

ARKANSAS STATE UNIVERSITY



Welcome



Welcome to our 14th annual Create@State event, A-State's celebration of student research and creativity. It is an honor to host this year's event, and I am thrilled to see (and hear!) the projects that students have generated in the last year. Research, innovation, and discovery are the backbone of American higher education, and independent and faculty-mentored research and creative projects provide students the skills they need to be ready for their next steps, whether that means additional education or the workforce. Big thanks to our Director for Student Research, Kari Harris, and our Director of Technology Transfer, Luna Acosta, for leading the preparation for this year's event. We have re-envisioned Create@State to highlight and celebrate the products and successes of our students.

Best regards,

Travis D. Marsico, Ph.D.

Vice Provost for Research, Innovation, and Discovery
Executive Director of the Arkansas Biosciences Institute
at Arkansas State University
Professor of Botany



Celebrating Research

April 18, 2024

Showcase of Creativity

9:30 a.m. - 11:30 a.m.

Heritage Plaza Lawn

Music, Art, History, Engineering and more!



Showcase of Creativity

9:30 AM – 11:30 AM ● Heritage Plaza Lawn

Create@State Outdoor Concert

Presented by the A-State Department of Music

X1 (8:00)

Erik Morales

A-State Trumpet Quintet:

Grayden Fields, Carlos Mejia, Jeremiah Hendrix, Zane Kenzik and Audrey Alpha

Finlandia (8:00)

Jean Sibelius

Adagio from the Organ Symphony (5:00)

Camille Saint Saëns

A-State Tuba & Euphonium Ensemble:

Euphoniums: Lari Norwood, Charlie Dixon, Blake Goforth, Drew Walker, Jess Crum

Tubas: Travis Slaughter, Peyton Stapleton, Calem Sykes, Cyler Hilton,
Jackson Manlove, Tyler Chamberlain, Ethan VanDon

Trio per Uno, Mvt. 1

Nebojsa Jovan Zivkovic

Vertex Percussion:

Matthew Hardin, Joshua Huffstutler, Tanner Tyler

Canzona (3:00)

Walter Hartley

A-State Trombone Ensemble:

Jacob Botwinick, Zander Burnett, Ethan Campagna, Faith Carson, Charlie Dixon, Jack Ezell,
Chase Gallentine, Kristen George, Jason Johnson, Lari Norwood, Alex Pequignot, Rike Robinson,
Kari Sexton, Selah Winn

Arsenal (3:00)

David Oz

Long I Stood (4:00)

James Naigus

A-State Horn Choir:

Ellie Dean, Landon Wiley, Tori Beckett, Dustie Hall, Molly Boroughs, Dagan Lillard,
Austin Crouse, Zane Jones, Andrew Baldrige, Marco Aguilar

Participating Faculty: Dr. Ed Owen, Dr. Brian Graiser, Dr. Juli Buxbaum, Dr. Bruce Faske, Dr. Nairam Simoes

Showcase of Creativity

9:30 AM – 11:30 AM ● Heritage Plaza Lawn

College of Liberal Arts and Communication

ASU TV

Johnathan Reaves
School of Media and Journalism

Barbie Unboxed

Myleea Hill and Sarah Scott
Department of Communication

Makeup Gore Theater

DayDay Robinson
Department of Theater

Tributary

Jessica Tran and Kerri Bennett
Department of English and Philosophy

Pre-Law Society

Jake Strawn, Dean McDonald, Nathaniel Reeves
Department of Political Science

Crime Scene Demonstration

Jaemin Lee
Department of Sociology and Criminology

Student Composers in Concert

Organized by Tim Crist
Department of Music

The Guitar Guild

Camdon Cobb, President
Organized by Tim Crist
Department of Music

For Joshua: A Handmade Book of Photographs

Shelby Russom and Rachel Boillot
Department of Photography

Showcase of Creativity

9:30 AM – 11:30 AM ● Heritage Plaza Lawn

College of Engineering and Computer Science

Concrete Canoe

Organized by Jason Stewart
Civil Engineering

Steel Bridge

Organized by Jason Stewart
Civil Engineering

Honors College at Create@State

You are invited to attend the thesis defense of **Abigil Avery** at 1:00 PM in the Arkansas River Room; 3rd floor of the Reng Student Union

Defense Title: Analyzing the Effect of the Covid-19 Pandemic on Student Academic Performance

Visit the Honors College Association table at Create@State!

Morning – Showcase of Creativity
Afternoon – 1:30PM- 3:30PM, 3rd Floor of Student Union

Play@State

Communication Disorders students and advisor Arianne Pait have prepared a jeopardy-like game for students to play!

Join them in the White River Room from 1:30 - 2:30 PM

Gamification: Promoting learning in a new era through cooperative and engaging tactics



April 18, 2024

Plenary:

*Spark the Fire –
Unveiling the Secrets of
Compelling Communication*

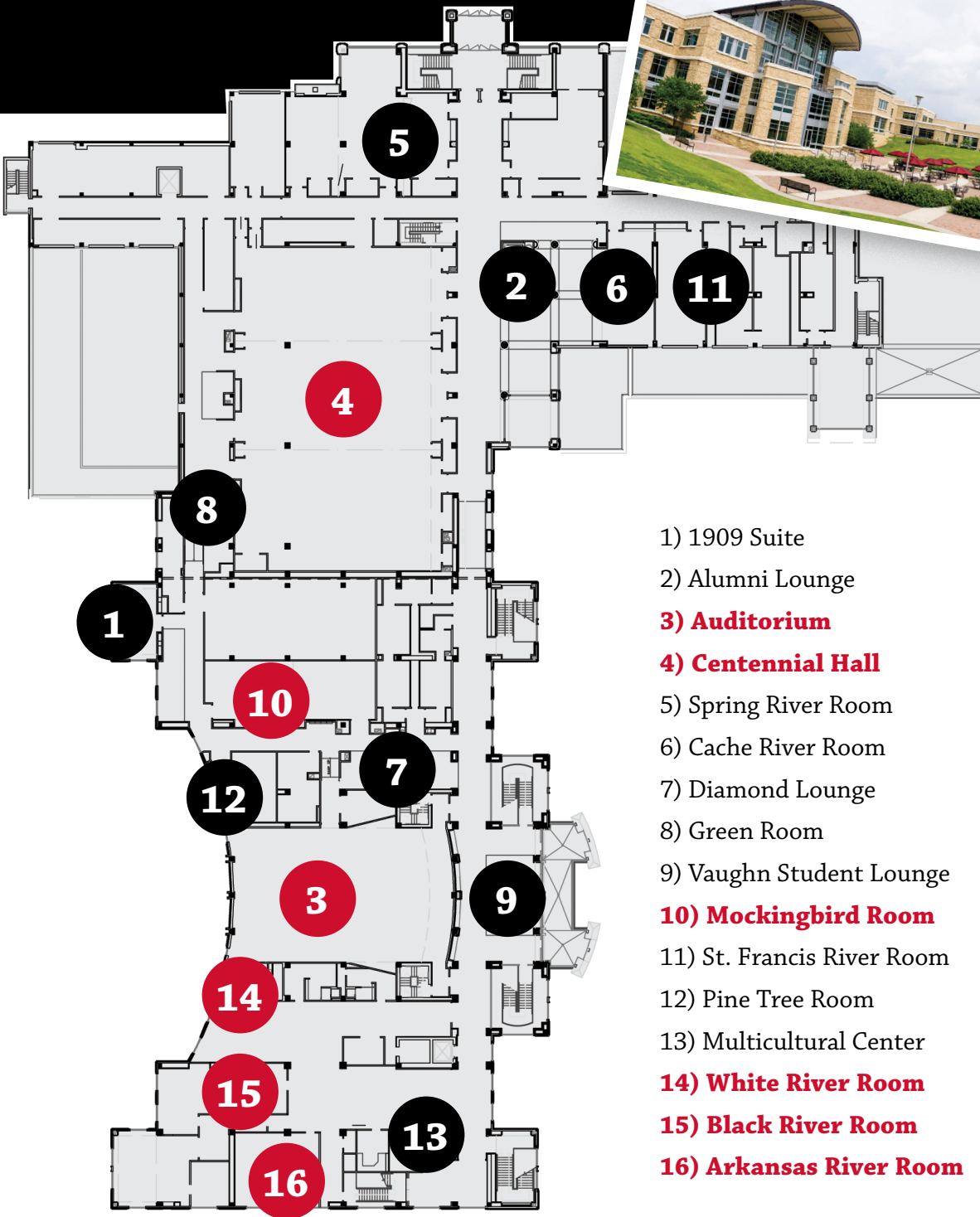
Dr. Chris Jones and
Dr. Meredith Adkins

12:00 p.m.

Reng Student Union Auditorium

Unlock the power of storytelling as a tool to effectively communicate research findings to the world. Panelists will share their real-life experiences with communicating complicated knowledge in ways that excite, inspire, and engage their audiences.

Reng Student Union Third Floor



- 1) 1909 Suite
- 2) Alumni Lounge
- 3) Auditorium**
- 4) Centennial Hall**
- 5) Spring River Room
- 6) Cache River Room
- 7) Diamond Lounge
- 8) Green Room
- 9) Vaughn Student Lounge
- 10) Mockingbird Room**
- 11) St. Francis River Room
- 12) Pine Tree Room
- 13) Multicultural Center
- 14) White River Room**
- 15) Black River Room**
- 16) Arkansas River Room**

● Room Used
● Room Not Used



April 18, 2024

**Poster Reception and
Ice Cream Social**

**1:30 p.m. - 3:30 p.m.
Reng Student Union
Centennial Hall**

*Over 150 graduate and undergraduate poster presentations
representing eight academic colleges.*

Headshot Studio and Career Closet

**9 a.m. - 11:00 a.m.
1:30 p.m. - 4 p.m.
Reng Student Union
Mockingbird Room**

*Professional headshots will be available for students.
If you need to borrow something to wear,
check out the career closet before taking your photo!*

Poster Presentations

College of Agriculture

1	The Influence Of Production Systems And Irrigation On Cotton Maturity And Yield By: Jennifer Hinojosa Faculty Mentor: Tina Teague
2	Chasing Methane: Exploring The Potential Of The Li-Cor Li-7810 Trace Gas Analyzer By: Nikki Arivel Larazo Faculty Mentor: Arlene Adviento-Borbe
3	The Relationship Change Between Corn, Ethanol, And Gasoline Prices Before And After The Covid-19 Pandemic By: Zackery Holloway Faculty Mentor: Gwanseon Kim
4	Investigating The Impact Of Soybean Cyst Nematode On Arkansas Soybean Production By: Rachel Davis Faculty Mentor: Gwanseon Kim
5	Analysing The Impacts Of Health, Education, And Standard Of Living On Human Development By: Fuka Noguchi Faculty Mentor: Gwanseon Kim
6	The Predicted Economic Impact Of The Established College Of Veterinary Medicine At Arkansas State University By: Zeke Sanders Faculty Mentor: Jacob Manlove
7	The Utility Of Two Commercially Available Sensors For Measuring Soil Moisture In Cotton By: Katerina Douglass Faculty Mentor: Nelson Benson

Poster Presentations

Neil Griffin College Of Business

8	Abstract For Gender Differences In Personal Liquidity By: Mary Jones Faculty Mentor: Matthew Hill
9	Future = Ai + Database : Proposing The Collective Academic Database To Manage Ai In Academic Environments By: Seungho Jeon Yeon-Mi Park Faculty Mentor: H. Steve Leslie
10	Future Of Education And The Development Of Ai By: Shunsuke Yachi Faculty Mentor: H. Steve Leslie
12	Forecasting Fortunes: Exploring The Relationship Between Inflation And Bitcoin Prices Post-Pandemic. By: Miles Richard Faculty Mentor: Huiqiang Wang
13	How To Win More Matches In Liv Golf Tournaments: Understanding The Relationship Between Hitting Fairways, Hitting Greens, And Putting Average Compared To Overall Performance By: Austin Jones, Fletcher Latting, Justin Parks Faculty Mentor: Hoyeol Yu
14	Spreading Wealth And Wellness By: Lauren Maness, Addison Fithen, Emily Willett, Jalene Tolbert Faculty Mentor: Melanie Ricker
15	"Digits And Debits: Deciphering The Digital Discourse On Changes To The Accounting Profession And Certification Processes" By: Nahida Islam Faculty Mentor: Hrishikesh Desai

Poster Presentations

College of Engineering and Computer Science

16	Sustainable Approach To Produce Ecofriendly Concrete Containing Brick Chips And Waste Tire Rubber As Aggregates By: Md Torikul Islam Faculty Mentor: Zahid Hossain
17	Cyberattack Detection Using Machine Learning Algorithms By: Fazla Rabbi Faculty Mentor: Niamat Ullah Ibne Hossain
18	Predicting The Cardiovascular Risk Using Machine Learning Classifiers. By: Saroj Raut, Fazla Rabbi Faculty Mentor: Dr. Niamat Hossain
19	Assessing Aggregate Binder System's Moisture Susceptibility Through Physicochemical Characterization By: Khaja Sameer Sadat Faculty Mentor: Zahid Hossain
20	Air Content Variation In Concrete At Different Stages Of Its Lifecycle By: Mohammadsarfaraz Uddin Faculty Mentor: Zahid Hossain
21	Heat Transfer Enhancement In Cold Plate Heat Exchangers Using Vortex Generators By: Montgomery Miller Faculty Mentor: Jeongmoon Park
22	A Novel Hybrid Evolutionary Algorithm For Economic Dispatch In Power Systems By: Partho Das Neer Faculty Mentor: Ehsan Naderi
23	Protecting Power Grid With Image Classification By: Aravind Sanikommu Faculty Mentor: Shubhalaxmi Kher

Poster Presentations

24	Image Classification For Impaired Vision Using Deep Learning Toolbox By: Yaqub Suleymanov Faculty Mentor: Shubhalaxmi Kher
25	Rubens Tube Acoustic Standing Waves By: Huy Huynh Faculty Mentor: Shivan Haran
26	Baja Sae - Drivetrain Design By: Morgan Diamond, Noah Sanders, Christian Stremming, Ryan Reynolds Faculty Mentor: Shivan Haran
27	Design Of A Motion Stabilization Platform By: John Lindner Faculty Mentor: Shivan Haran
28	Automation Of A Robot Using Vision-Based System By: Jeannette Strano Faculty Mentor: Shivan Haran
29	Design And Fabrication Of An Industrial Sorting System By: Jeannette Strano, Tuan Kiet Vuong Faculty Mentor: Shivan Haran
30	Design Of A Vibration Control Experiment By: Tuankiet Vuong Faculty Mentor: Shivan Haran
31	Korean Language Character Recognition Using Convolutional Neural Network By: Minsoo Kim Faculty Mentor: Shubhalaxmi Kher
32	Road Safety Analysis Of Jonesboro, Ar By: Cade Bennett Faculty Mentor: Zahid Hossain
33	Fluid Analysis Of Venturi Meter Using Ansys Fluent By: Takehito Sezai Faculty Mentor: Jeongmoon Park

Poster Presentations

College of Education and Behavioral Science

34	Children's Motivation To Read In The Modern World: An Action Research Study By: Paige Burns Faculty Mentor: Ryan Kelly
35	High School Advisory Program Impact On Graduation Rate By: Tracy Childers Faculty Mentor: Ryan Kelly
36	Investigating The Impact Of Collaborative Approaches On Reading Comprehension In Elementary Education By: Crystal Swiney Faculty Mentor: Dr. Ryan Kelly
37	Examining The Influence Of Student Autonomy, Student Competence, And Student-Teacher Relatedness On Student Performance On High-Stakes Tests By: Jennifer Gaston Faculty Mentor: Ibrahim Duyar
38	Perspectives Of Novice Teachers To Prepare For And Work Equitably With Students With Attention-Deficit/Hyperactivity Disorder By: Marilyn Hunt Faculty Mentor: Timberly Baker
39	The Impact Of Neuromuscular Training On Acute Ankle Injury Prevention In High School Female Athletes By: Reagan Counts Faculty Mentor: Veronika Pribyslavska
40	Batting Analysis In Mlb: Examining The Correlation Between Left And Right Handed Batters And Their Batting Average, On-Base Percentage, Most Strikeouts, Most Runs Batted In By: Ryan Cranford, Abigail Thurmerholly, Stallsjack Hevesy Faculty Mentor: Hoyeol Yu
41	Impact Of Fastball Spin Rate On Earned Run Average By: Ethan Odom, Seidai Yoshida, Spencer Johnson Faculty Mentor: Ho Yu

Poster Presentations

42	<p>Quarterback Rushing And Passing Yards Affect The Win Percentage Between Different Professional Divisions By: Blaine Sears, Tristian Smith, Trevian Thomas, Dylan Wallis Faculty Mentor: Hoyeol Yu</p>
43	<p>A Breakdown Of Home Field Advantage In The Nfl, And How Fan Attendance Impacts Winning Percentage. By: Brody Bearden, Jalen Farmer, Savanna Wilson Faculty Mentor: Hoyeol Yu</p>
44	<p>Where Are The Fans? By: William Blake Faculty Mentor: Hoyeol Yu</p>
45	<p>Support And Services For Youth In The Foster Care System By: Madelyn Cunningham Faculty Mentor: Minghui Gao</p>
46	<p>Student Apathy: Effects on Reading Achievement By: Demetris Isaac Faculty Mentor: Ryan Kelly</p>
47	<p>Academic Dishonesty: The Relationship Between Emotional Intelligence, The Dark Triad, And Cheating Behaviors By: Quinn Hodges Faculty Mentor: Jessica Curtis</p>
48	<p>I'm So Lucky, Everything Works Out For Me: Daily Affirmations, Lucky Girl Syndrome, And The Relationship Between Self-Affirmation And Anxiety By: Quinn Hodges, Mary Henson Faculty Mentor: Jessica Curtis</p>
49	<p>Online Dating Safety Practices By: Paige Cox, Sarah Hooker, Heidi Madsen Faculty Mentor: Jessica Curtis</p>
50	<p>Physical And Verbal Aggression Perception In Social Media By: Josie Roark, Fallon Backus, Shelby Taylor, Jayden Garrett Faculty Mentor: Jessica Curtis</p>
51	<p>High School Dress Codes And Sexism Later In Life By: Lynley Polsgrove Faculty Mentor: Karen Yanowitz</p>

Poster Presentations

52	<p>Attractiveness And Its Impact On Perceptions Of Stalking By: Ashlee Davis, River Cates, Laney Stout Faculty Mentor: Karen Yanowitz</p>
53	<p>Exploration Of Memory And Learning In Blaberus Discoidalis By: Eric Barnes Faculty Mentor: Kristin Biondilillo</p>
54	<p>The Path To Light Escape Behavior In Blaberus Discoidalis By: Eric Barnes, Quinn Hodges Faculty Mentor: Kristin Biondilillo</p>
55	<p>Picture Or Profile? By: Courtney Mohr, Laynee Burnett, Quinn Hodges, Allie Robb Faculty Mentor: Jessica Curtis</p>
<p>College of Liberal Arts and Communication</p>	
56	<p>Customer Perceptions Of Utility Provider Media By: Halle Coleman Faculty Mentor: Mary Jackson Pitts</p>
57	<p>Adapting To Tech-Savvy Audiences In The Digital Era: A Case Study Of Sagarmatha Television's Social Media Content Strategy By: Prasanna Dhungana Faculty Mentor: Lily Zeng</p>
58	<p>Media Framing On Transportation, Agriculture, Economy, And Gasoline In The Russia-Ukraine War By: Sk Farhan Rabbi Faculty Mentor: Po-Lin Pan</p>
59	<p>Portraying Female & Children In Israel And Palestine War. By: Zinnia Sheikh Faculty Mentor: Manu Bhandari</p>
60	<p>How Plural Systems Communicate With Each Other And The Outside World By: Trenton Thompson Faculty Mentor: Dinah Tetteh</p>

Poster Presentations

62	A New Era: The Positive Shift In Juvenile Interrogation Rights In The United States By: Anna Hartley Faculty Mentor: Stacy Dewald
63	Demystifying Artificial Intelligence By: Lindsay Ainsworth Faculty Mentor: Leslie Parker
64	Can Ai Benefit Our Campus? By: Sharline Vanpelt, Alex Holland Faculty Mentor: Leslie Parker
65	Miscommunication In The Field Of Athletic Training: Solutions From Current Educational Approaches By: Shota Irie Faculty Mentor: Dinah Tetteh
66	Barbie And Othering: A Cultural Textual Analysis By: Christina Smith Faculty Mentor: Sarah Mayberry-Scott
67	Don't Pick Up: An Analysis Of Campaign Strategy Shifts Post-Pandemic By: Richard Cook Faculty Mentor: Jonathan Smith
68	Local Jurisdiction Website Coding: Does Rurality Matter? By: Jacob Strawn Faculty Mentor: Cameron Wimpy
69	Compassion Of Care: The Premodern Precursor To Palliative Care By: Julien Mieirs Faculty Mentor: Joseph Castro

Poster Presentations

College of Nursing and Health Professions

70	Facilitating Better Literacy Outcomes In First And Second-Grade At-Risk Readers At An After-School Program By: Brooke Goldhammer Faculty Mentor: Christina Akbari
71	Effectiveness Of Life Skills Training To Increase Self-Sufficiency In Individuals With Substance Abuse: A Research Study By: Shayla Dickson Faculty Mentor: Andrea Brown
72	Number Of Core And Lower Extremity Injuries During The 2023 Nfl Season On Grass Vs. Turf Field By: Wyatt Barnes Jared Woodward Faculty Mentor: Scott Bruce
73	Publication Record Of Caate Accredited Athletic Training Program Faculty By: Emily Clark, Elizabeth Frey Faculty Mentor: Scott Bruce
74	A Comparison Of Reaction Time In Military Between Those With Or Those Without A Concussion History By: Mariquita Cotten Faculty Mentor: Scott Bruce
75	A Comparison Of Pupillary Light Reflex Between Two Different Phone Apps By: Presley Pierce, Jenna Love Faculty Mentor: Scott Bruce
76	Effect Of Perceptual Response Training Series On Reaction Time In Men's Collegiate Division I-A Club Rugby Players By: Kaitlin Yelton, Courtney Winters Faculty Mentor: Scott Bruce
77	Effective Occupational Therapy Intervention Approaches In Stroke Rehabilitation: Comparing Constraint-Induced Movement Therapy, Mirror Therapy, And Electrical Stimulation By: Kallie Alexander, Tinsley Clark, Sarah Brown Faculty Mentor: Amanda Carpenter

Poster Presentations

78	<p>Occupational Therapy's Role With Those Affected By Mental Illness Within The Homeless Community By: Katie Cunningham, Calin Clark, Abby Kincade, Noel Walters Faculty Mentor: Amanda Carpenter</p>
79	<p>Occupational Therapy Interventions Focused On Feeding And Eating For Children With Autism Spectrum Disorder (Asd) By: Katelyn Murphy, Madi Wood Faculty Mentor: Amanda Carpenter</p>
80	<p>Virtual Reality Methods In Occupational Therapy To Improve Client Motivation By: Mehak Rajani, Danielle Harris, Allison Landreth, Jordan Profit Faculty Mentor: Amanda Carpenter</p>
81	<p>The Use Of Telehealth In Occupational Therapy: A Scoping Review By: Madison Savage, Abby Bruff, Darcie Gibson, Emily Nichols Faculty Mentor: Amanda Carpenter</p>
82	<p>Exploring Evidence-Based Occupational Therapy Interventions Addressing Cognition And Lymphedema Impairments Secondary To Breast Cancer By: Ansley Simmons, Krysta Nash Faculty Mentor: Amanda Carpenter</p>
83	<p>Implementing A Foot Screening Project For Diabetic Patients In An Assisted Living Facility By: Beatrice Bailey Faculty Mentor: Sarah Davidson</p>
84	<p>Neckslevel: Exercise Intervention For Neck Pain By: Mattison Davis, Taylor Valentine, Peyton Lace, Elizabeth Padgett, Bryson Woods Faculty Mentor: Jim Farris</p>
85	<p>Local Anesthetic Systemic Toxicity Cart And Policy: Implementation And Education In An O.R. Department By: Lawrence Gardanier Faculty Mentor: L. Todd Hammon</p>
86	<p>Decreasing Opioid Adverse Drug Events And Enhancing Recovery After Thoracic Surgery Using Erector Spinae Plane Block: An Educational Project By: Brennan Jones Faculty Mentor: Lee Hammon</p>

Poster Presentations

87	<p>Educational Strategies On Precepting Burnout For Anesthesia Providers By: Gerardo Ruiz Faculty Mentor: Todd Hammon</p>
88	<p>Anesthetic Considerations For The Administration Of Sugammadex To Patients With Renal Failure Who Require Dialysis Or Take Steroidal Contraceptives By: Clay Patrick Faculty Mentor: Chris Ivy</p>
89	<p>Impact Of A Training To Increase Knowledge Of Behavioral Interventions In Acute Post-Surgical Pain By: Sean Clair Faculty Mentor: Cassandra Massey</p>
90	<p>Improving Anesthesia Provider's Knowledge On An Enhanced Recovery After Surgery Pathway For Mastectomy Patients Utilizing Pectoral Nerve Blocks By: Hannah Lutz Faculty Mentor: Cassandra Massey</p>
91	<p>The Effects Of Sugammadex On Hormonal Contraceptives: Education For Anesthesia Providers And Staff By: Darian Sims Faculty Mentor: Cassandra Massey</p>
92	<p>The Effects Of Imposter Phenomenon On Early Professional Athletic Trainers And Their Transition Into Practice By: Genita Smith, Jessica Gray Faculty Mentor: Carlitta Moore</p>
93	<p>Student Wellness In Anesthesia Programs By: Elizabeth Anderson Faculty Mentor: Armance White</p>
94	<p>Improving Anesthesia Provider's Knowledge On The Emetogenic Effects Of Sugammadex Vs. Neostigmine By: Madison Hightower Faculty Mentor: Armance White</p>

Poster Presentations

95	Local Anesthetic Systemic Toxicity (Last) Education For Nurses By: Troy Summerfield Faculty Mentor: Armance White
96	Improved Care Coordination Among Departments In Inpatient Rehab By: Madison Mears Faculty Mentor: Dr. Jessica Camp
97	Blockages In The Coronary Arteries: Why 70% Is The Magic Number. By: Nathan Brandon Faculty Mentor: Jessica Cooper
98	Patent Foramen Ovale Closure Procedure By: Madison Davis Faculty Mentor: Jessica Cooper
99	Heart Catheterization: The Right Amount Of Pressure By: Dakota Lightsey Faculty Mentor: Jessica Cooper
100	Pacemakers: How Cardiac Devices Are Changing Heart Disease By: Raney Minton Faculty Mentor: Jessica Cooper
101	Strokes: Why Healthcare Providers Must Befast By: Sarah Rendon Faculty Mentor: Jessica Cooper
102	Navigating Precision Medicine: The Role Of Robotics In Ct-Guided Biopsies By: Annalee Staton Faculty Mentor: Jessica Cooper
103	Navigating Precision Medicine: The Role Of Robotics In Ct-Guided Biopsies By: Annalee Staton Faculty Mentor: Jessica Cooper

Poster Presentations

104	Effects Of Interventional Radiologic Procedures On Quantity And Quality Of Life By: Lauren Stewart Faculty Mentor: Jessica Cooper
105	Benefits Of Intravascular Ultrasound In Diagnosing May-Thurner By: Michaela Tallmadge Faculty Mentor: Jessica Cooper
106	Deep Vein Thrombosis: A Complication Of Inferior Vena Cava Atresia By: Averie Vance Faculty Mentor: Jessica Cooper
108	Multiple Myeloma Prognosis And Lenalidomide By: Abigail Cline Faculty Mentor: Audrey Folsom
109	The Integration Of Artificial Intelligence Into Radiation Therapy Treatment Planning And Delivery By: Baylee Bowers Faculty Mentor: Jody Nutt
110	A New Option For Rural Healthcare: Mobile Radiation Therapy By: Catherine Couch Faculty Mentor: Jody Nutt
111	An Alternative Treatment Standard For Sickle Cell Disease Utilizing Radiotherapy By: Tavia Keys Faculty Mentor: Jody Nutt
112	What Causes Burnout Among Radiation Therapists? By: Madison Martin Faculty Mentor: Jody Nutt

Poster Presentations

113	Radiating Hope; Groundbreaking Treatment For Ventricular Tachycardia Using Radiation Therapy By: Mary Miller Faculty Mentor: Jody Nutt
114	A Comparative Study Of Flash Radiation Therapy Vs. Traditional Treatment Techniques By: Julie Newsom Faculty Mentor: Jody Nutt
115	Harnessing The Strength Of Optune Gio: Improving Quality Of Life In Patients With Glioblastoma Multiforme By: Chandler Roberts Faculty Mentor: Jody Nutt
116	Vegan Entrée "Earth's Finest Burger" By: Jack Bullard Faculty Mentor: Eric West
117	Plantcakes: A Healthy Alternative Packed With Micronutrients By: Madison Dettmer Faculty Mentor: Eric West
118	Ancient Grain Breakfast Pastry: "Grainy Goodies" By: Anna Young, Jonah Tiner, Leah Henson Faculty Mentor: Eric West
119	Student Wellness In Anesthesia Programs By: Elizabeth Anderson Faculty Mentor: Armance White
120	Fighting Mental Health Misdiagnosis By: Sydney Buchheit Faculty Mentor: Jessica Camp

Poster Presentations

Beck College of Sciences and Mathematics

121	Exploring Mode Of Action Of Novel Pyrazole Based Anti-Staphylococcal Agents Targeting Cell Wall And Cell Membrane By: Hansa Raj Kc Faculty Mentor: Mohammad Abrar Alam
122	Beyond Birds: An Argument For The Preservation And Enhancement Of The Ecosystem Services Of The Campus Bird Observatory By: Chenoa Summers, Molly Boroughs Faculty Mentor: John Artim
123	The Role Of Plant Phylogenetic Relatedness On Community Assembly In The Undisturbed Cherokee Prairie In Northwest Arkansas By: Chenoa Summers, Ben Benton Faculty Mentor: Scott Mangan
124	Spatial Modeling Highlights Risk Factors Of Colorectal Cancer Screening Patterns And Outcomes In Arkansas By: Johnna Berryhill Faculty Mentor: Sudeepa Bhattacharyya
125	A Preliminary Investigation Into The Gut-Liver-Brain Connection In Parkinson's Disease By: Raveena Ratnayake, Johnna Berryhill, Elizabeth Davis Faculty Mentor: Sudeepa Bhattacharyya
126	Water Quality In The North Fork Of The White River By: Jordan Bach Faculty Mentor: Jennifer Bouldin
127	Comparing Land Cover To Phosphorous Concentration In Four Ozark Streams By: Patrick Dyer Faculty Mentor: Jennifer Bouldin

Poster Presentations

128	<p>Temporal Variability Of Nutrients In The Eleven Point River Watershed, Arkansas. By: Karimot Shobowale Faculty Mentor: Jennifer Bouldin</p>
129	<p>Water Quality Measurements From Four Tributaries In The Arkansas Delta 2016 - 2022 By: Brittany Singleton, Amber Spence Faculty Mentor: Jennifer Bouldin</p>
130	<p>Aquatic Macroinvertebrate Diversity In Natural And Constructed Wetlands In Northeast Arkansas By: Helena Wheeler Faculty Mentor: Jennifer Bouldin</p>
131	<p>Do Snps And Microsatellites Support Previously Defined Management Units For The Endangered Cumberland Darter (Etheostoma Susanae)? By: Hilary Canada Faculty Mentor: Brook Fluker</p>
132	<p>Anti-Inflammatory And Antioxidant Properties Of Isoflavones From Elicited Pigeon Pea Hairy Root Cultures. By: Gaurav Gajurel, Salma Abdel-Karim Faculty Mentor: Fabricio Medina-Bolivar</p>
133	<p>Novel Long Noncoding Rnas And Inflammatory Markers In Aging-Related Hypothyroid Heart Failure With Preserved Ejection Fraction By: Sankalpa Chakraborty Faculty Mentor: Viswanathan Rajagopalan</p>
134	<p>Functional Characterization Of Uncharacterized Essential Gene Smu_393 In Streptococcus Mutans Ua159 By: Courtney Dover Faculty Mentor: Robert Shields</p>
136	<p>Epigenetic Insights Into Soybean Resistance: Dna Methylation's Role In Combating Phytophthora Sojae By: Sachleensingh Fnu Faculty Mentor: Asela Wijeratne</p>

Poster Presentations

137	<p>Elucidating Soybean Rhizosphere Functional Response To Sds Infection By: Phillip Miller, Kipa Tamrakar Faculty Mentor: Asela Wijeratne</p>
138	<p>Overcoming Challenges In Rna Preparation For Comprehensive Metatranscriptomic Profiling Of Soybean Rhizosphere By: Kipa Tamrakar, Phillip Miller Faculty Mentor: Asela Wijeratne</p>
139	<p>Novel Plant Cell-Based Strategy For Tnfa Neutralization In Inflammatory Bowel Disease By: Paula Perez Sanchez, Jonathan Trejo Martinez, Wenzheng Guo Faculty Mentor: Jianfeng Xu</p>
140	<p>Cytotoxic Effect Of Pigeon Pea Isoflavones In Triple-Negative Breast Cancer Cells By: Salma Abdel-Karim, Gaurav Gajurel Faculty Mentor: Fabricio Medina-Bolivar</p>
141	<p>The Effects Of Lead (Pb) Concentrations On The Immune System Of Red-Eared Sliders (Trachemys Scripta Elegans) By: Isabella Davis, Jennifer Terry Faculty Mentor: Lori Neuman-Lee</p>
142	<p>Potential Effects Of A9α10 Nicotinic Receptor Antagonists On Chronic Pain And Motor Deficits In Mice With Sciatic Nerve Injury By: Braden Ross Faculty Mentor: Jennifer Xie</p>
143	<p>Quantification Of Non-Structural Carbohydrate Reserves In Paddy Rice Plant Parts Using Fourier Transform Infrared Spectroscopy (Ftir) By: Keith Andzrej Monsalud, Kharla Mendez, Cheryl Quinoñes, Matthew Luster Faculty Mentor: Arlene Adviento-Borbe</p>

Poster Presentations

144	<p>Effects Of Degas Time And Temperature On Surface Area Of Titanium Oxide (Tio₂ - Rutile) By: Larrie Nation Faculty Mentor: Hashim Ali</p>
145	<p>Ascorbate Content Dynamics In Rice Under High Night Temperature (Hnt) Stress By: Brilee Petty Faculty Mentor: Argelia Lorence</p>
146	<p>Elliptic Curves As Mathematical Groups By: Victoria Nichols Faculty Mentor: William Paulsen</p>
147	<p>Genomic Strategies To Study Essential Biofilm Formation Genes In The Tooth Decay Pathogen Streptococcus Mutans By: James Goode, Ana Solano Morales Faculty Mentor: Robert Shields</p>
148	<p>Automated Similarity Analysis For Identification Of Homologs In Bacterial Species By: Emilio Soriano Chavez, Sangam Chudal, Courtney Dover Faculty Mentor: Robert Shields</p>
149	<p>Core-Cross Network Analysis Of Soybean Rhizosphere Microbiome After Infection With Fusarium Virguliforme By: Emilio Soriano Chavez, Kipa Tamrakar Faculty Mentor: Asela Wijeratne</p>
150	<p>Engineering “Designer” Biomolecules In Planta For Enhanced Biomass Processibility By: Daniela Perez Laguna Faculty Mentor: Jianfeng Xu</p>

Poster Presentations

151	Revolutionizing Biopharmaceutical Manufacturing In Plant Cells: Crispr/Cas9 Mediated Engineering Of Cell Wall-Deficient Tobacco Cells For Enhanced Therapeutic Protein Production By: Jacqueline Vargas Faculty Mentor: Jianfeng Xu
152	Cap1 (Cyclase-Associated Protein 1) Mediates Cyclic Amp (Camp) Regulation Of Breast Cancer Cell Adhesion And Migration By: Spencer Douglas, Auburn Ramsey, Rojina Sakha, Rutu Mahajan, Matthew Goodwin, Erina Miyajima, Lokesh Akana Faculty Mentor: Guolei Zhou
153	Optimizing Waxworm Diets For Metagenomic Analysis Associated With Plastic Degradation By: Mishka Jeevan Faculty Mentor: Maureen Dolan
154	Exploring Potential of Bacillaceae to Manage Soybean Sudden Death Syndrome By: Zach Rikard, Kipa Tamrakar, Amelia Roberts Faculty Mentor: Asela Wijeratne



ARKANSAS STATE
UNIVERSITY

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Congratulations to all of our winners.

*Thank you for your participation
in Create@State 2024.*



Thanks!

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