

15th Annual



Senior & Junior
WINNER'S BOOK

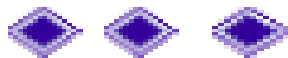


Missouri Southern State University

March 23-25, 2004

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Winners Senior Division

2004 Grand Prize Winners (\$100 each)

Danna McNett	Seneca High School
Matthew Volkman	Seneca High School

1ST Alternate: Chelsey Hall	Seneca High School
2nd Alternate: Logan Skelly	Joplin High School

Missouri Southern Scholarship Winners:

First Place in Each Senior Division Category



Scott Bartkoski	Neosho	
Logan Skelly	Joplin	
Chelsey Hall	Seneca	
Paul Whiteside	Thomas Jefferson	
John Carr		Neosho
Michael Barnes	Neosho	
Christopher Morehead	Seneca	
Matthew Volkman	Seneca	

Outstanding Sponsoring Teacher Award:

Brent Dodge

Thomas Jefferson

IDS

(\$100 check & plaque sponsored by Sunrise Optimist Club of Joplin)



MISSOURI SOUTHERN REGIONAL SCIENCE FAIR

2004 SPECIAL AWARDS

American Meteorological Society (*certificate*)

Sara Goodson – Sarcoxie Middle School

American Psychological Association (*certificate*)

Scott Bartkoski – Neosho High School

Association for Women Geoscientists (*certificate*)

Laura Knutzen – Carl Junction High School

ASM International Foundation (*certificate + medallion*)

Chris Eichman – Neosho High School

Audubon Society – Ozark Gateway Chapter (*cash awards*)

Senior High: Arthur Daus – Thomas Jefferson Independent Day School

Junior High: Patrick Chism – Carl Junction Junior High School

Bartlett Memorial Award (*plaque + \$100*)

Christopher Morehead – Seneca High School

Discovery Young Scientist Challenge Awards (*pin, certificate*)

Lacey McDannald – Northeast Vernon County Middle School

Michael Kory – Thomas Jefferson Independent Day School

Lindsey Hamm – South Middle School

Jonmichael Seibert – College Heights Christian School

Michelle Kropf – Iva Wells Middle School

Nathan Bramwell – Sarcoxie Middle School

David Wright – Iva Wells Middle School

Colton Myers – Sarcoxie Middle School

Jacob Stroud – Iva Wells Middle School

Josh Bentley – Diamond Junior High School

Eastman Kodak Award (*photokit for student and sponsoring teacher*)

John Carr – Neosho High School

Empire District Electric Environmental Award (*plaque + \$40*)

Senior High: Jessica Ellis – Seneca High School

Junior High: Patrick Chism – Carl Junction Junior High School

Herbert Hoover Presidential Library Association (*medallion + certificate*)

Michael Barnes – Neosho High School

Intel Excellence in Environmental Health and Safety Award (*\$200 + certificate*)

John Carr – Neosho High School

Meyer Biology Award (*certificate + \$50*)

Matthew Volkman – Seneca High School

Meyer Chemistry Award (*certificate + \$50*)
Chelsey Hall – Seneca High School

Microbiology Achievement Award (*plaque*)
Matthew Volkman – Seneca High School

Missouri Optometric Auxiliary (*plaque + \$100*)
Dalton Brothers – College Heights Christian School

Missouri Society of Professional Engineers (*plaque + \$25*)
Senior High: Chris Eichman – Neosho High School
Junior High: Nathan Bramwell – Sarcoxie Middle School

MSSU Biology Club (*plaque*)
Senior High: Danna McNett – Seneca High School
Junior High: Lindsey Hamm – South Middle School

MSSU Chemistry Department (*plaque*)
Senior High: Danna McNett – Seneca High School
Junior High: Nicole Hendrix – Northeast Vernon County Middle School

MSSU Environmental Health Club (*plaque*)
Senior High: Jessica Ellis – Seneca High School
Junior High: Michelle Kropf – Iva Wells Middle School

National Society of Professional Engineers (*certificate + pin*)
Josh Drake – McDonald County High School

Stockholm Junior Water Prize (*certificate*)
John Carr – Neosho High School

U.S. Air Force (*certificate, medallion, messenger bag, planner, electronic organizer*)
Senior High: Chris Eichman – Neosho High School
Drew Dumas – Neosho High School

Junior High: David Wright – Iva Wells Middle School
Jonathon Trim – Iva Wells Middle School

U.S. Army (*certificate, polo shirts for top 3 winners, medallion for overall winner*)
Engineering: Chris Eichman – Neosho High School
Environmental Sciences: John Carr – Neosho High School
Life Sciences: Logan Skelley – Joplin High School
Math and Computer Science: Frank Simmons – Aurora High School
Physical Sciences: Danna McNett -- Seneca High School
1st place: John Carr
2nd place: Logan Skelley
3rd place: Danna McNett

Medallion Winner: John Carr



Honorable Mention: Chelsey Hall – Seneca High School
Josh Manley – Seneca High School
Josh Drake – McDonald County High School
Nick Reinsvold – Thomas Jefferson Ind. Day School
Jessica Ellis – Seneca High School
Mike Kemp – Thomas Jefferson Independent Day School
Jarod Hay – Neosho High School
Jarrod Grewe – Marionville High School
Michael Barnes – Neosho High School
Reece Martin – Seneca High School

U.S. Metric Association (*certificate*)

Paul Whiteside – Thomas Jefferson Independent Day School - High School

U.S. Navy (*certificate + \$50 prize for Sr. High winners*)

Senior High: Drew Dumas – Neosho High School
Jarrod Grewe – Marionville High School

Junior High: Josh Bentley – Diamond Junior High School
Tyler Knewtson – North Middle School

U. S. Public Health Service (*certificate*)

Christopher Morehead – Seneca High School

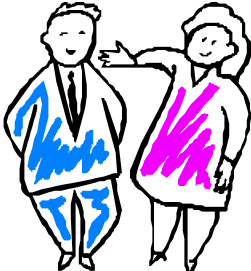
Yale Science & Engineering Awards (*certificate*)

Jarrod Grewe – Marionville High School



Congratulations to all winners!

**BEHAVIORAL/
SOCIAL SCIENCES**

	PLACE	STUDENT NAME	SCHOOL	SPONSOR
	1	Bartkoski, Scott, "The Testing Of Photographic Memory In Males Vs. Females And People Over Thirty Vs. People Under Thirty."	Neosho	David Elliott
	2	Millsap, Chelsea "Communicating Colors"	Webb City	Shauna Friend
	3	Ostendorf, David "The Effects Of Space Restriction On <u>Drosophila melanogaster</u> ."	Sarcoxie	Jane Kutz

BOTANY

	PLACE	STUDENT NAME	SCHOOL	SPONSOR
2nd Alternate -	1	Skelly, Logan "A Comparison Of Two Different Methods Of Phytohormonal Seed Coating To Stimulate <u>Cucumis sativus</u> And <u>Ipomoea tricolor</u> At Sub-Normal Temperature."	Joplin	Cathy Reed
	2	Daus, Arthur "The Effect Of Caffeine-Infused Pesticides On Plant Mitosis."	Thomas Jefferson	Brent Dodge
	3	Roschevitz, Coty "Mulch Madness"	McDonald County	Julia Eichman

**CHEMISTRY &
BIOCHEMISTRY**

	PLACE	STUDENT NAME	SCHOOL	SPONSOR
1st Alternate -	1	Hall, Chelsey "Synthesizing New Analogs For Triclosan"	Seneca	Shannon Sample
GRAND PRIZE -	2	McNett, Danna "Developing Organic Spermicides"	Seneca	Shannon Sample
	3	Gross, Aarden "Vitamin C Secrets"	McDonald County	Julia Eichman



**EARTH & SPACE SCIENCE
& PHYSICS**

	PLACE	STUDENT NAME	SCHOOL	SPONSOR
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- 1 **Whiteside, Paul** **Thomas Jefferson** **Brent Dodge**
 "The Effectiveness Of Conductive Foam As A Pressure Sensor."
- 2 **Kemp, Mike** **Thomas Jefferson** **Brent Dodge**
 "Measurement Of Background Radiation Using A Cloud Chamber."
- 3 **Dumas, Drew** **Neosho** **David Elliott**
 "The Environmental Interference Of Different Compounds On Radio Waves."

**ENVIRONMENTAL
SCIENCE**

<u>PLACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
1	Carr, John "A Comparison Between Southwest Missouri Streams, Based On Their Watershed."	Neosho	David Elliott
2	Hay, Jerod "Methane Generator"	Neosho	David Elliott
3	Manley, Joshua "Comparison Of Effluent Discharge From Two Area Wastewater Treatment Plants: A Study Of Water Quality."	Seneca	Shannon Sample



**MATH, COMPUTER
SCIENCE &
ENGINEERING**

<u>PLACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
1	Barnes, Michael "Optimal Testing Environment For A Fuel Cell"	Neosho	David Elliott
2	Drake, Josh "Bottle Washer"	McDonald County	Julia Eichman
3	Grewe, Jarrod "Submarine Escape Capsule"	Marionville	Rebecca Cavener



**MEDICINE
& HEALTH**

<u>PLACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
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- 1 **Morehead, Christopher Seneca** **Shannon Sample**
 "The Effect Of Bergamottin On The Utilization Of Androstenedione In Mice."
- 2 **Barnes, Tyler Neosho** **David Elliott**
 "The Comparison Of The Heart Rate And Respiration Rate Of Teenage Males While Participating In Intense Digital Entertainment, And While Taking The ACT."
- 3 **Wood, Whitney College Heights** **Jean Miller**
 "Does Caffeine Affect Blood Pressure?"



**MICROBIOLOGY/
 ZOOLOGY**

	<u>PLACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
GRAND PRIZE -	1	Volkman, Matthew	Seneca	Shannon Sample
		"The Antimicrobial Properties Of Green And Black Teas."		
	2	Costan, James	Neosho	David Elliott
		"The Effect Of T4 Bacteriophage On The Growth Of Antibiotic Resistant <i>E. coli</i> Bacterium."		
	3	Ellis, Jessica	Seneca	Shannon Sample
		"The Detection And Analysis Of Lead And Cadmium In Fish."		





Junior Division Winners

Grand Prize Winners: Lindsey Hamm (\$75 each) South Middle School
Michelle Kropf Iva E. Wells Middle Sch.

First Place each category - \$25 Each

Behavior/Social Sci.	Lacey McDannald	NE Vernon County
Botany	Michael Kory	Thomas Jefferson
Chemistry/Biochem.	Lindsey Hamm	South Middle School
Earth & Space	Jonmichael Seibert	College Heights
Environmental	Michelle Kropf	Iva E. Wells School
Math/Computer/ Engineering	David Wright	Iva E. Wells School
Medicine & Health	Colton Myers	Sarcoxie Jr. High
Microbiology/ Zoology	Jacob Stroud	Tamyra Larson



**BEHAVIORAL/
SOCIAL SCIENCES**

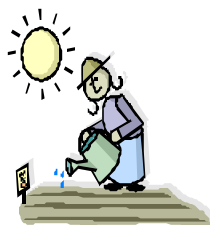


PLACE	STUDENT NAME	SCHOOL	SPONSOR
1	McDannald, Lacey "What Do You See?"	NE Vernon County	Kristi Blair
2	Chenoweth, Lindsey "I Can't Think!"	College Heights	Rick Lairmore
3	Greninger, Tosha "Do Boys Or Girls Participate More In The Classroom At Sarcoxie Middle School?"	Sarcoxie	Betty Agan

Honorable Mention - Kory, Kristina **Thomas Jefferson** **Brent Dodge**
"Does Music Affect Heart Rate?"

BOTANY

PLACE	STUDENT NAME	SCHOOL	SPONSOR
1	Kory, Michael "What Type Of Mulch Has The Best Water Retention Capability?"	Thomas Jefferson	Brent Dodge
2	Gann, Joshua "Which Water To Prefer"	Noel	Sheryl Madden
3	Clouse, Ethan "Plant Growth: The Effect Of Soil Types."	College Heights	Rick Lairmore



**CHEMISTRY &
BIOCHEMISTRY**

PLACE	STUDENT NAME	SCHOOL	SPONSOR
1	Hamm, Lindsey "Enzymes: Which Substance Contains The Enzymes To Extract DNA?"	South Middle School	Mary Hamm
2	Bowman, Alexandra "How Much Fat Is In Your French Fry?"	Thomas Jefferson	Brent Dodge
3	Washburn, Heather "Fired Up With Energy"	North Middle School	Stephanie Morehead

Honorable Mention - Robertson, Mark **North Middle School** **Teri Byrd**
"Will Vinegar Aid In The Electrolysis Of Water?"

EARTH & SPACE SCIENCE

& PHYSICS	PLACE	STUDENT NAME	SCHOOL	SPONSOR
	1	Seibert, Jonmichael "Inertia"	College Heights	Rick Lairmore
	2	Fordyce, Machaela "Reversal Polarity"	North Middle	Stephanie Morehead
	3	Sparlin, Lacie "Temperature's Effect On Magnets"	College Heights	Rick Lairmore
Honorable Mention -		Baker, Cory "Which Type Of Subsoil Promotes The Drainage And Growth Of Fescue For Athletic Field Turf?"	Sarcoxie	Jane Kutz

**ENVIRONMENTAL SCIENCE**

	PLACE	STUDENT NAME	SCHOOL	SPONSOR
GRAND PRIZE -	1	Kropf, Michelle "What Goes Up Must Come Down"	Iva E. Wells	Tamyra Larson
	2	Bentley, Josh "George Washington Carver National Monument Pond: Baseline Data"	Diamond	Julie Eichman
	3	Kewtson, Tyler "Fuel Cells versus Fossil Fuels"	North Middle	Stephanie Morehead
Honorable Mention -		Chism, Patrick "The Wonder Of Worms"	Carl Junction	Susan Hogard

MATH, COMPUTER SCIENCE & ENGINEERING

	SPACE	STUDENT NAME	SCHOOL	SPONSOR
	1	Wright, David "The Can Stirling Engine"	Iva E. Wells	Tamyra Larson
	2	Bramwell, Nathan "What Is The Strongest Architectural Roof Design?"	Sarcoxie	Betty Agan
	3	Asbil, Shelby "Look Through Walls"	Iva E. Wells	Jarrett Cook
Honorable Mention -		Schofield-Johnson, Tati Thomas Jefferson "Calculating Area Utilizing Monte Carlo Math"		Brent Dodge

**MEDICINE &
HEALTH**



PLACE	STUDENT NAME	SCHOOL	SPONSOR
1	Myers, Colton "Does Cigarette Smoke Affect The Growth Of Plants?"	Sarcoxie	Betty Agan
2	Good, Lauren "Facing The Effects Of Steroids"	Carl Junction	Susan Hogard
3	Knutzen, Elisabeth "Digital-Eyes"	Carl Junction	Susan Hogard
Honorable Mention -			
	Sarwinski, Connor "Sweet Or Rotten"	Iva E. Wells	Erin Wilson

**MICROBIOLOGY &
ZOOLOGY**

PLACE	STUDENT NAME	SCHOOL	SPONSOR
1	Stroud, Jacob "Effects Of Low Temperature Storage Time On The Hatchability Of Fertile Hen's Eggs."	Iva E. Wells	Tamyra Larson
2	Chapman, Glorinda "Does Gender Affect Finger Dexterity?"	Sarcoxie	Betty Agan
3	Ross, Emily "Are You Really Trying To Get Your Dishes Clean With That	Thomas Jefferson	Brent Dodge

Sponge?"

Honorable Mention -			
	Bautista, Luis "Butterflies Love Red"	Noel	Sheryl Madden





PLACEMENT OF
PAST GRAND PRIZE WINNERS
of

MISSOURI SOUTHERN REGIONAL FAIR at ISEF

<u>YEAR</u>	<u>NAME/SCHOOL</u>	<u>PLACEMENT AT ISEF</u>
1990	Caitlin Lenon – Nevada High School Vijay Sree – Nevada High School	Participant 1 st – Medicine & Health
1991	Heather Crain – Carl Junction High School Matt Triplett – Carl Junction High School	Participant Participant
1992	Amy Lawson – Joplin High School Jason Talley – Joplin High School	3 rd – Microbiology 4 th – Environmental Science
1993	Amy Lawson – Joplin High School Janelle Meyer – Joplin High School	3 rd – Microbiology Participant
1994	Amy Lawson – Joplin High School Katherine Sheridan – Carl Junction High School	3 rd – Microbiology Participant
1995	Aaryn McFarland – Neosho High School Deepa Mangalat – Joplin High School	Participant 4 th – Chemistry
1996	Beth Lawson – Joplin High School Deepa Mangalat – Joplin High School	4 th – Microbiology 4 th – Chemistry
1997	Beth Lawson – Joplin High School Deepa Mangalat – Joplin High School	2 nd – Microbiology Participant
1998	Danielle Miller – Neosho High School Michael Sweeney – Carl Junction High School	Participant Participant
1999	Mason Cummins – Sarcoxie High School Nathan Dawson – Sarcoxie High School	3 rd – Behavioral & Social Science Participant
2000	Sarah Chrisman - Sarcoxie High School Terra Higgins - Carl Junction High School	Participant 2 Special Awards
2001	Lindsey Barnes – Neosho Ryan Thompson – Carl Junction	Participant Participant
2002	Marian Cox – Seneca Caleb Gallemore – Seneca	Participant 3 rd – Behavioral Science
2003	Marian Cox - Seneca Lindsey Herbert – Seneca	Participant Participant



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