Junior Science, Engineering and Humanities Symposium

STUDENT RESEARCH SHARING
SESSION I

Missouri I Room
8:00 p.m. - 10:00 p.m.

BEHAVIOR

- **John Bachman**, “Effect of Socioeconomics Status on Purchasing Type,” Central High School, St. Joseph, Missouri, Jay Meyers, Sponsoring Teacher

- **Sierra Comer**, “The Effects of the SSRI Metabolite Norfluoxetine on Behavior, Fecundity and Morphology of *Daphnia magna*,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Jay Gulshen**, “Predator Olfactory Cue Recognition: Developing a Training Protocol for Recognition of Non-Native Aquatic Predators,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Robert Hutchinson**, “Determining Residents and Non-Residents Awareness of *Escherichia coli* Levels at the Lake of the Ozarks,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Jonathan Kimbel**, “Refrigerator Browsing: Habitual or Circumstantial?” St. Charles West High School, St. Charles, Missouri, Heather Horstmann and Joan Twillman, Sponsoring Teachers

- **Dylan Lyle**, “A Study of the Perception of Human Pheromones,” Tuscumbia High School, Tuscumbia, Missouri, Constance Wyrick, Sponsoring Teacher

- **Paige Wood**, “Dying to be Beautiful: Investigating Psychological Motivations for Tanning,” Tuscumbia High School, Tuscumbia, Missouri, Constance Wyrick, Sponsoring Teacher
Junior Science, Engineering and Humanities Symposium

STUDENT RESEARCH SHARING
SESSION II

Clayton Room
8:00 p.m. - 10:00 p.m.

EDUCATION

- **Caitlin Beckmeyer**, “The Affects of Speech and Music as Auditory Distractions on Short-Term Memory,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Devin Ditto**, “The Ability of an Electronic Reader to Kindle Student Interest,” Maplewood-Richmond Heights High School, Maplewood, Missouri, Kathleen Dwyer, Sponsoring Teacher

- **Nicholas Huey**, “The Effect of Individual Behavior on Group Situational Perception,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Heather Lovell**, “A Comparison of Visual and Haptic Information Processing in Children in Real and Virtual Settings,” Tuscumbia High School, Tuscumbia, Missouri, Constance Wyrick, Sponsoring Teacher

- **Abbey Martin**, “The Effects of Music on Learning and Testing Efficiency,” School of the Osage, Osage Beach, Missouri, Amanda Wersching, Sponsoring Teacher

- **Anna Morgan**, “Determining the Effectiveness of the New Missouri Legislation Requiring Kindergarteners to Receive Comprehensive Vision Examinations,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher
Junior Science, Engineering and Humanities Symposium

STUDENT RESEARCH SHARING
SESSION III

Atrium II Room
8:00 p.m. - 10:00 p.m.

ENVIRONMENTAL SCIENCE

- **Kyle Ahart**, “A Study of Embankment Erosion,” Tuscumbia High School, Tuscumbia, Missouri, Constance Wyrick, Sponsoring Teacher

- **Courtney Beckmeyer**, “Application of Native Sunflowers (*Helianthus occidentalis* and *Helianthus mollis*) for Roadside Heavy Metal Phytoremediation,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Kyle Gulshen**, “The Effects of Wireless Internet Router Radiation on Mortality Rates of Darkling Beetles,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Adam Kellerman**, “The Effect of Geographic Location on *Arabidopsis thalina*,” Maplewood-Richmond Heights High School, Maplewood, Missouri, Kathleen Dwyer, Sponsoring Teacher

- **Cynthia Lam**, “Probiotics: Antibacterial Effects of Honey from Different Floral Sources on *Escherichia coli*,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Emily Siebert**, “Carbon Sequestration of Plant Power Effluents Streams Using Plant Matrices,” Cor Jesu Academy, St. Louis, Missouri, William Joern, Sponsoring Teacher
Junior Science, Engineering and Humanities Symposium

STUDENT RESEARCH SHARING
SESSION IV

Frontenac Room
8:00 p.m. - 10:00 p.m.

MICROBIOLOGY AND MEDICINE

- **Chelsey Carron**, “The Effects of Caffeine on *Micrococcus luteus* and *E. coli* Bacteria,” West St. Francois County High School, Park Hills, Missouri, Barb Steel, Sponsoring Teacher

- **Victoria Cope**, “The Effects of Heat on the Growth of *Enterobacter cloacae*,” School of the Osage, Osage Beach, Missouri, Amanda Wersching, Sponsoring Teacher

- **Victoria Fritchey**, “Investigating Statewide Bed Bug Infestation and Various Eradication Methods,” Tuscumbia High School, Tuscumbia, Missouri, Constance Wyrick, Sponsoring Teacher

- **Alisha Gray**, “Effects of Environmental Glycerol on the Hyperosmotic Response of *Saccharomyces cerevisiae*,” Mansfield High School, Mansfield, Missouri, Pam Probert, Sponsoring Teacher

- **Kaysha Ousley**, “Effects of Environmental Glycerol on the Hyperosmotic Response of *Saccharomyces cerevisiae*,” Mansfield High School, Mansfield, Missouri, Pam Probert, Sponsoring Teacher

- **Anna Waldschlager**, “A Determination of the Presence of Guard Bacteria in the Parenchyma Cells,” Pleasant Hope High School, Pleasant Hope, Missouri, Jim Flora, Sponsoring Teacher
Junior Science, Engineering and Humanities Symposium

STUDENT RESEARCH SHARING
SESSION V

Atrium I Room
8:00 p.m. - 10:00 p.m.

PHYSICAL SCIENCES, ENGINEERING AND MATH

- **Adam Brandt**, “Characterizing Defects with Magneto Absorption,” Timberland High School, Wentzville, Missouri, Terrence Brennan, Sponsoring Teacher

- **Andrea Colson**, “Troubleshooting an Automatic Titration System,” Cor Jesu Academy, St. Louis, Missouri, William Joern, Sponsoring Teacher

- **Cameron Falk**, “Rocket Propulsion Based on Propellant Mixtures,” Pleasant Hope High School, Pleasant Hope, Missouri, Jim Flora, Sponsoring Teacher

- **Rachel Hagan**, “Bridge Structure,” Buffalo High School, Dan McCorkendale, Sponsoring Teacher

- **Cameron Nunn**, “Splitting Water with Sunlight: Discovering the Optimal Photocatalytic Metal Oxide Combination for the Production of Hydrogen Gas from Water,” Seneca High School, Seneca, Missouri, Shannon Sample, Sponsoring Teacher

- **Callie Sare**, “Comparison of Actual Milk Protein Content to Its Nutritional Labels,” Pleasant Hope High School, Pleasant Hope, Missouri, Jim Flora, Sponsoring Teacher
STUDENT RESEARCH SHARING
SESSION VI
Manchester Room
8:00 p.m. - 10:00 p.m.

PHYSIOLOGY

- **Cierra Calloway**, “The Effects of Energy Drinks on the Performance of Athletes,” School of the Osage, Osage Beach, Missouri, Amanda Wersching, Sponsoring Teacher

- **Ann Letterman**, “Determining the Effects of Body Mass Index on Pheromone Intensity,” Camdenton High School, Camdenton, Missouri, Christopher Reeves, Sponsoring Teacher

- **Scott Morton**, “Calling all Germophobes: Can Your Cell Phone Make You Sick?” Elsberry High School, Elsberry, Missouri, Kenna Heitman, Sponsoring Teacher

- **Michele Painter**, “The Effect of Salinity on Root Development of *Arabidopsis thaliana*,” Elsberry High School, Elsberry, Missouri, Kenna Heitman, Sponsoring Teacher

- **Eric Sawyer**, “Modeling and Applications of Suppressor tRNAs to the Boolean Satisfiability Problem,” Central High School, St. Joseph, Missouri, Jay Meyers, Sponsoring Teacher

- **Della Spratt**, “The Effects of pH Levels on Mutant-Type *Arabidopsis thaliana* Gene bam 1-3,” Elsberry High School, Elsberry, Missouri, Kenna Heitman, Sponsoring Teacher