

2024 Central Magnet School STEM Expo

Biomed	Engineering	Psychology
Sarah Gwen Arnold -- B19 The Effects of Intrinsic and Extrinsic Motivation Stimuli on Motivation in Fitness	Ethan Adams -- E21 Designing a System to Mitigate Flood Damages in West African Farmlands	Lindsay Arbez -- P24 Beyond Sibling Rivalry: The Impacts of Competitive Academic Environments on Twins
Ella Bracy -- B1 Assessing the Effectivity of Chemical Solutions in Breaking Down the Synthetic Fabrics of Fast Fashion Garments	Luke Anguish -- E1 Reusable Architecture Model	Olivia Arbez -- P24 Beyond Sibling Rivalry: The Impacts of Competitive Academic Environments on Twins
Lola Brown -- B24 The Effects of Mindful Eating on High School Students in an Academically-Driven Environment	Josh Bartolotto -- E2 Foam Roller Sleeve	Amelie Burleson -- P26 The Impact of the Emergency Foster Care System on Foster Caregivers

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<p>Lucas Davis - B29 A Study of the Effectiveness of Insecticides in Cattle</p>	<p>Mason Brown -- E3 Safe Surf: The Reliable Wake-Surfing Experience</p>	<p>Gracee Carmichael -- P 16 The Effects of Red Coloring on Short-Term Memory and Recall</p>
<p>Jackie Dummermuth --B5 Measuring the Variances in Decomposition of Pork Ribs in Multiple Soil Varieties</p>	<p>Ashton Bryant -- E4 Zen Shade: a Conical Hat to Minimize UV Exposure</p>	<p>Kate Chappin -- P13 Sleep Deprivation and its Effects on Memory Performance and Long-Term Memory Disorders</p>
<p>Garrett Florida -- B17 How Stretching Effects Vertical Jump Height and Flexibility</p>	<p>Jett Bryant -- E5 Lunar Dust Remover</p>	<p>Daniel Chera -- P4 Learned Optimism and Its Effects on Academics</p>
<p>Nicole Garza -- B3 Effectiveness of Zumba and Low Potassium and Nitrate Fruits and Vegetables on Lowering BP of a Medicated Hypertensive Subject</p>	<p>Alijah Dean -- E6 Braille Payment Cards: Innovation for the Visually Impaired</p>	<p>John Cook -- P5 Pregame Behaviors' Effects on Feelings and Statistical Performance</p>

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<p>Madelyn Fautino Gaunt -- B22 A Comprehensive Guide to Pacifiers and its Effects</p>	<p>Bryan Dowell -- E7 The Tiger Wall</p>	<p>Maddie Degnan -- P28 The Effect of Tactile Stimulation on Eyewitness Memory</p>
<p>Harper Guthrie -- B28 The Correlation Between a Sunscreen's SPF Rating and its Ability to Block Ultraviolet (UV) Light</p>	<p>Jean Drugmand -- E8 M.A.I.S: Expanding Agricultural Horizons</p>	<p>Katelyn Donahue -- P27 The Effects of Parenting Styles on Adolescent Stress and Anxiety</p>
<p>Jaydn Hayes -- B2 Crime Show Viewing and its Effects on Students' Opinions Regarding Aspects of Crime Scene Investigation</p>	<p>Eli Fearn's -- E9 The Plate Saver</p>	<p>Bella Donaldson -- P31 Vulnerability To Stress Induced Illness in High Achievers Compared to Average Individuals</p>
<p>Jakob Howard - B31 Revision of Guidelines for Organ Transplants: Proposing a Framework for Equitable Allocation and Treatment</p>	<p>Jackson Foster -- E10 The Better Helmet</p>	<p>Ella Edge -- P19 Grapheme-Color Synesthesia and its Relation to Stronger Memory</p>

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<p>Aylssa Kini --B8 Alignment of Physical and Psychological Test Results Following an ACL Tear</p>	<p>Zach Gardner -- E11 Ultimate Launch: Frisbee Launcher</p>	<p>Kaitlyn Elliott - P32 The Effects of the Daily Practices of Adolescents on Their Quality of Sleep</p>
<p>Noah Koenig -- B25 Effect of Increased Protein on Student Cognition</p>	<p>The Kimberly Guerra - E12 Timing Diffuser</p>	<p>Makena Griggs -- P22 The Effects of Student's Social and Emotional Intelligence on Academic Burnout</p>
<p>Maddy Lane -- B32 The Eradication of Invasive English Ivy</p>	<p>Mikayla Harris -- E13 Central Event Center: Designing an Affordable Event Venue Space for Middle Tennessee</p>	<p>Adriana Guevart P12 The Effects of Employment on Central Magnet High Schoolers' Academic Achievement and Academic Stress</p>
<p>Logan LaPointe --B23 The Effect Of Sleep Quality and Quantity on Reaction Time of College Basketball Athletes</p>	<p>Wyatt Kelton -- E22 The Agility Training Grid</p>	<p>Reily Gusman -- P3 The Effect of Birth Order on Self-Talk</p>
<p>Daniel Le --B10 Rheumatoid Arthritis and its Relation to Gut Permeability Gene Expression</p>	<p>Hau Lamkai -- E7 The Tiger Wall</p>	<p>Julia Ann Hamiton -- P23 NIL Education and Physiological Strain in DI Collegiate Athletes</p>

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<p>Bella Longa-Robinson --B13 Analysis of Various Substances on Bacterial Beauty Sponges</p>	<p>Alex Marson -- E14 Drum Stax</p>	<p>Sophie Harrell -- P1 The Effect of Parenting on Child Development and Social Interaction</p>
<p>Brennan Martin -- B32 The Eradication of Invasive English Ivy</p>	<p>Rachel Oppmann -- E15 Customizable Set Diorama for Student and Community Set Designers</p>	<p>John Hays -- P7 The Relationship Between Self-Efficacy and Self-Talk in Male and Female Basketball Players</p>
<p>Dawson McCrary -- B17 How Stretching Effects Vertical Jump Height and Flexibility</p>	<p>Vinny Peck -- E9 Plate Saver</p>	<p>Marlee Johnson -- P10 Hardships of Healthcare: Analyzing the Stress Levels of Healthcare Workers</p>
<p>Addison Melton --B18 The Effects of a Basketball Season on the Stress Levels of Female Basketball Players</p>	<p>Stefen Scarvell -- E6 Braille Payment Cards: Innovation for the Visually Impaired</p>	<p>Savannah Johnson -- P21 The Effect of Academic Competition and Comparison on High School Students' Self-Efficacy</p>
<p>Trinity Mertz --B9 The Effects of Differing Peroxide Concentrations on the Whitening Ability of Dental Bleaching Products</p>	<p>Ethan Smith -- E16 The Fryguard: A Hot Oil Protection Device</p>	<p>Sarah Jones -- P11 Impacts of Covid-19 on Elementary and Middle School Education</p>

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<p>Claudia Mitchell -- B28 The Correlation Between a Sunscreen's SPF Rating and its Ability to Block Ultraviolet (UV) Light</p>	<p>Trevor Stevens -- E 17 Preventing Clavicle Fractures Using a Magnetic Apparatus</p>	<p>Evan Keegan -- P17 The Effects of Self-Reported Entitlement on Prevalence of Risky Driving Behaviors</p>
<p>McKayla Nolan -- B12 Comparative Efficacy Spray and Lotion Sunscreens in Skin Protection with Human Application</p>	<p>Haydn Suerstedt -- E18 HERMES: The Electromagnetic Cargo Transport Network</p>	<p>Claire Lee -- P2 The Link Between Extracurricular Activities and Academic Stress</p>
<p>Noella Obi -- B16 An Analysis on Gender of Coach and the Effect on High School Female Student Athlete Mental Health, Self-Efficacy, and Performance</p>	<p>Tasman Takayama -- E4 Zen Shade: a Conical Hat to Minimize UV Exposure</p>	<p>Jillian Londre -- P8 Different Grading Scales and Their Effects on a Student's Cognitive Abilities</p>
<p>Mesom Okafor -- B26 A Different Approach to Ammonia Detection</p>	<p>Jace Traugher -- E10 The Better Helmet</p>	<p>Carter Long -- P5 Pregame Behaviors' Effects on Feelings and Statistical Performance</p>

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<p>Ava Oliva --B20 Similarities Between Insect's Color Sensitivities, and their Primary Color Preferences when a Reward is Presented</p>	<p>Johnathan Warner -- E19 The Nashville Monorail</p>	<p>Andy Loughry -- P29 Home Advantage and the Impact of Crowd Size on Performance</p>
<p>Nij Patel -- B11 The Effect of Partial Repetitions After Failure on Strength Improvements</p>	<p>Austin Webb -- E20 Modular Octocopter Drone</p>	<p>Jake Maddox -- P20 The Effects of a Music Presence and Self-Efficacy on Shooting Percentage of High School Men's Basketball Players</p>
<p>Jake Petty --B7 Correlational Analysis of Eye Color vs. Personality and Motor Control</p>	<p>Hank Wells -- E14 Drum Stax</p>	<p>Alli Malone -- P14 The Impact of Familiar and Unfamiliar Music on Mood and Stress Levels</p>
<p>Carly Phillips -- B16 An Analysis on Gender of Coach and the Effect on High School Female Student Athlete Mental Health, Self-Efficacy, and</p>	<p>Ty Yoders - E16 The Fryguard: A Hot Oil Protection Device</p>	<p>Reilly McMillian -- P33 The Effects of Burnout on High Achieving Highschoolers</p>

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<p>Aleeza Razzaq -- B5 Measuring the Variances in Decomposition of Pork Ribs in Multiple Soil Varieties</p>		<p>Payton Nicholson -- P6 The Effect of Birth Order on Objective and Subjective Academic Achievement in High Achieving High School Environments</p>
<p>Dominick Shelton-Pisut -- B15 Do Leukocyte Counts Differ between Bold and Less Bold Turtles?</p>		<p>Ayana Perry -- P3 The Effect of Birth Order on Self-Talk</p>
<p>Hayden Staines --B6 Virtual Reality and its Effects on Memory</p>		<p>Mason Putnam -- P 15 Short-term Stress Synchronization in the Human-Dog Relationship</p>
<p>Emalee Tang -- B14 Breaking Barriers to Equal Care: Increasing the Middle Tennessee Lao Community's Access to Accommodating Healthcare</p>		<p>Edith Rust -- P13 Sleep Deprivation and its Effects on Memory Performance and Long-Term Memory Disorders</p>
<p>Kirmina Wageh -- B4 The Extensiveness of Passive Screen Time's Impact on Academic Focus</p>		<p>Maftunakhon Saidkhodjayeva -- P25 Student Perceptions of People Experiencing Homelessness</p>

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<p>Ethan Wahl -- B21 An Analysis of the Effect of Corrective Eyewear on Visual Acuity</p>		<p>Nathan Stewart -- P29 Home Advantage and the Impact of Crowd Size on Athletic Performance</p>
<p>Kaydee Watkins -- B27 Stress and Gratitude Journaling for Reducing the Stress of Living with an ADHD Sibling</p>		<p>Joson Thenthirath -- P30 The Effects of Social Media on Body Image in Adolescents</p>
		<p>Anastasia Volkova -- P18 The Effects of Color on Brain Activity and Memory Retention</p>
		<p>Aubrey Walters -- P9 Perceived Efficacy of Non-directiveness in the Central Magnet Writing Lab</p>
		<p>Amaya Warren -- P4 Learned Optimism and Its Effects on Academics</p>

Biomed

Engineering

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Carson Wood -- P30

The Effects of Social Media on Body Image in Adolescents

Owen Zubkus -- P20

The Effects of a Music Presence and Self-Efficacy on Shooting Percentage of High School Men's Basketball Players