

TABLE OF CONTENTS

3 Letter from the President

Dr. Rodney Hanley

4 Council on Research for Regional Universities

5 Keynote Speaker

Shree Bose

6 Research Day Schedule

7 Acknowledgments

8 Poster Session I

8 Business & Administration

8 Education

11 Fine Arts & Design

12 Liberal Arts

14 Mathematics & Sciences

29 Poster Session II

29 Business & Administration

30 Education

32 Fine Arts & Design

33 Liberal Arts

34 Mathematics & Sciences

Letter from the President

On behalf of Northeastern State University, I am honored to welcome you to the 26th annual Oklahoma Research Day. This year, we are excited to host an outstanding event that brings together students and researchers from across the state to share their innovative work. It is truly inspiring to witness the depth of knowledge and creativity on display through the numerous research presentations and posters.

At NSU, we are proud to be recognized as Oklahoma's Immersive Learning Institution, where we understand the importance of hands-on training and real-world experiences. We know that providing opportunities for students and faculty to present their research is vital to fostering a deeper understanding of their fields and encouraging the exchange of ideas that shape future progress. Events like Oklahoma Research Day exemplify the power of collaboration and the impact that research has on our communities.

I would like to express my sincere appreciation to all those who have contributed to making this event a success, including our faculty, staff, students, and supporters. Your commitment to advancing knowledge is a testament to the value of research in building a stronger future for our state and beyond.

Please enjoy today's presentations, engage with your peers, and take full advantage of the opportunities to connect and grow. May your pursuit of knowledge continue to inspire and inform your future endeavors.

Sincerely,

A handwritten signature in black ink, appearing to read "Rodney S. Hanley". The signature is fluid and cursive, with a large initial "R" and "H".

Rodney S. Hanley, Ph.D.
President, Northeastern State University

COUNCIL ON RESEARCH FOR REGIONAL UNIVERSITIES

Cameron University

Marge Kingsley, Interim, VP, Academic Affairs
Dana Lee, Grant Coordinator

East Central University

Jeffrey Gibson, Provost and VP, Academic Affairs
Leah Lyon, Director, Office of Sponsored Programs and Research

Northeastern State University

Jim Ferrell, Assistant VP of Academic Affairs
Jessica Secratt, Director, Research and Sponsored Programs

Northwestern Oklahoma State University

Eric Schmaltz, Professor of History, Chair, Department of Social Sciences
Shawn Holliday, Associate Dean of Graduate Studies, Professor of English
Aaron Mason, Professor of Political Science

Southeastern Oklahoma State University

Teresa Golden, VP, Academic Affairs
Susan Trombley, Assistant Comptroller

Southwestern Oklahoma State University

Joel Kendall, VP, Academic Affairs
CJ Smith, Assistant Director, Sponsored Programs

University of Central Oklahoma

Michael Springer, Professor of History, Director, Office of High-Impact Practices
Charlotte Simmons, Provost and VP, Academic Affairs
Gregory M. Wilson, AVP, Office of Research & Sponsored Programs

KEYNOTE SPEAKER

SHREE BOSE

At 17 years old, Shree triumphed over 10,000 competitors to become the Grand Prize Winner of the first-ever Google Global Science Fair in 2011. She presented her winning work to President Obama and directors of the National Institutes of Health, as well as students around the world.

Through these experiences, Shree also became a passionate advocate for better STEM education, which led her to co-found Piper Learning, Inc., a company creating educational toys for kids. She currently serves as co-CEO.

After graduating Harvard University in 2016, she joined the MD/PhD program at Duke University School of Medicine, where she recently completed her PhD on understanding metabolic changes in ovarian cancer metastasis and her MD in May 2023. She is now a resident physician at the University of Chicago.

She was honored on the 2023 Forbes 30 Under 30 for Science list.



RESEARCH DAY SCHEDULE

8:00am – 1:00pm

Registration
University Center

8:00am – 9:00am

Breakfast
University Center

9:00am – 10:30am

Welcome & Keynote
University Center

- Call to Order: Dr. Carla Swearingen, Provost and Vice President Academic Affairs, Northeastern State University
- Welcome: Northeastern State University's 20th President, Dr. Rodney S. Hanley
- Regional University System of Oklahoma (RUSO)
- Cherokee Nation
- Keynote Speaker: Dr. Shree Bose
- Closing Remarks: Dr. Carla Swearingen, Provost and Vice President Academic Affairs, NSU

10:45am – 11:30am

Career Fair & Poster Session I Setup
Jack Dobbins Field House

11:30am – 12:30pm

Poster Session I
Jack Dobbins Field House

11:30am – 1:30pm

Drop-in Lunch, *Come at your convenience
University Center

12:45pm – 1:30pm

Career Fair & Poster Session II Setup
Jack Dobbins Field House

1:30pm – 2:30pm

Poster Session II
Jack Dobbins Field House

ACKNOWLEDGEMENTS

NSU OKLAHOMA RESEARCH DAY EXECUTIVE PLANNING COMMITTEE

Dr. Jim Ferrell, Chair

Ms. Kandra Medlin

Mr. Ken Rivas

Dr. Jessica Secratt

Mr. Steve Ford

Chief James Bell

Dr. Peggy Glenn

Ms. Tory Lander

Dr. Jessica Martin

Ms. Sydney Cain

Dr. Cammi Valdez

VOLUNTEERS

We extend our heartfelt gratitude to each and every one of you for your time, energy, and dedication in making this event a success. Your hard work behind the scenes, from assisting with setup to guiding attendees and supporting the presenters, played a crucial role in creating a welcoming and impactful environment for all involved. Your commitment to fostering academic growth and community engagement exemplifies the true spirit of collaboration, and we are incredibly thankful for your contributions. We couldn't have done it without you!

SPONSORS

Thank you to the following sponsors: Oklahoma State Regents for Higher Education (OSRHE); Oklahoma IDeA Network of Biomedical Research Excellence (OK-INBRE); Oklahoma Established Program to Stimulate Competitive Research (OK-EPSCoR); National Science Foundation; National Institutes of Health; Oklahoma Regional Universities (Northeastern State University, University of Central Oklahoma, Southwestern Oklahoma State University, Southeastern Oklahoma State University, Northwestern Oklahoma State University, East Central University and Cameron University)

POSTER SESSION I

BUSINESS & ADMINISTRATION

1A How Faculty Use AI: A Synopsis of the Literature

Dolma Gurung, Trilok Sai
Kambham, Suzanne Clinton, Abbie
Lambert
- University of Central Oklahoma

2A Optimizing Crime Prevention with Predictive Analytics

Tarun Sai Kodamati, Kiran Kumar Reddy
Pullareddygari, Krishna Lasya Raja, Yogya
Sri Sai Vithanala, Mohammed Saad Haq
- University of Central Oklahoma

3A The 2001 Recession, the Sarbanes-Oxley Act, and Director Characteristics

Halil Kaya
- Northeastern State University

4A CEO Pay Balance and Firm Performance

Halil Kaya, Zahar Rosinsky
- Northeastern State University

5A THE IMPACT OF THE COVID-19 CRISIS ON CEO PAY BALANCE

Halil Kaya, Zahar Rosinsky
- Northeastern State University

6A How Social Media Affects Mental Health

Michael Gonzalez, Camille Hale
- Cameron University

EDUCATION

7A Expanding Horizons with the ESRF eLearning Project for Recruitment and Retention

Karis Barnett
- University of Central Oklahoma

8A GRADUATE NUTRITION STUDENTS BRIDGING THEORY AND PRACTICE

Subikshya Bogati, Ms. Hope Russel, Dr.
Linda Harris, Dr. Tawni Holmes, Dr.
Sunshine Cowan
- University of Central Oklahoma

9A Perspectives of an International Graduate Student working as a Research Assistant at the Center for Neuroscience and Embodied Learning

Ivy Chemutai
- University of Central Oklahoma

10A Creating and Using a Children's Book Analysis Guide for Math Picture Books

Jill Davis

- University of Central Oklahoma

11A Foster Care Influence on Educators' Attitudes Related to Trauma-Informed Care (ARTIC-35) Scores

Katie Fields

- University of Central Oklahoma

12A Pursuing My True Self: Naoto Shirogane, Persona 4, and Queer Reception

Daniel Hanuschak

- University of Central Oklahoma

13A Development and Nutritional Analysis of Chickpea Flour-Based Mayonnaise: A Sustainable and Healthy Vegan Alternative for Egg Mayonnaise.

Venkata Vedas Chebrolu, Kanika Bhargava

- University of Central Oklahoma

14A Overdose Oasis: Narcan Navigators Creating a Safe Haven on Campus

Supriya Dahal

- University of Central Oklahoma

15A DEVELOPMENT OF PEARL MILLET MILK AS AN ALTERNATIVE REPLACEMENT FOR DAIRY MILK

Sandeep goud Jerripothula, Sandeep goud Jerripothula, Dr.kanika Bhargava

- University of Central Oklahoma

16A Can Portable Force Plates Differentiate Braking and Propulsive Phases Between Genders?

Eric Conchola, Tatum Robertson,Regan Walker

- University of Central Oklahoma,

17A A neural network and psychometric examination of transformative potential of female sport human brand

Susmit Gulavani

- Northeastern State University

18A Body Shape Profiles of Overweight and Obese Women: Exploring Weight Perception and Apparel Shopping Behaviors

Stephanie Gonzalez, Dr. Uikyung Jung

- University of Central Oklahoma,

19A Effects of Early Hospice/Palliative Care

Kara Blackwelder, Heather Gritz

- Northwestern Oklahoma State University

20A Comparing Chlorohexidine vs. Povidone-Iodine to Prevent Surgical Site Infections

Leslie Hernandez
- Northwestern Oklahoma State University

21A Exoplanet Discovery and False Color Astrophotography

Bryce Lagunas, Ethan Layman
- Southwestern Oklahoma State University

22A Prosociality and Religion: Religion's effect on prosocial behavior towards other religious groups

Laura Breidenstein, Peter Rerick, Lily Dilbeck, Tierra Mythen, Stormie Ramsey
- University of Central Oklahoma

23A How Does Gender Influence the Perceived Victimization of Domestic Abuse Victims

Isabel Brown, Peter Rerick
- University of Central Oklahoma

24A Identification of Stimuli for Eye Tracking Study with a Unique Mental Athlete Population

K. Breana Downey
- University of Central Oklahoma

25A Seeing is Believing: The Role of Evidence Presentation in Juror Decisions

Ryanne Felix
- University of Central Oklahoma

26A Faith and Ideology in Music

Pandora Figueroa, Peter Rerick
- University of Central Oklahoma

27A The Impact of Thematic Reading Material on Empathic Response Towards Diverse Social Groups

John Geiger, Mackenzie Lee
- Cameron University

28A The Relationship between Hormonal Contraceptives, ADHD Symptoms, and Mood in Adult Females

Alexandria Herron, Tephillah Jeyaraj-Powell
- University of Central Oklahoma

29A The Effects of Birth Control on ADHD Symptoms.

Kylee Hilliard
- University of Central Oklahoma

30A Cheaters, Hazards, and Life History

Eileen Hinman
- University of Central Oklahoma

31A The Impact of Caffeine on People with ADHD and Autism

Alison Julien, Dr. Alimamy Fornah
- Cameron University

32A Influences in the Development of Feminist Consciousness

Cynthia Keeth
- Southeastern Oklahoma State University

33A Women’s healthcare issues: Oklahoma attitudes and education in relation to policies

Reese Lugafet, Vickie Jean
- University of Central Oklahoma

34A Living Unapologetically: LGBTQ+ Coming Out in Midlife and Beyond

Mari Belle
- University of Central Oklahoma

**FINE ARTS &
DESIGN**

35A Poverty in Japan and the United States

Jessica Cornelius
- University of Central Oklahoma

36A The Concept of Loss and Trauma in Children’s Books in Japan and the United States

Jessica Cornelius
- University of Central Oklahoma

37A Buddhism During the Heian Period: Great Wisdom Sutra (Daihannya-kyō) from the Chūsonji Temple Sutra Collection (Chūsonji-kyō)

McKenzie King
- University of Central Oklahoma

38A History of the Japanese Kimono and the Transformation in Modern Designs

McKenzie King
- University of Central Oklahoma

39A Fostering Makers, Innovators, and Builders in STEAM Education

Dan Li
- University of Central Oklahoma

40A Incomplete Design History Season 5

Amanda Horton,
Drayeson Swanegan,Michelle
Nguyen,Gabbi Warriner,Spencer Gee
- University of Central Oklahoma

41A “Chalking” Up Success in 3D Thinking: Analog and Digital Activities to Develop Interior Space Planning

Amy Jacobson-Peters
- University of Central Oklahoma

42A A Reexamination of Paul Bowles as a Pseudo-Moroccan Representative

Madison Jacobs
- University of Central Oklahoma

43A Vocal Habits in Contemporary Christian Music: Observing Participatory Performance Practices

Mackenzie Cook
- University of Central Oklahoma

44A Commissioning Opera in the Twenty First Century

Danielle Herrington
- University of Central Oklahoma

45A Differentiation of THC Isomers in Oral Fluid by UHPLC/MS-MS

Cortney Hanna, Thomas Jourdan
- University of Central Oklahoma

46A Development of University Level Wildlife Forensics Laboratory Course Curriculum

Chloe Dutcher
- University of Central Oklahoma

47A Variations of Humor styles and their influence in well-being on forensic science students who are exposed to violent images

Fabiola Bueno, Alicia Mclean
- University of Central Oklahoma

LIBERAL ARTS

48A Exploring the Relationship Between Disciplinary Actions Recorded for Illegal Drugs through Teacher Training, Drug Testing, and Search for Contraband.

Minji Cho, Jimmi Winn, Chunghyeon Seo, Yoojin Oh
- University of Central Oklahoma

49A Raising An Occitan Voice: Investigating the Potential Postcolonial Character of Frédéric Mistral's Mirèio

Eli Grasso, Kenneth Hada
- East Central University

50A Surfing the Tsunami of Trauma: The Power of Storytelling in Bad Indians

Sterling Haws
- University of Central Oklahoma

51A The Liminal Wives of Jean Lafitte: Piracy and Nationbuilding

Noelle Buffo
- University of Central Oklahoma

52A Clothing as Character: The Pedagogical Importance of Dress Symbolism in Medieval French Literature

Kendra Dittmer
- University of Central Oklahoma

53A The Power of The President: President Trump & The U.S. Department of Education

Jurnee Catron
- East Central University,

54A Fossil Fuel Bullies: How the Fossil Fuel Industry Undermines Nuclear and Renewable Energy

Stone Coley
- East Central University

55A Funding Our Future: Public v. Private School Outcomes in Oklahoma

Lilian Fuchs
- East Central University

56A Connecting with Gen Z: The Political power of social media

Sage Garcia
- East Central University

57A Effect of Marijuana Cultivation on Groundwater Depletion in Oklahoma

Puja Gyawali
- East Central University

58A Flowers in the Desert: The Impact of Civil Mediation in Oklahoma's "Legal Deserts"

Rachel Hedges
- East Central University

59A A New Mind for an Old Nation: Comparing and Contrasting Political Views Between Younger and Older Americans

Deacon Jones
- East Central University

60A Go Big Blue?: Democratic College Towns in Republican Dominated Oklahoma

Raygan Lee
- East Central University

61A (Dis)belief in Free Will: Its Sociopsychological Effects

Clover Bitting-Cheek
- Oklahoma City Community College

62A Sacred Seduction: An Examination of the Sexualization of Catholic Nuns in Historical Art and Contemporary Art

Rylie Eisenhauer
- University of Central Oklahoma

63A Addressing Educational Disparities and Strengthening Community Cohesion: A Multi-dimensional Study

Sam Ferguson -
University of Central Oklahoma

MATHEMATICS & SCIENCES

64A Effect of Group Size in a GreenFeed System on Enteric Methane Emissions from Pasture-Grazing Meat Goats

Jasmine Lyons, Ryszard Puchala, Arthur Goetsch, Dereje Gulich, Hirut Tejeji, Amlan Patra

- Langston University

65A Detecting C. burnetti Type IVB Secretion System Proteins in Infected HeLa Cells

Paris Al-khateib, Melissa Brewer

- Southeastern Oklahoma State University

66A The Effect of Marine Sponge Extract on Myofibroblast Proliferation

Ahmad Alnabhan, Melville Vaughan

- University of Central Oklahoma

67A Development and Characterization of Sodium Alginate-Agar-Agar Composite for Enhanced Wound Management

Kazi Avha, Lujayn Alkalani, Zoha Asim

68A Studies on the structure and function of human Polymerase Epsilon catalytic subunit

Nicholas Botto, Lydia Ostmo, Sapna Das-Bradoo

- Northeastern State University

69A An Assessment of Carbon Sequestration and Carbon Storage Within Forested Conservation Easements in Northeastern Oklahoma

Kaitlin Branson

- Northeastern State University

70A Analyzing the FILS Mutation in POLE: Impact on DNA Replication

Zachary Burks, Lydia Ostmo, Sapna Das-Bradoo

- Northeastern State University

71A Assessing the Behavior and Physiological Traits of Deer Mice from the Selman Living Laboratory in Western Oklahoma using Radio Telemetry

Eve Cameron-Mazin, Richard Dolman, PhD, Christopher Goodchild, PhD

- University of Central Oklahoma

72A Deterrent effects of Capsaicin on non-target species consumption of corn at bait piles in traps set for feral pigs (*Sus scrofa*).

Billy Cantrell, Michael Shaughnessy
- Northeastern State University

73A POPULATION DIVERSITY OF MAMMALIAN SPECIES FOUND ON MODERATELY AND HIGHLY DISTURBED LAND PLOTS IN CUSHING, OKLAHOMA.

Nadiya Cavallo
- University of Central Oklahoma

74A Gut Microbiome of Freshwater Fish Species in Oklahoma

Tayson Cornwell
- Tulsa Community College

75A Aquatic Invertebrate Emergence Comparing Two Habitats within Thomas Bamberger Wildlife Management Area

Rachael Croley
- Northeastern State University

76A Seasonal Temperature and Humidity Effects on Insect Diversity and Microhabitat Selection in a Western Oklahoma Lake Environment

Dustin Ferry, Renan Bosque, Jonathan Almanza, Erik Mesta, Bryant Franco, McKaegan Gregory, Madilyn Crisp, Rachel Uhlig
- Southwestern Oklahoma State University

77A Flora on File: Utilizing a New Approach to Digitizing Herbarium Records for Institutions

Bryant Franco Sea, Erik Mesta, Renan Bosque, Rachel Uhlig, Dustin Ferry, Jonathan Almanza, Stevie Langstraat, Craig Meyer, Madilyn Crisp, Mckaegan Gregory
- Southwestern Oklahoma State University

78A Investigating Normal and Mutant POLE1 Protein Dynamics in Human Cells

Matthew Girard, Lydia Ostmo, Sapna Das Bradoo
- Northeastern State University

79A Feeding Preferences in *Drosophila melanogaster*: Yeast versus Sugar

Stardaja Golden Sims, Jimena Aracena
- Southwestern Oklahoma State University

80A Isolation and Purification of Microbacterium paraoxydans Bacteriophages from Oklahoma Soil and Soil Sediments

Cassidy Gosse , Gustavo Kajiwarara,Hari Kotturi

- University of Central Oklahoma
- West Virginia School of Osteopathic Medicine

81A Developing and Evaluating an Inquiry-Based Curriculum for an Introductory Cell Biology Lab

Allison Grieshop

- University of Central Oklahoma

82A Unlocking the potential of CRISPR-Cas9 for cystic fibrosis

Hudson Harris

- University of Oklahoma

83A DETECTION OF PARASITES AND MICROPLASTICS IN RODENT FECAL PELLETS

Michelle Haynie , Lillian R.

Gunelson,Liliana Ballon,Joshua D.

Walker,Wayne D. Lord

- University of Central Oklahoma

84A The Biodiverse Diet of the Pallid Bat (*Antrozous pallidus*) from Big Bend National Park

Caeli Herrera, Dana Lee

- Cameron University

85A A Cross Sectional Analysis of Artificial Intelligence Guidelines in Journals of Pediatrics, Perinatology and Child Health

Malek Itani

- University of Oklahoma Health Sciences Center

86A How Bait may affect Mammalian Diversity of Species Occurrence Surrounding Lake Arcadia, Oklahoma County, OK

Connor Jones

- University of Central Oklahoma

87A Investigating the Effects of 5AD and CQ on Chemotherapy Treatment of AML Cancer Cell Lines

Nathan Jones, Michael Morgan

- Northeastern State University

88A Immunofluorescence Microscopy Analysis of *Coxiella burnetii* In HeLa cells

Shandra Jones, Kincade Hise,Melissa Brewer

- Southeastern Oklahoma State University

89A Continued Sampling of Mediterranean Geckos (*Hemidactylus turcicus*) around the University of Central Oklahoma campus

Jenna Karp, Andi Purcell,Viannka

Galarza,Allyson Fenwick

- University of Central Oklahoma

90A Ex vivo and In vivo evaluation 3D-Printed PCL-based Bone Scaffolds and Intramedullary Nail for long bone repair

Ayan khan, Melville Vaughan, Morshed Khandaker, Amar Samour, Sohaib Mesiya, Ziyam Khan
- University of Central Oklahoma

91A Multiphase Bioabsorbable Scaffold for Osteochondral Regeneration in Weight-Bearing Joints

Ziyam Khan, Melville Vaughan, Ayan Khan, Morshed Khandaker, Amar Samour, Sohaib Mesiya
- University of Central Oklahoma

92A Analyzing the Diet of Ghost-Faced Bats, Mormoops megalophylla, using DNA Sequencing

Masa Kinder, Dana Lee
- Cameron University

93A Studying Pollinators in an Urban Setting: The UCO Pollinator Garden Initiative

Sophia Knox,, Charlotte Simmons, Matthew Parks, Gloria Caddell, Jenna Messick, John Barthell, Chad King, Jacob Wilson, Marie Martinez, Sean Laverty, Greg Wilson, Michael Weeks, John Hensel, Mark Mwalvoord, Mary Matlock, Connie Scothorn
- University of Central Oklahoma,
- Boy Scouts of America, Troop 226
- CLS & Associates, LLC

94A Elucidating the Effects of Downregulation and Overexpression of Cell Wall Biosynthesis Genes on Stomatal Dynamics

Qimeng Li, Deborah Petrik, Brant Osborn, Maricela Espinoza
- Northeastern State University

95A Differential protein expression of NMII *Coxiella burnetii* through serial passaging via ACCM-D

Benjamin Lind, Melissa Brewer
- Southeastern Oklahoma State University

96A Determining *Escherichia coli*'s Bacteriotherapeutic Effects Against Bladder Cancer Cells

Alejandro Lopez, Janaki Iyer
- Northeastern State University

97A Effects of *Castilleja coccinea* (L.) Sprengel (Scarlet Indian Paintbrush) on Native and Introduced Plant Species

Zakori Blackwell, Ashton Blackwell, Elizabeth Waring
- Northeastern State University

98A Using Brine Shrimp Lethality Assay to identify Bioactive Marine Invertebrate Extracts

Joy Adebayo
- University of Central Oklahoma

99A Hydrogen Bonding Interactions Between Fluorohydrogenated Ionic Liquids and Model Compounds of Polyethylenimine

Stella Aldridge, Christopher M. Burba
- Northeastern State University

100A An Investigation of High Temperature Reactions Between Titanium, Silicon, and Yttrium Oxides

Hunter Allen, Dwight Myers
- East Central University

101A Cross-linking of Cysteine Residues in Subunit a Affecting ATP Synthesis in E. coli

Jin Beadles, Kyle Moore
- Cameron University

102A Investigation of Solvation Dynamics Photophysical Properties of Fluorescent Dyes in a Confined Reverse Micelle Environment

Evan Capuccio, Dr. Rajesh Nayak, Wyatt Johnson, Daniel Kim
- Cameron University

103A Inhibition of Escherichia coli Dihydrodipicolinate Synthase by the Slow Binding Inhibitor Acetopyruvate : A Path to Drug Design

Lilian Chooback, Leonard Thomas, William Karsten
- University of Central Oklahoma

104A Isolation of Carvone from Spearmint Leaves

Charles Crittell, Maverick Stephenson, Daniel McInnes McInnes
- East Central University

105A Development and Validation of an Atomic Absorption Spectroscopy Method for Quantifying Heavy Metals in Urban Dust Samples

Zoey Dean, Mohammad Ebqa'ai, KD Priyasantha
- Cameron University

106A INHIBITION OF HISTONE DEACETYLASES BY A NOVEL SYNTHETIC HYDROXAMIC ACID COMPOUND

Connor Ferlazzo, Sean Kim
- Northeastern State University

107A Multiple applications of curcumin to explain undergraduate concepts.

Srimal Garusinghea
- Southeastern Oklahoma State University

108A Steric Effects on Bromotriflates in a Suzuki Coupling

Mitchell Hackett
- University of Central Oklahoma

109A Photophysics and Fluorescence Quenching Investigation of Alexa Fluoro (AF647) Dye in Anionic Reverse Micelle Environments

Wyatt Johnson, Rajesh Nayak, Nathalie Moro
- Cameron University

110A Isolating and Identifying Bioactive Marine Invertebrate Extracts with Brine Shrimp Lethality Assay

Constance Kettler
- University of Central Oklahoma

111A Inhibition of HDAC1 Using a New Hydroxamate Compound

Kong Lee, Sean Kim
- Northeastern State University

112A Depth Camera Assisted Traffic Light Detection

Mohammad Aariz, Shuai Zhang
- University of Central Oklahoma

113A SecurePass: A Robust Password Management System

Rad Alrifai, Chase Jones
- Northeastern State University

114A Keyboard Warrior: Enhancing Interactive Response Skills

Rad Alrifai, Elijah Little
- Northeastern State University

115A PassVault: Secure and Intelligent Password Management

Rad Alrifai, Christopher Hultz
- Northeastern State University

116A Identifying Vulnerabilities in High-Performance Computing Environments

Jarred Arthurs, Junghwan Rhee
- University of Central Oklahoma

117A A Secure Password Query Database on the Ethereum Blockchain

K'Vion Berry, Clint Givens
- University of California, Los Angeles

118A Artificial Intelligence: Past, Present, and Future

Trace Boggs
- Cameron University

119A Artificial Intelligence in Digital Forensics Sciences

Raymond Butac, Reyna Byer, David McDonald, Jawad Drissi
Cameron University

120A Strategies to Prevent Cheating during In-Person Exams

Bhargav Chaganti, Dr. Suzanne Clinton
- University of Central Oklahoma

121A Implementation of an OpenGL Application: WebGL vs Godot

Caleb Clifton
- University of Central Oklahoma

122A Going Serverless: Small Architecture, Big Impact

Belinda Foley, Belinda Foley, Dr. Jawad Drissi, Felicia Goetsch, Lance Wallace
- Cameron University

123A Enhancing Fibrin Network Degradation Modeling

Logan Gauchat, Brittany Bannish
- University of Central Oklahoma,

124A A Novel Lightweight Approach for Processing Sensor Data Generated by Smart Mobile Devices

Asher Horst, Jicheng Fu
- University of Central Oklahoma

125A Understanding Deep-Fake Images, Videos, and Audios

Divyanshu Jaiswal, Junghwan Rhee
- University of Central Oklahoma,

126A Developing a Deep-Learning Algorithm to Classify Smartwatch Data to Evaluate Manual Wheelchair Users' Pressure Relief Exercises

Stephen Ketola, Jicheng Fu
- University of Central Oklahoma

127A Autonomy Within Curricula

Raianne Brand
- Oklahoma City Community College

128A FIXED TRAITS AND FLEXIBLE HABITS: BALANCING PERSONALITY, CHRONOTYPE, AND LIFESTYLE IN WHOLE-PERSON EDUCATION

Emily Castile, Duoduo Cai ,Nancy Mankin, Philip Nelson, Scarlet Jost, Brady Gerstenberger, Eva K Trompler, Myra Bloom, Enrique Valderrama Araya, Andrew Lang, Victor Rodrigues da Costa Gomes, Nathan Anderson ,Chloe May Winkler
- Oral Roberts University

129A Pressurized Chamber for Product Design and Testing

Dylan Carpenter, Nikita Dadabhai, Howard Richards, Kaitlyn Rapoport, Sezin Kadioglu
- University of Central Oklahoma

130A Development of Phase Change Material Based Insulation Technology for Building Energy Savings and Thermal Comfort

Gonzalo Castells, Weihuan Zhao
- Northeastern State University

131A Developing a Specialized Large Language Model for Material Sciences: Vision and Objectives

Colton Cox, Joshua Torres, Anjali Poulo, Tej Lamichane
- University of Central Oklahoma

132A Pressurized Chamber for Product Design and Testing

Nikita Dadabhai, Dylan Carpenter, Kaitlyn Rapoport
- University of Central Oklahoma

133A Baja SAE Drive Train Comparative Analysis

Caitlin Delaney, Dr. Brett Chase
- Southwestern Oklahoma State University

134A Adapting Air Travel to Decrease Environmental Impact

Kaitlyn Fisher
- Oklahoma City Community College

135A In Silico Analysis of the Flagella-Propelled Cell Swimming in Viscous Fluids

Quinton Fister, Lauren Sowards
- University of Central Oklahoma

136A Segment-based Analysis of 18F-fluorothymidine Positron Emission Tomography Unveils Significant Prognosis Predictor for Hematopoietic Stem Cell Transplantation Therapy

Zheng Han, Lacey McNally
- University of Central Oklahoma

137A Mechanical Characterization of polycaprolactone (PCL) Microfilaments for Flow Diverting Stents

Mohammad Hossan, Alex Matsayko, Sulman Bhatti
- University of Central Oklahoma

138A Development of an Unmanned Aerial Vehicle (UAV) for Aerosol Detection and Hazardous Condition Alarming

Wey Hom Lau, Jesus Estrada, Morshed Khandaker
- University of Central Oklahoma

139A Enhanced Microindentation Precision for Engineered Tissues Using a 3D-Printed Mini Funnel and Optical Coherence Tomography

Wey Hom Lau, Gang Xu, Melville Vaughan
- University of Central Oklahoma

**140A BAT BIODIVERSITY
SURVEYS ON PUBLIC LANDS IN
NORTHEAST OKLAHOMA: A
POST WHITE-NOSE
SYNDROME ASSESSMENT**

Hope Davis
- Northeastern State University

**141A Comparison of Benthic
Macroinvertebrates in an
Agricultural Stream and an
Urban Runoff Stream**

Alyssa Fields, Elizabeth Waring
- Northeastern State University

**142A Air Pollution: The Facts,
The Dangers and How It
Affects Our World**

Avery Hodges, Mai Ahn Vu Tran
- Northeastern State University

**143A Woody Brush Fire
Responses in a Western
Oklahoma Rangeland.**

Zach Jones, Peyton Becker, Janae
Barker, Grayson Bromlow, Shane Munsey
- Southwestern Oklahoma State
University

**144A Post-fire Ground Cover
Responses in a Native
Grassland Near Crowder Lake,
OK.**

Zach Jones, Tj Ramsey ,Cooper Larsen,
Elijah Permenter, Will Blood, Dominick
Contreras
- Southwestern Oklahoma State
University

**145A Rodent Communities in
Exotic and Native Western
Oklahoma Grasslands.**

Zach Jones, Rylie Mcintyre, Trent
Downey, Coy Pope, Tatum Cummings
- Southwestern Oklahoma State
University

**146A Topographical effects of
juniper mortality following a
prescribed fire near Crowder
Lake, OK.**

Zach Jones, Austin Rooney, Beau
Hansen, Ian Hodge, Tyler Vanover, Micah
Maledon
- Southwestern Oklahoma State
University

**147A Avoiding Errors in the
Analysis of Ethical Issues**

Abbas Johari, Ronald Wilson
Cameron University

**148A Comparison and
Optimization of Methods for
Agrobacterium tumefaciens-
mediated Transformation of
Brachypodium distachyon**

Maricela Espinoza, Deborah Petrik,
Qimeng Li, Brant Osborn
- Northeastern State University

**149A ANALYSIS OF THE AQP2
GENE IN BULLDOGS
AFFLICTED WITH FETAL
ANASARCA**

Essie Hill
- East Central University

150A CAN LEADING A PHYSICALLY ACTIVE AND HEALTHY LIFESTYLE PREVENT GAINING THE FRESHMAN 15?

Nathan Anderson, Brady Gerstenberger, Myra Bloom, Duoduo Cai, Andrew Lang, Victor Gomes, Chloe Winkler, Eva Trompler, Philip Nelson, Nancy Mankin, Enrique Valderrama Araya, Scarlet Jost, Emily Castile
- Oral Roberts University

151A "Unlocking Beetroot's Healing Potential: Investigating Molecular Interactions, Antioxidant Capacities, and PCOS Management Strategies"

Maanasa Baralanka, Dr. Susan woods, Dr. Sabitha y, Jaswanth Avula
- University of Central Oklahoma

152A The Relationship Between Marriage and Mental Health

Colten Barbee
- Oklahoma City Community College

153A Comorbidity of Postural Orthostatic Tachycardia Syndrome (POTS) in Women's Health

Kamryn Bennett
- Rogers State University

154A Endorsement of Artificial Intelligence Guidelines Across Leading Neurology Journals: A Cross-Sectional Analysis

Noah Calvert, Kohl Kirby
- Oklahoma State University

155A An Evaluation on Artificial Intelligence Guidelines in the Leading Clinical Pulmonology and Respiratory Medicine Journals: A Cross-Sectional Analysis

Nicholas Camasso, Matt Vassar, Andrew Tran, Zohaib Thayani, Alicia Ford, Ty Lutze, Daniel Archer, Logan Corwin, Alec Young, Patrick Crotty
- Oklahoma State University
- Oklahoma State University Center for Health Sciences, Oklahoma State University Center for Health Sciences

156A Endorsement of Artificial Intelligence Guidelines Across Leading Endocrinology Journals: A Preliminary Cross-Sectional Analysis.

Eva Chen, Eddy Bagaruka, Annes Elfar, Amy Nguyen, Andrew Tran, Matt Vassar, Kellen Keefer, Alicia Ford, Alec Young, Mahad Chaudhry, Patrick Crotty
- Oklahoma State University College of Osteopathic Medicine

157A Evaluating Data-Sharing Policies and Author Compliance in Leading Pain Journals: A Cross-Sectional Analysis.

Victor Do, Victor Do, Wyatt Compton, Eli Paul, Matt Vassar, Tim Smith, Andrew Tran, Alicia Ford
- Oklahoma State University-Tulsa

158A To optimize the enzymatic process for the formulation of plant-based milk alternatives from mung beans

Rathnababu Gorremuchhu, Priyanka Gupta, Kanika Bhargava
- University of Central Oklahoma

159A Endorsement of Artificial Intelligence Guidelines Across Leading Rehabilitation Journals: A Series of Cross-Sectional Reviews

Garrett Herring, Trevon Jelinek, Noah Barks, Matt Vassar, Diya Mathew, Alec Young, Andrew Tran, Patrick Crotty, Alicia Ford, Luis Frias
- Oklahoma State University Center for Health Sciences

160A Current Trends in Artificial Intelligence Use in Otorhinolaryngology Research: A Cross-Sectional Analysis

Graham Jameison, Rachel Hazlitt, Matt Vassar, Seth Sims, Alicia Ito Ford, Alec Young, Mahad Chaudry, Patrick Crotty, Annes Elfar, Andrew Tran, Josh Saurino
- Oklahoma State University - College of Osteopathic Medicine

161A Effect of Lentil Fortification on Yogurt Fermentation and Nutritional Enhancement.

Meghana, Dr. Kanika Bhargava kotapati - University of Central Oklahoma

162A Evaluating Guidelines for Artificial Intelligence in Critical Care Journals: Addressing Research Integrity and Transparency

Makalie Lackey, Sam Lassiter
- Oklahoma State University

163A Endorsement of Artificial Intelligence Guidelines Across Leading Emergency Medicine Journals: A Cross-Sectional Analysis

Ryan Langerman, Alicia Ito Ford, Lucas Martinez, Andrew Tran, Patrick Crotty, Alec Young, Wyatt Compton, Matt Vassar, Kurt Mahnken, Josh Major
- Oklahoma State University
- Oklahoma State University Center for Health Sciences

164A Evaluating Guidelines for Artificial Intelligence in Critical Care Journals: Addressing Research Integrity and Transparency

Samuel Lassiter, Jacob Duncan, Andrew V. Tran, Patrick Crotty, Tag Harris, Makalie Lackey, Alex Hagood, Alec Young, Matt Vassar, Jeanie Marchbanks, Alicia Ito Ford
- Oklahoma State University-Tulsa

165A The Evolution of the 3D Printing Process: Programming, Reliability, and Security

Rodolfo Lozano, Information Operations Management, Hunter Ledford, Jeremy Vongsana, Jawad Drissi
- Cameron University

166A The Impact of Flexibility on Balance and Self-Sufficiency

Aiswarya Ajesh, Melissa Powers
- University of Central Oklahoma

167A Mathematical Model of Fibrin Networks Under Tension

Madeline Bradley, Brittany Bannish
- University of Central Oklahoma

168A Agent-Based Modeling of Fibrin Fiber Network Formation

Key Crosley, Brittany Bannish
- University of Central Oklahoma

169A Toroidal Game Structures

Andrew Easley
- University of Central Oklahoma

170A Recurrent Variational Autoencoders for Multi-Lead ECG Classification

Ethan Fogarty, Shervin Tabatabai, Emily Hendryx Lyons, Tyler Cook
- University of Central Oklahoma

171A Beyond the Classroom: Transformative Learning through the Central Oklahoma Math Teachers' Circle

Kristi Karber
- University of Central Oklahoma

172A Creativity in Calculus: From Task Development to Adaptation

Liz Lane-Harvard, Emily Lyons
- University of Central Oklahoma

**173A Oversampling
Algorithms for Archetype-
Preserving Data
Summarization**

Autumn Langer, Auri Davis, Emily
Hendryx Lyons, Tyler Cook
- University of Central Oklahoma

**174A Getting to the Heart of it:
A Mathematical Model of
Canine Heartworm Infections**

Sean Laverty, Raelynne Burns
- University of Central Oklahoma

**175A A mathematical model of
Mycobacterium leprae
transmission in the nine-
banded armadillo**

Vanessa Lay, Beth McAnally, Jamie
Crouch, Sean Laverty, Gordon Cooper
Technology Center,
- University of Central Oklahoma

176A Effects of Video Games

Jillian Burton, Kayleigh Rausch, Jadin
Wilkinson
- Northwestern Oklahoma State
University

**177A Effects of Ketogenic
Dietary Therapy on Pediatric
Epilepsy**

Shay Collins, Rebekah Skoda, Maggie
Swann
- Northwestern Oklahoma State
University

**178A Enhancing Pediatric
Comfort: The Role of Virtual
Reality During Medical
Procedures**

Brittan Crabtree, Cason Matthews,
Tiffany Baugh
- Northwestern Oklahoma State
University

**179A The Critical Impact of
Parental Education on
Childhood Vaccination**

Brook Hess, Jazlyn Norwood, Adrianna
Gutierrez
- Northwestern Oklahoma State
University

**180A Seasonal variation in
Deer mouse's White blood cell
differentials from NorthWest
Oklahoma**

Franklin Kiplagat, Christopher
Goodchild, Richard Dolman
- University of Central Oklahoma

**181A Comparing
Chlorohexidine vs. Povidone-
Iodine to Prevent Surgical Site
Infections**

Liliana Labra, Lyzeth Salcedo-Vega, Leslie
Hernandez
- Northwestern Oklahoma State
University

**182A On the stability of a
satellite constellation in ultra
low Moon orbit to support the
Artemis mission**

Ethan Achipa, Diogo Sanchez

183A Understanding the Martian Atmosphere and Seasons Using and Analyzing Martian Cloud Data

Ophelia-Eden Brown, Susmita Hazra
- Cameron University

184A An Examination Of The Uses And Limits of Averaging Techniques Applied To Astrophotography

Douglas Bryhan, Jake McCraw
- East Central University

185A In-silico Autonomous Magnetic Material Science Research with Open-Source Large Language Models

Jia Le Chin, Tej Nath Lamichhane, Joshua Joshua Torres, Anjali Poulo
- University of Central Oklahoma

186A Applications of Topology in Physics

Jerry Clark, Derik Ferry
- East Central University

187A Determining the Date of Betelgeuse's Supernova using Stellar Characteristics

Aldan Gallaway

188A Magnetic Noise in Hall Sensors Due to Domain Wall Motion: A MuMax3-cQED Simulation Study

Haley Graham-Kluck, Eden Haack, Anjali Poulo, Jia Le Chin, Levi Cosgrove, Tej Lamichhane, Josh Torres
- University of Oklahoma

189A Measurements of Halo CMEs and CMEs in Co-relation with Space Weather

Oren Kennedy, Susmita Hazra
- Cameron University

190A Predicting Student Academic Success and Dropout Rates Using Machine Learning

Bharath Keesara, Kanchan Gautam, Muhammad Abu Hurairah, Ka Khui Chow
- University of Central Oklahoma

191A Does the Rattling Sound of Rattlesnakes Function as an Effective Aposematic Signal?

Jonathan Almanza, Mckaegan Gregory, Dustin Ferry, Erik Mesta, Rachel Uhlig, Bryant Franco, Madilyn Crisp, Renan Bosque
- Southwestern Oklahoma State University

192A Exploring GPCR Activation of CFTR in Model Human Airway Cell Lines

Savannah Caldwell
- Oklahoma State University

193A Habitat Selection and Status of Arogos and Delaware Skippers in the Wichita Mountains Wildlife Refuge, Oklahoma

James Howard
- Cameron University

194A Development and Characterization of Sodium Alginate-Agar-Agar Composite for Enhanced Wound Management

Kazi Avha , Lujayn Alkalani,Zoha Asim

195A On the stability of a satellite constellation in ultra low Moon orbit to support the Artemis mission

Ethan Achipa, Diogo Sanchez

196A A Secure Password Query Database on the Ethereum Blockchain

K'Vion Berry - Clint Givens
- University of California, Los Angeles

197A Determining the Date of Betelgeuse's Supernova using Stellar Characteristics

Aldan Gallaway

POSTER SESSION II

BUSINESS & ADMINISTRATION

1B An Analysis of CPA Exam Content Changes and Suggested Curriculum Enhancements

Edward Walker, Dr. Jaclyn Prentice, Owen Young
- University of Central Oklahoma

2B The Usage of Artificial Intelligence by Accounting Professionals: An Initial Study

Yinghong (Ying) Zhang, Thao Lam
- University of Central Oklahoma

3B Business With A.I.

Olivia Muniz, Madalynn Elkouri
- Cameron University

4B EmpowHERing Women in Higher Education: Leveraging AI for Enhanced Efficiency, Leadership and Success

Ojaswee Rai, , Abbie Lambert, Suzanne Clinton
- University of Central Oklahoma

5B Discounts Made Simple? Coupons versus Rebates: Which Technique Is More Attractive?

Kathy Tran
- University of Central Oklahoma

6B Weather Forecast, Forecast Revisions and Natural Gas Price Dynamics

Jubelqui Miramontes, Nefeli Zafeiri,Zhen Zhu,Kuang-Chung Hsu
- University of Central Oklahoma

7B Silicon Valley Bank's Risk Management Failure & Lessons Learned: A Case Study

Saul Padilla
- East Central University

EDUCATION

8B MESSAGE IN A BOTTLE: TRAIN GRAFFITI IN THE US AND SPAIN IN THE 1970s

Somer Rhodes

- University of Central Oklahoma

9B Special Education and the Law: Ensuring Access and Equity for Students with Disabilities

Torie Ortiz-Jones

- Cameron University

10B The Role of Graphic Novels in Enhancing Mathematical Learning: A Systematic Review

Eileen Richardson, Kaylee Anderson,
Courtney Matthews

- Cameron University

11B Satire in the Magical World

Brooke Nicholson

- Cameron University

12B Impact of Social Belonging on Mental Health Outcomes Among Diverse UCO Students

Samina Shabnam, Sunshine Cowan

- University of Central Oklahoma

13B DEVELOPMENT OF HIGH PROTIEN DUMPLINGS USING KIDNEY BEANS

Sreelekha Velishala, Kanika

Bhargava, Priyanka Gupta

- University of Central Oklahoma

14B Does one's Body Mass Index Impact Vertical Jump Performance?

Dylan Montgomery, Tatum Robertson,
Eric Conchola, Abbey Wahl, Tiauna Alsup,
Mikayla Navarro, Regan Walker

- University of Central Oklahoma

15B Does Treadmill Walking While Studying Increase Academic Performance in College Students

Julia Shawn, Kevin Fink

- University of Central Oklahoma

16B Do Braking and Propulsive Impulse Indexes Vary Between Females?

Abbey Wahl, Eric Conchola, Regan

Walker, Tiauna Alsup, Mikayla Navarro,

Dylan Montgomery, Tatum Robertson

- University of Central Oklahoma

17B Cardiorespiratory Exercise Intensity and Perceived Stress Among College Students

Regan Walker, Melissa Powers

- University of Central Oklahoma

18B Endorsement of Artificial Intelligence Guidelines Across Leading Ophthalmology Journals: A Cross-Sectional Analysis.

Grayson McBee, Madison Dinh, B.S., Chance Bratten, B.S., Chris Tran, B.S., Matt Vassar, Ph.D., Ahmed Elghzali, B.S., Patrick Crotty, B.S., Alicia Ito Ford, Ph.D., Alec Young, B.S., Andrew V. Tran, B.S.
- Oklahoma State University
- Oklahoma State University Center for Health Sciences

19B The House Wins: The Effect of Casinos on Poverty among Native American Population

Nathan Sheppard
- East Central University

20B Identifying Barriers to Veteran Mental Healthcare and How They Influence Veteran Reintegration

David Pittman, Kala Anderson, Jeremy Morris, Amanda Harris, Dr. Vickie Jean, Will Jobson
- University of Central Oklahoma

21B The Social Ties That Bind: Slow-Life Strategies Positively Correlate With Binding Foundations Endorsement

Saige Schmidt
- Cameron University

22B Identifying Valid Measures of Attention in Young Children

Alicia Welch, Doreen Kamanda
- University of Central Oklahoma

23B More Than Just Ramen: The Real Cost of Food Insecurity for College Students

Briana Whetstone
- University of Central Oklahoma

24B Mirror Touch Synesthesia: Do You Feel What I Feel?

Lexi Zimmerman, K. Breana Downey
- University of Central Oklahoma

25B Ultraviolence: The Convergence of Violence and Romance in Women's Fiction

Danielle Wagner
- University of Central Oklahoma

26B Assessing AI Integration in Psychiatry Research: Evaluating Policies Across Leading Journals

Albert Tran, Andrew Tran, Patrick Crotty, Elizabeth Hall, Alec Young, Ryan Sherry, Lauren Kocour, Matt Vassar, Alicia Ford
- Oklahoma State University

FINE ARTS & DESIGN

27B Flow and Stagnation: Integrating the Fluid Systems into Movement

Izabella Taylor

- University of Central Oklahoma

28B The Cuban Revolution: Beginning, End, and Aftermath of Its Graphic Recognition

Chau Nguyen

- University of Central Oklahoma

29B Handmade Type: Typography in Reality

McKenna Sanderson

- University of Central Oklahoma

30B Spaces to Feel Proud of: Using Interior Design to Support Family Stability

Valerie, Adrienne Wright

Settles - University of Central Oklahoma

31B “Rehabilitation Center for Girls Healing from Human Sex Trafficking”

Joselin Trejo

- University of Central Oklahoma

32B The Aeolodion Family of Instruments: Forgotten and Obsolete

Jimmy Miller

- University of Central Oklahoma

33B Remembrance and Renewal an Outreach and International Recording project

Tess Remy-Schumacher

- University of Central Oklahoma

34B Muse Muscle: A Revolutionary Research in Music Education

Yasaman Seif, Hamed Erfani

- University of Central Oklahoma

35B Comparing Digital Forensic Memory Analysis Tools

Jaden McIntosh

- University of Central Oklahoma

36B Evaluating the General Acceptance of Race-Neutral Statistical Analyses of CODIS Loci

Isabelle Reed, James Creecy

- University of Central Oklahoma

37B Three-dimensional analysis of various ammunition brands fired from AR-style rifles

Teagan Trent, Eden Amin, Eric Law, Ph.D.

- University of Central Oklahoma

LIBERAL ARTS

38B Through the Lens of a Defense Attorney

Catherine McGee - East Central University, Criminal Justice

39B Crisis Intervention Team (CIT) Training in Oklahoma

Yoojin Oh, Chunghyeon Seo, Jimmi Winn, Minji Cho
- University of Central Oklahoma

40B School Safety Strategies and School Violence in K-12 Schools

Chunghyeon Seo, Jimmi Winn, Minji Cho, Yoojin Oh
- University of Central Oklahoma

41B Exploring the Relationship Between Student Bullying and Teacher Training

Jimmi Winn, Minji Cho, Yoojin Oh, Chunghyeon Seo
- University of Central Oklahoma

42B Unveiling the Multifaceted Layers of Katsuhiro Otomo's Akira

Axel Sanchez
- University of Central Oklahoma

43B Brewing National Identity: Exploring the Rhetoric of Coffee Consumption as a Marker of Cultural Identity

Alexandra Sweis
- University of Central Oklahoma

44B Queerness and Strangeness of Place in Welcome to Night Vale

Robyn Thornton
- University of Central Oklahoma

45B Romancing the Host

Gina Welborn
- Cameron University

46B Beyond Binary: Exploring Playsersexuality in Video Games

Brandon Westfall
- University of Central Oklahoma

47B Microplastic exposure and the effects on our health.

Susan Sexton
- East Central University

48B Les Objets (indigènes) trouvés – Indigenous lost and found along the Mississippi in 18th century French documents

Skye Rustad, Mara Stevens, Cathrine Webster
- University of Central Oklahoma

49B Don Northcutt: An Oklahoman in America's War in Vietnam

Cas Northcutt
- East Central University

50B When Oklahoma Was Red: An Analysis of Early 20th Century Oklahoma Socialist Newspapers and Their Relationship with Contemporary Events

Connor Rakes
- East Central University

51B Mythology: Myths Connecting Minds

Madison Upton
- Oklahoma City Community College

52B The rise of anti-homelessness in Oklahoma

Willa Marlowe
- Oklahoma City Community College

53B Speed Traps: Investigating Police Revenue in Oklahoma

Hollie Mckinney
- East Central University

54B Groundwater and Surface Water Interaction in Oklahoma: The Curious History of Senate Bill 288

Christine Pappas
- East Central University

55B Capital in the Capitol: Stock Trading by Members of Congress and Environmental Policy

Garrett Trett
- East Central University

56B How social media negatively affects children

Shanelle Walker
- Oklahoma City Community College

57B Diverse Experiences of Forced Family Separation: Spouses Share Their Stories

Nina Michalikova
- University of Central Oklahoma

MATHEMATICS & SCIENCES

58B Hempseed Meal as a Feed for Ruminants

Klaudia Ryan, Dereje Tadesse, Hirut Yirga, Ignacio Tovar-Luna, Ryszard Puchala, Arthur Goetsch
- Langston University

59B Comparing Hyperthermic Conditions and Sugar's Effect on Cancer Cells: Mechanisms, Applications, and Effects.

Graciela Martinez
- Northeastern State University

**60B Access Ectoparasites
Diversity and Load as Product
of Variation in Micro-Habitat**

Syndia Melancon, Richard Dolman, PhD,
Christopher Goodchild, PhD
- University of Central Oklahoma

**61B Flying Under The Radar: A
Study of Adenovirus
Prevalence and Genetic
Variation in Oklahoma's Bat
Populations**

Solomon Meraz, Honey Peters, Dana Lee
- Cameron University

**62B Investigating the Effects
of Marine Sponge Extract
(02PD1L) on Myofibroblast
Contraction Utilizing the
Collagen Lattice Model and
Optical Coherence
Tomography**

Xander Molina, Melville Vaughan, Austin
Segrest, Gang Xu

**63B From Bean to Brew:
Uncovering Potential Risks in
Your Morning Coffee**

Ashlee Morgans
- Rogers State University

**64B Identifying Geographic
Disparities in Oklahoma for
Smoking as a Health-Risk
Behavior**

Tykari Mosburg-Samuels, Mona
Easterling
- Tulsa Community College

**65B Feeding Preferences in
Drosophila melanogaster:
Yeast versus Sugar**

Stardaja Moss, Jimena Aracena
- Southwestern Oklahoma State
University

**66B The Effects of Sugars on
UPEC Growth and Biofilm
Formation**

Katherine Nehmzow, Janaki Iyer
- Northeastern State University

**67B Identification of Citrus
Mold: Utility of DNA Barcoding
in Fungus Identification**

Princeton Niblack, Amy Hurst
- University of Central Oklahoma

**68B Cell-Type Specific
Manipulation of the Monocot
Stomatal Complex: Employing
amiRNA Mediated RNAi to
Study Guard and Subsidiary
Cells**

Brant Osborn, Debra Petrik
- Northeastern State University

**69B Unraveling the functions
of Polymerase Epsilon
complex in DNA replication
and DNA damage**

Lydia Ostmo, Sapna Das-Bradoo
- Northeastern State University

**70B Screening fungi infecting
watermelon for mycoviruses**

Kelly Parsley
- University of Tulsa

71B MRSA in a student population

Eric Paul, Madison Keene
- Southwestern Oklahoma State University

72B The Frequency of Microplastics in the Bats of Oklahoma

Honey Peters, Solomon Meraz, Dana Lee
- Cameron University

73B Microbiological Safety of Leafy Greens Sold in Farmers Market and Grocery Stores in Edmond, Oklahoma

Bhuvaneshwari Pothuraju
- University of Central Oklahoma

74B Exploring the Role of a Liquid Handling Device During PCR Amplification of Mediterranean Geckos (*Hemidactylus turcicus*)

Cassandra Purcell, Jenna Karp, Viannka Galarza, Allyson Fenwick
- University of Central Oklahoma

75B Investigating the role of GOT2 in kidney development

Jimena Ramirez, Yilin Yu, Courtney Karner
- East Central University
- UT Southwestern Medical Center

76B Identifying Geographic Disparities in the Health-Risk Behaviors in Oklahoma

Jazmin Ramos, Mona Easterling, Tykari Mosburg-Samuels
- Tulsa Community College,

77B Evaluating the antimicrobial effectiveness of native medicinal plant extracts (Yarrow, Sassafras and Dandelion) against clinically important pathogens (MRSA, *P. aeruginosa* and *C. albicans*).

Kelsey Rawls, Lauren Ethridge, Jyotisna Saxena, Jenna Messick
- University of Central Oklahoma

78B Delayed Vacuole Formation of *C. burnetii* in HeLa Cells Following Multiple Passages in Axenic Media

Theresa Rayburn, Melissa Brewer
- Southeastern Oklahoma State University

79B Isolation and characterization of Mycobacteriophage against *Mycobacterium smegmatis*

Kaleb Roper, Teagan Fox, Hari Kotturi
- University of Oklahoma

80B Prevalence of Antibiotic Resistant Bacteria in Chisholm Creek of Oklahoma Across Varying Seasons.

Erica Ross, Seoyeon Kim, Jizell Valencia, Manning Evans, Jyotisna Saxena
- University of Central Oklahoma

81B In Vitro Testing of Bismuth Trioxide Fused PCL Samples for Biomedical Applications

Wafaa Rouf, Melville Vaughan, Mohammad Hossan
- University of Central Oklahoma

82B Sayonara, Surgical Sutures: Biodegradable Stitching for Surgical Sutures

Luisamaria Rubio, Gang Xu, Melville Vaughan
- University of Central Oklahoma

83B Innovative Model for Investigating Blast-Induced Traumatic Brain injury

Amar Samour, N. Alsbou, A. Gomez, M. Ahmad, R. Wolf, M. Khandaker
- University of Central Oklahoma

84B What Scorpions Are On The Menu For Pallid Bats?

Ivette Sarabia-Cintron, Dana Lee, Teanna Doleman, Loren Ammerman, Halle Summers
- Cameron University,
- Angelo State University

85B Examination of P. leiophylla regrowth within Peloncillo mountain range, New Mexico.

Tanner Scott
- University of Central Oklahoma

86B Systematic Analysis of Parameter Variations in a Stochastic Fibrin Fiber Degradation Model

Austin Segrest, Brittany Bannish
- University of Central Oklahoma

87B Crinkled Clouds: Chitosan and TGF- β Effects Collagen Lattice Morphology

Austin Segrest, Melville Vaughan, Xander Molina
- University of Central Oklahoma

88B Investigating the abundance of antibiotic-resistant genes in Oklahoma River and Overholser Reservoir, the two freshwater ecosystems of Oklahoma

Shreya Sharma, Delaney F. Donnohue, Matthew Parks, Jyotisna Saxena
- University of Central Oklahoma

89B The Effect of Urbanization on Two Northeastern Oklahoma Streams

Emma Stock
- Rogers State University

**90B ECOLOGICAL
DISTURBANCE IN THE
ANTHROPOCENE: LEGACY
EFFECTS OF ORPHANED
WELLS ON VEGETATIVE
COMMUNITIES AND
METABOLIC PHENOTYPE OF
FREE-LIVING RODENTS**

Jess Warr

- University of Central Oklahoma

**91B Extrapolating Data for the
Biodiversity of Hantavirus
Reservoirs in Gypsum Hills of
Oklahoma**

Hannah Watson, Richard W. Dolman

- University of Central Oklahoma

**92B Exposure to 'Alternative'
Flame Retardants Alters Rat
Aortic Smooth Muscle Cell
Function In Vitro and
Decreases Heart Rate In Ovo**

Alex Webb, Austin Aduddell, Melville
Vaughan, Christopher Goodchild,
Matthew Roberts

- University of Central Oklahoma

**93B Seasonal and Interspecific
Variation in VO₂ and
Hematological Indices of Free-
Living Rodents**

Alex Webb, Michelle Haynie, Yulianis
Pagan, Richard Dolman, Christopher
Goodchild

- University of Central Oklahoma

**94B Environmental Predators
Turn Therapeutic Allies:
Investigating Antimicrobial
Potential Against Multidrug-
Resistant Pathogens**

Andrew Welch, Roxanne Remer, Alex Hill,
Bre Henderson

- Northeastern State University

**95B Trends in Small Mammal
Populations After Seven Years
of Mark-Recapture Research
in the Gypsum Hills of
Western Oklahoma**

Claire Wiley, Gloria Caddell, Michelle
Haynie, Chad King, Francisca Mendez-
Harclerode

- University of Central Oklahoma

- Bethel College

**96B Investigating the
Expression of TGF- β 1 and
TGF- β 2 in Different Cancer
Cells**

Breane Wilson, Luke Miller, Conner
Ghere, Aniee Khan, Janaki Iyer

- Northeastern State University

**97B Inhibition of Autophagy
by Chloroquine in Bladder
Cancer**

Kinley Wilson, Michael Morgan

- Northeastern State University

98B Sprint speed, hematology, and active metabolic rate of juvenile collared lizards

Megan Wilson, Troy Baird, Christopher Goodchild
- University of Central Oklahoma

99B Isolation and identification of multidrug resistant pathogenic bacteria from retail meat

Devin Worstell, Joel Folres
- Northeastern State University

100B Developing A Tool for Identifying Pericytes and Endothelial Cells in Diabetic Mouse Eyes

Quan Yan, Cammi Valdez
- Northeastern State University,

101B Evaluation of the Antimicrobial Properties of Tree Leaf Extracts Against Gram-Positive and Gram-Negative Bacteria

Gokul Maniventhan
- Southeastern Oklahoma State University

102B Characterizing a Cross Timbers Forest in Tulsa, Oklahoma

Sarah Short, Chad King
- University of Central Oklahoma

103B Metal-oxide Nanoparticle Recovery from Limestone-Packed Columns

Randall Maples, Gwendolyn Autrey
- East Central University

104B Core-Shell Silica Nanoparticle Synthesis and Surface Functionalization

Brenna Maynard, Nathan Green
- Northeastern State University

105B Molecules of Nature: A Summer Academy for Rising 8th and 9th Graders

Daniel McInnes, Charles Crittall
- East Central University

106B Halide-Ion Polymer Electrolytes Constructed from Crosslinked Polyethylenimine and Ionic Liquids

Alexa Mutz, Christopher Burba
- Northeastern State University

107B HMP-Alkyne as a Potent Inhibitor of Metallo- β -Lactamase from *Klebsiella pneumoniae*

Lydia Neff, Sean Kim
- Northeastern State University

108B Design, Synthesis, and Evaluation of a Novel Histone Deacetylase Inhibitor for Cancer Therapy

Nicol Nightingale, Sean Kim
- Northeastern State University

109B Determining if the Age of an Individual Affects the Chemical Composition of Latent Prints

Reagan Oliver, Sanjeewa Gamagedara, Ph.D.

- University of Central Oklahoma

110B The Development and Validation of Various Bio-separation Techniques Utilizing an UHPLC

Abigail Organ, Natalie Workman, Sanjeewa Gamagedara, Ph.D.

- University of Central Oklahoma

111B The effect of Graphene Oxide on Photo physics of Rhodamine-6-G dye (R6G) in a reverse micelle environment.

Jeran Rivera, Daniel Kim, Blake Howard, Dr. Rajesh Nayak

- Cameron University

112B Profiling Phenolic Acids in Commercially Available Teas in Lawton, OK

Alexis Salone, Leilani Hunter, KD Priyasantha

- Cameron University

113B Synthesis of Aspirin Analogs as Potential Histone Deacetylase Inhibitors

Baljit Sandhar, Sean Kim

- Northeastern State University

114B Effect of Potyviruses on the organic compounds produced in Cucurbitaceae

Paige Taylor, Gregory Palomar, Robert Sheaff

- University of Tulsa

115B In Silico and Enzyme Kinetic Evaluation of HMP-Alkyne as a Metallo- β -Lactamase Inhibitor

Houa Thao, Sean Kim

- Northeastern State University

116B Multi-Step Microwave Assisted Synthesis of Sulfathiazole

Shaw Thornton, Spence Pilcher

- Northeastern State University

117B Near IR Gold Nanorod Combined Photothermal and Photodynamic Therapy

Ashley Viso, Dr. Nathan Green

- Northeastern State University

118B Inhibitory Effect of Histone Deacetylase 8 by a Hydroxamic Acid Compound

Evann Walker, Sean Kim

- Northeastern State University

119B Study of iodine distribution and concentrations in western Oklahoma brine waters and recycling of used chloroform

Jason Wickham, Amanda Lane,Alaina Pierce, Averie Larson
- Northwestern Oklahoma State University

120B Synthesis of Histone Deacetylase (HDAC) Inhibitor Analogs Towards Gold Nanorod Surface Coatings

Charli Woessner, Dr. Nathan Green, Dr. Sean Kim
- Northeastern State University

121B Biomolecule Conjugation to Dye-Doped Silica Nanoparticles

Brandi Woods, Nathan Green
- Northeastern State University

122B The Investigation of Peak Purity and the Identification of the Degradant Products of Statins

Natalie Workman, Abigail Organ,Sanjeewa Gamagedara, Ph.D.
- University of Central Oklahoma

123B Search Engine for Software Vulnerabilities

Prerana Madhira, Junghwan (John) Rhee
- University of Central Oklahoma

124B Generative AI

Lynda Martinez, Jawad Drissi, Anthony Gonzales, Zoe Muecke
- Cameron University

125B IoT Security: Optimization Models and Blockchain-neural hybrid solutions.

Michael Martinez, Richard Essig, Michael Phillips, Jawad Drissi
- Cameron University

126B Securing Cloud Environments

Xavier McClure, Crystal Alvarez, Tia Primc, Dr. Jawad Drissi
- Cameron University

127B Convolutional Neural Networks in Computer Vision

Ellechel Ngiraibai, Andrew Macom,Laurie Francisco,Jawad Drissi
- Cameron University

128B Active Inference: Bridging Neural Representations and Human Interpretability

Iliia Nikulin

129B Exploring Unsupervised Machine Learning for Anomaly Detection.

Jeehyun Oh, Zhiqiang Zhang,Junghwan Rhee,Fei Zuo,Myung-Ah Park
- University of Central Oklahoma

130B Integrating a Large Language Model into a Smartwatch Health Application to Improve Engagement

Joshua Pinzon, Jicheng Fu
- University of Central Oklahoma

131B Context Matters: Investigating Its Impact on ChatGPT's Bug Fixing Performance

Xianshan Qu, Fei Zuo, Xiaopeng Li, Junghwan Rhee
- University of Central Oklahoma
- Microsoft

132B An Evaluation on the Impact of Large Language Models on Computer Science Curricula

Junghwan (John) Rhee, Gang Qian, Fei Zuo, Aakankshya Shrestha, Goutam Mylavarapu, Myungah Park, Jicheng Fu, Hong Sung, Xianshan Qu
- University of Central Oklahoma

133B Artificial Intelligence in Cyber Security

Hans Schulz, Edrei Javier, Josue Franco Otero
- Cameron University

134B Building an Educational Platform for Game Development and Augmented Reality Technology

Aakankshya Shrestha, Junghwan Rhee
- University of Central Oklahoma

135B Free IT-Camp Workshop – AI/ML for Beginners

Ming-Shan Su, Rahul Iyengar
- Southeastern Oklahoma State University
- Arizona State University

136B Verifying the Safety of Windows Binaries

Jacob Thomas, Junghwan Rhee
- University of Central Oklahoma

137B AI-Powered Virtual Assistant for Veteran Suicide Prevention: Real-Time Conversational Support through NLP and AI

Yong Shen Wong, Ji Cheng Fu
- University of Central Oklahoma

138B Towards Enriched Dataset for Traffic Light Detection and Recognition

Shuai Zhang, Mohammad Aariz, Ben Le, Jicheng Fu
- University of Central Oklahoma

139B Security event analysis resistant to large data volume attacks

Zhiqiang Zhang, Junghwan Rhee, Jeehyun Oh
- University of Central Oklahoma

140B ChatGPT as an assembly language interpreter for computing education

Fei Zuo, Gang Qian, Junghwan Rhee, Xianshan Qu
- University of Central Oklahoma

141B Fabrication and Analysis of Bioresorbable Flow Diverters with parameters to achieve pre-defined porosities

Faisal Mahmud, Mohammad Robiul Hossan
- University of Central Oklahoma

142B Radiopacity Analysis of Angiogram Contrast Agents Infused with Polycaprolactone for Medical Applications

Alex Matsayko
- University of Central Oklahoma

143B Prolonged Antimicrobial and Biocompatible Properties of Polycaprolactone (PCL) Nanofiber Membranes for Deep Wound Healing Applications

Sohaib Mesiya, Morshed Khandaker, Ziyam Khan, Ayan Khan, Amar Samour, Melville Vaughan
- University of Central Oklahoma

144B Rapid Injection Molding with Resin 3D-printed molds

Jeffery Moore
- University of Central Oklahoma

145B Comparative Study of Chiral Magnetic Nanoparticles Preparation Techniques

Jeffery Moore, Tej Nath Lamichhane
- University of Central Oklahoma

146B Arduino Potentiostat Utilizing Nanofiber Sensors

Jeffery Moore, Robert Riggs
- University of Central Oklahoma

147B Self-Driving Model Car

Nishitha Motakatla, Junghwan (John) Rhee
- University of Central Oklahoma

148B Development of the Testing of Corrosion Resistant Nano Fiber Coating

Dylan Muse, Melaina Matthews, Abby Nguyen, Dylan Muse, Pablo Soto, Morshed Khandaker
- University of Central Oklahoma

149B Machine Learning for Diagnosis of Traumatic Brain injury and Developing tools for Educating the General Public

Chidera Osaji, Amarachukwu Oti
- University of Central Oklahoma

150B 3D Detector Using Plastic Scintillators

Chidera Osaji, Dr. Nesreen Alsbou, Alyssa Gazaway, Joshua Pitzer, Dr. Imad Ali
- University of Central Oklahoma

151B Advancements in 3D-Printed PCL-HA Bone Scaffolds and Intramedullary Nail Systems

Onyedikachi Oti
- University of Central Oklahoma

152B Analysis of the Applicability for Micro Welding in the Aerospace Industry

Yen Pham, Sezin Kadioglu, Abdellah Moussa, Brad Bowes, Thanh Tran, Mahmoud Alomari
- University of Central Oklahoma

153B Design of a Multilateral Dispenser Prototype for a Binder-Jet 3D Printer

Mason Price, Mason Price, Kamilla Ali, Ravi Shah, Dr. Tej Lamichhane, Dr. Abdellah Ait Moussa
- University of Central Oklahoma

154B Cabin Pressure Valve Tooling System with Tinker Air Force Base

Cole Ranck, Madeline Bradley, Matelyn Jones, Evan Lemley, Yuhao Jiang
- University of Central Oklahoma

155B Pressurized Chamber for Product Design and Testing

Kaitlyn Rapoport, Yuhao Jiang, Nikita Dadabhai, Dylan Carpenter, Sezin Kadioglu, Howard Richards
- University of Central Oklahoma

156B FAA Navigation Lighting Testing Array Renewal

Joshua Smith, Lauren Sowards, Tyler Trulock
- University of Central Oklahoma

157B Hybrid Systems in Aerospace

Christopher Svebek, Cody Conrady, Gunner Snowden
- Southwestern Oklahoma State University

158B EMG Signal Guided Prosthetic Hand

Matthew Tipton, Kiefer Massey, Amarachukwu Oti
- University of Central Oklahoma

159B Antenna Pointer

Cesar Vasquez
- University of Central Oklahoma

160B Development of Phase Change Material Based Insulation Technology for Building Energy Savings and Thermal Comfort

Weihuan Zhao, Gonzalo Castells
- Northeastern State University

161B Sustainable Solutions: Recycling Glass to Reduce Microplastic Pollution, Overflowing Landfills, and Sand Over-Extraction

Adrian Odhiambo
- East Central University

162B Effects of Household Chemicals on Decomposition

Norine Murphy
- Rogers State University

163B Determining the Viability of Breathwork and Meditation as Intervention Techniques for Stress in the Forensic Science Community

Prateek Shetty

164B Utilizing Honeybees (*Apis mellifera*) as a Surveillance and Monitoring Technique for Bacterial Pathogens in Specific Environments

Jordan Walter, James Creecy
- University of Central Oklahoma

165B The effect of increased pathogenicity of bacteria on the development of *Dictyostelium discoideum*

Muatasem Ubeidat, Angelia Buford
- Southwestern Oklahoma State University

166B Comparing DNA Extraction Methods for *Quercus shumardii*: Cost, Quality, and Efficiency

Benjamin Woolen
- Northeastern State University

167B Exploring the Endorsement and Implementation of Artificial Intelligence Guidelines in Leading Orthopaedic and Sports Medicine Journals: A Cross-Sectional Study

Kurt Mahnken, Patrick Crotty, Alec Young, Alicia Ito Ford, Andrew Tran, Cameron O'Brien, Josh Major, Matt Vassar
- Oklahoma State University

168B Endorsement of Artificial Intelligence Guidelines Across Leading Obstetrics and Gynecology Journals: A Preliminary Cross-Sectional Analysis

Caitlin McCormick, Jillian Brassfield, Matt Vasser, Alicia Ford, Alec Young, Allie Shumard, Andrew Tran, Kaylyn Rowsey, Patrick Crotty, Tanner Profice
- Oklahoma State University
- Oklahoma State University College of Osteopathic Medicine

169B Endorsement of Artificial Intelligence Guidelines Across Leading Nephrology Journals: A Cross-Sectional Analysis

Vivian Nguyen
- Oklahoma State University-Tulsa

170B Adoption of Artificial Intelligence Guidelines in Anesthesia Journals: A Cross-Sectional Analysis.

Malachi Penland, Alicia Ford, Andrew Tran, Jeanie Marchbanks, Tag Harris, Patrick Crotty, Matt Vassar, Lydia Hashemi, Alex Hagood, Alec Young
- Oklahoma State University Center for Health Sciences

171B Endorsement of Artificial intelligence Guidelines Across Leading Immunology Journals: A Cross-Sectional Analysis

Madeline Rowe, Alec Young, Amhed Elghzali, Alicia Ito Ford, Ph.D, Chris Tran, Matt Vassar, Ph.D, Andrew V. Tran, Chance Bratten, Nevada Denton, Patrick Crotty
- Oklahoma State University
- Oklahoma State University College of Osteopathic Medicine

172B Discovering the prevalence of analgesic medication used at different levels of baseball

David Ryan
- Oklahoma State University

173B A Look into the Development of Senolytic Drugs as Anti-Aging Solutions

Nia Sauda
- Cameron University

174B Comparing the Quality and Readability of Postoperative Instructions for Inferior Turbinate Reduction: Insights from ChatGPT and Google

Seth Sims, Rachel Hazlitt, Matt Vassar
- Oklahoma State University College of Osteopathic Medicine
- Oklahoma State University Center for Health Science

175B Exploring the Endorsement of Artificial Intelligence Guidelines Among Top Dermatology Journals: A Cross-Sectional Analysis

John Stroup, Taylor Gardner, B.S., Ha Huynh, B.S., Ryan Sherry, B.S., Elizabeth Hall, B.S., Andrew Tran, B.S., Matt Vassar Ph.D., Alicia Ito Ford, Ph.D., Alec Young, B.S., Patrick Crotty, B.S.
- Oklahoma State University Center for Health Sciences

176B GRIP STRENGTH, BODY COMPOSITION, AND ACADEMIC PERFORMANCE IN COLLEGE STUDENTS

Eva Trompler, Nancy Mankin, Brady Gerstenberger, S carlet Jost, Nathan Anderson, Myra Bloom, Duoduo Cai, Enrique Valderrama-Araya, Victor Rodrigues da Costa Gomes, Andrew Lang, Philip Nelson, Emily Castile, Chloe Winkler
- Oral Roberts University

177B The Utilization of AI in Top Surgery Literature: Insights from a Cross-Sectional Study

Pau Von, Benjamin Hudgens, Luis Frias Perez, Noah Barks
- Oklahoma State University
- Oklahoma State University College of Osteopathic Medicine

178B Endorsement of Artificial Intelligence Guidelines Across Leading Geriatric Journals: A cross-sectional analysis

Beck Wakefield, Alicia Ito Ford, Patrick crotty, Joanna George, Rachel Hazlitt, Matt Vassar, Danielle Waller, Khanh Nguyen, Alec Young, Andrew Tran
- Oklahoma State University
- Oklahoma State University Center for Health Science

179B A Comparative Analysis of AI Platforms in Neurosurgical Education: Evaluating ChatGPT, DeepSeek, Open Evidence, and AtlasGPT on Board-Style Questions

Ethan Wood, Beste Gulsuna, Timurhan Aksoy, Kishore Balasubramanian, Christopher Graffeo
- Oklahoma State University
- Dokuz Eylül University

180B Predicting Growth of Eastern Red Cedar (Juniperus virginiana) Using Mathematical Modeling Techniques

Thomas Nelson, Sean Laverty
- University of Central Oklahoma

181B Error Rates in Hurricane and Typhoon Wind Speed Models

Mason Robinson, Brittany Bannish
- University of Central Oklahoma

182B Understanding Deficiencies and Creating Resources for Precalculus-Algebra

Scott Williams, Britney Hopkins, Liz Lane-Harvard, Erin Williams
- University of Central Oklahoma

183B The Effect of the COVID-19 Pandemic on the Evaluation and Treatment of Dysphagia by Speech-Language Pathologists

Camdin Pierce, Kaitlyn Scrapper
- Northeastern State University

184B Effects of Chlorhexidine Products On Central Line Associated Bloodstream Infections

Jaydon Mills, Brianna Brantley, Malik Wilson
- Northwestern Oklahoma State University

185B LGBT Mental Health

Madeline Pack, Karen Rust, Adele Callaway
- Northwestern Oklahoma State University

186B Negative Pressure Wound Therapy Compared to Traditional Wound Therapy

Morgan Poust, Bridget Wilhite, Talia Wright
- Northwestern Oklahoma State University

187B Nursing Bedside Handoff Report Compared to at the Nursing Station

Maegan Rexrode, Maria Cornwell, Megan Kegin
- Northwestern Oklahoma State University

188B Vaccine Hesitancy and Refusal Among Parents For Their Children

Aubrey Ritter
- Northwestern Oklahoma State University

189B Comparing Chlorohexidine vs. Povidone-Iodine to Prevent Surgical Site Infections

Lyzeth Salcedo Vega
- Northwestern Oklahoma State University

190B The Impact of Interruptions on Nurses During Medication Administration and Patient Outcomes

Catherine Vaverka, Katherine White
- Northwestern Oklahoma State University

191B Evaluating Data-Sharing Policies and Author Compliance in Leading Orthopedics Journals

Josh Major, Klaire Wild
- Oklahoma State University-Tulsa

192B Ab initio calculations of the threshold displacement energies in lead-free inorganic halide perovskites

Nina Parvin, Mario Borunda, Rosty Martinez
- Oklahoma State University

193B Electrochemical deposition optimization of Fe-Co-B/Ta magnetic multilayers for spintronics

Anjali Poulo, Tej Nath Lamichhane, Levi Cosgrove, Joshua Torres, Jeffery Moore, Matthew Goodman, Haley Kluck Graham
- University of Central Oklahoma

194B Synthesis and characterization of Ce-Mg based hydrogen storage alloys

Anjali Poulo, Joshua Torres, Levi Cosgrove, Jeffery Moore, Tej Lamichhane, Haley Kluck Graham, Matthew Goodman
- University of Central Oklahoma

195B Prediction of Magnetic Order and Dimensionality in Cerium-Based Compounds Guided by Structural Characteristics and Tri-Critical Exponents

Joshua Torres, Tej Lamichhane, Levi Cosgrove, Anjali Poulo, Jeffery Moore
- University of Central Oklahoma, Physics

196B Chaotic Motion of Satellites and Moons

William Walker, Shayne Johnston
- Oklahoma School of Science and Mathematics

197B Finding the Effective and Biological Half-Life of Tc-99m using Radiacode

Karen Williams
- East Central University

198B The Ethics of Water Preservation: Exploring Tribal Perspectives on Fluoridation in Oklahoma

Mason Martinez
- East Central University

199B Religiosity and Sexual Attitudes

Izabella Valdez, Alex Godwin Herron, Peter Rerick
- University of Central Oklahoma

200B Determining the Transmission Rate of Deer Mice Hantavirus Carriers in Oklahoma Central Plains

Ethan Metzger, Richard Dolman
- University of Central Oklahoma

201B How changes in density relating to seasons impact sexual selection in lake and spring populations of Hyalella amphipods

Madison Normile
- Southwestern Oklahoma State University

202B Natural History Necromancy: An Analysis of Specimen Rehydration

Rachel Uhlig, Renan Bosque, Jonathan Almanza, Dustin Ferry, Kyle Lane, Kylar Byrd, McKaegan Gregory, Madilyn Crisp, Bryant Franco, Erik Mesta
- Southwestern Oklahoma State University

203B Sexual selection in response to varying levels of cultural eutrophication

Rachel Uhlig, Rickey Cothran
- Southwestern Oklahoma State University

**204B Investigating the Effects
of Marine Sponge Extract
(02PD1L) on Myofibroblast
Contraction Utilizing the
Collagen Lattice Model and
Optical Coherence**

Tomography

Xander Molina, Melville Vaughan, Austin
Segrest, Gang Xu
- University of Central Oklahoma

**205B Active Inference:
Bridging Neural
Representations and Human
Interpretability**

Ilia Nikulin
- Oklahoma School of Science and
Mathematics

**206B Determining the
Viability of Breathwork and
Meditation as Intervention
Techniques for Stress in the
Forensic Science Community**

Prateek Shetty

**207B Chaotic Motion of
Satellites and Moons**

William Walker, Shayne Johnston
- Oklahoma School of Science and
Mathematics

Oklahoma Research Day



**NORTHEASTERN
STATE UNIVERSITY**



**OKLAHOMA STATE REGENTS
FOR HIGHER EDUCATION**

Improving our future by degrees



Established Program to Stimulate Competitive Research



Northwestern
OKLAHOMA STATE UNIVERSITY



**Southeastern Oklahoma
State University**

