## Ozark Region Missouri Junior Academy of Science – March 22, 2024

Highly Superior			
Matthew Kelley	Junior	Take Down	
Connor Boyle	Junior	Holy Guacamole	
Ryan Radlund	Junior	SOS (Save Our Soles)	
Lyla Naslund	Junior	Slow Mo	
Cooper Self	Junior	Slick Pistons	
Jackson Bruns	Junior	Earth's Invisible Farmers	
Joey Tietze	Senior	Novel Application of Toroidal Propellers on Single Propeller Fixed-Wing Aircraft	
Olivia McGruder	Senior	Effects of Sodium Bicarbonate On Methotrexate Affected Livers in <i>Danio rerio</i> : An Embryological study	
Michael Owen	Senior	The Effect of Cytoplasmic Material on <i>Rosa</i> 'ZARrefre' Rate of Decay: A Novel Approach to Preservation	
Kasey Hicks	Senior	Assessing the Impacts of Lead-Loaded Biochar Degradation on <i>Caenorhabditis elegans</i> Population Growth	

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Superior			
Luke Patton	Junior	Improving the Tools of Ignorance	
lan Johnson	Junior	Take Me Out to the Ballpark	
Charles Boyle	Junior	Smile Bright with Pearly Whites	
Jordan Ray	Junior	How Much Weight Has to Fall Before An Infant Dies	
Gavin Kurth	Junior	The Crayfish Mystery	
Chase Benedick	Junior	Forging new paths to cleaning	
Larry Quade	Senior	The Power of Citrus: Constructing an Eco-friendly Citric Acid Battery Alternative to Alkaline and Lithium Batteries	
Sadie Rinck	Senior	Feasibility of Litium Sulfate and Other Concentrations in Place of Liquid Electrolytes in a Lithium Battery	
Opal Antoszewski	Senior	The effects of abiotic factors on the toxicity of Neotyphodium coenophialum in Festuca arundinacea	
Keith Bass	Senior	Implementation of a Proportional-Integral- Derivative (PID) Controller-emulating Feedforward Neural Network to Improve the Success Confidence of Autonomous Attitude Control for Low-Orbit Satellites	

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Excellent			
Braya Scott	Junior	Straps to Last	
Rylan Archer	Senior	Ionic Thrust: Manipulation of Electro-Hydrodynamics	
Kelsey Daugherty	Senior	Unveiling Salicylic Acid's Potential: Enhancing Tomato Plant Resilience Against <i>Meloidogyne incognita</i> Race 3	