzolla

Certificates to student and plaques to teachers

Senior Division: Emily Frederick
"Gall"-darnit: Biocontrol of
A. tumefaciens
Greenwood Lab School
Hugh Brewer

Amanda Nold
Impact of Stream Bank
Stability on Epifaunal
Substrate and Benthic
Macro-invertebrates in the
North Dry Sac
Pleasant Hope HS
Gail Emrie

Daniel Greene
Bacterial Indicators in
Herbal Medications
Greenwood Lab School
Hugh Brewer

Julie Hutton
Impact of Salicylic Acid on
Symbiotic Relationships
Mansfield HS
Pam Probert

Dustin Frieda
Kindel McIlroy
Alternation of Circadian
Rhythms
Central HS
Karen Reed

\$1,000 Work/Study Award

Senior Division: Emily Frederick
"Gall"-darnit: Biocontrol of
A. tumefaciens
Greenwood Lab School
Hugh Brewer

SMSU COLLEGE OF NATURAL AND APPLIED SCIENCES

\$50 Cash

Junior Division: Curran Merrigan
What's Stomata With
You?
Immaculate Conception
Elaine Marzolla

Senior Division: Keenan Rose
Heavy Metal Levels in
Stream Sediments
Glendale HS
Charles Rey

Claire Clothiaux
A Comparison of Two
Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

STOCKHOLM JUNIOR WATER PRIZE

Award Certificate and Nomination for State and National Competition

Senior Division: Amy Kellogg
An Analysis of the
Relationship Between
Riparian Zone, Water
Chemistry and Benthic
Macro-invertebrates in the
North Dry Sac
Pleasant Hope HS
Gail Emrie

UNITED STATES AIR FORCE

Electronic planners and binders

Senior Division: Charlie Rosenbury
Fractal Computation
Through a Distributed
Network
Glendale HS
Fred Fotsch

Tyler Williams
Testing Water Absorbing
Polymers as an Aid in
Fighting Fires
Hartville HS
Glen Boyer

Kyle Gann
Wondering About Wings
Sparta HS
Treva Henderson

SPECIAL AWARDS

UNITED STATES AIR FORCE (cont.)

Ricky Blankenship
Development of an
Aerodynamic Shell to
Decrease Drag and
Increase Speed
Seymour HS
Grant Boyer

UNITED STATES ARMY

Bronze Medallion, Polo Shirt, and Certificate of Achievement

Senior Division: Keenan Rose
Heavy Metal Levels in
Stream Sediments
Glendale HS
Charles Rey

Polo shirt and Certificate of Achievement

Senior Division: Claire Clothiaux
A Comparison of Two
Hyaluronate Preparations
Greenwood Lab School
Hugh Brewer

Amanda Jones
The Effects of Recluse
Toxins on Cells in
Planeria
Hartville HS
Glen Boyer

Certificates of Achievement

Senior Division: Joseph Anderson
Shielding Defibrillator
Patients From an EMF
Glendale HS
Charles Rey

Julie Hutton
Impact of Salicylic Acid on
Symbiotic Relationships
Mansfield HS
Pam Probert

Megan Keith
Appearance and Social
Judgments
Greenwood Lab School
Hugh Brewer

Shane Algieri
The Mathematical
Equation for Superworms
Greenwood Lab School
Hugh Brewer

UNITED STATES ARMY (cont.)

Zach Seagrave
Force, Friction, and Feet
Greenwood Lab School
Hugh Brewer

Dustin Frieda
Kindel McIlroy
Alteration of Circadian
Rhythms
Central HS
Karen Reed

Casey Freeman
Experimental Use of
Herbicide as Growth
Stimulant
Hartville HS
Glen Boyer

Emily Frederick
"Gall"-darnit: Biocontrol of
A. tumefaciens
Greenwood Lab School
Hugh Brewer

Tyler Williams
Testing Water Absorbing
Polymers as an Aid in
Fighting Fires
Hartville HS
Glen Boyer

Charlie Rosenbury
Fractal Computation
Through a Distributed
Network
Glendale HS
Fred Fotsch

Cody Elliott
The Effects of Pre-Plant
2, 4-D on Growth of
Cotton
Mansfield HS
Pam Probert

UNITED STATES DEPARTMENT OF HEALTH & HUMAN SERVICES

Certificate of Award

Senior Division: Karley Hammers
Dani Asher
In Which Gender Do
Eating Disorders Occur
Most Often?
Billings HS
Karla Shiveley

UNITED STATES METRIC ASSOCIATION

Certificate of Award

Senior Division: Robert Busiek
Noninvasive Glucose
Testing for Diabetics
Greenwood Lab School
Hugh Brewer

UNITED STATES NAVY/MARINE CORPS

Award Letter & Certificate of Achievement

Junior Division: Andrew Miller
Looking at Iron in
Breakfast Cereal
Greenwood Lab School
Dave Davison

Meghan Arnall
Corrosion Explosion!
Immaculate Conception
Elaine Marzolla

Nicholas Hurt
Which Metal is Most Rust
Resistant
St. Agnes MS
Lynn Vogel

Sebastian Karuppan
Ka-King! Computer
Processor vs. Memory
Immaculate Conception
Elaine Marzolla

Alexis DieKemper
Does It Absorb?
Immaculate Conception
Elaine Marzolla

Erin Squires
Grip 'N Slip
Cherokee MS
Jackie Hutcherson

Mary Kathryn Byrne
Effects of Water and Light
Variables on the
Efficiency of a Hydrogen
Fuel Cell
Mary Byrne

Matthew Yaktine
On Target
Hickory Hills MS
Rebecca Jamison-Pugh

SPECIAL AWARDS

UNITED STATES NAVY/MARINE CORPS (cont.)

Jessica Kratz
A Rocket Parachute
Shape, Size & Material,
Do They Matter?
Immaculate Conception
Elaine Marzolla

*Certificate of Award, Award Letter and Gift
Certificate*

Senior Division: Joseph Anderson
Shielding Defibrillator
Patients From An EMF
Glendale HS
Charles Rey

Robert Busiek
Noninvasive Glucose
Testing for Diabetics
Greenwood Lab School
Hugh Brewer

Zach Seagrave
Force, Friction and Feet
Greenwood Lab School
Hugh Brewer

Tyler Williams
Testing Water Absorbing
Polymers as an Aid in
Fighting Fires
Hartville HS
Glen Boyer

Jordan Bowles
Design of a Software
Algorithm
Glendale High School
Charles Rey

Kaleb Long
Testing the Optimum
Temperature for CPU
Operation on a P100
Hartville HS
Glen Boyer

WALLACE WEBER MEMORIAL AWARD FOR BOTANY

\$50 Cash

Senior Division: Emily Frederick
"Gall"-darnit: Biocontrol of
A. tumefaciens
Greenwood Lab School
Hugh Brewer

WATERSHED COMMITTEE OF THE OZARKS

\$50 Cash Award

Junior Division: Shelby Setzer
Algae Munchers
Cherokee MS
Jackie Hutcherson

Senior Division: Sarah Helsley
Effect of Landfill Leach on
Gasconade River
Hartville HS
Glen Boyer

YALE SCIENCE & ENGINEERING ASSOCIATION, INC.

Award Certificate and Medallion

Senior Division: William Vandergrift
Using an RS-232 Port for
Remote PC Data Control
Hartville HS
Glen Boyer

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

*This cash award of \$250 is awarded to the
Junior High or Middle School Teacher who
sponsored the most students winning
placement awards. The award will be used
for the purchase of research equipment for
his/her classroom. The recipient of the Kell
Award for 2004 is:*

Lynn Vogel, St. Agnes Middle School

DR. WARFORD B. JOHNSON, SR., MEMORIAL AWARD

*This cash award of \$1,000 is awarded to the
Senior High Teacher who sponsored the most
students winning placement awards. Half of
the award is to be used for the purchase of
classroom research equipment for his/her
classroom, and half is for the teacher
personally. The recipient of the Johnson
Award for 2004 is:*

Hugh Brewer, Greenwood Lab School

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

\$20 Cash to a First Time Teacher.

Josh Wanner, Springfield Lutheran

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 2004 is:*

Lynn Vogel, St. Agnes Middle School

OZARKS SCIENCE & ENGINEERING FAIR FOUNDATION JUNIOR DIVISION TEACHER AWARDS

*This award of a book of abstracts from the
International Science and Engineering Fair is
awarded to the teachers of the Junior Division
First Place Category winners. The recipients
of the Junior Division Teacher Awards for
2004 are:*

Elaine Marzolla, Immaculate Conception
Aaron Tillman, Marshfield Junior High
Lynn Vogel, St. Agnes Middle School
Mary Ann Kopp, Cherokee Middle School
Jackie Hutcherson, Cherokee Middle School
Darlene Henne, Pleasant View Middle School
Kathryn Keller, St. Joseph Middle School

OZARKS SCIENCE & ENGINEERING FAIR FOUNDATION SENIOR DIVISION TEACHER AWARDS

*This award of a book of abstracts from the
International Science and Engineering Fair is
awarded to the teachers of the Senior Division
First Place Category winners. The recipients
of the Senior Division Teacher Awards for
2004 are:*

Hugh Brewer, Greenwood Lab School
Glen Boyer, Hartville High School
Jill Palmer, Kickapoo High School
Pam Probert, Mansfield High School
Karen Reed, Central High School
Charles Rey, Glendale High School

SPECIAL AWARDS

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

This award of a three-year set of books of International Science and Engineering Fair 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 2004 is:

Elaine Marzolla, Immaculate Conception

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

This award of a three-year set of books of International Science and Engineering Fair 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 2004 are:

Charles Rey, Glendale High School
Hugh Brewer, Greenwood Lab School