



Oklahoma Research Day

Northeastern State University

2026



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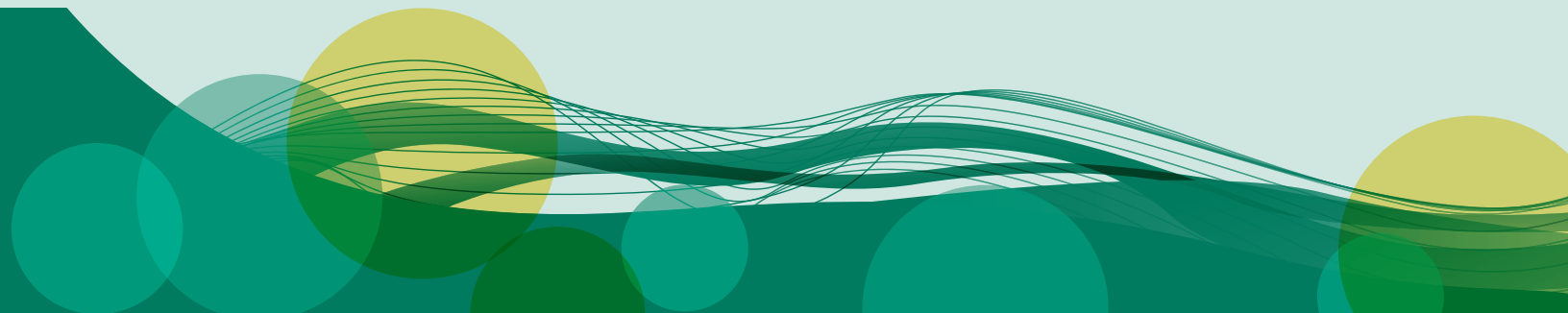
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LETTER FROM THE PRESIDENT

On behalf of Northeastern State University, I am pleased to welcome you to the 2026 Oklahoma Research Day. This year's theme, Silver Linings: Research Illuminating a Brighter Future, highlights the important role research plays in advancing knowledge and addressing both current and emerging challenges.

Oklahoma Research Day provides an opportunity for students and researchers from across the state to share their work, exchange ideas and engage in meaningful academic dialogue. The research presented here reflects the strength of scholarship taking place in Oklahoma, work that is often rooted in local contexts while contributing to conversations and solutions that extend well beyond our state.

At Northeastern State University, we are proud to be Oklahoma's Immersive Learning Institution, committed to hands-on learning and research experiences that prepare students for professional and academic success. Opportunities to present and discuss research are essential to this mission and to the continued growth of our academic community.

I would like to thank the organizers, faculty, staff and students whose efforts make this event possible. Your dedication to research and scholarship is greatly appreciated.

I hope you find today's presentations informative and engaging and I wish you a productive and rewarding Oklahoma Research Day.

Sincerely,



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

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Southwestern Oklahoma State University

Jessica Salmans Meditz, Associate Professor of Media Arts
Jason Johnson, Provost and VP, Academic Affairs

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

DR. RAVEN BAXTER

As a molecular biologist and science educator, Dr. Raven aims to simplify science through engaging educational content. With degrees in Molecular Biology and a PhD. in Science Education and 15+ years in science education and communications, she makes complex scientific theories relatable. Raven brings expertise in high-throughput drug discovery and consults with science companies to enhance communication.

As the Executive Director at The Science Haven, she promotes curiosity and engaging science experiences for all. Her work has earned recognitions from Forbes 30 Under 30 and EBONY Power 100, for striving to make science inclusive and exciting globally.

Starting as an intern, Raven has built a community of science enthusiasts through storytelling, music and comedy. Collaborating with industry leaders like 3M and Netflix to convey scientific narratives effectively and develop brand strategies.



EVENT SCHEDULE

8 a.m. - 1 p.m.

Registration
University Center

8 a.m. - 9 a.m.

Breakfast
University Center

9 a.m. - 10:30 a.m.

Welcome & Keynote
University Center

- **Call to Order:** *Northeastern State University's 20th President, Dr. Rodney S. Hanley*
- **Welcome:** *Chief Executive Officer for the Oklahoma State System of Higher Education, Chancellor Sean Burrage*
- **Welcome:** *Principal Chief of the Cherokee Nation, Chief Chuck Hoskin Jr.*
- **Keynote Speaker:** *Dr. Raven Baxter*
- **Closing Remarks:** *Dr. Carla Swearingen, Provost and Vice President Academic Affairs, NSU*

10:45 a.m. - 11:30 a.m.

Career Fair & Poster Session I Setup
Jack Dobbins Field House

11:30 a.m. - 12:30 p.m.

Poster Session I
Jack Dobbins Field House

11:30 a.m. - 1:30 p.m.

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

12:45 p.m. - 1:30 p.m.

Career Fair & Poster Session II Setup
Jack Dobbins Field House

1:30 p.m. - 2:30 p.m.

Poster Session II
Jack Dobbins Field House

ACKNOWLEDGMENTS

NSU OKLAHOMA RESEARCH DAY EXECUTIVE PLANNING COMMITTEE

Dr. Jim Ferrell, *Co-Chair*

Dr. Jessica Secratt, *Co-Chair*

Dr. Peggy Glenn

Ms. Sydney Cain

Ms. Tory Lander

Dr. Cammi Valdez

Dr. Jessica Martin

Ms. Halie Jo Maupin

Ms. Lyndie Childress

Ms. Marissa Mitchell

Mr. Harold McMillen

Dr. Rui Zhang

Captain James Bell

VOLUNTEERS

Our volunteers helped fill vital roles in setting up this event, ensuring smooth transitions between registration and poster presentations, guiding our attendees, supporting presenters, and so much more. To all who helped make this event possible, we extend our deepest appreciation for all of your time and effort to help make this event successful. Your dedication, teamwork, and support throughout this event played a key role in ensuring a welcoming and meaningful experience for everyone involved. Thank you again for supporting our students and creating a space that encourages confidence, success, and academic growth for students all across Oklahoma!

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 Prompt Echo Effects on Audit Evidence

Mfon Akpan, Buhe Li and Adeyemi Adebayo

- *Northeastern State University*

2A The Usage of Artificial Intelligence by Accounting Professionals

Maegan Bedwell

- *University of Central Oklahoma*

3A Cryptocurrency: A Legal and Tax Analysis

Neva Le

- *University of Central Oklahoma*

4A The Dark Triad, Belief in a Just World and the Attitude Toward Cheating of University Students

Marty Ludlum, Syed Kamal and Alicia Mclean

- *University of Central Oklahoma*

5A Beyond Command and Control: A Leadership Model for Complex Healthcare Environments

M Asif and Ricky Wallace

- *Northeastern State University*

6A Probing the Dialectical Tensions of AI Integration among Business Executives

Ray Butler and Jeanetta Sims

- *University of Central Oklahoma*

EDUCATION & PROFESSIONAL STUDIES

7A What's in the Toolbox? Graduate Education Students' Interests in Intervention Resources

Karis Barnett, Jeffrey Dobbs and Karen Gichinga

- *University of Central Oklahoma*

8A Instructional Strategies in Reading for a Student With Childhood Apraxia of Speech

Jennie Blankenship

- *Northeastern State University*

9A Scaling The “Cook and Learn” Model: Challenges in Sustaining Transformative Learning Projects

Subikshya Bogati, Linda Harris and Sunshine Cowan

- University of Central Oklahoma

10A Bridging the Gap: Using Technology to Empower Multidisciplinary Collaboration in Special Education

Ashley Johnson, Adison Kerchal, Susan Phillips, Justina Rhodes and Jodi Benjamin

- Northeastern State University

11A Development of Pea Milk and Comparative Analysis of its Physicochemical Properties with Cow Milk

Debaki Bhandari and Kanika Bhargava

- University of Central Oklahoma

12A Comparative study of physiochemical Properties of Soy tofu and Chickpea tofu made with two different coagulant $MgCl_2$ and lemon.

Sujata Bhandari and Kanika Bhargava

- University of Central Oklahoma

13A Innovative Quinoa Cookies Fortified with Omega-3: Evaluating Nutritional Composition and Health Benefits

Vani Reddy Kothapally and Priyanka Gupta

- University of Central Oklahoma

14A Balancing Books and Babies: Parenting Students in Higher Education

Kyra Beer

- University of Central Oklahoma

15A Armor with Limits: Oil and Gas Field Workers' Perceived Value of Protective Clothing and Equipment

Misael Duque, Uikyung Jung and Haelee Manning

- University of Central Oklahoma

16A Mung Bean Plant Milk: Process Optimization and Quality Characterization

Rathnababu Gorremuchhu, Priyanka Gupta and Kanika Bhargava

- University of Central Oklahoma

17A Determining the Re-testability and Reliability of the Jamar Handgrip Dynamometer and the Vernier GoDirect Handgrip Dynamometer.

Marina Hartman, Eliana Christensen, Kevin Fink, Jaci Olsen, Eric Conchola and Tracy Morris

- University of Central Oklahoma

18A Is There a Significant Difference in Sway Index (SI) as a Function of Rock-Climbing Status and Testing Conditions?

Eliana Christensen, Marina Hartman, Kevin Fink, Eric Conchola, Jacilyn Olson and Tracy Moris, Keith Rodgers, Barrett Cowan

- University of Central Oklahoma

19A Longitudinal Examination of Health, Wellness and Handgrip Strength of Beginning Climbers

Kevin Fink, Jaci Olson, Eric Conchola, Barrett Cowan, Eliana Christensen, Marina Hartman and Tracy Morris

- *University of Central Oklahoma*

20A Utilizing Embodied Learning as a College Student

Baylor Franz, Tyler Weldon and Rachelle Franz

- *University of Central Oklahoma*

21A Do Sponsoring Brand Familiarity and Credibility Matter in Professional Sport League Website Sponsorship?

Doyeop Kim

- *Northeastern State University*

22A Leveraging Pose Estimation for Markerless Motion Analysis in Naturalistic Settings

Uikyung Jung

- *University of Central Oklahoma*

23A Poker Face Under Pressure: Moderating Impact of Autonomic Arousal on Expressive Suppression and Facial Affect Sensitivity

Kala Anderson

- *University of Central Oklahoma*

24A "Living Unapologetically: LGBTQ+ Coming Out in Midlife and Beyond"

Mari Belle

- *University of Central Oklahoma*

25A From the Top: Examining How Changes in Coaching Instruction Affect Perceived Task Difficulty

Lauren Berry and Robert Mather

- *University of Central Oklahoma*

26A Social Media Addiction as a Behavioral Addiction

Fernanda Binda

- *Oklahoma City Community College*

27A Risk Taking Under Scarcity

Adam Canler

- *Southeastern Oklahoma State University*

28A Dark Triad Personality Risk Factors among Aspiring Law Enforcement and Officers

Hope Crowell, Trinity Levy, Isabella Simpson and Bri Sneed

- *University of Central Oklahoma*

29A Initiation and Denigration

Gisel Diaz

- *University of Central Oklahoma*

30A Empathy in the Digital Age: How Empathy is Perceived Across Technological Mediums

Dalton Haley

- *University of Central Oklahoma*

31A ADHD vs Birth Control

Kylee Hilliard and Vickie Jean

- *University of Central Oklahoma*

32A Unpredictable Indulgence: How Childhood Unpredictability and Deprivation Influences Adult Materialism

Eileen Hinman

- *University of Central Oklahoma*

33A Seven-Year Review of Change in Depression Management by Undergraduate Students

Rachel Ly and Tephillah Jeyaraj-Powell

- *University of Central Oklahoma*

FINE ARTS & DESIGN

34A Identity Labels and Aesthetics of First American Descendant Art

Tobi Coleman

- *University of Central Oklahoma*

35A Mass of St. Gregory: Hybridized Art in Colonial Mexico

Madsen Flores

- *University of Central Oklahoma*

36A Towards a Joyful Collaboration: Strategies for Negotiating the Dynamics and Complexities of Collaboration in Art Education

Oksun Lee

- *University of Central Oklahoma*

37A Incomplete Design History season 6 : continuing stories of women, BIPOC designers, & expanding on design culture

Amanda Horton, Chloe Falls, Gabbi Warriner, Noel Barr, Haley Dawkins and Spencer Gee

- *University of Central Oklahoma*

38A A Catalogue of Double Bass Tunings

Ford Chambers

- *University of Central Oklahoma*

39A How Music Affects the Physical and Cognitive Development of Infancy Through Late Adulthood

Kylee Hall

- *University of Central Oklahoma*

FORENSIC SCIENCE INSTITUTE

40A Evaluating the Efficiency of Laundry Sanitizers on the Removal and Transfer of DNA in a Washing Machine

Nicole Agre and Rhonda Williams

- *University of Central Oklahoma*

41A Judicial Gatekeeping: Use of Scientific Standards & Forensic Expert Qualification in Oklahoma

Brittlyn Eckerd and John Mabry

- *University of Central Oklahoma*

42A Evaluating the Quality and Quantity of Detail of Latent Prints on Buried Objects

Angela Gonzalez Bueno and Caitlin Porterfield

- *University of Central Oklahoma*

43A Analysis of Accuracy and Sensitivity in Semen Presumptive Testing: ABACard™ p30, RSID Semen™ and Seratec™

Livia Jojo and Rhonda Williams, Ph.D.

- *University of Central Oklahoma*

HEALTH PROFESSIONS

44A Assessing Seasonal Patterns in the Prevalence of Antibiotic-Resistant Bacteria in Chisholm Creek, Oklahoma

Seoyeon Kim, Erica Ross, Ally Turner, Makayla Coursey, Shreya Sharma and Jyotisna Saxena

- *University of Central Oklahoma*

45A Food Safety Risks in Retail Leafy Greens

Ranjana Ghimire, Bhuvaneswari Pothuraju, Priyanka Gupta and Kanika Bhargava

- *University of Central Oklahoma*

46A Bridging Disciplines: A Collaborative Framework for Supporting Students with ASD in Educational Settings

Kaitlin Brumley, Savannah Dry, Autumn Armstrong, Tammy Lester and Elena Rodriguez

- *Northeastern State University*

47A Empowering Future Practitioners: A Peer Review Resource for the OTA Curriculum

Holly Afendras

- Oklahoma City Community College

48A Stress Management Interventions for Single Mothers

Kimberly Alvarez, Kelly Woolum and Olivia Tarver

- University of Central Oklahoma

49A The Critical Care Burnout Cycle in New Nurses: How do we fix this?

Nineth Barrios

- University of Central Oklahoma

50A Protect Those Who Care: Ending Violence Towards Nurses

Madison Bennett and Leann Laubach

- University of Central Oklahoma

51A Prevention of Needlestick Injuries

Lauren Burchel

- University of Central Oklahoma

52A Pediatric Mental Health

Madeline Buz and Leann Laubach

- University of Central Oklahoma

53A Trauma Informed Care - How Nursing Education Promotes Psychological Safety in Pediatric Patients

Emily Cole

- University of Central Oklahoma

54A Overprescription of Antidepressants in Adolescents

Caitlyn Fowlkes

- University of Central Oklahoma

55A Understanding Adult Sepsis: Nursing Interventions to Help Patient Outcomes

Joshua Gau

- University of Central Oklahoma

56A Food Insecurity in Pregnancy

Taylor Hayes, Leann Laubach and Ashley Wilson

- University of Central Oklahoma

57A Health Anxiety in Nursing Students: What You Can Do

River Housh

- University of Central Oklahoma

58A Central Line-Associated Bloodstream Infections in the NICU

Caitlin Inman and Leann Laubach

- University of Central Oklahoma

59A Medication Error Prevention in Nursing

Kaylee Land

- *University of Central Oklahoma*

60A Twice-Yearly Lenacapavir for HIV Preexposure Prophylaxis

Delaney Ferguson, Kristen Norris, Megan Presley and Kayla Burleson

- *Southwestern Oklahoma State University*

LIBERAL ARTS

61A Preventing Violence: The Role of Community, Social-Emotional Learning and Student-Centered Programs

Minji Cho, Jimmy Winn and Chunghyeon Seo

- *University of Central Oklahoma*

62A The Dire Case of Incarcerated Mothers and their Children in OKC, in the “Era of Penal Excess”

Elias Jeradeh and J. Sunshine Cowan

- *University of Central Oklahoma*

63A The Cultural and Physical Division Brought Upon the Keetoowah/Cherokee Tribes

Kyndal Aimerson

- *Northeastern State University*

64A Hepeating: The History of He Said She Said

Ellie Barnett

- *University of Central Oklahoma*

65A Colonial Erasure and Cultural Renewal: The Psychological and Spiritual Dimensions of Two-Spirit Identity in Southwestern Indigenous Communities

Ella Fomby

- *University of Central Oklahoma*

66A Pueblo Ways of Knowing and Aristotelian and Platonist Metaphysics

Colin Aberson

- *University of Central Oklahoma*

67A Beyond Friendship, Beyond Genre: An Exploration of Manga Studies with Nana

Sierra Bratcher and Savannah Detert

- *University of Central Oklahoma*

68A Beyond Friendship, Beyond Genre: An Exploration of Manga Studies with Nana

Savannah Detert and Sierra Bratcher

- *University of Central Oklahoma*

69A Sociopolitical Behavior Replication in Hyperreal Media

Ash Carlock

- *Cameron University*

70A Navigating Stake Escalation: Threshold Theory

Sam Ferguson

- *University of Central Oklahoma*

MATHEMATICS & SCIENCES

71A Comparative Analysis of Growth and Yield Performance of Lettuce Cultivars in Aquaponic and Soil-Based Systems

Tremar Ivey

- *Langston University*

72A Detecting C. Burnettii Type IVB Secretion System Proteins in Infected HeLa Cells

Paris Al-khateib, Katelyn Ortiz and Melissa Brewer

- *Southeastern Oklahoma State University*

73A The Effects of Vincristine on Collagen Matrix Organization

Sara Albani and Melville Vaughan

- *University of Central Oklahoma*

74A Mediterranean Geckos (*Hemidactylus turcicus*) Found Almost a Mile from Introduction Site on the University of Central Oklahoma campus

Daizha Anderson, Lexi Cochran, Julian Lodes and Allyson Fenwick

- *University of Central Oklahoma*

75A Ongoing Developments in the 'Partial Rescue' Strategy for FILS syndrome

Tyler Armstrong, Aditya Das, Lydia Ostmo, Matthew Girard and Sapna Das-Bradoo

- *Northeastern State University*

76A Evaluating Barium Sulfate Blended polycaprolactone (PCL) for Endovascular Implants

Aria Bayat, Aria Bayat, Chloe Tsinya, Asia Bayat, Alex Matsayko, Mohammad Hossan and Melville Vaughan

- *University of Central Oklahoma*

77A Changes in Flowering of Four Plant Species

Aria Bayat, Aria Bayat and Jenna Messick

- *University of Central Oklahoma*

78A Cellular Evaluation of Ta2O5 Blended Polycaprolactone for Biomedical application

Asia Bayat, Asia Bayat, Chloe D Tsinya, Aria Bayat, Alex C Matsayko, Mohammad R Hossan and Melville B Vaughan

- *University of Central Oklahoma*

79A In-Vitro Antimicrobial Activity of Native American Medicinal Plant Extracts Against Emerging Microbial Pathogens

Skyler Bradford Barnes, Kylie Castonguay, Jyotisna Saxena and Jenna Messick
- *University of Central Oklahoma*

80A Generation of a Stable POLE1-FILS Mutant Cell Line Using CRISPR-Cas9 and CRISPR Inhibitory System

Mary Burks and Sapna Das-Bradoo
- *Northeastern State University*

81A Investigating the Impact of the FILS mutation in POLE and its Effect on DNA Replication

Zachary Burks, Matthew Girard, Lydia Ostmo and Sapna Das-Bradoo
- *Northeastern State University*

82A Environmental pH Levels; Their Effect on S. mutans Growth and EPS Production.

Maxx Cook, Vincent Rock and Nnamdi Ekesi
- *Northeastern State University*

83A Assessing Bat Distribution and Habitat Use to Support Conservation on an Arkansas Military Installation

Lauren Couch and Elizabeth Burba
- *Northeastern State University*

84A Monitoring Bat Communities on Northeast Oklahoma Public Lands: A Two-Year Perspective

Hope Davis and Elizabeth Burba
- *Northeastern State University*

85A Source of Red and Pink Feathers in Scissor-tailed Flycatcher

Devonn Doleman, Marry Pettit and Michael Husak
- *Cameron University*

86A Biological Characterization of a Novel LDHA inhibitor Against Pancreatic Cancer

Ty Elliott, Amery Good, Pragya Sharma and Horrick Sharma
- *Southwestern Oklahoma State University*

87A Automated image analysis identifies retinal microvascular cells in mouse models

Maricela Espinoza, Luis Vazquez, Lauren Wilcox, Anne Martin, Madison Whitekiller, Rui Zhang, Joshua Butcher and Cammi Valdez
- *Northeastern State University*

88A Honey Bees (Apis Mellifera) as a Continuous Surveillance and Detection System for Fungal Pathogens in the Environment

Victoria Everhart, James Creecy, Matthew Parks, John Barthell, Paul Olson and Jordan Walter
- *University of Central Oklahoma*

**89A Small Urban Creeks as Resources to Understanding Local Natural History:
A Casy Study**

Mallory Forsgren and Matthew Parks

- *University of Central Oklahoma*

**90A Camera Trapping in Riparian Corridors within Pearl Jackson
Crosstimbers Preserve**

Teague Fox

- *University of Central Oklahoma*

91A POLE1 meets MCM2: Defining a critical interaction during human DNA replication

Matthew Girard, Lydia Ostmo and Sapna Das Bradoo

- *Northeastern State University*

92A Detection of Parasites and Microplastics in Rodent Fecal Pellets

Michelle Haynie, Liliana Ballon, Lillian Gunelson and Wayne Lord

- *University of Central Oklahoma*

93A Detection of microbial pathogens in Duckweed populations

Kincade Hise and Nancy Paiva

- *Southeastern Oklahoma State University*

94A Repurposing a Pathogen: The Therapeutic Potential of E. coli in Bladder Cancer

Shane Holmes, Alejandro Lopez and Janaki Iyer

- *Northeastern State University*

95A Why Some S. aureus Strains Kill in Secondary Pneumonia

Nico Jackson and Ethan Enlow

- *Northeastern State University*

**96A Molecular Mechanisms Involved in Survival of Pancreatic Cancer Cells Under
Metabolic Stress**

Taylor Jones and Pragya Sharma

- *Southwestern Oklahoma State University*

97A Exploration of Gene Sequences from Developing Redbud Seeds (Cercis canadensis)

Magnus Laitinen and Nancy Paiva

- *Southeastern Oklahoma State University*

98A Temporal Activity Patterns of Central Oklahoma Mammals

Kyle Lane, Adreana Aquino and Kizito Nwosu

- *Southwestern Oklahoma State University*

99A Testing the Relationship Between Dental Occlusion and Diet in Extant Mammals

London Lawrence and Keegan M. Melstrom

- *University of Central Oklahoma*

100A Observing Antioxidants Mitigation of Oxidative Stress in Human Microglial Cells

Sophie Lowther

- *Northeastern State University*

101A *Oenothera macrocarpa* as a potential source of antimicrobials

Denna Bussinger

- *East Central University*

102A Using *Salvia azurea* Herbarium and iNaturalist Specimens to Observe a Change in Flowering Times Over Time

Damon Corvelo and Jenna Messick

- *University of Central Oklahoma*

103A Using Brine Shrimp Lethality Assay to Identify Bioactive Marine Invertebrate Extracts

Joy Adebayo and Amanda Waters

- *University of Central Oklahoma*

104A Quantitative Determination of Polycyclic Aromatic Hydrocarbons (PAHs) in Urban Soils by Gas Chromatography-Mass Spectrometry

Emily Bakhtiari, Sanjeewa Gamagedara and Sarah Hileman

- *University of Central Oklahoma*

105A Synthesis of Novel Imidazoles Using Microwave technology

Brock Barr

- *Cameron University*

106A Covalently Loaded Naloxone Nanoparticles as a Long-Acting Medical Countermeasure to Opioid Poisoning

Kaleb Cossette

- *Cameron University*

107A Retinal Capillary Cell Identification and Quantification Within Diabetic Mouse Models

Logan Crooks, Elijah Mounce, Quan Yan, Cary Wang, Bethany Mejia, Conager McBroom, Joshua Butcher and Cammi Valdez

- *Northeastern State University*

108A Crimson, Scarlet and Vermilion: A Spectrum of Red Dyes in Medieval Textiles

Kendra Dittmer

- *University of Central Oklahoma*

109A Characterization of Commercial Herbal Tinctures by Gas Chromatography-Mass Spectrometry (GC-MS)

Zachary Duncan and Sanjeewa Gamagedara

- *University of Central Oklahoma*

110A Electrochemical and Structural Analysis of Fluoride-Ion Batteries that Employ a Fluorohydrogenate Ionic Liquid

Elijah Galdamez and Chris M. Burba

- *Northeastern State University*

111A Simultaneous Identification and Quantification of Preservatives in Skin Care Products by LC-MS/MS

Sanjeewa Gamagedara and Ashanti Biehl

- *University of Central Oklahoma*

112A Investigation into Aggregation Induced Emission of Tetraphenylethylene Derivatives

Mitchell Hackett

- *University of Central Oklahoma*

113A Green synthesis of zinc oxide nanoparticles using aqueous clove extract

Caleb Kyles, Kalli May and Deshani Fernando

- *Mid-America Christian University*

114A Development of Novel Diketoacid Derivatives as Inhibitors of Dihydrodipicolinate Synthase

Adrian LaPointe, Adrian LaPointe, Kaden Smith, Martin Osinde and Lilian Chooback

- *University of Central Oklahoma*

115A Selective Inhibition of Histone Deacetylase 1 by a Novel Hydroxamate Compound

Kong Lee and Sean Kim

- *Northeastern State University*

116A Autonomous Obstacle Avoidance in UAVs: Integrating Stereo Vision and Simulation-Based Machine Learning

samson adidela and Jicheng Fu

- *University of Central Oklahoma*

117A Froggy Type: Web Typing

Rad Alrifai and Saray Ramirez Esquivel

- *Northeastern State University*

118A Teaching Computer Science With OER: Insights and Next Steps

Rad Alrifai

- *Northeastern State University*

119A Building Level Dynamic Population Mapping of Kathmandu Metropolitan City

Nayan Bakhadyo, Alison Shilpakar, Sujana Tyata, Kushal KC and Abhas Maskey

- *University of Central Oklahoma*

120A Deep Learning Based Image Analysis of Pericyte and Endothelial Cells in Microscopy

Benjamin Berres, Rui Zhang and Cammi Valdez

- *Northeastern State University*

121A Furthering Student Understanding of Linear Algebra Through an Interactive Web Application

Blake Carlton

- *University of Central Oklahoma*

122A Effective Natural Language Translation using Open-sourced Models

Jia Le Chin

- *University of Central Oklahoma*

123A Implementation of a WebGL Application

Caleb Clifton

- *University of Central Oklahoma*

124A Video Game Dungeon Generation Algorithm Trade-Offs

Caleb Clifton

- *University of Central Oklahoma*

125A An Adaptive Preprocessing Pipeline System for Enhanced OCR Accuracy on Scanned Documents

suman gorkhali and Jicheng Fu

- *University of Central Oklahoma*

126A Enhancing Automated Debugging Performance by Evaluating Context and Error Types Across Large Language Models

Dinesh Kumar Gummadavelli, Xiaopeng Li and Xianshan Qu

- *University of Central Oklahoma*

127A Using Inquiry-Based Curriculum in Secondary and Postsecondary Biology Labs

Allison Grieshop

- *University of Central Oklahoma*

128A Manufacturing and Characterization of Bioresorbable Microfibers

Casey Bond, Alex Matsayko, Melville Vaughan and Mohammad Hossan

- *University of Central Oklahoma*

129A CERES: A Cost-Conscious High-Temperature System for Resistivity and Seebeck Coefficient Measurement

Caden Brummer, Joshua Torres and Eli Matthews

- *University of Central Oklahoma*

130A Mechanical Behavior of Electrodeposited Copper-Kevlar Composites

Isaac Carney and James Manimala

- *Oklahoma State University*

131A Tracking Chlamydomonas Cell Motility towards Development of a Hybrid Drug Delivery System

Jayden Carter, Gang Xu and Yuhao Jiang

- *University of Central Oklahoma*

132A Wave Propagation Characteristics of Locally Resonant Acoustic Metamaterials with Translational-Rotational Coupling in the Microstructure

Digonta Chanda, Daniel Cuellar and James Manimala

- Oklahoma State University

133A In- Vivo Dosimetry Using Plastic Scintillation Detectors in Radiation Therapy

Kevin Cobbs, Angel La and Vu Dong

- University of Central Oklahoma

134A Hybrid manufacturing of Halbach arrays using sintered NdFeB magnets and additively manufactured soft magnet frames

Levi Cosgrove and Tej Lamichhane

- University of Central Oklahoma

135A Kinesio-Electric Generator

Braden Egger, Quinton Fister, Joshua Henstock, Morshed Khandaker and Yuhao Jiang

- University of Central Oklahoma

136A Exploratory Flux Growth and Magnetic Characterization of Ce-Te-TM Ternary Compounds

Matthew Goodman and Tej Lamichhane

- University of Central Oklahoma

137A Comparative Study of Substrate Influences on Exploratory Ternary Ce-Fe-S Thin Film Synthesis via Aerosol-Assisted Plasma Enhanced Chemical Vapor Deposition

Haley Graham-Kluck, Tej Nath Lamichhane, Anjali Poulo, Josh Torres, Levi Cosgrove and Shawn Hughes

- University of Central Oklahoma

138A Gradient-free Rotation-free Portable MRI: a Simulation Study

Zheng Han, Nischal Khatri, Jonathan Lindsey, Kayla Lingle, Kriti Kafle, Clayton Mlinar, Levi Cosgrove and Tej Lamichhane

- University of Central Oklahoma

139A Explainable Graph Attention Neural Network for Predicting PTE risk with EHR data

Zheng Han and Daniel Starks

- University of Central Oklahoma

140A Redesign of Photovoltaic Cell Voltage Testing Apparatus

Kyler Henderson and James Bidlack

- University of Central Oklahoma

141A Thermal Performance Enhancement of Firefighter Turnout Gear Using Phase Change Material

Sue Ella Lind and Weihuan Zhao

- Northeastern State University

142A Environmental Determinants of Mammal Diversity in a Transitional Amazonian Landscape

Kimberly Harris and Daniel Rocha
- *Southwestern Oklahoma State University*

143A Ethical Considerations of an Ethics-centered Design

Abbas Johari and Lauren B Epp
- *Cameron University*

144A Determining the effects of water submersion of a body on the retention of biological and trace evidence on the victim's clothing

Kai Jie Leong and Meagan Raddatz
- *University of Central Oklahoma*

145A 3-Dimensional Agent-Based Modeling of Fibrin Fiber Interactions

Key Crosley and Brittany Bannish
- *University of Central Oklahoma*

146A Class Detection with Oversampling Methods

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

147A The Geometry of Groove: A Two-Dimensional Mapping of Rhythmic Microstructures

Tyler Garcia
- *University of Central Oklahoma*

148A Developments on the Local Convergence of Newton-Like Methods in Normed Linear Spaces with Applications to Motion Problems

Landon Holley, Trace Boggs, Kaila Keithley, Ioannis Argyros and Dillan Gibbons
- *Cameron University*

149A Beat Segmentation Effects on Electrocardiogram Summarization Using the Discrete Empirical Interpolation Method

Rabina Karki and Emily Hendryx Lyons
- *University of Central Oklahoma*

150A The Redshift Wrangler: Analyzing Distant Galaxies

Bobie Johnson and Blanca Alvarado
- *Oklahoma City Community College*

151A Comparing Gamma Attenuation and Ultrasound Attenuation of Polycarbonate and Acrylic

Chance Krueger
- *East Central University*

152A Numerical Modeling of Optical Pumping in a Three-Level System of Sodium D₂

Sue Ella Lind, Rui Zhang and Doerte Blume
- *Northeastern State University*

POSTER SESSION II

BUSINESS & ADMINISTRATION

1B Life-Threatening Medical Errors: System-Level Impacts and Management Strategies-A Systematic Review

Ricky Wallace, Ricky Wallace, Hossein Nezakati, Alireza Mohammadi and Li Yang

- *Northeastern State University*

2B Protectionism, Push Factors and Service Sector Pull: A New Look at Low-Skilled Female Migration

L. Nichole McKee and Teresa Carrion

- *University of Central Oklahoma*

3B Commodity Price Jumps and Fundamental Factors - The Case of U.S. Natural Gas

Jubelqui Miramontes, Kayla Busk, Kuang-Chung Hsu and Zhen Zhu

- *University of Central Oklahoma*

4B The Impact of Gas and Oil Drilling Activity on Natural Gas Prices and Productivity

Yann Penvern

- *University of Central Oklahoma*

5B Assessing Food Insecurity In Texas: Socio-economic Factors and Intervention Strategies

Jasmine Price and Kamal Gosh

- *Langston University*

6B Integrating Transformative Social Innovation and Behavioral Perspectives to Explain Ecovillage Adoption and Sustainability:

A Study in the Cherokee Nation, Oklahoma

Hossein Nezakati, MaiAnh VuTran and Alireza Mohammadi

- *Northeastern State University*

7B Analyzing Advertising Performance Across Digital Platforms

William Rosener

- *Northeastern State University*

EDUCATION & PROFESSIONAL STUDIES

8B Exploring the Impact of Color Therapy on Early Reading Development in Students with Dyslexia

Torie Ortiz

- *Cameron University*

9B How ADHD Impacts Children's Cognitive Development: Implications for Early Childhood Education

Robin Vann

- Northeastern State University

10B Ultraviolence: The Convergence of Romance and Violence in Women's Fiction

Danielle Wagner

- University of Central Oklahoma

11B Not Just Gear: How Safety Climate and Self-Efficacy Shape Oil and Gas Workers' Perceived Value of PPE

Haelee Manning, Ukiyung Jung and Misael Duque

- University of Central Oklahoma

12B Development and Optimization of a Natural Prebiotic and Probiotic Mix for Gut Health: A Functional Synbiotic Food Approach

Chandu Yampati and Priyanka Gupta

- University of Central Oklahoma

13B Data Collection, Organization and Analysis Research of the Hanson Hat Collection

Joanne Wong, Erin Kelley and Stephanie Gonzalez

- University of Central Oklahoma

14B The Role of Purposeful Kinship Maintenance in Mental Health Outcomes Among UCO Students

Samina Shabnam and Sunshine Cowan

- University of Central Oklahoma

15B Compromise or Confusion? Juror Misunderstanding of Felony Murder Doctrine

Robert Mather and Alicia McLean

- University of Central Oklahoma

16B Grounding The Mind: How Guided Meditation Impacts Attention Span

Kayla Risner, Sydney Clark and Vickie Jean

- University of Central Oklahoma

17B Social Influence on Risk-Taking Behavior in Financial Decision-Making

Jessica Shields and Tephillah Jeyaraj-Powell

- University of Central Oklahoma

18B Effect of Nostalgic Priming on Rates of Cooperation in an Iterated Prisoner's Dilemma Task

Haley Smith

- University of Central Oklahoma

19B Taming the Distracted Mind: ADHD Group Treatment Manual

David Swan and Brady Rangel

- University of Central Oklahoma

20B The COVID-19 Time Warp: Was that One or Five Years Ago?

Dylan Swanlek, Emily Martinez, Peter Rerick and Vickie Jean

- University of Central Oklahoma

21B The Power of Micro-Moments: Adding Positivity and Subtracting Fear in Statistics

Tabitha Thompson, Ezra Aslinger and Mickie Vanhoy

- University of Central Oklahoma

22B Bias Motivated by Political Affiliation

Vivian Willson, Vivian Willson, Camryn Schroeder, Ariann Mai, Daniela Garces and Brenden Fry

- University of Central Oklahoma

23B Auditory Environments as Parameters of Visual Vigilance Performance

Jake Yost

- University of Central Oklahoma

24B I Feel You, But Can I Remember? The Impact of Courtroom Environments on Mirror-Touch Synesthetes

Lexi Zimmerman and Jaclyn Maass

- University of Central Oklahoma

FINE ARTS & DESIGN

25B 50th in Education: Emotional Regulation Through Art Education

Natalie Rippy

- University of Central Oklahoma

26B Informal Collaborative Learning: Helping Students Work Together Better

Adrienne Wright

- University of Central Oklahoma

27B Digital Arts in the High School Art Classroom

Olivia Walker

- University of Central Oklahoma

28B No Rhymes With a Reason: Defining and Analyzing Abstract Hip Hop

Jimmy Miller

- University of Central Oklahoma

29B The Unknown Contributions of Riot Grrrls: A Literature Review of Elizabeth K. Keenan's "Riot Grrrl: Nostalgia and Historiography"

Victoria Mosburg

- University of Central Oklahoma

HEALTH PROFESSIONS

30B How Trauma-Informed Practices Enhance Student Interventions

Janaya McIntosh, Chanika Anderson, Erica Hickey, Janaya McIntosh, Fernanda Sanchez and
Melanie Williams

- *Northeastern State University*

31B Gossip Motivation and Health Behavior Change: A Langston University Study

Alexis Montague

- *Langston University*

32B A comprehensive study of potentially important factors contributing to the suicide rate in the United States of America

Ning Wu, Gokul Maniventhan and Audrey Gordon

- *Southeastern Oklahoma State University*

33B Bridging communication: A review of the power of AAC and team collaboration

Camdin Pierce, Shiela Lindsey, Christauna Parker, Madelyn Hayes, Lara Davis and Eun-Jun Bang

- *Northeastern State University*

34B The Silent Struggle: Psychological Stress and Coping in Couples Experiencing Infertility

CHIAMAKA MADUAKONAM

- *University of Central Oklahoma*

35B Postpartum Depression

Caitlyn Morton

- *University of Central Oklahoma*

36B Language Barriers and Pediatric Pain Management

Jasmine Nunez

- *University of Central Oklahoma*

37B Nurse-Led Protocol To Prevent and Identify Lower Limb Ischemia in Adults on VA ECMO: A Quality Improvement Project

Emily Patrick and Leann Laubach

- *University of Central Oklahoma*

38B Reducing Perineal Trauma During Vaginal Birth

Teagan Romero

- *University of Central Oklahoma*

39B Promoting Recovery in Liver Transplant Recipients

Olivia Saunders and Leann Laubach

- *University of Central Oklahoma*

40B Improving Sleep Quality for ICU Patients

Karla Villalobos

- *University of Central Oklahoma*

41B A Prospective Evaluation of Brazil Nut Intake and Changes in Serum Cholesterol Levels Over Time: Initial Results

Angelina Nguyen, Michael Munkirs, Ishmael Borlabi, Anna Kurian, Aliya Lee, Gracen Ripperger, Lisa Appeddu and Stephen Drinnon

- *Southwestern Oklahoma State University*

42B Consequences of a Missed Diagnosis: A Case Report of Latent Autoimmune Diabetes in Adults (LADA) Diagnosed 17 Years Late

Kristen Norris, Kayla Burleson, Megan Presley and Delaney Ferguson

- *Southwestern Oklahoma State University*

43B Orforglipron: An Investigational Oral Non-Peptide Glucagon-Like Peptide-1 Receptor Agonist as a Treatment Option for Obesity and Type 2 Diabetes

Amber Williamson

- *Southwestern Oklahoma State University*

LIBERAL ARTS

44B U.S. Presidential Debates 1948-2020: An Issue of Formality and Respect

David K. Scott, Mike Chanslor and Jenny Dixon

- *Northeastern State University*

45B Crisis Encounters in Policing: Officer Views on Training Approaches for Mental Health Response in Oklahoma

Chunghyeon Seo, Jimmi Winn, Minji Cho and Yeni Jang

- *University of Central Oklahoma*

46B Analyzing the Correlation between Cyberbullying and Teacher Training

Jimmi Winn, Yoojin Oh and Chunghyeon Seo

- *University of Central Oklahoma*

47B The Importance and Impact of Writing Stories

Jonas McGee

- *Oklahoma City Community College*

48B Triggering Change: A Call for Firearm Reform

Tristan McLennan

- *Oklahoma City Community College*

49B "Like a Seed Under the Soil": Nature and LGBTQ+ Identity in Gender Queer: A Memoir by Maia Kobabe

Robyn Thornton

- *University of Central Oklahoma*

50B Press (X) to Erase: The Rhetoric of Playersexuality in Videogames

Brandon Westfall

- *University of Central Oklahoma*

51B Children, Hats and Violence: Childhood and the Narco World in the Film “Fiesta en la madriguera”

Guillermo Martinez-Sotelo
- *University of Central Oklahoma*

52B From Ashes to Archives

Heatherene Merrill
- *Northwestern Oklahoma State University*

53B Historical Recovery and Preservation at Tillman Watson Cemetery

Edith Ritt-Coulter, Brooke Lefler, Taylor Reich and Will Braver
- *Oklahoma City Community College*

54B The Effect of America's Colonization on Hawai'i's Metaphysics and Epistemology: A Contrast of Hawai'i's Presence in the World Fair in 1867 and 1965

Makenna Penrod
- *University of Central Oklahoma*

55B On the Bus: What Long-Distance Travel Reveals About Social Inequality in the United States

Nina Michalikova
- *University of Central Oklahoma*

56B Reintegration as a Social Process of Identity Repair: How Re-Becoming Someone After Failure Changes Everything

Shiloh Revilla
- *Northeastern State University*

57B Till Dying do Us Part: Social Death, Some of its Causes and Some Methods of Prevention

Madison Upton
- *Oklahoma City Community College*

MATHEMATICS & SCIENCES

58B Sustainable Alternatives to Traditional Ice in Cold Chain Shipping: A Comparative Analysis of Thermal Performance, Energy Demands and Environmental Impact

Megan Malloy and Nnamdi Ekesi
- *Northeastern State University*

59B Differences by life stage of critical thermal limits and metabolic rates of Mediterranean geckos

Eli Maynard
- *University of Central Oklahoma*

60B Determining gene expression of TGF- β isoforms and their associated receptors in bladder cancer

Lucas Miller and Janaki Iyer
- *Northeastern State University*

61B Targeted Downregulation of Cell Wall Biosynthesis Genes Reveals Grass Stomatal Complex Dynamics

Siearah Milton, Maricela Espinoza, Qimeng Li, Brant Osborn and Deborah Petrik

- *Northeastern State University*

62B The relationship of soil characteristics with polycyclic aromatic hydrocarbon (PAH) and metal loading in urban soils

Hanna Mobley Hubbard and Sarah Hileman

- *University of Central Oklahoma*

63B Evidence for Antibiotic Resistant Bacteria in Commonly Used UCO Campus Drinking Fountains

Michelle Mondeja and Matthew Parks

- *University of Central Oklahoma*

64B Genetic Identification of Peromyscus Specimens from Small Mammal Mark-Recapture Studies in Western Oklahoma

Kayli Newport, Claire Wiley, Francisca Mendez-Harclerode and Michelle Haynie

- *University of Central Oklahoma*

65B Marine Sponge Extract's Impact on α -Tubulin Expression Using Western Blot Analysis

Salmeh Noori

- *University of Central Oklahoma*

66B Effects of chloroquine on chemotherapy response and cell death pathways in breast cancer cells

Reagan Pierce and Michael Morgan

- *Northeastern State University*

67B How a self-fertilizing fish copes with fluctuating tidal conditions

John Preston, Gracie Askew and Mark Garcia

- *Southwestern Oklahoma State University*

68B Feeding preferences for fruit flies (*Drosophila melanogaster*) according to sex

Christian Rick and Jimena Aracena

- *Southwestern Oklahoma State University*

69B Geographic Disparities in Adult Smoking Near the Tulsa-Osage County Boundary

Royce Risinger, Kylie Smith and Mona Easterling

- *Tulsa Community College*

70B Cell-Specific Overexpression Examining the Impact of Cell Wall Structure on Stomatal Function in *Brachypodium distachyon*

Annamarie Schuermann, Maricela Espinoza and Deborah Petrik

- *Northeastern State University*

71B DNA Extraction and Amplification of Historic Bovid Remains in Oklahoma: a Promising Avenue for Future Studies of Natural History

Cameron Smith

- *University of Central Oklahoma*

72B Marine Sponge Extract's Impact on Beta-Tubulin Expression Using Western Blot Analysis

Mariam Toughanipour

- *University of Central Oklahoma*

73B Analyzing the Biocompatibility of PCL - Bi2O3 Composite Samples for Endovascular Implants

Chloe Tsinya, Asia Bayat, Alex Matsayko, Melville Vaughan, Aria Bayat and Mohammad Hossan

- *University of Central Oklahoma*

74B Breast Cancer and available resources in Custer County, Oklahoma

Muatasem Ubeidat, Ria Govind and Carla Albert

- *Southwestern Oklahoma State University*

75B Stray, Feral and Outdoor Cats - Problems and Solutions

Macie Wells

- *Southeastern Oklahoma State University*

76B Eight Years of Small Mammal Mark-recapture Research in Western Oklahoma: Trends and Hantavirus Presence

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

- *University of Central Oklahoma*

77B Hidden in Plain Sight: *Yersinia enterocolitica*

Maximus Wrather and Dulanjani Wijayasekara

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78B Differential Etoposide Sensitivity in MOLM-14 and U937 AML Cells With Caspase Inhibition by Z-VAD-fmk

Maximus Wrather and Noah Thompson

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79B Shall I Compare Thee to a Known: Morphological Analysis of Hairs for Identification of Oklahoma Species

Elena Wright and Vicki Jackson

- *University of Central Oklahoma*

80B Flora of the Ecopark (Durant, OK)

Samantha Scott, Erica Corbett, Adam Dodson, Katie Heinz, Zack Leadbetter and Alexandria Szakacs

- *Southeastern Oklahoma State University*

81B Immigration and adaptation: differing leaf shape across ranges in *Lythrum salicaria*

Aviel Spurgeon and Elizabeth Waring

- *Northeastern State University*

82B Evaluating Surface Sampling Tools for a Sarin Simulant (DMMP) Using ATR-FTIR

Randall Maples and Anna Stone

- *East Central University*

83B Groundwater Transport Behavior of Citrate-Coated Metal Nanoparticles

Randall Maples and Gwendolyn Autrey

- *East Central University*

84B Isolation of Eugenol from Cloves in the Biochemistry Laboratory

Daniel McInnes and Charles Crittall

- *East Central University*

85B Molecules of Nature: A Summer Academy for Rising 8th and 9th Graders

Daniel McInnes and Charles Crittall

- *East Central University*

86B Mechanochemical Polymer Synthesis

Lydia Park and Ebqa'ai Mohammad

- *Cameron University*

87B Exploratory Synthesis of Chiral Magnetic Nanoparticles and Magnetic Multilayers

Anjali Poulo, Tej Nath Lamichhane, Joshua Torres, Matthew Goodman, Haley Graham Kluck, Levi Cosgrove, Shawn Hughes and Tom Nguyen

- *University of Central Oklahoma*

88B Crosslinked Polyethylenimine Polymer Electrolytes for Fluoride-Ion Battery Applications

Gabe Ritter and Chris Burba

- *Northeastern State University*

89B Synthesis and Surface Modification of Near-IR Gold Nanorods for Combined Photothermal and Photodynamic Therapy

Ashley Viso and Nathan Green

- *Northeastern State University*

90B Aspirin Derivative HDAC1 Inhibitor

Evann Walker and Sean Kim

- *Northeastern State University*

91B Progress Towards the Confinement of Lithium Salts in Mesoporous Silica

Parker Whisenhunt and Christopher Burba

- *Northeastern State University*

92B Study of iodine distribution and concentrations in western Oklahoma brine waters and recycling of used chloroform

Jason Wickham, Alaina Pierce, Amanda Lane, David Edlin and David Edlin

- *Northwestern Oklahoma State University*

93B Synthesis of Histone Deacetylase (HDAC) Inhibitor Analogs Towards Gold Nanorod Surface Coatings

Charli Woessner and Nathan Green

- *Northeastern State University*

94B Biomolecule Conjugation to Dye-Doped Silica Nanoparticles

Brandi Woods, Zakery Crofford and Nathan Green

- *Northeastern State University*

95B Extracting and Testing Marine Sponge Using Brine Shrimp Lethality Assays for Anticancer Potential

Savanna Zimmer

- *University of Central Oklahoma*

96B Automating the fabrication process of PCL Flow Diverters to achieve pre-defined porosities using supervised learning

Faisal Mahmud and Mohammad Robiul Hossan

- *University of Central Oklahoma*

97B Dynamical Degradation of Fibrin Networks: A Spring Mass Approach to Network Collapse Analysis

Kamal Mandava and Brittany Bannish

- *University of Central Oklahoma*

98B Comparative Security Analysis of HPC Job Schedulers: Authentication Vulnerabilities and Container Escape

Imam Uddin Mohammed and Junghwan Rhee

- *University of Central Oklahoma*

99B Mental Health Application

Rakshith Raveendra

- *University of Central Oklahoma*

100B Supporting Trauma-Informed Parenting Through Artificial Intelligence

Jaylen Rider

- *University of Central Oklahoma*

101B Zero2Neuro: A Zero-Code Solution for Deep Neural Networks

Luke Sewell

- *University of Oklahoma*

102B The Progression of AI chips

Deshawn Sexton, Brennan Hibdon and Juan Juarez

- *Cameron University*

103B Building an Action-Adventure game to explore the capabilities and impact of AI tools on the development process

Aakankshya Shrestha and Junghwan Rhee

- *University of Central Oklahoma*

104B A Comparative Study of Container Hardening Strategies

Amit Soni and Myungah (Grace) Park

- *University of Central Oklahoma*

105B Free IT-Camp: AI/ML for Beginners Workshop

Ming-Shan Su

- *Southeastern Oklahoma State University*

106B A Comparative Study of AI Large Language Models for SQL Query Statement Generation

Shristi Thapaliya and Gang Qian

- *University of Central Oklahoma*

107B Concentration Analysis of Angiographic Contrast Agents in Polycaprolactone for Flow-Diverter Stent Development

Alex Matsayko and Mohammad Hossan

- *University of Central Oklahoma*

108B Designing and Building a 2-stage Rocket

Manuel Mayorga, Hritu Bishwakarma, Grayson McCullough and Wayne Trail

- *Southwestern Oklahoma State University*

109B End-Facer Tube Indexing System

Brayden Miller

- *University of Central Oklahoma*

110B Testing Mechanical Properties of PCL Non-Woven Nanofiber Mats by Dylan Muse

Dylan Muse

- *University of Central Oklahoma*

111B Automatic LOS Antenna Alignment System

Lorelei Potter, Les Malan and Brett Bailey

- *University of Central Oklahoma*

112B Precision Pulling Mechanism or Crystal Growth

Abraham Ross, Cole Woodard, Colton Miller, Tej Lamichhane and Yuhao Jiang

- *University of Central Oklahoma*

113B Development of Meta-stacks for Thermoacoustic Devices

Mason Snyder, Samarjith Biswas and James Manimala

- *Oklahoma State University*

114B Evaluation of UV and UV- Advanced Oxidation Processes for the Degradation of Macrolide Antibiotics in Wastewater

Chole' Tolle

- Oklahoma State University

115B Design and Manufacturing an Ejection Mechanism for the APSX-PIM

Raj Zala, Michael Jones and Abdelleah Moussa

- University of Central Oklahoma

116B Thermal Performance Enhancement of Firefighter Turnout Gear Using Phase Change Material

Weihsuan Zhao and Sue Lind

- Northeastern State University

117B Utilizing Plant-Pollinator-Microbe Networks to Develop a Novel Surveillance Method for Rapid Detection of Bacterial and Fungal Pathogens

Princeton Niblack and James Creecy

- University of Central Oklahoma

118B A Map of Lipid Metabolic Pathways for the Biochemistry Study

Ning Wu, Audrey Gordon, Mitchell Washington, Netanya Bhakta, Maci Morrison, Chloe Russell, Nolan Baughman, Reagan McCortney, Cristen Jones, Jr. and Gokul Maniventhan

- Southeastern Oklahoma State University

119B Comparative Analysis of ECG Beat Segmentation Strategies for Arrhythmia Classification

Aasik Mandal and Emily Hendryx

- University of Central Oklahoma

120B Applied Algebra at UCO: A Successful Alternative to College Algebra

Alana McAnally, Erin Corbeil and Erin Williams

- University of Central Oklahoma

121B Active Learning with Technology: Transforming How Students See Functions

Alana McAnally, Britney Hopkins and Kristi Karber

- University of Central Oklahoma

122B Including Just-In-Time remediation in Precalculus-Algebra

ERIN Williams, Britney Hopkins and Alana McAnally

- University of Central Oklahoma

123B Prediction, Synthesis and Experimental Validation of Magnetic Order and Dimensionality in Cerium-Based Compounds Guided by Structural Characteristics, Tri-critical Exponents and Unsupervised Machine

Joshus Torres

- *University of Central Oklahoma*

124B Ground Verification of the NASA/JAXA Global Precipitation Measurement Project Using CoCoRaHS Precipitation Data - "The Next 6 Years"

Karen Williams

- *East Central University*

125B Deep Learning Methods for Electrocardiogram Noise Detection

Shervin Tabatabai, Ethan Fogarty, Emily Hendryx Lyons and Tyler Cook

- *University of Central Oklahoma*

126B Survey of the Assemblage of Dung Beetles in Cimarron County, Oklahoma and the Efficacy of Two Dung Types as Bait

Byron Ross, Sue Fairbanks, Mary Liz Jameson, Morgan Tribble and George Wang

- *East Central University*

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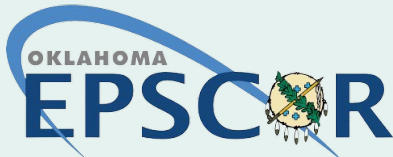


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