# OZARKS SCIENCE \& ENGINEERING FAIR 

HAMMONS STUDENT CENTER SOUTHWEST MISSOURI STATE UNIVERSITY

$$
\text { APRIL 9, 10, \& 11, } 2002
$$



## 2002 WINNERS

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Assodiated Electric Cooperative Clariant
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# THE OZARKS SCIENCE \& ENGINEERING FAIR FOUNDATION IS PROUD TO WELCOME 



# Associated Electric Cooperative Inc. 

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## AS A MAJ OR SPONSOR OF THE 42ND ANNUAL OZARKS SCIENCE \& ENGINEERING FAIR.

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## MASTER OF CEREMONIES

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## scientific review committee

Dr. To m To masi, chair<br>Dr.jack st eiert, microbiology<br>Dr.bryan breyfogle, chemist ry<br>Dr.jim davis, human beh avior<br>Dr. Michael pfander, dvm, nonhuman vertebrates



## THECFARKSSIINVE\&RVGN田ING FAR



## JUNITRDMSCNPLAGMENT AVARDWNNRS

|  | 」unior | ivision |  |
| :---: | :---: | :---: | :---: |
| BEHAVI ORAL AND SOCI AL SCI ENCES |  | BEHAVI ORAL AND SOCI AL SCI ENCES (cont.) |  |
| First Place: | Ariana Botsford <br> The Great Debate: Girls, Boys, and Vocabulary <br> St. Agnes Middle School Lynn Vogel | Honorable Mention: | Kellen McLean Lutz <br> What is Fuchsia and Why Do I <br> Care? <br> Hickory Hills Middle School <br> Rebecca Jamieson Pugh |
| Second Place: | Keaton Todd <br> Sounding It Out, Part II: How <br> Our Brain Reads <br> Immaculate Conception MS <br> Elaine Marzolla |  | Alison Daniels <br> Color: Does It Matter? <br> Hollister Middle School <br> Dwayne Felks |
|  | Jessica Laird Do Boys Smell Better Than Girls? <br> Immaculate Conception MS Elaine Marzolla | BI OCHEMISTRY First Place: | Shanna Akley <br> Protein Munchers <br> Pleasant View Middle School <br> Darlene Henne |
|  | Whitney Meyer Misha Terrell Stolen . . . The Signs Hollister Middle School Dwayne Felks | Second Place: | Megan Knight <br> Detergent Emergency Immaculate Conception MS Elaine Marzolla |
| Third Place: | Laura Rues <br> Messaging <br> St. Joseph Middle School <br> Katherine Keller | Third Place: | Cheri Garrett <br> Where's the Sugar? <br> St. Agnes Middle School Lynn Vogel |
|  | Leree Mays <br> Your Favorite Shoe <br> Pleasant View Middle School <br> Darlene Henne | Honorable Mention: | Andrew Myracle <br> Burn, Baby, Burn <br> Immaculate Conception MS <br> Elaine Marzolla |
|  |  | BOTANY |  |
|  | Kim Koch <br> Did You See That? <br> St. Agnes Middle School Lynn Vogel | First Place: | Patrick Merrigan <br> Allelopathy: When Grass is Greener Under the Other Trees Immaculate Conception MS |
| Honorable Mention: | Ann Moran <br> The Stroop Effect: Memory vs. |  | Elaine Marzolla |
|  | Color <br> Pleasant View Middle School <br> Darlene Henne | Second Place: | Paige Goodnight <br> What Are the Effects of Bottled Water and Creek Water on Plant Growth? |
|  | Allison Rasnick |  | Pipkin Middle School |
|  | Are You a Sucker for Subliminal Messages? |  | Dr. Protima Roy |
|  | Marshfield Middle School |  | Blake Bel |
|  | Aaron Tillman |  | Luke Barber <br> The Growth Rate of Trees at <br> Two Sites <br> Marshfield Middle School <br> Aaron Tillman |


| BOTANY (cont.) |  |
| :--- | :--- |
| Third Place: | Sarah Golubski <br> Hydroponics <br> Billings Middle School <br> Karla Shively |
|  | Nathan Pugh |
|  | Soil Engineering - A Continuing |
|  | Study of Soil Management: The |
| pH factor - How Much is Too |  |
|  | Much of a Good Thing? |
|  | Hollister Middle School |
|  | Jeff Ellison |

## CHEMI STRY

First Place:

Second Place:

Third Place: John Bartow
An Acid Effect on Gold
Marshfield Middle School
Aaron Tillman

Stuart Lloyd-Smith Turn Up the Heat Immaculate Conception MS Elaine Marzolla

Honorable Mention: Chad Carleton
Rid of the Red
New Covenant Academy
Tammy Cook
Sarah Dobard
Have You Had Your Vitamin C Today?
Immaculate Conception MS
Elaine Marzolla
Eric Camejo
Liquitricity
St. Agnes Middle School
Lynn Vogel

## EARTH AND SPACE SCI ENCES

| First Place: | Aften Nelsen <br> Megan Willis <br> Crystals! Crystals! Crystals! <br> Marshfield Middle School <br> Aaron Tillman |
| :--- | :--- |
| Second Place: | Lauren Cervellere <br> Can't See For The Light <br> Immaculate Conception MS <br> Elaine Marzolla |
| Third Place: | Collin Herman <br> Weather Predictions <br> St. Agnes Middle School <br> Lynn Vogel |
|  | Kyle Davis <br> A Stream Runs Through It <br>  <br> St. Agnes Middle School <br> Lynn Vogel |
|  | Rusty Gallagher <br> Melt it Off and Keep it Off <br> Immaculate Conception MS |
|  | Elaine Marzolla |

## ENGI NEERING

| First Place: | Byron Wilcox <br> Robotic Climber <br> Springfield Lutheran School <br> Mary Brockman |
| :---: | :---: |
| Second Place: | David Camejo <br> Dam It Up <br> St. Agnes Middle School Lynn Vogel |
|  | Garret Lowder <br> Jacob Skinner <br> Amazing Arms <br> Marshfield Middle School <br> Aaron Tillman |
| Third Place: | Sean Levy <br> Are the "Ultra" Batteries Worth the Price? <br> Springfield Lutheran School Mary Brockman |
|  | Derek Wilkerson <br> Who's Got the Hots? <br> Skyline R-2 Middle School Lannie Hinote |
| Honorable Mention: | Matthew Boyd Floating Around St. Agnes Middle School Lynn Vogel |
|  | Alex Reith <br> What is the Relevance of Insulation and Which Form is the Best? <br> Immaculate Conception MS Elaine Marzolla |

## ENVI RONMENTAL SCIENCES

First Place: Leo Elworth
Gas Guzzlers vs. Gas Misers
St. Agnes Middle School
Lynn Vogel
Second Place: Mike Renkoski
Priceless Poop
St. Agnes Middle School Lynn Vogel

## ENVI RONMENTAL SCIENCES (cont.)

| Second Place: | Burton Mathews |
| :---: | :---: |
|  | Daniel Chambers |
|  | Can We Prevent the Weathering of Our Sidewalks? |
|  | Pipkin Middle School |
|  | Dr. Protima Roy |
| Third Place: | William Conway |
|  | Algae Here, Algae There |
|  | St. Agnes Middle School |
|  | Lynn Vogel |
|  | Sarah Francka |
|  | Dissolved Oxygen Levels in |
|  | Finley Creek, Missouri |
|  | Immaculate Conception MS |
|  |  |
| Honorable Mention: | Mykelnn Youngblood |
|  | Just Breathe |
|  | Hollister Middle School |
|  | Dwayne Felks |
|  | Kindra Mooneham |
|  | Brandie Courtois |
|  | Recycling Kitchen Waste |
|  | Billings Middle School |
|  | Karla Shively |
| MATHEMATICS |  |
| First Place: | Sophie Parker |
|  | The Curve of the Future |
|  | Spokane Middle School |
|  | Margaret LaCavera |
| Second Place: | Craig Eck |
|  | Loops, Arches, Whorls |
|  | St. Agnes Middle School |
|  | Lynn Vogel |
| Third Place: | Brandon Bowenscholte |
|  | Probability |
|  | Immaculate Conception MS |
|  | Elaine Marzolla |
| Honorable Mention: | Zach Valdivia |
|  | Mental Magic |
|  | St. Agnes Middle School |
|  | Lynn Vogel |


|  | unior | vision |  |
| :---: | :---: | :---: | :---: |
| MATHEMATI CS (cont.) |  | MICROBI OLOGY (cont.) |  |
| Honorable Mention: | Alicia Tanjulk <br> Traffic Accident Probability in Springfield, Missouri Immaculate Conception MS Elaine Marzolla | Second Place: | Emily Wardein Black Mold, Red Mold, Blue Mold, Bread Mold St. Agnes Middle School Lynn Vogel |
| MEDICINE AND HEALTH |  | Third Place: | Laura Glenn Jessica Jenkins |
| First Place: | Kendra Weatherford <br> The Effect of Caffeine on Drosophila melanogaster Pleasant View Middle School |  | The School's Creepy Creatures Marshfield Middle School Aaron Tillman |
|  | Darlene Henne | Honorable Mention: | Mitchell Bell |
| Second Place: | Rachel Love <br> Where is Sylvester? <br> Pleasant View Middle School |  | Immaculate Conception MS Elaine Marzolla |
|  | Darlene Henne | PHYSICS |  |
|  | Divya Viswanathan Rainbow Babies St. Agnes Middle School Lynn Vogel | First Place: | Ryan Garfarian <br> Hot Shots <br> St. Agnes Middle School <br> Lynn Vogel |
| Third Place: | Rachelle Leddy <br> Effects of Grade Level on Lung Capacity <br> Skyline R-2 Middle School Lannie Hinote | Second Place: | Connor Eck <br> Got Bounce? <br> St. Agnes Middle School Lynn Vogel |
|  | Sam Jersak <br> Which Antacid is Best for the Stomach? <br> Immaculate Conception MS |  | Raeann Edson <br> Thermal Conduction of Metals Hollister Middle School J eff Ellison |
|  | Elaine Marzolla | Third Place: | Kayla Messick <br> Where is Your Sweet Spot? |
| Honorable Mention: | Ashley Reecht <br> Which Cavity Protection <br> Toothpaste Protects Your Teeth |  | Marshfield Middle School Aaron Tillman |
|  | Best? |  | Kyle Reinert |
|  | Immaculate Conception MS Elaine Marzolla |  | Zachary Ware <br> An Enlightening Idea: Can You |
| Honorable Mention: | Claire Dohmen |  | Read This Eye-Chart? <br> Billings Middle School |
|  | Whippin' Flippin' Flexin' Ankles Go Faster |  | Karla Shively |
|  | St. Agnes Middle School |  | J acquelyn Meltabarger |
|  | Lynn Vogel |  | Sara Sanderson |
| MICROBI OLOGY |  |  | Now That's An Insulator Billings Middle School Karla Shively |

## PHYSI CS (cont.)

Honorable Mention: | Chris Camey |
| :--- |
| The Gravity Grand Prix |
| St. Agnes Middle School |
| Lynn Vogel |
|  |
|  |
|  |
| Lyndsay Schroeder |
| Zip It |
| St. Agnes Middle School |
| Lynn Vogel |
|  |
|  |
| Matthew Opitz |
| Hydroelectric Generator |
| Study Middle School |
| Trey Garson |

## ZOOLOGY

| First Place: | Catherine DiSarno Breathe In, Breathe Out St. Agnes Middle School Lynn Vogel |
| :---: | :---: |
| Second Place: | Wenonah Toney <br> Pulse Rates <br> Marshfield Middle School <br> Aaron Tillman |
|  | Kristine Malter <br> Amazing Mice <br> St. Agnes Middle School <br> Lynn Vogel |
| Third Place: | Ashton Peck <br> Saddle Up . . . Or Not? <br> Pleasant View Middle School <br> Darlene Henne |
|  | Rachel Ball <br> Can an Old Dog Learn New Tricks? <br> St. Agnes Middle School Lynn Vogel |
| Honorable Mention: | Kurtis Grothoff <br> Fat Cat Special <br> St. Agnes Middle School <br> Lynn Vogel |
|  | Matt Wright <br> Food For Thought <br> St. Agnes Middle School <br> Lynn Vogel |

## THECFAPKSSIANEEANGINHRNG FAR



## \$NIRDMSCNPLAHMENT AVARD WNNPS

## BEHAVI ORAL AND SOCI AL SCI ENCES

| First Place: | Ryan Cady <br> The Effect of Sleep Deprivation <br> on Cognitive Efficiency <br> Greenwood Laboratory School <br> Hugh Brewer |
| :--- | :--- |
| Second Place: | Leah Sartin <br> Kimberly Baker <br> Eye Spy With My Little Eye <br> Billings High School <br> Karla Shively |
| Third Place: | Tyler Montileone <br> Laser, Aim, Putt <br> Greenwood Laboratory School <br> Hugh Brewer |

## BOTANY

| First Place: | Claire Clothiaux <br> A Comparative Study of the Effects of Two Commercially Available Fertilizers on the Growth of Plants Using fabaceae Phaseolus Lunatus Greenwood Laboratory School Jennifer Cvitak |
| :---: | :---: |
| Second Place: | Avery Mack <br> Marie Whitson <br> How Fertilizer Affects a Plant's <br> Root Structure <br> Parkview High School <br> Kathleen Hodge |
| Third Place: | Kelly Goodman <br> The Individual Importance of Nitrates and Phosphates to Plants <br> Strafford High School <br> Katharine Myers |
| Honorable Mention: | Bryson Roller <br> Electromagnetic Fields and Their <br> Effect on Plants <br> Bolivar High School <br> Teresa Holt |

## CHEMISTRY

First Place:

Matt Carlile
The Effect of Auditory Sonic Waves on Reaction Rates Greenwood Laboratory School Hugh Brewer

## CHEMI STRY (cont.)

| Second Place: | Ryan Gerecht <br> Sarah Ensor <br> Effectiveness of Food <br> Preservatives in Unusually Harsh <br> Conditions <br> Central High School <br> Karen Reed |
| :--- | :--- |
| Third Place: | Brett C. Young <br> Longevity of Computer Printer <br> Ink Under General Electric <br> Chroma 500 Daytime Balanced <br> Lighting <br> Strafford High School <br> Katharine Meyers |
| Honorable Mention: | Carina Wolf <br> Which Acid is Most Damaging? <br> Central High School <br> Dr. Protima Roy |

## ENGI NEERI NG (this category sponsored by Associated Electric Cooperative, Inc.)

First Place:
Rebecca Hannah
Improving the Cane as a
Navigational Device for the Blind
Glendale High School
Fred Fotsch

## ENVI RONMENTAL SCIENCES (this category sponsored by Kraft Foods, Inc.)

| First Place: | Ginny Barnhart <br> The Effect of Ammonia on <br> Freshwater Mussels <br> Greenwood Laboratory School <br> Hugh Brewer |
| :--- | :--- |
| Second Place: | Brad Young <br> Comparison of Stream Habitat <br> for the Niangua Darter <br> Pleasant Hope High School <br> Gail Emrie |
| Third Place: | Julie Neal <br> Protozoa: Do They Indicate <br> Water Quality? <br> Greenwood Laboratory School <br> Hugh Brewer |

## SENIOR DIVISION

ENVI RONMENTAL SCIENCES (this category sponsored by Kraft Foods, Inc.) (cont.)

Honorable Mention:
Daniel Dillard
Affect of Land Use on Nutrient Levels in the North Dry Sac
Pleasant Hope High School
Gail Emrie

## MATHEMATICS

Honorable Mention: Steven Frantz
Pythagorean Theorem Shortcut Expansion
Buffalo High School
Dan McCorkendale

## MEDI CI NE AND HEALTH

| First Place: | Rick Seagrave <br> The Trainer-less Ultrasound Treatment Greenwood Laboratory School Hugh Brewer |
| :---: | :---: |
| Second Place: | Karen Ward <br> Effects of High Heeled Shoes on <br> Balance <br> Greenwood Laboratory School Hugh Brewer |
| Third Place: | Megan Pruitt <br> No More Toothbrushes Greenwood Laboratory School Hugh Brewer |
| Honorable Mention: | Andrea Perkins <br> Do You Snore (Obstructive <br> Sleep Apnea)? <br> Buffalo High School <br> Dan McCorkendale |
| MICROBIOLOGY |  |
| First Place: | J essica Hacker <br> Can Candida Albicans be Controlled Without Using Antibiotics? <br> Greenwood Laboratory School Hugh Brewer |
| Second Place: | Aaron McCarty <br> Micah Sukany <br> Household Defense Against Bio- <br> Terrorism <br> Pleasant Hope Middle School <br> J ames Flora |

## MI CROBI OLOGY (cont.)

| Third Place: | Brad Stockdale <br> Antibiotic Resistant Bacteria . . . <br> They Are All Around Us! <br> Central High School |
| :--- | :--- |
| Dr. Protima Roy |  |

## PHYSICS

| First Place: | Adam Schoeller <br> Hot Or Not? <br> Greenwood Laboratory School <br> Hugh Brewer |
| :--- | :--- |
| Second Place: | Colin Towery <br> Efficiency of Three Methods of <br> Heating Water with Solar Power <br> Central High School <br> Nova Mrad |
| Third Place: | Samantha DeArmon <br> The Effects of Pressure Change <br> on Basketballs <br> Central High School <br> Nova Mrad |
|  | Cody Pace <br> The Effects of Pressure on Wire <br> Resistance <br> Central High School <br> Nova Mrad |
|  | Michael Gardner <br> Permanent Magnetic Levitation: <br> A Search for Cheaper |
|  | Transportation <br> Greenwood Laboratory School <br> Hugh Brewer |
|  |  |

## ZOOLOGY

First Place:

Amanda Burling
Ronald McCants
Of Mice and Ginkgo: An
Experiment Testing the Effect of Ginkgo Biloba on Memory in Mice
Central High School
Karen Reed

## SENIOR DIVISION

## ZOOLOGY (cont.)

| Second Place: | Adam Clarke <br> Matt Trtan <br> Andrew Netzer <br> The Effects of Caffeine on Mice <br> Parkview High School <br> Kathleen Hodge |
| :--- | :--- |
| Third Place: | Casey Richardson <br> Math Attraction <br> Buffalo High School <br> Dan McCorkendale |
| Honorable Mention: | Shawna Hanson <br> Is Your Cat South Pawed? <br> Hillcrest High School <br> Barbara Hannah |

## THECFARKSSIINVE\&RVGN\#RING FAR



## SETALAMARDS

## SPECIALAWARDS

## AARP ANDRUS FOUNDATI ON AWARD

\$100.00 Cash Award and Certificate

| Junior Division: | Michael Duda |
| :--- | :--- |
|  | Man's Best Friend |
|  | Immaculate Conception MS |
|  | Elaine Marzolla |

## AEROSPACE SUMMIT - CONSTELLATION CLUB TROPHIES ETC.

\$50.00 Check and a Large Engraved Plaque

| Senior Division: | Brian VanOsdol <br> The Design of a Localized <br> Positioning System <br> Glendale High School <br> Fred Fotsch |
| :--- | :--- |
| Junior Division: | Byron Wilcox <br> Robotic Climber <br> Springfield Lutheran <br> Mary Brockman |
|  | Casye Davidson <br> Solar Activity <br> Study Middle School |
| Trey Garson |  |

\$100.00 Cash Award and a Plaque
Junior Division: Patrick Crisp
Through The Fog
Hollister Middle School
Jeff Ellison

## AMERICAN SOCIETY OF MAMMALOGI STS

Certificate of Award

| Senior Division: | Shawna Hanson <br> Is Your Cat South Pawed? <br> Hillcrest High School <br> Barbara Hannah |
| :--- | :--- |
| Junior Division: | Wade Woods <br> You Never Know Who's <br> Watching <br> Skyline Middle School <br> La nnie Hinote |

## ARCHER ENGI NEERS AWARD

$\$ 35.00$ Cash Award

| Senior Division: $\quad$ | Jessica Hacker |
| :--- | :--- |
|  | Can Candida Albicans Be |
|  | Controlled Without Antibiotics? |
|  | Greenwood Laboratory School |
|  | Hugh Brewer |

## ASSOCI ATED ELECTRIC COOPERATIVE, I NC. AWARD

\$100 Cash Award and Certificate
Senior Division: Brian VanOsdol
The Design of a Localized
Positioning System Glendale High School
Fred Fotsch
Rebecca Hannah
Improving the Cane as a Navigational Device for the Blind Glendale High School Fred Fotsch

## ASSOCIATION OF WOMEN GEOSCI ENTISTS

Certificate of Award
Senior Division: Ginny Barnhart Effect of Ammonia on Freshwater Mussels Greenwood Laboratory School Hugh Brewer

## CITY UTILITIES OF SPRI NGFI ELD

\$50.00 Cash Award

| Senior Division: | Julia Neal <br> Protozoa: Water Quality <br> Indicators <br> Greenwood Laboratory School <br> Hugh Brewer |
| :--- | :--- |
| Junior Division: | Eric Camejo <br> Liquitricity <br> St. Agnes Middle School <br> Lynn Vogel |

# SPECIAL AWARDS <br> CITY OF SPRI NGFI ELD SOLI D WASTE MANAGEMENT DIVISI ON <br> THE DI SCOVERY YOUNG SCIENTI ST AWARD (cont.) 

Recycled Plastic Soda Bottle T-shirt
Junior Division: Burton Matthews
Daniel Chambers
How Can We Prevent the
Weathering of Our Sidewalks
and Driveways?
Pipkin Middle School
Dr. Protima Roy

## CONSERVATION I NTERNATI ONAL AWARD

Certificate of Award, Letter of Congratulations, and a Biodiversity Hotspots Map

| Senior Division: | Brad Young <br> A Comparative Analysis of Stream Habitat for the Nia Darter in the North Dry Sa Maries, and Little Niangua Rivers <br> Pleasant Hope High Schoo Gail Emrie |
| :---: | :---: |
| THE MARK I V AUTOMOTI VE/ DAYCO |  |
| IMAGINEERING AWARD (sponsored by the |  |
| DAYCO PRODUCTS, I NC, OF SPRI NGFIELD. |  |
| TECHNI CAL CENTER) |  |

\$100 Check and plaque

Senior Division: $\quad$| Rebecca Hannah |
| :--- |
| Improving the Cane as a |
|  |
|  |
| Navigational Device for the Blind |
| Glendale High School |
|  |
| Fred Fotsch |

## THE DI SCOVERY YOUNG SCIENTIST AWARD

Certificate and Lapel Pin

Junior Division: Ariana Botsford
The Great Debate: Girls, Boys, and Vocabulary
St. Agnes Middle School Lynn Vogel

Shanna Akley
Protein Munchers
Pleasant View Middle School
Darlene Henne

Certificate and Lapel Pin


| SPECIALAWARDS |  |  |  |
| :---: | :---: | :---: | :---: |
| THE DI SCOVE (cont.) | UNG SCIENTI ST AWARD | THE DI SCOVERY YOUNG SCIENTI ST AWARD (cont.) |  |
| Certificate and Lapel Pin |  | Certificate and Lapel Pin |  |
| Junior Division: | Emily Wardein Black Mold, Red Mold, Blue Mold, Bread Mold St. Agnes Middle School Lynn Vogel | Junior Division: | Paige Goodnight <br> What Are the Effects of Bottled Water and Creek Water on Plant Growth? <br> Pipkin Middle School <br> Dr. Protima Roy |
|  | Ryan Gafarian Hot Shots |  | Blake Bel |
|  | St. Agnes Middle School |  | Luke Barber |
|  | Lynn Vogel |  | The Growth Rate of Trees at Two Sites |
|  | Conner Eck |  | Marshfield Middle School |
|  | Got Bounce? |  | Aaron Tillman |
|  | St. Agnes Middle School Lynn Vogel |  | Mary Mantei |
|  |  |  | Tainted Tableware: Lead and |
|  | Catherine DiSarno |  | Cadmium in Tableware |
|  | Breathe In, Breathe Out |  | St. Agnes Middle School |
|  | St. Agnes Middle School Lynn Vogel |  | Lynn Vogel |
|  |  |  | Justin Garcia |
|  | Wenonah Toney |  | What Can You See in a Color? |
|  | Pulse Rates |  | Immaculate Conception MS |
|  | Marshfield Middle School |  | Elaine Marzolla |
|  | Aaron Tilman |  | Thomas Reigel |
|  | Keaton Todd |  | Is Clorox Bleach Really the |
|  | Sounding It Out! Part II: How |  | Best? |
|  | Our Brain Reads |  | Pipkin Middle School |
|  | Immaculate Conception MS Elaine Marzolla |  | Dr. Protima Roy |
|  |  |  | Lauren Cevellere |
|  | Jessica Laird |  | Can't See for the Light |
|  | Do Boys Smell Better Than |  | Immaculate Conception MS |
|  | Girls? |  | Elaine Marzolla |
|  | Immaculate Conception MS |  |  |
|  | Elaine Marzolla |  | David Camejo |
|  |  |  | Dam It Up |
|  | Whitney Meyer |  | St. Agnes Middle School |
|  | Misha Terrell |  | Lynn Vogel |
|  | Stolen . . . The Signs |  |  |
|  | Hollister Middle School |  | Garret Lowder |
|  | Dwayne Felks |  | J acob Skinner |
|  |  |  | Amazing Arms |
|  |  |  | Marshfield Middle School |
|  | Detergent Emergency |  | Aaron Tillman |
|  | Immaculate Conception |  |  |
|  | Elaine Marzolla |  | Mike Renkoski |
|  |  |  | Priceless Poop |
|  |  |  | St. Agnes Middle School Lynn Vogel |


| SPECIALAWARDS |  |  |  |
| :---: | :---: | :---: | :---: |
| THE DI SCOVERY YOUNG SCIENTI ST AWARD (cont.) |  | DRURY COLLEGE (cont.) |  |
|  |  |  |  |
| Certificate and Lapel Pin |  | 3 Hours Undergraduate Credit to each Senior High First Place Award Winner |  |
|  |  |  |  |
| Junior Division: | Burton Mathews | Senior Division: | Rick Seagrave |
|  | Daniel Chambers |  | The Trainer-less Ultrasound |
|  | Can We Prevent the Weathering |  | Treatment |
|  | of Our Sidewalks? |  | Greenwood Laboratory School |
|  | Pipkin Middle School |  | Hugh Brewer |
|  | Dr. Protima Roy |  | Jessica Hacker |
|  | Craig Eck |  | Can Candida Albicans Be |
|  | Loops, Arches, Whorls |  | Controlled Without Using |
|  | St. Agnes Middle School |  | Antibiotics? |
|  | Lynn Vogel |  | Greenwood Laboratory School Hugh Brewer |
| DRURY COLLEGE |  |  |  |
|  |  |  | Adam Schoeller |
| 3 Hours Undergraduate Credit to each Senior High First Place Award Winner |  |  | Hot or Not? |
|  |  |  | Greenwood Laboratory School Hugh Brewer |
| Senior Division: | Ryan Cady |  |  |
|  | The Effect of Sleep Deprivation |  | Amanda Burling |
|  | on Cognitive Efficiency |  | Ronald McCants |
|  | Greenwood Laboratory School |  | Of Mice and Gingko: An |
|  | Hugh Brewer |  | Experiment Testing the Effect of Gingko Biloba on Memory in |
|  | Claire Clothiaux |  | Mice |
|  | A Comparative Study of the |  | Central High School |
|  | Effects of Two Commercially |  | Karen Reed |
|  | Available Fertilizers on the |  |  |
|  | Growth of Plants Using fabaceae | 6 Hours Undergraduate Credit to the Senior High Grand Prize Award Winners |  |
|  | Phaseolus lunatus |  |  |
|  | Greenwood Laboratory School |  |  |
|  | Jennifer Cvitak <br> Matt Carlile <br> The Effect of Auditory Sonic Waves on Reaction Rates Greenwood Laboratory School Hugh Brewer | Senior Division: | Brian VanOsdol |
|  |  |  | The Design of a Localized |
|  |  |  | Positioning System |
|  |  |  | Glendale High School |
|  |  |  | Fred Fotsch |
|  |  |  |  |
|  |  |  | Siir Kilkis |
|  |  |  | Mathematical Correlation |
|  | Rebecca Hannah |  | Greenwood Laboratory School |
|  | Improving the Cane as a |  | Hugh Brewer |
|  | Navigational Device for the Blind |  |  |
|  | Glendale High School | EASTMAN KODAK PHOTOGRAPHIC AWARD |  |
|  | Fred Fotsch |  |  |
|  |  | Certificate of Award and Kodak ${ }^{\ominus}$ Camera Kit |  |
|  | Ginny Barnhart |  |  |
|  | The Effect of Ammonia on | Junior Division: | Chris Wright |
|  | Freshwater Mussels |  | Hair of the Dog |
|  | Greenwood Laboratory School |  | St. Agnes Middle School |
|  | Hugh Brewer |  | Lynn Vogel |

## SPECIALAWARDS

## EVANGEL UNI VERSITY

\$1,500.00 Scholarship to each Senior Division First Place Winner

## Senior Division: Ryan Cady

The Effect of Sleep Deprivation on Cognitive Efficiency Greenwood Laboratory School Hugh Brewer

## Claire Clothiaux

A Comparative Study of the
Effects of Two Commercially
Available Fertilizers on the Growth of Plants Using fabaceae phaseolus lunatus
Greenwood Laboratory School
Jennifer Cvitak
Matt Carlile
The Effect of Auditory Sonic Waves on Reaction Rates Greenwood Laboratory School Hugh Brewer

Rebecca Hannah Improving the Cane as a Navigational Device for the Blind Glendale High School Fred Fotsch

Ginny Barnhart
The Effect of Ammonia on Freshwater Mussels Greenwood Laboratory School Hugh Brewer

Rick Seagrave
The Trainer-less Ultrasound Treatment
Greenwood Laboratory School
Hugh Brewer
Jessica Hacker
Can Candida Albicans Be
Controlled Without Using
Antibiotics?
Greenwood Laboratory School
Hugh Brewer
Adam Schoeller
Hot or Not?
Greenwood Laboratory School
Hugh Brewer

## EVANGEL UNI VERSITY (cont.)

\$1,500.00 Scholarship to each Senior Division First Place Winner

Senior Division: Amanda Burling
Ronald McCants
Of Mice and Gingko: An
Experiment Testing the Effect of Gingko Biloba on Memory in Mice Central High School Karen Reed
$\$ 2,500.00$ Scholarship to each Senior Division Grand Prize Winner

Senior Division: Brian VanOsdol
The Design of a Localized
Positioning System
Glendale High School
Fred Fotsch
Siir Kilkis
Mathematical Correlation
Greenwood Laboratory School
Hugh Brewer

## FANTASTIC CAVERNS

"Excellence In Science" Award
Senior Division: Ginny Barnhart
The Effect of Ammonia on Freshwater Mussels Greenwood Laboratory School Hugh Brewer

## GAMMA I OTA SI GMA - BAKER CHAI R OF INSURANCE AWARD

## \$25.00 Cash Award and Certificate

Senior Division: Karen Ward
The Effects of High Heeled
Shoes on Balance
Greenwood Laboratory School Hugh Brewer

## GREATER OZARKS AUDUBON SOCI ETY

Environmental Awareness Award
Junior Division: Leo Elworth
Gas Guzzlers vs. Gas Misers
St. Agnes Middle School
Lynn Vogel

## SPECIALAWARDS

THE GREENE COUNTY GROUNDWATER GUARDI AN AWARD (sponsored by the GREENE COUNTY PLANNI NG AND ZONI NG DEPARTMENT)

Travel \& Expenses Paid to Groundwater University during the summer of 2002

| Junior Division: | Sarah Francka <br>  <br> Dissolved Oxygen Levels in <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Rinley Creek, Missouri, in to Populated Areas <br>  <br>  <br> Elaine Marzolla |
| :--- | :--- |
| HERBERT HOOVER PRESI DENTI AL LI BRARY |  |
| ASSOCIATION "YOUNG ENGI NEER AWARD" |  |

Certificate of Award and Medallion

Senior Division: $\quad$| Rebecca Hannah |
| :--- |
| Improving the Cane as a |
|  |
|  |
|  |
|  |
|  |
| Navigational Device for the Blind |
| Gred Fotsch |

HORAN \& BECKER MEDI CAL SCI ENCE AWARD
(sponsored by HORAN \& BECKER, DDS, AFFI LI ATED ORAL SURGEONS)
\$100.00 Health Science Award

Senior Division:
Rick Seagrave
The Trainer-less Ultrasound
Treatment
Greenwood Laboratory School
Hugh Brewer

## INTEL EXCELLENCE IN COMPUTER SCIENCE AWARD

## \$200.00 Cash Award and Certificate

| Senior Division: | Brian VanOsdol |
| :--- | :--- |
|  | The Design of a Localized |
|  | Positioning System |
| Glendale High School |  |
|  | Fred Fotsch |

INTEL EXCELLENCE IN ENVI RONMENTAL HEALTH AND SAFETY AWARD
\$200.00 Cash Award, Certificate of Merit, and an Intel Memento

| Senior Division: | Ginny Barnhart <br> The Effect of Ammonia on <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Greshwater Mussels <br> Hugh Brewer |
| :--- | :--- |

## IRENE BRUNNER MEMORI AL AWARD

\$25.00 Cash Award \& Certificate
Junior Division: Alexandria Mixon The Big Mouth Myth
Ozark Upper Elementary
Paula Young
Casey McCann
One Way or the Other
St. Agnes Middle School Lynn Vogel
\$25.00 Cash Award \& Certificate
Junior Division: Kristine Malter
Amazing Mice
St. Agnes Middle School
Lynn Vogel

## UNE FENDER MEMORI AL BI OLOGY AWARD

\$100.00 Cash Award and Certificate of Achievement
Senior Division: Ginny Barnhart
The Effects of Ammonia on
Freshwater Mussels
Greenwood Laboratory School
Hugh Brewer

## THE 2002 KRAFT AWARD (sponsored by Kraft

 Foods, I nc.)\$50.00 Cash Award
Senior Division: Susan Gladden
How Filthy is Your Lucre? A
Study of Bacterial Habitation
Halfway High School
Rodney Delmont

## SPECIALAWARDS

## THE 2002 KRAFT AWARD (sponsored by Kraft Foods, Inc.) (cont.)

\$50.00 Cash Award

| Senior Division: | Brad Stockdale <br> Resistant Bacteria <br> Central High School <br> Dr. Protima Roy |
| :--- | :--- |
|  | Ryan Gerecht <br> Sarah Ensor <br> Effectiveness of Food <br> Preservatives in Unusually Harsh <br> Conditions <br> Central High School <br> Karen Reed <br>  <br>  <br>  <br> Bryson Roller <br> How Magnetic Fields Affect <br> Plant Growth <br> Bolivar High School <br> Teresa Holt. |

## MI SSOURI SOCI ETY OF PROFESSIONAL ENGI NEERS

\$40.00 Cash Award
Junior Division:

David Camejo
Dam It Up
St. Agnes Middle School Lynn Vogel

## $\$ 75.00$ Cash Award

Senior Division: $\quad$| Rebecca Hannah |
| :--- |
| Improving the Cane as a |
| Navigational Device for the Blind |
| Glendale High School |
| Fred Fotsch |

## OZARK AREA PHARMACY ASSOCI ATI ON

\$75.00 Cash Award (if awarded to partners, prize amount will be split between them)

| Junior Division: | Sarah Dobard |
| :--- | :--- |
|  | Have You Had Your Vitamin C |
|  | Today? |
|  | Immaculate Conception MS |
|  | Elaine Marzolla |

OZARK AREA PHARMACY ASSOCI ATI ON (cont.)
\$75.00 Cash Award (if awarded to partners, prize amount will be split between them)

| Junior Division: | Kendra Weatherford <br> The Effect of Caffeine on <br> Drosophilia Melanogaster <br> Pleasant View Middle School <br> Darlene Henne |
| :--- | :--- |
| Senior Division: $\quad$Jonathan Geuin <br> Kelly Jacobs <br> Nutritional Effects of Food <br> Preservation <br> Central High School <br> Karen Reed/Laura Schmutz <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Amanda Burling <br> Ronald McCants <br> Of Mice and Gingko: An <br> Experiment Testing the Effect of <br> Gingko Biloba on Memory in <br> Mice <br> Central High School <br> Karen Reed |  |

## OZARK AREA PSYCHOLOGI CAL ASSOCI ATI ON

A First Place Plaque
Senior Division: Megan Keith Advertising Recall: Effect of Ad Color, Gender and Age Greenwood Laboratory School Jennifer Cvitak

A Second Place Plaque

| Senior Division: | Ryan Cady |
| :--- | :--- |
|  | Effects of Sleep Deprivation on |
|  | Cognitive Efficiency |
|  | Greenwood Laboratory School |
|  | Hugh Brewer |

A Third Place Plaque
Senior Division: Tyler Montileone Laser, Aim, Putt Greenwood Laboratory School Hugh Brewer


OZARKS TECHNI CAL COLLEGE SCI ENCE RESEARCH AWARD (cont.)

Ozarks Science \& Engineering Fair/Ozarks Technical College $T$-shirts

Senior Division: | Marie Pesek |
| :--- |
| Central High School |
|  |
| Jordan Hickey |
| Central High School |
|  |
| Ryan Bayer |
| Bolivar High School |
|  |
| Alex Bethuren |
| Greenwood Laboratory School |
|  |
| Tyler Seiner |
| Bolivar High School |
|  |
| Jeanie Wilson |
| Strafford High School |
|  |
| Erin Lawson |
| Strafford High School |

## POSITRONIC INDUSTRIES RESEARCH AWARD

Certificates of Award and Desk Clocks to Students
Junior Division: Desiree Muir
Clever Middle School
Krystal Lais
Immaculate Conception MS
Jenna Engler
Immaculate Conception MS
Heather Thomas
Marshfield Middle School
Amanda Lowe
Marshfield Middle School
Briana Willoughby
Clever Middle School
Jessica Peebles
Clever Middle School
Sarah Maples
Billings Middle School
Ty Tyler
Billings Middle School

POSI TRONIC I NDUSTRIES RESEARCH AWARD (cont.)

Certificates of Award and Desk Clocks to Students
Junior Division: Kelsey Barlett
Hollister Middle School
Heather Scheck
Hollister Middle School
Mary Graham
Immaculate Conception MS
Marty Duda
Immaculate Conception MS
Ben Hamilton
St. Joseph Middle School
Nic Dykman
St. Joseph Middle School
J ared Weaver
St. Joseph Middle School
Ryan Haik
St. Agnes Middle School
Cody Hagewood
Billings Middle School
Andy Staiger
Billings Middle School
Joshua Hinote
Skyline R-2 Middle School
Nathan Pugh
Hollister Middle School
Whiteney Aiken
Pipkin Middle School
Caitlin Williams
Pipkin Middle School
Kristiana Blasi
Immaculate Conception MS
Kylie Wright
Billings Middle School
Kaleigh J enish
Billings Middle School

| SPECIA |  | $A \mathrm{MARD}$ |  |
| :---: | :---: | :---: | :---: |
| POSITRONIC I NDUSTRIES RESEARCH AWARD (cont.) |  | $\begin{aligned} & \text { POSI TRONI C } \\ & \text { (cont.) } \end{aligned}$ | TRIES RESEARCH AWARD |
| Certificates of Award and Desk Clocks to Students |  | Certificates of Award and Desk Clocks to Students |  |
| Junior Division: | Brady Yate | Junior Division: | Shane Salyers |
|  | Pleasant View Middle School |  | Billings Middle School |
|  | Kyle Ellman |  | Jennifer Bradley |
|  | Immaculate Conception MS |  | Marshfield Middle School |
|  | Lindsey Zumwalt |  | Mandy Stockton |
|  | St. Agnes Middle School |  | Marshfield Middle School |
|  | Steffani Burks |  | Kimberly Schaller |
|  | Marshfield Middle School |  | Springfield Lutheran School |
|  | Kassie Hyde |  | Lucas Poole |
|  | Marshfield Middle School |  | St. Agnes Middle School |
|  | Elle Chancellor |  | Erika Thompson |
|  | Marshfield Middle School |  | St. Agnes Middle School |
|  | James Reese |  | Casey May |
|  | Marshfield Middle School |  | Marshfield Middle School |
|  | Kalyn Baker |  | Drew Summers |
|  | Marshfield Middle School |  | Marshfield Middle School |
|  | Alex Bartow |  | Damien Sisk |
|  | Marshfield Middle School |  | St. Agnes Middle School |
|  | Nathan Van Diggelen |  | Jerry Gray |
|  | Marshfield Middle School |  | Billings Middle School |
|  | Kyle Caldwell |  | Paxton Long |
|  | Marshfield Middle School |  | Billings Middle School |
|  | Jess Renner |  | Kari Labenz |
|  | Marshfield Middle School |  | Immaculate Conception MS |
|  | Chelsea Jones |  | Andrew Linville |
|  | Hollister Middle School |  | Marshfield Middle School |
|  | Stephen Dalton |  | Kyle Stewart |
|  | Hollister Middle School |  | Marshfield Middle School |
|  | Cecilia Scott |  | Joe Kelly |
|  | Immaculate Conception MS |  | St. Joseph Middle School |
|  | Anna Kicker |  | Paul Johnson |
|  | Marshfield Middle School |  | St. Joseph Middle School |
|  | Samantha Bigley |  | Lori Allison |
|  | Marshfield Middle School |  | Marshfield Middle School |


| POSI TRONIC INDUSTRIES RESEARCH AWARD (cont.) |  | AWARDS |  |
| :---: | :---: | :---: | :---: |
|  |  | R. DUANE GRA | DDS, MEMORIAL AWARD |
|  |  | \$50.00 Cash Aw | Certificate |
| Certificates of Award and Desk Clocks to Students |  |  |  |
|  |  | Senior Division: | Megan Pruitt |
| Junior Division: | Goldie Weaver |  | No More Toothbrushes |
|  | Marshfield Middle School |  | Greenwood Laboratory School Hugh Brewer |
|  | Laura Carman |  |  |
|  | Immaculate Conception MS | SCHNEIDER FO the Communit | ATI ON (in cooperation with dation of the Ozarks) |
|  | Brittany Honson |  |  |
|  | Immaculate Conception MS | \$500.00 Cash Aw | nd Certificates |
|  | Tyler Kutz | Senior Division: | Brian VanOsdol |
|  | St. Agnes Middle School |  | Glendale High School |
|  | Andrew Myers |  | Fred Fotsch |
|  | Springfield Lutheran School |  | Siir Kilkis |
| Certificates of Award and Desk Clocks to Teachers |  |  | Greenwood Laboratory School Hugh Brewer |
| Junior Division: | Melissa Warren |  | Ginny Barnhart |
|  | Clever Middle School |  | Greenwood Laboratory School |
|  | Elaine Marzolla |  | Hugh Brewer |
|  | Immaculate Conception MS |  | Jessica Hacker |
|  | Aaron Tillman |  | Greenwood Laboratory School Hugh Brewer |
|  | Marshfield Middle School |  |  |
|  |  |  | Rick Seagrave |
|  | Karla Shively Billings Middle School |  | Greenwood Laboratory School Hugh Brewer |
|  | J eff Ellison | \$200.00 Cash Awards and Certificates |  |
|  | Hollister Middle School |  |  |
|  |  | Junior Division: | Kendra Weatherford |
|  | Kathryn Keller |  | Pleasant View Middle School |
|  | St. Joseph Middle School |  | Darlene Henne |
|  | Lynn Vogel |  |  |
|  | St. Agnes Middle School |  | Pleasant View Middle School |
|  | Lannie Hinote |  | Darlene Henne |
|  | Skyline R-2 Middle School |  | Shanna Akley |
|  |  |  | Pleasant View Middle School |
|  | Pipkin Middle School |  | Darlene Henne |
|  |  |  | Leo Elworth |
|  | Darlene Henne |  | St. Agnes Middle School |
|  | Pleasant View Middle School |  |  |
|  | Kimberly Potter |  | Patrick Merrigan |
|  | Marshfield Middle School |  | Immaculate Conception |
|  |  |  | Elaine Marzolla |

## SPECIALAWARDS

## SCI ENTI FIC AMERI CAN

One Year Subscription to "Scientific American" and a Certificate of Award

Senior Division: \begin{tabular}{l}
Siir Kilkis <br>
Greenwood Laboratory School <br>
Hugh Brewer

$\quad$

Brian VanOsdol <br>
Glendale High School <br>
Fred Fotsch <br>
<br>
Ginny Barnhart <br>
Greenwood Laboratory School <br>
Hugh Brewer <br>
<br>
Matt Carlile <br>
Greenwood Laboratory <br>
Hugh Brewer <br>
<br>

| Rick Seagrave |
| :--- |
| Greenwood Laboratory School |
| Hugh Brewer |

\end{tabular}

## THE SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATI ON AWARD

\$200.00 Cash Award

| Senior Division: | Ryan Cady <br> Effects of Sleep Deprivation on <br> Cognitive Efficiency <br> Greenwood Laboratory School <br>  <br> Hugh Brewer |
| :--- | :--- |
|  | Rick Seagrave <br> The Trainer-less Ultrasound <br> Treatment <br> Greenwood Laboratory School <br> Henior Division: <br>  <br> Hugh Brewer |
|  | Julia Neal <br> Protozoa: Water Quality <br> Indicators? <br> Greenwood Laboratory School <br> Hugh Brewer |
|  | Jessica Hacker <br> Can Candida Albicans Be <br> Controlled Without Antibiotics? <br> Greenwood Laboratory School |
| Hugh Brewer |  |

THE SMITH-GLYNN-CALLOWAY MEDICAL FOUNDATI ON AWARD (cont.)
$\$ 50.00$ Cash Award

| Senior Division: | Brad Stockdale <br> Antibiotic Resistant Bacteria . . . <br> They Are ALL Around Us! <br> Central High School <br> Protima Roy |
| :--- | :--- |
|  | Karen Ward |
|  | Effects of High Heeled Shoes on |
| Balance |  |
| Greenwood Laboratory School |  |
| Hugh Brewer |  |

## SOCIETY OF MANUFACTURI NG ENGI NEERS

Palm Pilots

| Senior Division: | Rebecca Hannah <br> Improving the Cane as a <br> Navigational Device for the Blind <br> Glendale High School |
| :--- | :--- |
|  | Brian VanOsdol <br> Design of a Localized <br> Positioning System <br> Glendale High School |
| Junior Division: | David Camejo <br> Dam It Up <br> St. Agnes Middle School |
| SOUTHWEST MISSOURI SOLAR ENERGY |  |

## SPECIAL AWARDS

## SOUTHWEST MISSOURI SOLAR ENERGY

 ASSOCIATI ON (cont.)Certificate of Achievement

| Junior Division: | Gallagher Roed <br> Mechanical Uses of Solar Energy <br> Springfield Lutheran School <br> Mary Brockman |
| :--- | :--- |
|  | Steffani Burks <br> Super Solar Sizzler <br> Marshfield Middle School <br> Kimberly Potter |
| Senior Division: | Colin Towery <br> Efficiency of Four Methods of <br> Heating Water with Solar Power <br> Central High School <br> Nova Mrad |

## SMSU COLLEGE OF NATURAL AND APPLIED SCIENCES

\$50.00 Cash Awards

| Senior Division: | Brian VanOsdol <br> The Design of a Localized <br> Positioning System <br> Glendale High School <br> Sponsor: Fred Fotsch |
| :--- | :--- |
| \$50.00 Cash Award | Siir Kilkis <br> Mathematical Correlation <br> Greenwood Laboratory School <br> Hugh Brewer |
| Junior Division: | Kendra Weatherford <br> The Effect of Caffeine on <br> Drosophila Melanogaster <br> Pleasant View Middle School <br> Darlene Henne |

## SMSU DEPARTMENT OF BI OLOGY

Certificates of Award

| Senior Division: | Ronald McCants <br> Amanda Burling <br> Of Mice and Gingko: An <br> Experiment Testing the Effect of <br> Gingko Biloba on Memory of <br> Mice <br> Central High School <br> Karen Reed |
| :--- | :--- |

SMSU DEPARTMENT OF BIOLOGY (cont.)
Certificates of Award

| Senior Division: | Claire Clothiaux <br> A Comparative Study of the Effects of Two Commercially Available Fertilizers on the Growth of Plants Using Fabaceae Phaseolus Lunatus Greenwood Laboratory School Jennifer Cvitak |
| :---: | :---: |
|  | Rick Seagrave <br> The Trainer-less Ultrasound Treatment Greenwood Laboratory School Hugh Brewer |
|  | Ginny Barnhart <br> Effect of Ammonia on <br> Freshwater Mussels <br> Greenwood Laboratory School <br> Hugh Brewer |
| Junior Division: | Patrick Merrigan <br> Allelopathy: When Grass is Greener Under the Other Trees Immaculate Conception MS Elaine Marzolla |
|  | Kendra Weatherford <br> The Effect of Caffeine on Drosophila Melanogaster Pleasant View Middle School Darlene Henne |
|  | Catherine DiSarno Breathe In, Breathe Out St. Agnes Middle School Lynn Vogel |
|  | Meghan Pfander <br> Water! Who Needs It? <br> Clever Middle School <br> Melissa Warren |
| Plaques to Teacher |  |
| Senior Division: | Jennifer Cvitak |
|  | Greenwood Laboratory School |
|  | Hugh Brewer Greenwood Laboratory School |
|  | Karen Reed Central High School |



## SPECIALAWARDS

## UNITED STATES ARMY ROTC (cont.)

Certificates of Achievement signed by the Secretary of the Army with a presentation folder, and Ultimate Daypack


## UNITED STATES METRIC ASSOCI ATION

Certificate of Outstanding Achievement

| Senior Division: | Siir Kilkis |
| :--- | :--- |
|  | Mathematical Correlation |
|  | Greenwood Laboratory School |
|  | Hugh Brewer |

## WALLACE WEBER MEMORI AL AWARD FOR BOTANY

\$25.00 Cash Award

| Junior Division: | Patrick Merrigan |
| :--- | :--- |
|  | Allelopathy: When Grass is |
| Greener Under the Other Trees |  |
|  | Immaculate Conception MS |
|  | Elaine Marzolla |

## WATERSHED COMMITTEE OF THE OZARKS

$\$ 50.00$ Savings Bond

| Senior Division: | Brad Young |
| :--- | :--- |
|  | Comparison of Stream Habitats |
| for Niangua Darter |  |
|  | Pleasant Hope High School |
|  | Gail Emrie |

WATERSHED COMMI TTEE OF THE OZARKS (cont.)
\$50.00 Savings Bond

| Senior Division: | Ginny Barnhart <br> Ammonia Toxicity and <br>  <br>  <br>  <br> Freshwater Mussels <br> Greenwood Laboratory School <br>  <br> Hugh Brewer |
| :--- | :--- |
|  | Sarah Francka <br> Dissolved Oxygen Levels in <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Inley Creek <br> Elaine Marzolla |

YALE SCIENCE AND ENGI NEERI NG
ASSOCIATI ON, INC. ASSOCIATION, INC.

Award Certificate

| Senior Division: | Siir Kilkis |
| :--- | :--- |
|  | Mathematical Correlation |
|  | Greenwood Laboratory School |
|  | Hugh Brewer |

## DR. GARY A. KELL AWARD

This cash award of $\$ 250.00$ is awarded to the J unior 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 2001 is:

Lynn Vogel, St. Agnes Middle School

## DR. WARFORD B. 」OHNSON, SR., MEMORI AL AWARD

This cash award of $\$ 1,000.00$ 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 2001 is:

Hugh Brewer
Greenwood Laboratory School

## TEACHER PARTI CI PATI ON AWARD

This award of a two-night stay at Howard Johnson's in Branson, Missouri is given to a new sponsor with the most placement awards. The recipient of the 2001 Teacher Participation Award is:

Elaine Marzolla, Immaculate Conception MS

# SPECIAL AWARDS <br> <br> POSI TRONI C INDUSTRIES TEACHER AWARD <br> <br> POSI TRONI C INDUSTRIES TEACHER AWARD <br> This cash award of $\$ 75.00$ is awarded to the Teacher, <br> OZARKS SCI ENCE AND ENGI NEERI NG FAIR FOUNDATI ON SENI OR DIVISI ON GRAND PRIZE TEACHER AWARD 

either J unior High, Middle School or Senior High, with the most total entries. The recipient of the Positronic Award for 2001 is:

Lynn Vogel, St. Agnes Middle School

## OZARKS SCI ENCE AND ENGI NEERI NG FAIR FOUNDATI ON SENI OR DIVISI ON TEACHER AWARD

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 Award for 2001 are:

Hugh Brewer, Greenwood Laboratory School Jennifer Cvitak, Greenwood Laboratory School Fred Fotsch, Glendale High School Karen Reed, Central High School

## OZARKS SCI ENCE AND ENGI NEERI NG FAIR FOUNDATI ON JUNI OR DIVISI ON TEACHER AWARD

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 Award for 2001 are:

Lynn Vogel, St. Agnes Middle School Darlene Henne, Pleasant View Middle School Elaine Marzolla, Immaculate Conception MS Aaron Tillman, Marshfield Middle School Mary Brockman, Springfield Lutheran School Margaret LaCavera, Spokane Middle School Melissa Warren, Clever Middle School

## OZARKS SCI ENCE AND ENGI NEERI NG FAIR FOUNDATI ON JUNIOR DIVISI ON 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 J unior Division Grand Prize Teacher Award for 2001 is:

Darlene Henne
Pleasant View Middle School

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 project. The recipients of the OSEF Foundation Senior Division Grand Prize Teacher Award for 2001 are:

Fred Fotsch
Glendale High School
Hugh Brewer
Greenwood Laboratory School

