

Ozark Region Missouri Junior Academy of Science – March 8, 2022

Highly Superior		
Jack Johno	Junior	Can Sound Affect Plant Development?
Cooper Self	Junior	Lights in Action
Marlee Howard	Junior	Lima Beans in Winter
Ian Johnson	Junior	Flash Plants
Mila Krenzel	Junior	Shady's in Shambles!
Addison Handley	Junior	Light Pollution: A Solution
Baely Hansen	Junior	Beams on Beans
Kennedy Esquibel	Junior	Bread: The Staff of Life
Gracie Ulam	Junior	To Feed or Not to Feed Your Lawn
Paige Mulford	Junior	Icephobic Concrete
Maya Elliott	Senior	A Ball-milled Biochar Alginate Filter: A Novel Approach to Water Quality
Alaina Semsch	Senior	The Efficacy of Doxycycline Hyclate as a Topical Treatment on <i>Amblyomma americanum</i>
Carter Smith	Senior	Year Two of an Ongoing study on the Utilization of Biomimetic Designs to Engineer a More Efficient Surgical Laparoscopic Grasper
Isabella Hamner	Senior	Exploring the Deterrent Properties of β -linalool against <i>Odocoileus virginianus</i> as a Method for Limiting Deer-Vehicle Collisions.
Christopher Wadley	Senior	Customizable Video Gesture Recognition Interface for Smartphone using MediaPipe Hands and Machine Learning Algorithms
Connor Starkey	Senior	Developing a Web Communication Debris Evasion System of LEO CubeSats

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Superior		
Ben Emory	Junior	Oxygen, the New Way of Life
Kennedy Wright	Junior	Friend or Foe: Fruit Snacks
Mikayla Joseph	Junior	Pollution Solution
Connor Hannigan	Junior	Barrier Brawl
Matt Kelley	Junior	Lockdown
Chase Benedick	Junior	Clingy Cleats
Maddox Sublette	Junior	Finding the Ocean Cure: A Natural and Effective Way to Safely Remove Oil From Water
Rainier Sode	Senior	The Effects of Light Pollution on the Circadian Rhythms of <i>Blattella germanica</i>
Torri Smith	Senior	Slowing the Onset of <i>Botrytis</i> Fruit Rot in Store-Bought Strawberries: An Investigation of Fungicide Treatments
Layla Strickland	Senior	Application of Potassium Bicarbonate and Hydrogen Peroxide for use Against the Protozoan Parasite <i>Ophryocystis elektroscirrha</i>
Ayden Meckley	Senior	Surveying Feminine Hygiene Products for Per- and Polyfluoralkyl Compounds Utilizing Particle Induced Gamma Ray Emissions Spectroscopy (PIGE) coupled with Supplementary Analytical Testing Methods
Kameron Compton	Senior	Arrhythmia in the water flea <i>Daphnia Magna</i> treated with Coenzyme Q10
Owen Howser	Senior	Quieting the Rumble: The Engineering of a Modified Noise Reduction Rumble Strip Employing Destructive Interference
Keith Bass	Senior	A Study on the Qualifications of Ultraviolet (UV) Light Resistant Polycarbonate Plastics for Potential Applications in Nuanced Space Suit Components
Larry Quade	Senior	Creating a Magnetic Field Detector to Keep Pacemakers Away From Magnetic Fields

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Excellent		
Sadie Rinck	Senior	Treatment of Bacterial Cold Water Disease in <i>Oncorhynchus mykiss</i> through usage of Far-UVC light