

14th Annual



**Senior & Junior
WINNER'S BOOKLET**



Missouri Southern State College

March 25-27, 2003



Winners **Senior Division**

2003 Grand Prize Winners (\$100 each)

Marian Cox Seneca High School
Lindsey Herbert Seneca High School

1ST Alternate: Nathan Shelley Joplin High School

Missouri Southern Scholarship Winners: **First Place in Each Senior Division Category**

Autumn Yust	Seneca
Sara Robbins	Marionville
Marian Cox	Seneca
Stephanie Porter	Neosho
Nehemiah Alvarez	Neosho
Nicole Bowers	McDonald County
Kimberly Brewer	McDonald County
Lindsey Herbert	Seneca
Nathan Skelley	Joplin
Logan Skelley	Joplin



Outstanding Sponsoring Teacher Award:

Susan Hogard Carl Junction Junior High

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





2003 SPECIAL AWARDS

American Foundation for Vision Awareness (*plaque + \$100*)
Kirsten Chodrick – Carl Junction Junior High School

American Meteorological Society (*certificate*)
Nicole Bowers – McDonald County High School
Leo Flint – Northeast Vernon County Junior High School

Association for Women Geoscientists (*certificate*)
Stephanie Porter – Neosho High School

Audubon Society – Ozark Gateway Chapter (*cash awards*)
Sr. High: Logan Skelley – Joplin High School
Jr. High: Mark Pinta – Carl Junction Junior High School

Bartlett Memorial Award (*plaque + \$100*)
Kimberly Brewer – McDonald County High School

Carver Superior Achievement Award (*plaque + cash awards*)
Sr. High: Sara Robbins – Marionville High School
Corey Baker – Carl Junction High School (Hon. Mention)

Jr. High: Michelle Kropf – Iva Wells Middle School
Tyler Knewton – North Middle School (Hon. Mention)

Discovery Young Scientist Challenge Awards (*pin, certificate,*)
Zack Haralson – Carl Junction Junior High School
Alexia Walker – Riverton Middle School
Nathan Bramwell – Sarcoxie Middle School
Kirsten Chodrick – Carl Junction Junior High School
Arthur Daus – Thomas Jefferson Independent Day School
Laura Knutzen – Carl Junction Junior High School
Amanda Shelton – Carl Junction Junior High School
Leanne Bal – Iva Wells Middle School
Aaron McGinn – Carl Junction Junior High School
Garrett Smith – Carl Junction Junior High School

Eastman Kodak Award (*photokit*)
Nehemiah Alvarez – Neosho High School

Empire District Electric Environmental Award (*plaque + \$40*)
Sr. High: Nicole Bowers – McDonald County High School
Jr. High: Denae Boman – Iva Wells Middle School

Herbert Hoover Presidential Library Association (*medallion + certificate*)
Nehemiah Alvarez – Neosho High School

Intel Excellence in Environmental Health and Safety Award (*\$200 + certificate*)
Nicole Bowers – McDonald County High School

Meyer Biology Award (*certificate + \$50*)
Lindsey Herbert – Seneca High School

Meyer Chemistry Award (*certificate + \$50*)
Marian Cox – Seneca High School

Microbiology Achievement Award (*plaque + \$25*)
Lindsey Herbert – Seneca High School

Missouri Society of Professional Engineers (*plaque + \$25*)
Sr. High: Nehemiah Alvarez – Neosho High School
Jr. High: Alexia Walker – Riverton Middle School

MSSC Chemistry Department (*plaque*)
Sr. High: Nicole Thomas – Miller High School
Jr. High: Dwayne Holly – Sarcoxie Middle School

MSSC Environmental Health Club (*plaque*)
Sr. High: Marian Cox – Seneca High School
Jr. High: Aaron McGinn – Carl Junction Junior High School

MSSC Biology Club (*plaque*)
Sr. High: Lindsey Herbert – Seneca High School
Jr. High: Amanda Shelton – Carl Junction Junior High School

Society for In Vitro Biology (*certificate*)
Mercedes Elder – McDonald County High School

U. S. Air Force Research Laboratory Century of Flight Award (*certificate, T-shirt*)
Chris Eichman – Neosho High School
Nathan Skelley – Joplin High School

U.S. Air Force (*certificate, medallion, messenger bag, planner, electronic organizer*)
Senior High: Chris Eichman – Neosho High School
Stephanie Porter – Neosho High School
Junior High: David Wright – Iva Wells Middle School
Brent Patterson – Granby Junior High School



U.S. Army (*certificate, \$50 bond for top 3 winners, medallion for overall winner*)

Engineering: Chris Eichman – Neosho High School
Environmental Sciences: Stephanie Porter – Neosho High School
Life Sciences: Logan Skelley – Joplin High School
Math and Computer Science: Casey Slaughter – Webb City High School
Physical Sciences: Nathan Skelley – Joplin High School

1st place: Nathan Skelley
2nd place: Logan Skelley
3rd place: Chris Eichman



Medallion Winner: Nathan Skelley

Honorable Mention: Marian Cox – Seneca High School
Lindsey Herbert – Seneca High School
Kimberly Brewer – McDonald County High School
Ben Burleson – Neosho High School
Lauren Kearney – Marionville High School
Nehemiah Alvarez – Neosho High School

U.S. Metric Association (*certificate*)

Marian Cox – Seneca High School

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

Senior High: Stephanie Porter – Neosho High School
Preston Harmon – Marionville High School
Marian Cox – Seneca High School

Junior High: David Wright -- Iva Wells Middle School
Tiffany Bogardus – Northeast Vernon County Junior High

Stockholm Junior Water Prize (*certificate*)

Ashlee Williams – Thomas Jefferson Independent Day School

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

Kimberly Brewer – McDonald High School
Marissa Allen – Marionville High School




Yale Science & Engineering Awards (*certificate*)

Chris Eichman – Neosho High School




Senior High Winners


BEHAVIORAL/ SOCIAL SCIENCES

	<u>SPACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
	1	Yust, Autumn "The Relationship Between Brain Dominance, Handedness, Not Perception And The Influence Of Music On Retention Of Information."	Seneca	Shannon Sample
	2	Alderman, Holly "Are Lying And Eye Movement Related?"	Carl Junction	Paul Foster
	3	Millsap, Chelsea "Mozart Vs. Metallica"	Webb City	Shauna Friend

BOTANY

	<u>SPACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
	1	Robbins, Sara "Gas For Grass"	Marionville	Rebecca Cavener
	2	Whiteside, Paul "Thick Wind"	Thomas Jefferson	Brent Dodge
	3	Baker, Corey "Soybean Study"	Carl Junction	Paul Foster

CHEMISTRY

	<u>SPACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
	GRAND PRIZE --- 1	Cox, Marian "The Quantitative Analysis On The Release Of Phthalate Esters From Consumer Plastic Bottles Into Drinking Water."	Seneca	Shannon Sample
	2	Thomas, Nicole "Over The Counter"	Miller	Ronda Thompson
	3	Schwartz, Alex "The Energy Content Of Fuels"	Thomas Jefferson	Brent Dodge

**EARTH
& SPACE**



SPACE	STUDENT NAME	SCHOOL	SPONSOR
1	Porter, Stephanie "Latitudinal Effects On The Propagation Of GPS Signals Through The Ionosphere"	Neosho	David Elliott
2	Kienenberger, Brandon "Under Pressure"	Marionville	Rebecca Cavener

ENGINEERING



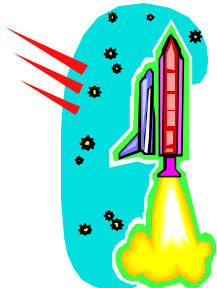
SPACE	STUDENT NAME	SCHOOL	SPONSOR
1	Alvarez, Nehemiah "Holomemeory: The Data Within"	Neosho	David Elliott
2	Bridges, Rebecca "R.A.P.T.O.R. Helmet System (Re-Engineered Accessorized Padding Technology For Off-Road)"	Neosho	David Elliott
3	Eichman, Chris "Fuel Cells: Efficient Future Or Useless Technology"	Neosho	David Elliott

ENVIRONMENTAL



STUDENT NAME	SCHOOL	SPONSOR
1 Bowers, Nicole "It's Raining...Acid?"	McDonald County	Julia Eichman
2 Milam, Jacob " <i>Planorbis Corneus</i> : Dead is Snailleus"	Marionville	Rebecca Cavener
3 Simmerman, Mindy "Which Type Of Rock Is Most Affected By Acid?"	Marionville	Rebecca Cavener

**MATH &
COMPUTERS**



STUDENT NAME	SCHOOL	SPONSOR
2 Slaughter, Casey "Time Travel: The Impossibly Possible."	Webb City	Shauna Friend

**MEDICINE
& HEALTH**



SPACE	STUDENT NAME	SCHOOL	SPONSOR
1	Brewer, Kimberly "Herbal Vitamins – Help Or Harm?"	McDonald County	Julia Eichman
2	Allen, Marissa "Are You What You Eat?"	Marionville	Rebecca Cavener

MICROBIOLOGY

GRAND PRIZE --

SPACE	STUDENT NAME	SCHOOL	SPONSOR
1	Herbert, Lindsey "The Effects Of Various pH Levels And Metallic Ions On The Rate Of Bacterial Transformation In Escherichia coli."	Seneca	Shannon Sample
2	Cochran, Jonathan "Micro-Organisms"	Miller	Laurel Sparks

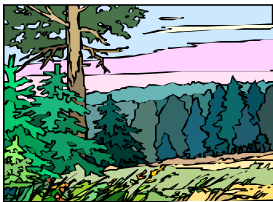
PHYSICS

**Alternate -----
Grand Prize**



SPACE	STUDENT NAME	SCHOOL	SPONSOR
1	Skelley, Nathan "Hypervelocity Impact Research – Acceleration Technology And Applications."	Joplin	Cathy Perrin
2	Thompson, Jaleana "Achieving Neutral Buoyancy"	Bronaugh	Susan Ricketts
3	Stogsdill, Jennifer "Electrical Properties Of Magnetic Fluids"	East Newton	John Brockman

ZOOLOGY



SPACE	STUDENT NAME	SCHOOL	SPONSOR
1	Skelley, Logan "Trapping Lymantria dispar: A Potential Threat To Missouri's Forests"	Joplin	Cathy Perrin
2	Jones, Justin "The Effect Of B3 Vitamin, Niacine On Crayfish"	Carl Junction	Paul Foster
3	Elder, Mercedes "Alternative Safety Testing"	McDonald County	Julia Eichman





Junior Division Winners

**Grand Prize Winners: Alexia Walker Riverton Mid. Sch.
(\$100 each) Arthur Daus Thomas Jefferson**

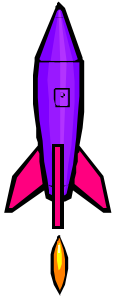
First Place each category - \$25 Each


Engineering	Zach Haralson	Carl Junction
Health Science	Nathan Bramwell Kirsten Chodrick	Sarcoxie Carl Junction
Life Science	Amanda Shelton	Carl Junction
Physical Science	Aaron McGinn Garrett Smith	Carl Junction Carl Junction





Junior High Winners

<u>ENGINEERING</u>	<u>SPACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
GRAND PRIZE ---	1	Walker, Alexia "Which Window Glass Prevents Heat Transfer Best?"	Riverton Mid. Sch	Claudia Cox
	1	Haralson, Zack "Electrifying Temperatures"	Carl Jct. JH	Susan Hogard
	2	Haralson, Brandon "Blast Off"	Carl Jct. JH	Susan Hogard
	2	Nowlin, Brittaney "What Will Help Reinforce Cement?"	Sarcoxie Mid. Sch	Betty Agan
	3	Cox, Mark "Testing The Effect Of Weight On Different Bridge Design"	Carl Jct. JH	Susan Hogard
	3	Ogle, Ryan "Creating A Better Airplane Propeller"	Sarcoxie Mid Sch	Betty Agan
Honorable mention School		Lori Divine "Engineering: Simple And Complex Bridges"	Lynn Jarnagin	North Middle



<u>HEALTH SCIENCE</u>	<u>SPACE</u>	<u>STUDENT NAME</u>	<u>SCHOOL</u>	<u>SPONSOR</u>
	1	Bramwell, Nathan "Which Ear Plugs Work The Best?"	Sarcoxie Mid. Sch	Betty Agan
	1	Chodrick, Kirsten "A Shady Idea: An Eye-Opening Look At Ultraviolet Light"	Carl Junction JH	Susan Hogard
	2	Daus, Haley "The Effect Of Various Solutions On Teeth"	Thomas Jefferson	Brent Dodge
	2	Myers, Colten "Does Listening To A Walkman CD Player Affect A Person's Hearing?"	Sarcoxie Mid. Sch	Betty Agan
	3	Baker, Cory "Does Smoking Affect One's Lung Capacity?"	Sarcoxie Mid. Sch	Betty Agan
	3	Cole, Ranelle "Got Milk?"	Iva E. Wells	Tamyra Larson
3	Greninger, Tosha "Which Ground Meat Has The Highest Percent Of Fat?"	Sarcoxie Mid. Sch	Betty Agan	

LIFE SCIENCE	SPACE	STUDENT NAME	SCHOOL	SPONSOR
GRAND PRIZE ---	1	Daus, Arthur "Is Caffeine An Effective Pesticide Against <i>Drosophilae Hydea</i> ?"	Thomas Jefferson	Brent Dodge
	1	Shelton, Amanda "Caution: Brain Hemispheres At Work"	Carl Junction JH	Susan Hogard
	2	Anderson, J.D. "Heart Affect"	Noel Jr. High	Sheryl Madden
	2	Knutzen, Laura "Say Cheese"	Carl Junction JH	Susan Hogard
	3	Keckley, Lauren "You Can Make You Hamster Mighty!"	Carl Junction JH	Susan Hogard
	3	Schultz, Dan "From Dust To Dust: Four Questions To Ask About Decomposition."	Carl Junction JH	Susan Hogard
	3	Schulze, Ashton "A Nose Knows: Gender Vs. Olfactory"	Carl Junction JH	Susan Hogard

PHYSICAL SCIENCE	SPACE	STUDENT NAME	SCHOOL	SPONSOR
	1	McGinn, Aaron "How To Prevent Erosion"	Carl Junction JH	Susan Hogard
	1	Smith, Garrett "Static Electricity"	Carl Junction JH	Susan Hogard
	2	Bal, Leanne "Coefficient Of Friction, Basis Weight, & Precision Caliper Of Paper Types"	Iva E. Wells	Tamyra Larson
	2	Stinnett, Phillip "Are All Light bulbs Equal?"	Sarcoxie Mid. Sch	Betty Agan
	3	Holly, Dwayne "The Separation Of Flower Pigments B The Use Of Chromatography"	Sarcoxie Mid. Sch.	Betty Agan
	3	Meyer, Lauren "Pretty As A Penny"	Carl Junction JH	Susan Hogard
	3	Stanbery, Samantha "Which Household Substance Will Grow The Biggest Crystal?"	Granby Elem.	Verla Spears





**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

