



2018

Guide Book

Hosted by Northwestern Oklahoma State University
Enid's Central National Bank Center
March 9, 2018

WELCOME

On behalf of the Council on Research for Regional Universities and Dr. Janet Cunningham, President of Northwestern Oklahoma State University (NWOSU), I am pleased to welcome you to the 19th annual Oklahoma Research Day (ORD). Again this year, Enid's Central National Bank Center was chosen for its central locale to NWOSU's Enid campus, its attractive art-deco style, and its ability to house all events of the day under the same roof.

Oklahoma Research Day 2018 would not have been possible without significant financial support from the Oklahoma State Regents for Higher Education (OSRHE); Oklahoma Established Program to Stimulate Research Excellence (EPSCoR); National Science Foundation; the Oklahoma IDEa Network of Biomedical Research Excellence (INBRE) – National Institutes of Health; NWOSU's Office of Graduate Studies; and the Aurora Learning Community Association (ALCA). Additionally, Oklahoma Research Day is supported annually by Oklahoma's Regional Universities, which include Cameron University, East Central University, Northwestern Oklahoma State University, Southwestern Oklahoma State University, Southeastern Oklahoma State University, and the University of Central Oklahoma. Finally, Jump Technologies; NWOSU's Institute for Citizenship Studies; NWOSU's Department of English, Foreign Language, and Humanities; and all staff members from the Central National Bank Center deserve especial thanks for their hard work in preparing for this special day. Also deserving thanks are Professor Mark Bagley, Bruno Miguel, and Richard Fischer for designing and maintaining the ORD mobile app.; and Coach Matt Walter and NWOSU's football team for putting together the poster boards for display. Dr. Marc Decker and Professor Karsten Longhurst also deserve thanks for providing banquet entertainment from NWOSU's jazz ensemble and the University Singers.

I also am glad to use this opportunity to thank all supporters, faculty, staff, and students for attending Oklahoma Research Day this year. I believe that you will find that NWOSU has provided an atmosphere conducive to sharing and networking your current research methodologies and findings. NWOSU is especially proud to help you connect with other members of Oklahoma's academic community. The scope and breadth of research topics shows the hard work and innovation that is occurring by college students throughout our state.

With best wishes,
Shawn Holliday, Ph.D.

COUNCIL ON RESEARCH FOR REGIONAL UNIVERSITIES

Dr. Shawn Holliday, Coordinator
2017 & 2018 Oklahoma Research Day
Associate Dean of Graduate Studies
Professor of English
Northwestern Oklahoma State University

Dr. Eric Schmaltz
Associate Professor of History
Department of Social Sciences
Northwestern Oklahoma State University

Dr. Aaron Mason
Professor of Political Science
Department of Social Sciences
Northwestern Oklahoma State University

Dr. Jennifer Page
Assistant Professor of English
Department of English, Foreign Language,
& Humanities
Northwestern Oklahoma State University

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School of Agriculture
Langston University

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Academic Affairs
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Dean Emeritus, Jackson College of
Graduate Studies and Research
University of Central Oklahoma

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Director
Research and Sponsored Programs
Northeastern State University

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Provost, Vice President
Academic Affairs
Southwestern Oklahoma State University

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George Kaiser Family Foundation
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Chair of Research
Tulsa Community College

Dr. Ronna Vanderslice
Vice President
Academic Affairs
Cameron University

Dr. Gregory Wilson
Assistant Vice President
Research and Grants
University of Central Oklahoma

Schedule of Events

Oklahoma Research Day—March 9, 2018
Central National Bank Center of Enid

- 8:00–9:30 a.m.** Registration—Central National Bank Center Foyer
- 8:45–9:00 a.m.** Poster Setup—Session One—Even Numbers—Event Center
- 9:00–10:30 a.m.** Poster Presentations—Session One—Even Numbers—Event Center
- 10:30–10:45 a.m.** Poster Setup—Session Two—Odd Numbers—Event Center
- 10:45–12:15 p.m.** Poster Presentations—Session Two—Odd Numbers—Event Center
- 12:15 p.m.** Poster Breakdown—Event Center
- 12:30–3:00 p.m.** Banquet Luncheon and Keynote Speech—Grand Ballroom

Introductions: Dr. Shawn Holliday, Associate Dean of Graduate Studies, Northwestern Oklahoma State University

Welcome: Dr. Janet Cunningham, President, Northwestern Oklahoma State University

Greetings: Dr. Debbie Blanke, Vice Chancellor for Academic Affairs, Oklahoma State Regents for Higher Education

Keynote Speech: Dr. Tyrone Hayes, Professor of Integrative Biology, University of California, Berkeley

Entertainment provided by NWOSU's University Singers, Professor Karsten Longhurst, Director, and NWOSU's jazz ensemble, Dr. Marc Decker, Director.

Sponsors

Thank you to the following sponsors of Oklahoma Research Day:

- Oklahoma State Regents for Higher Education (OSRHE)
- Oklahoma IDeA Network of Biomedical Research Excellence (INBRE)—National Institute of Health
- Oklahoma Experimental Program to Stimulate Competitive Research (EPSCoR)—National Science Foundation
- Enid Regional Development Alliance
- The Aurora Learning Community Association (ALCA)
- Cameron University o East Central University o Northeastern State University
Northwestern Oklahoma State University o Southwestern Oklahoma State University
Southeastern Oklahoma State University o University of Central Oklahoma

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01 BUSINESS ADMINISTRATION

01 Accounting

01.01.01 ~ The Impact of Internal Controls on Debt Structure

Yinghong Zhang - University of Central Oklahoma

Brandon Laughlin - University of Central Oklahoma

Edward Walker - University of Central Oklahoma

01.01.02 ~ How do Business Students Select Their Majors?

Alexandra Munger - University of Central Oklahoma

01.01.03 ~ Preparation of Consolidation Accounting Journals for SAP ERP

Boyoung Kim - University of Central Oklahoma

01.01.04 ~ A Statistical Analysis of Information Technology in the Modern Workplace

Travis Morgan - University of Central Oklahoma

02 Business

01.02.01 ~ Financial Decisions of Finland's College Students: An Investigative Study of Finnish Student Debt

Marty Iudlum - University of Central Oklahoma

Cenea Reese - University of Central Oklahoma

01.02.02 ~ Policy Uncertainty and Firm Performance: A Multilevel Analysis

Sammy Muriithi - University of Central Oklahoma

Willis Mwangola - University of Central Oklahoma

01.02.03 ~ The Impact of Student-Mentoring Programs on the Development of Emotional Intelligence and Interpersonal Relationships.

Christina Alexander - University of Central Oklahoma

Holly Osburn - University of Central Oklahoma

M. Suzanne Clinton - University of Central Oklahoma

01.02.04 ~ Creating a Survey for the School of Business with Students in Quantitative Methods in Business Course

Holly McKee - Southwestern Oklahoma State University

Alexandra Young - Southwestern Oklahoma State University

03 Economics

01.03.01 ~ Which Fossil fuel Taxes Promote Innovation in Renewable Electricity Generation?

Linh Pham - University of Central Oklahoma

01.03.02 ~ The costs of induced seismicity: A hedonic analysis Neil Metz - University of Central Oklahoma

Travis Roach - University of Central Oklahoma

Jordan Williams - University of Oklahoma

01.03.03 ~ Cost of Natural Gas in Eastern Chinese Markets: Implications for LNG Imports

Zhen Zhu - University of Central Oklahoma

01.03.04 ~ Monetizing Golf Performance: "Clutch or Choke"

Brody Mayberry - University of Central Oklahoma

Neil Metz - University of Central Oklahoma

01.03.05 ~ Tiger Effect on Golf Prize Purses

Nick Efaw - University of Central Oklahoma

Neil Metz - University of Central Oklahoma

01.03.06 ~ Examining the Relationship between Economic Freedom and Obesity Rate

James Pettigrew - University of Central Oklahoma

Mariya Burdina - University of Central Oklahoma

04 Finance

01.04.01 ~ Gentrification, Social Capital, and Redevelopment: A Case Study

Corey Bornemann - University of Central Oklahoma

Nate DeBee - University of Central Oklahoma

Mason Cude - University of Central Oklahoma

Trevor Debee - University of Central Oklahoma

J. David Chapman - University of Central Oklahoma

Jennifer Chapman - University of Central Oklahoma

Daniel Range - Coventry University

Tom Fisher - Coventry University

David McIlhatton - Coventry University

01.04.02 ~ Promoting Student Success Among College of Business Students

Ashley Salim - University of Central Oklahoma

Niccole Miller - University of Central Oklahoma

M. Suzanne Clinton - University of Central Oklahoma

01.04.03 ~ Pre-professional organizations as Active Learning Activities (ALA) for Business Majors

Ayomide Babalola - Southwestern Oklahoma State University

Philip Humphery - Southwestern Oklahoma State University

01.04.04 ~ 2008 Financial Crisis and its effects on Lawton, OK

Arif Qayyum - Cameron University

Jian Li - Cameron University

Charles owona - Cameron University

01.04.05 ~ Budgeting Coffee

Arif Qayyum - Cameron University

Pratap Basnet - Cameron University

Solu pathak - Cameron University

01.04.06 ~ Cryptocurrencies: How they relate to each other and the stock markets.

Arif Qayyum - Cameron University

Cheryl Davis - Cameron University

Deepika Paudel - Cameron University

Kenia Sarmiento-Perez - Cameron University

01.04.07 ~ US Dollar Fluctuations and Nepal's Economy

Arif Qayyum - Cameron University

Ambika Dhanuki - Cameron University

Rosha Shakya - Cameron University

Rakshya Bajgain - Cameron University

Anima Bhurtel - Cameron University

01.04.08 ~ U.S. Economy and US-Latin American Free Trade Agreement (CAFTA-DR) impact on Dominican Republic

Arif Qayyum - Cameron University

Manuel Perez - Cameron University

Eustus Saunders - Cameron University

Astha Shrestha - Cameron University

Tara Stevens - Cameron University

05 Information Operation Management

01.05.01 ~ Assessing the Impact of Music-related Technologies on Amateur Musicians

Nicholas Hampton - University of Central Oklahoma

01.05.03 ~ Impact of Gulf Storms on Oil and Natural Gas Prices Laila Samara -
University of Central Oklahoma

Zhen Zhu - University of Central Oklahoma

Kuang-Chung Hsu - University of Central Oklahoma

06 Management

01.06.01 ~ Student Engagement: Crucial to Student Retention

Nautica Greene - University of Central Oklahoma

M. Suzanne Clinton - University of Central Oklahoma

Susanne Rassouli-Currier - University of Central Oklahoma

01.06.02 ~ Business on the Links: An Examination of the Rise of Golf and its Role in Modern Business Practices

Dylan West - East Central University

07 Marketing

01.07.01 ~ Leadership through Thick and Thin: An Examination of Corning's Identity Development

Jeanetta Sims - University of Central Oklahoma

Zakery Dixon - University of Central Oklahoma

01.07.02 ~ A Family-Led Identity: Examining Zildjian's Executive Leadership and Market Prominence

Jeanetta Sims - University of Central Oklahoma

Peyton Alexander - University of Central Oklahoma

01.07.03 ~ Global Disney: How a Brand Fails, Adapts, and Succeeds across Cultures

Jeanetta Sims - University of Central Oklahoma

Allyson Muldoon - University of Central Oklahoma

Jennalin Partee - University of Central Oklahoma

Kasey Robinson - University of Central Oklahoma

01.07.04 ~ Inside Out: An Analysis of Southwest Airlines' Identity Development

Jeanetta Sims - University of Central Oklahoma

Myah Murphy - University of Central Oklahoma

Kallee Mills - University of Central Oklahoma

Dalton Stone - University of Central Oklahoma

01.07.05 ~ The Evolution of Leadership and Identity within the Ford Motor

Company

Jeanetta Sims - University of Central Oklahoma

Mary Balcerak - University of Central Oklahoma

Gabe DeGroot - University of Central Oklahoma

01.07.06 ~ Coast to Coast Growth: An Identity Analysis of Love's and Their Family Values

Jeanetta Sims - University of Central Oklahoma

Colt Weiner - University of Central Oklahoma

Joe Biby - University of Central Oklahoma

John Woolever - University of Central Oklahoma

Ty Golay - University of Central Oklahoma

01.07.07 ~ An Examination of Amazon's Identity: From Start to Prime

Jeanetta Sims - University of Central Oklahoma

Haylee Christian - University of Central Oklahoma

Grant Lemmons - University of Central Oklahoma

01.07.08 ~ Should Managers consider the Tenure of the Salesperson when implementing Output Controls?

Joy Chong - University of Central Oklahoma

Manoshi Samaraweera - University of Central Oklahoma

01.07.09 ~ Do We Need the Transition from Value Chain to Value Creation?

Kanghyun Yoon - University of Central Oklahoma

Chae Hyeon Lee - University of Central Oklahoma

02 EDUCATION & PROFESSIONAL STUDIES

01 Education

02.01.01 ~ MOVEMENT OPPORTUNITIES in the CLASSROOM and its EFFECTS ON DISCIPLINE.

Eric Paul - Cameron University

Daniele Harrell - Cameron University

Anna Thom - Cameron University

Eileen Richardson - Cameron University

02.01.02 ~ UNTITLED Ms. Jenny K. Milner, M.S., M.Ed.

Jenny Milner - University of Central Oklahoma

Dr. Lori Risley - University of Central Oklahoma

02.01.03 ~ Student Perceptions of the Effectiveness of Rubrics

David Leader - University of Central Oklahoma

02.01.05 ~ A Collaboration on Investigating Literate Language: A Theme Based, Cycles Approach in a Child Development Classroom

Susan Benson - University of Central Oklahoma
Leah Blackburn - University of Central Oklahoma
Hailey McClain - University of Central Oklahoma
LaDonna Atkins - University of Central Oklahoma

02.01.06 ~ An investigation of Instructional Methodologies for Teaching Grammar in a Speech-Language Pathology Program

Susan Benson - University of Central Oklahoma
Shane Reed - University of Central Oklahoma
Linda Sealey - University of Central Oklahoma
Bucky Dodd - University of Central Oklahoma

02.01.07 ~ Exploring sources of sex education in African American Females

Oluwakemi Olurotimi - University of Central Oklahoma
Lorry Youll - University of Central Oklahoma
Tiara Roberson - University of Central Oklahoma

02.01.08 ~ Effects of Music Lyrics on Narcissism Scores

Morgan Nicoll - University of Central Oklahoma
Robert Mather - University of Central Oklahoma

02.01.09 ~ Sexual Assault and the Longevity of Relationships

Jaely Deleon - University of Central Oklahoma
Robert Mather - University of Central Oklahoma

02.01.10 ~ Non-Conscious Mimicry and Its Effect on Rapport and Recall

Fulani Petties - University of Central Oklahoma
Robert Mather - University of Central Oklahoma

02.01.11 ~ Life Lessons from the Countryside

Julia Bonewell - Northwestern State University

02.01.12 ~ Mealworm Powder as a Novel Source of Food Protein: Defatting and Proximate Analyses

Mojdeh Akbaran - University of Central Oklahoma
Kanika Bhargava - University of Central Oklahoma
Rashmi Vadivelu Amarender - University of Central Oklahoma
Sanjeewa Gamagedara - University of Central Oklahoma
Aaron Dossey - University of Central Oklahoma

Kanika Bhargava - University of Central Oklahoma

02.01.13 ~ Assessing Recovery Expectations of Individuals in a Society

Bre'Ana Byrd - University of Central Oklahoma

02.01.14 ~ 2018 Retention Projects ECU Mathematics Department

Nicholas Jacob - East Central University

Michelle Lastrina - East Central University

Matthew Lynam - East Central University

02.01.15 ~ What Does It Mean to be Well Educated?

Fawna Yunker - Northwestern State University

02.01.16 ~ Employee and Employer Perception of Corporate Training and Development

Talitha Falconer - University of Central Oklahoma

02.01.17 ~ The Relationship between Experiencing Empathy through Movies and Emotional Intelligence

Devin Watson - Northwestern State University

02.01.18 ~ Does Power Posing Decrease Public Speaking Anxiety

Kaitlyn Harkey - University of Central Oklahoma

Ashtin Dunham - University of Central Oklahoma

Jesus Ramones - University of Central Oklahoma

Theodore Mofle - University of Central Oklahoma

Mickie Vanhoy - University of Central Oklahoma

02.01.19 ~ Autobiographical Implicit Association Test

Kaitlyn Harkey - University of Central Oklahoma

Ashtin Dunham - University of Central Oklahoma

Theodore Mofle - University of Central Oklahoma

Jesus Ramones - University of Central Oklahoma

Mickie Vanhoy - University of Central Oklahoma

02.01.20 ~ Poster consisting of jail issues (problems) among older jail facilities.

Lupe Vidaurri - Southwestern Oklahoma State University

02.01.21 ~ Utilization of Counselor Education Faculty and Doctoral-Level Counselor Education Students for Gatekeeping Purposes in Master's-Level Counselor Education Programs

Leigh Kirby - Northwestern State University

02.01.22 ~ Analyzing methods to approach a crime scene with the application of Think-aloud strategy

Shi Rui Yeoh - University of Central Oklahoma
Nesreen Alsbou - University of Central Oklahoma
Samuel Lawrence - University of Central Oklahoma

02.01.23 ~ Better Under Pressure: Procrastination and its Influence on Perceived Capability in University Students

Catherine Henry - University of Central Oklahoma
Gracielita Maldonado - University of Central Oklahoma
Robin Whittaker - University of Central Oklahoma
Vickie Jean - University of Central Oklahoma

02 Family Science

02.02.01 ~ Parental Perceptions of Cost in Relation to Quality Care: A Survey of Middle to High-income Parents

Bailey Grogg - University of Central Oklahoma
Brandon Burr - University of Central Oklahoma

03 Health Studies

02.03.01 ~ Attachment styles and their influence towards condom-taking behavior

Anna Meyer - University of Central Oklahoma
Jaira Bramblett - University of Central Oklahoma
David Ball - University of Central Oklahoma

02.03.02 ~ Prevalence of Food Insecurity among Undergraduate Students in Western Oklahoma

Holly Davis - Southwestern Oklahoma State University
Hannah Madison - Southwestern Oklahoma State University
Marshall Wallace - Southwestern Oklahoma State University
Haley Zellner - Southwestern Oklahoma State University
Taylor Lewis - Southwestern Oklahoma State University
Kathryn Rodgers - Southwestern Oklahoma State University
Anne Pate - Southwestern Oklahoma State University

02.03.03 ~ The Effect of Caffeine on Anaerobic Power and Velocity of Movement in a 1RM Back Squat

Kyler Daugherty - University of Central Oklahoma

02.03.08 ~ Formulation, Optimization, and Characterization of Functional Food (Candies) to Treat Cold and Flu.

Nalebra Barnett Jackson College of Grad Studies.

Kanika Bhargava - University of Central Oklahoma.
Nalebra Barnett - University of Central Oklahoma
Kanika Bhargava - University of Central Oklahoma

02.03.09 ~ Sit-to-Stand Workstation and Work Engagement Among University Employees

Cara Daniels - University of Central Oklahoma
Jacilyn Olson - University of Central Oklahoma
Melissa Powers - University of Central Oklahoma
Larissa Boyd - University of Central Oklahoma

02.03.10 ~ Promoting Healthy Eating on Campus

Krutika Patel - University of Central Oklahoma

02.03.11 ~ Energy Expenditure of Lower Limb Amputees Using a Running Blade Compared to Non-Amputees

Matthew Blair - University of Central Oklahoma

02.03.12 ~ Analysis of Addiction Research Literature Reporting and Registration Requirements

Craig Cooper - Oklahoma State University
Harrison Gray - Oklahoma State University
Jake Checketts - Oklahoma State University
Matt Vassar - Oklahoma State University

02.03.13 ~ An Analysis of the Literature Addressing Tonsillectomy Knowledge Gaps

Craig Cooper - Oklahoma State University
Jake Checketts - Oklahoma State University
Lacy Brame - Oklahoma State University
Harrison Gray - Oklahoma State University
Jaye Downs - Oklahoma State University
Matt Vassar - Oklahoma State University

02.03.14 ~ Investigating the Research Pipeline in Barrett's Esophagus

Benjamin Halloran - Oklahoma State University
Chase Myer - Oklahoma State University
Jennifer Austin - Oklahoma State University

02.03.15 ~ Survey of Reporting Guidelines and Trial Registration Required Among Anesthesiology Journals

Harrison Gray - Oklahoma State University
Craig Cooper - Oklahoma State University
Jake Checketts - Oklahoma State University
Matt Vassar - Oklahoma State University

02.03.16 ~ Use of Trial Registry Data in Surgery Systematic Reviews

Harrison Gray - Oklahoma State University
Alainna Simpson - Oklahoma State University
Aaron Bowers - Oklahoma State University
Matt Vassar - Oklahoma State University

02.03.21 ~ Marketing Characteristics of Pharmaceutical/Medical Device Manufacturers Towards Family Medicine Physicians

Joshua Redmond - Oklahoma State University
Dr. Matt Vassar - Oklahoma State University
Dev Jaiswal - Oklahoma State University

02.03.22 ~ Swimming and Quality of Life

Rachel Cook - Southwestern Oklahoma State University

04 Nursing

02.04.01 ~ Quantifying Blood Loss in a Postpartum Hemorrhage

Jada LaFosse - Northwestern State University
April Troop - Northwestern State University

02.04.02 ~ Cognitive Therapy and Opioid Addiction

Madison Welch - Northwestern State University

02.04.04 ~ Effective Mentorship Practices in Nursing

Blake DeMond - Northwestern State University
Kyler Ferguson - Northwestern State University
Rachael ~ Girton - Northwestern State University
Osam Sakamoto - Northwestern State University

02.04.05 ~ Alternative Therapy in Decreasing Preeclampsia

Taylor Kennedy - Northwestern State University

02.04.06 ~ Nursing Preceptorships: The Key Element to Job Satisfaction and Nurse Retention

Rachel Mock - Northwestern State University
Cody Carpenter - Northwestern State University
Taylor Jokerst - Northwestern State University
Rhonda Worthen - Northwestern State University

02.04.07 ~ Newborn Capillary Blood Draws

Caitlin Blanton - Northwestern State University
Kayleigh Surratt - Northwestern State University

02.04.08 ~ Early Warning Monitoring System

Catherine Edelson - Northwestern State University

02.04.09 ~ Central Line Infections and Care Bundles

Brittany Palmer - Northwestern State University
Tristen Morgan - Northwestern State University
Sung Jin Cho - Northwestern Oklahoma State University

02.04.10 ~ Fighting the Prevalence of Heart Failure Readmission

Whitney Johnson - Northwestern State University

02.04.11 ~ PEWS, Pediatric Early Warning Systems

Alex Reed - Northwestern State University
Ana Zendejas - Northwestern State University

02.04.12 ~ Student Job Shadowing

Cruz Nava - Northwestern State University

02.04.13 ~ The Association between a Parent Spending Time in Jail and Drug Use in Young Adults from Low Income Families

Shelbi Scheffler - Southwestern Oklahoma State University

05 Physical Education

02.05.01 ~ What's a Checkbook!? A Study on the Relationship between UCO Student Financial Stress and Suicide Ideations

Kate Mohr - University of Central Oklahoma

06 Professional Teacher Education

02.06.01 ~ The Impact of Negative Emotions on Five Areas of Cognition

Casey Batson - University of Central Oklahoma
Linda Rittner - University of Central Oklahoma

02.06.02 ~ Molecular Docking-Guided Design and Synthesis of Lactate Dehydrogenase-A Inhibitors as Potential Anticancer Agents

Horrick Sharma - Southwestern Oklahoma State University
Raymond Leniger - Southwestern Oklahoma State University
Mustafa Alsunni - Southwestern Oklahoma State University

03 FINE ARTS & DESIGN

01 Arts

03.01.01 ~ Women Artists during the Great War

Beth Anderson - University of Central Oklahoma

03.01.03 ~ Laughter of Superiority: A Comparison of Commedia dell'Arte in 16th Century Venice and Amüsierkabarett in early 20th Century Berlin

Olivia Musgrove - University of Central Oklahoma

03.01.04 ~ Cubano Polaco Americano: A Study on the Globalization of Capitalist and Socialist Cinematic Poster Art during the Cold War

Olivia Musgrove - University of Central Oklahoma

03.01.05 ~ How Dolls Were Used to Push the Nationalist Agenda of Russia and Japan in the 19th & 20th Century

Amber Borum - University of Central Oklahoma

03.01.06 ~ Addressing Artistic Styles of Two German-Born Jewish Artists Before and After the Holocaust

Sarah Blank - University of Central Oklahoma

03.01.07 ~ Art Historical Study of the Trauma of Human Migration by Boat to the United States since 1970s

Nina Nguyen - University of Central Oklahoma

03.01.08 ~ Vaginal Imagery & Female Identity: The Art of Alicja Żebrowska and Hannah Wilke

Elizabeth Suarez-Montero - University of Central Oklahoma

03.01.09 ~ Tower of Babel: A comparative of multilingual societies in Japan and Belgium during the 16th century

Michael May May - University of Central Oklahoma

03.01.10 ~ Traditional Japanese Tea Vessels in Contemporary Art

Michael May May - University of Central Oklahoma

03.01.11 ~ Pedagogical Inquiry on Korean Visual Culture: Collaborative Process of an E-Book Anthology

Oksun Lee - University of Central Oklahoma

03.01.12 ~ Cults of Mother Goddess: A Comparative Examination between

Renaissance Italy and Egypt in Fourth Century B.C.E

Lyazzat Galilolla - University of Central Oklahoma

03.01.13 ~ Cross-Cultural Significance of Blue and White Ceramics of China and the Netherlands in the 1600s

Warapat Krasaetanont - University of Central Oklahoma

03.01.14 ~ Representation of National Identity in Art: A Comparative study of the sculptures of Khien Yimsiri and H.C. Westermann

Warapat Krasaetanont - University of Central Oklahoma

02 Dance

03.02.01 ~ Saltwaters: A choreographic response to the refugee crisis

Tina Kambour - University of Central Oklahoma

Alexis Hendrix - University of Central Oklahoma Natasha

Abu-Fadel - University of Central Oklahoma

Yukina Sato - University of Central Oklahoma

Bailey Smith - University of Central Oklahoma

Emma Prilaman - University of Central Oklahoma

03 Design

03.03.01 ~ Touch and See Your Park

Siriporn Peters - Southwestern Oklahoma State University

Connor Albrightson - Southwestern Oklahoma State University

03.03.02 ~ What Makes a Successfully Designed Theatre Poster

Natalie Heng - University of Central Oklahoma

03.03.03 ~ Logo Design as Transformative Learning: The Melton Gallery Rebrand

Amanda Horton - University of Central Oklahoma

Samuel Washburn - University of Central Oklahoma

03.03.04 ~ Meggs and Beyond: Does Graphic Design History Pedagogy Begin or End at the Canon of Graphic Design History?

Amanda Horton - University of Central Oklahoma

03.03.05 ~ So Many Terms, So Little Time: Searching for Best Practices in Teaching Interior Design History

Valerie Settles - University of Central Oklahoma

Sarah Wilhoit - Harding University

03.03.06 ~ Stages of refurbishment of Arabic calligraphy

Hussam Basha - University of Central Oklahoma

03.03.07 ~ Sharks with Frickin' Laser Beams Attached to Their Heads

Sam Ladwig - University of Central Oklahoma

03.03.08 ~ Creative Interpretations

Lanie Gabbard - University of Central Oklahoma

03.03.09 ~ Application of Advanced VR and AR Technologies to Interior Design Education and Studio Projects

SeonMi Choi - University of Central Oklahoma

03.03.10 ~ Office Animal: Furniture that Works for Pets and People

Amy Jacobson-Peters - University of Central Oklahoma

05 Music

03.05.01 ~ Music for Peace II A Journey through Different Cultures and CD Recording

Tess Remy-Schumacher - University of Central Oklahoma

03.05.02 ~ The Brisch Center for Historical Performance: A Documentary Short

Andrea Dillingham - University of Central Oklahoma

06 Theatre Arts

03.06.01 ~ Feminism and its Distant, Shady Friend; Restoration Drama

Abigail Rinestine - Cameron University

03.06.02 ~ "Dressing Up a Historical Approach to Terminology"

Kelsey Hood - Cameron University

04 LIBERAL ARTS

01 Communication

04.01.01 ~ Peer Mentor Programs: Benefits of Implementation in Higher Education

Alexis Loudermilk - University of Central Oklahoma

Niccole Miller - University of Central Oklahoma

M. Suzanne Clinton - University of Central Oklahoma

04.01.02 ~ Exploring Instructor Communication: Assessing the relationship between Teacher Clarity and Self-Reports of Student Learning.

Shannon McCraw - Southeastern Oklahoma State University

Maddison Poteet - Southeastern Oklahoma State University
Ieysha Cheney - Southeastern Oklahoma State University

02 English

04.02.01 ~ Much Ado About Villains: Don John's Unique Role in Much Ado About Nothing

Anna Dore - University of Central Oklahoma

04.02.02 ~ "Ekphrastic Poetry-The Muse from Within"

Angela Helmig - University of Central Oklahoma

04.02.03 ~ Beyoncé and Feminism: A Rhetorical Analysis

Alyssa Compton - University of Central Oklahoma

04.02.04 ~ An Ecophobic Analysis of "The Owl and the Nightingale"

Laura Blackstone - University of Central Oklahoma

05 Geography

04.05.01 ~ Religion, Ethnic Communities and the Spatial Integration of Immigrants in the Oklahoma City Metropolitan Area

Blake Taylor - University of Central Oklahoma

Hellen Yosef - University of Central Oklahoma

Michelle Brym - University of Central Oklahoma

07 History

04.07.01 ~ Globe Trotting British Women in the Age of Victoria

Jessica Sheetz-Nguyen - University of Central Oklahoma

04.07.02 ~ Conflicted Hearts: Correspondence from Unwed Mothers to the London Foundling Hospital, 1857-1872

Margaret Snowden - University of Central Oklahoma

04.07.03 ~ The Greenwood Massacre: How the 1921 Tulsa Race Riot destroyed the hope of a people.

Brandy Hinesley-Chambers - Northwestern State University

04.07.04 ~ "Despotic Monopoly in Trade"

Blake Janak - University of Central Oklahoma

04.07.05 ~ The Chronicle of Elis Gruffydd

Ann Riley-Adams - University of Central Oklahoma

04.07.06 ~ Ida Tarbell and Anti-Suffrage Thought

Emily Burgess - Southwestern Oklahoma State University

04.07.07 ~ Identity and Politics in the Late Victorian Era

Justin Olmstead - University of Central Oklahoma

04.07.08 ~ Anglo-Women Travelers in Victorian Italy

Jessica Sheetz-Nguyen - University of Central Oklahoma

04.07.09 ~ Pressure to Produce- Princess Charlotte to Queen Victoria

Rebekah Mills - University of Central Oklahoma

04.07.10 ~ The Struggle for Schools: Education in the Nineteenth-century Creek Nation

Rowan Steineker - University of Central Oklahoma

04.07.11 ~ Joseph Oklahombi-Choctaw War Hero

Mike Maxey - University of Central Oklahoma

04.07.12 ~ Equality of Opportunity: The Racial Significance of The Elementary and Secondary Education Act

Olivia Branscum - Southwestern Oklahoma State University

04.07.13 ~ Equality of Opportunity: The Racial Significance of The Elementary and Secondary Education Act

Olivia Branscum - Southwestern Oklahoma State University

04.07.14 ~ "Is That All?": Media Portrayal of Women in the 1950s and 1960s

Katy Elmore - Southwestern Oklahoma State University

04.07.15 ~ Road to a Thesis

Heather Scheele - University of Central Oklahoma

04.07.16 ~ Gendering the Black Body: An Examination of Gender, Power and Lynching During the First World War Era

Edith Ritt-Coulter - University of Central Oklahoma

04.07.17 ~ Sunken Steamer Heroine and the Discovery Made Over a Century Later: Significance and Irony of a Shipwreck in Oklahoma

Krissy Frost - University of Central Oklahoma

08 Political Science

04.08.01 ~ "The Rights of Victims of Crime in America"

Dan Brown - Southwestern Oklahoma State University

04.08.02 ~ The Role of Followership in Organizational Performance: The Case of Edmond City Administration

Nathan Tayero - University of Central Oklahoma

John Wood - University of Central Oklahoma

M. Suzanne Clinton - University of Central Oklahoma

04.08.03 ~ Serving Women or Serving Time: The Effect of Women Legislators on Female Incarceration Rates

Paula Heitland - East Central University

04.08.04 ~ “No one knows what it is until they have seen—I’m right up where History is made”: A Personal Account of The Great War.

Kate Springer - East Central University

04.08.05 ~ Addicted Newborns and Oklahoma Legalities

Riley Pearce - Northwestern State University

04.08.06 ~ The Gap: Consequences in Lacking Foreign Language Education Resources in the U.S. Public School System

Elsa Moseley - East Central University

04.08.07 ~ Assessing Domestic Water Consumption Patterns and Water Conservation Behaviors in Ada Oklahoma

Sarita KC - East Central University

04.08.09 ~ Colonialism and Ethnopolitical Conflict in the Developing World: A Marxist Perspective

Wil Crawford - East Central University

04.08.10 ~ How Memes May Have Affected the 2016 Presidential Campaign: Hillary Clinton.

Kate Springer - East Central University

04.08.11 ~ Immersive Learning at Northeastern State University: A Dialogue

Cheryl Van Den Handel - Northeastern State University

Stephan Sargent - Northeastern State University

Christine Hallman - Northeastern State University

Mitch Ricketts - Northeastern State University

Mia Revels - Northeastern State University

Nathan Green - Northeastern State University

04.08.12 ~ An Analysis of the Rhetoric of Reaction to Political Protest in the Age of Trump: Very Fine People vs. Sons of B**s**

Jocelyn Gordon - University of Central Oklahoma

04.08.13 ~ "The Reaction to the Rhetoric of Political Protest in the Era of Trump: Very Fine People vs. Sons of B**es"**

Jocelyn Gordon - University of Central Oklahoma

04.08.14 ~ The Tale of the Spider and the Fly

Skyler Riddle - East Central University

09 Sociology

04.09.01 ~ Comparative Environmental Analysis of Two Bars in Oklahoma

Nikita Muniz - University of Central Oklahoma

04.09.02 ~ A Cross-National, Quantitative Study of the Relationship between Income Inequality and Incarceration Rates

Burle Steelman - University of Central Oklahoma

Thomas Burns - University of Oklahoma

04.09.03 ~ The Challenges of Researching Methamphetamine in Rural Oklahoma

Rashi Shukla - University of Central Oklahoma

Kenzi Lockwood - University of Central Oklahoma

Danielle Stoneberg - University of Central Oklahoma

Paige Copple - University of Central Oklahoma

Amanda Dorman - University of Central Oklahoma

04.09.04 ~ Assessing a Facility's CPTED Score

Johnathan Preston - University of Central Oklahoma

04.09.06 ~ Generational Transitions in Graduate Gerontology Program Leadership

Douglas Reed - University of Central Oklahoma

Karel Kalaw - University of Central Oklahoma

04.09.07 ~ Attitudes toward the non-violent offender among college students as it relates to educational attainment, political ideology, and gender

Cami Cho - University of Central Oklahoma

Gary Steward, Jr. - University of Central Oklahoma

04.09.08 ~ Global Feminism: A Study of Existence for Women Around the World

Stephanie Easterling - University of Central Oklahoma

04.09.09 ~ Stillwater Auto Burglary Project: A Study in Command Emphasis

Michael Jenkins - University of Central Oklahoma

04.09.10 ~ Lessons Learned: Drought Mitigation and Planning in Oklahoma

Tanya Chapman - East Central University

04.09.11 ~ Working with the Homeless: A Glimpse Through the Eyes of Managers Who Recruit and Organize Volunteers.

Dr. Gary Steward, University of Central Oklahoma

Jennifer brown - University of Central Oklahoma

04.09.12 ~ Working with the Homeless: A Glimpse Through the Eyes of Managers Who Recruit and Organize Volunteers.

Dr. Gary Steward, University of Central Oklahoma

Jennifer brown - University of Central Oklahoma

05 MATHEMATICS & SCIENCE

02 Animal Science

05.02.01 ~ Effects of Level of Intake of a 50% Concentrate Pelleted Diet on Digestion and Energy Utilization by Katahdin Wethers

Arthur Goetsch - Langston University

Dereje Tadesse - Langston University

Ryszard Puchala - Langston University

Italo Portugal - Langston University

Ali Hussein - Langston University

05.02.02 ~ Effects of High Heat Load Conditions on Body Weight, Dry Matter Intake, and Blood Constituent Levels of Dorper, Katahdin, and St. Croix Sheep from Different Regions of the USA

Arthur Goetsch - Langston University

Dereje Tadesse - Langston University

Ryszard Puchala - Langston University

Terry Gipson - Langston University

Italo Portugal - Langston University

Tilahun Sahlu - Langston University

05.02.03 ~ Effect of Water Restriction on Hair Sheep Breeds from Different Regions of the United States

Ali Hussein - Oklahoma State University

03 Biology

05.03.01 ~ Foraging Patterns of Carpenter Bees at Chasteberry Bushes on Lesvos (Greece)

John Barthell - University of Central Oklahoma

Emily Brown - University of Massachusetts at Amherst
Amanda Fernandez - University of Maryland Baltimore County
Erika Metzler - Salem College
Cody Pavlick - Bloomsburg University
Vilnery Rivera-Figuero - University of Puerto Rico at Rio Piedras
Taylor Salaguinto - Whitman College
Victor Gonzalez - University of Kansas
José Agosto-Rivera - University of Puerto Rico at Rio Piedras
Theodora Petanidou - University of the Aegean at Mytilene
John Hranitz - Bloomsburg University

05.03.02 ~ Extent and Distribution of Ticks and Tick-Borne Pathogens in Residential and Non-Residential Sites of Edmond, Oklahoma

Mariah Small - University of Central Oklahoma
Robert Brennan - University of Central Oklahoma
Sean Laverty - University of Central Oklahoma

05.03.03 ~ Use of a Daily Text Message to Increase Student Engagement and Retention in an Online Clinical Immunology Course

Alexis Jones - Northeastern State University

05.03.04 ~ Searching for a fast, simple way to accurately measure protein concentration in colored bacterial cultural media by spectrophotometer

Ning Wu - Southeastern Oklahoma State University
Erika Costain - Southeastern Oklahoma State University
Teresa Golden - Southeastern Oklahoma State University
Brad Ludrick - Southeastern Oklahoma State University

05.03.05 FoxM1 Promotes Tubular Regeneration Following Acute Kidney Injury

LaQuan Johnson - Langston University

05.03.06 ~ RTK ACTIVATION FOLLOWING REMODELING OF THE ECM VIA HYALYRONIDASE PROMOTES AEROBIC GLYCOLYSIS

Matthew Maxwell - Southeastern Oklahoma State University

05.03.07 ~ Viability of Cancerous Cells Under Low- and High-Dose Laser Irradiation

Sana Mesiya - University of Central Oklahoma

05.03.09 ~ Determining conjugate diene in Sjogren's syndrome patients using spectrophotometry

Huyen Tran - University of Central Oklahoma

05.03.10 ~ Oxidative damage in Sjogren's syndrome patients using ELISA assays

Huyen Tran - University of Central Oklahoma

05.03.11 ~ Modified Early Obstetric Warning System

Melissa Bell - Northwestern State University

Kimberly McKinney - Northwestern State University

05.03.12 ~ Development of a microfluidic immunological assay for the detection and identification of Bluetongue virus and Enzootic hemorrhagic disease virus induced antibodies in serum.

Mary Tappert - University of Central Oklahoma

Hope Ogbeide - University of Central Oklahoma

John Bowen - University of Central Oklahoma

Robert Brennan - University of Central Oklahoma

05.03.13 ~ Southeastern Oklahoma State University undergraduate OK-LSAMP-scholars participated in the NSF-supported summer international research training program in Beijing, China

Lindsay Perez - Southeastern Oklahoma State University

Brianna Cole - Southeastern Oklahoma State University

Erika Costain - Southeastern Oklahoma State University

Brad Ludrick - Southeastern Oklahoma State University

Teresa Golden - Southeastern Oklahoma State University

Ning Wu - Southeastern Oklahoma State University

05.03.14 ~ Cloning and Over-Expression of a Novel Thermophilic Nuclease From Sulfurihydrogenibium Azorense

Abigail Trejo - Southeastern Oklahoma State University

Amy Grunden - North Carolina State University

Vijay Somalinga - Southeastern Oklahoma State University

05.03.15 ~ Predation Preference of Toxorhynchites rutilus septentrionalis on Two Primary West Nile Vectors in Oklahoma

Daniel Marshall - University of Central Oklahoma

05.03.16 ~ Mars Regolith Simulant Grow Project

Dustin Mullings - Tulsa Community College

05.03.17 ~ Genetic Effects of Caffeine Treatments on Dupuytren's Contracture Cells in a High-Tension Environment

Sarah Olson - University of Central Oklahoma

Mel Vaughan - University of Central Oklahoma

Dr. Steven Karpowicz - University of Central Oklahoma

05.03.18 ~ Serologic Evidence of Viral Reactivation and Increased Disease Activity in Patients With Systemic Lupus Erythematosus

Rebecca Wood - Oklahoma Christian University

Lauren Guthridge - Oklahoma State University

Emma Thurmond - Oklahoma Medical Research Foundation

Carla Guthridge - Oklahoma Medical Research Foundation

Hua Chen - Oklahoma Medical Research Foundation

Susan Macwana - Oklahoma Medical Research Foundation

Joel Guthridge - Oklahoma Medical Research Foundation
Judith James - Oklahoma Medical Research Foundation
Rufei Lu - Oklahoma Medical Research Foundation
Wade deJager - Oklahoma Medical Research Foundation
Cristina Arriens - Oklahoma Medical Research Foundation
Eliza Chakravarty - Oklahoma Medical Research Foundation
Katherine Thanou - Oklahoma Medical Research Foundation
Joan Merrill - Oklahoma Medical Research Foundation

05.03.19 ~ Overexpression of YAP1-TFE3/FAM118B Fusion Genes

Casey Love - Southeastern Oklahoma State University

05.03.20 ~ Genetic structure and the potential for hybridization in populations of *Peromyscus* spp. of plateau regions in western Oklahoma

Sarah Vrla - University of Central Oklahoma
Michelle Haynie - University of Central Oklahoma

05.03.21 ~ The Prevalence of *Trypanosoma cruzi* in Mexican Free-Tailed Bats (*Tadarida brasiliensis*) at Three Maternity Roosts in Oklahoma

Matthew Nichols - University of Central Oklahoma
Wendy Monterroso - University of Central Oklahoma
Wayne Lord - University of Central Oklahoma
Robert Brennan - University of Central Oklahoma
Victoria Jackson - University of Central Oklahoma
Michelle Haynie - University of Central Oklahoma

05.03.22 ~ An Assessment of Copper in High-Touch Areas for use in A Pharmacy's Cleanroom

Paul Olson - University of Central Oklahoma
David Freeman - University of Central Oklahoma

05.03.23 ~ Hunting for Viruses: Protocols for the Isolation, Enumeration, and Characterization of Soil Bacteriophages

Paul Olson - University of Central Oklahoma
Alma Marquez - University of Central Oklahoma

05.03.24 ~ Community-Level Antibiotic Profiling and Resistance of Microorganisms in Oklahoma Soils

Paul Olson - University of Central Oklahoma
David Freeman - University of Central Oklahoma
Luis Frias - University of Central Oklahoma
Alma Marquez - University of Central Oklahoma

05.03.25 ~ Antimicrobial Activity of Silver Nanoparticles Against Pathogenic *Acinetobacter baumannii*

Paul Olson - University of Central Oklahoma
Dana Khdr Sabir - Charmo University, Iraqi Kurdistan

05.03.26 ~ Virology SEA-PHAGE Research Phage-Busephilis

Philip Karanja - University of Central Oklahoma

05.03.30 ~ Pick your poison: sublethal effects of pesticides on amphipod life history traits

Lindsey Hendricks - Southwestern Oklahoma State University

Rickey Cothran - Southwestern Oklahoma State University

05.03.31 ~ Using Molecular Markers to Assess Contact Zones and Boundary Lines of Cryptic Species (Geomys) in Oklahoma

Michelle Haynie - University of Central Oklahoma

Cristina Coffman - University of Central Oklahoma

05.03.32 ~ Intensity Matters: Perineuronal Nets Remodeling in Nalozone-Percipitated Morphine Withdrawal on Female Adolescent

Ashley Brown - Tulsa Community College

05.03.33 ~ Analysis of Proliferation in Phenylalanine, Retinoic Acid, and 4-diethylaminobenzaldehyde Treated Cells

Kayley Pate - University of Central Oklahoma

Nikki Seagraves - University of Central Oklahoma

05.03.34 ~ The Effects of Phenylalanine, Retinoic Acid, and Diethylaminobenzaldehyde on Cell Migration

McKayla Muse - University of Central Oklahoma

Nikki Seagraves - University of Central Oklahoma

Gabriel Rucci - University of Central Oklahoma

05.03.35 ~ Overexpression of Hydrophobins in the Fungal Cell Factory Aspergillus nidulans

Caleb Alexander - Oklahoma State University

05.03.36 ~ The effects of e-juice on CHO cells

Ayla Hughes - Tulsa Community College

Steven Grace - Tulsa Community College

05.03.37 ~ Isolation and Characterization of Bacteriophage "Sasian" from Host Microbacterium foliorum

Haris Zafar - University of Central Oklahoma

Sze Hoe Sea - University of Central Oklahoma

Hari Kotturi - University of Central Oklahoma

05.03.38 ~ Detecting Historic Disturbance Regimes in an Oak-Hickory Forest at Hottonia Bottoms Nature Preserve

Justin cheek - University of Central Oklahoma

Chad King - University of Central Oklahoma

05.03.39 ~ Evaluation of the Blue River for Presence of Campylobacter jejuni Gunner Parent and April Nesbit

Gunner Parent - East Central University

05.03.40 ~ Cilia-driven Cellular Diffusion and Biomixing at Different Viscosities

Oswah Cheema - University of Central Oklahoma

Kara Clark - University of Central Oklahoma

Gang Xu - University of Central Oklahoma

05.03.42 ~ Redefining HTLV and Host Protein-Promoter Interactions in Magnetic Promoter Pull-Down Assays

Conner Anderson - East Central University

Alisha Howard - East Central University

05.03.45 ~ YfaX and YggD protein function on sugar metabolism

Aljan Ranjit - East Central University

05.03.48 ~ ID biases in Citizen-Science Databases for Birds: Under-the-radar observations.

Joseph Grzybowski - University of Central Oklahoma

05.03.49 ~ Effects of bacterial secreted products on fibroblast lattice height and correlated contraction

Pratiksha Kshetri - University of Central Oklahoma

Robert Brennan - University of Central Oklahoma

Mel Vaughan - University of Central Oklahoma

05.03.50 ~ AEBSF inhibits adipogenesis and reduces fly body fat

Jin Seo - Rogers State University

William Redmond - Rogers State University

Morgan Youngblood - Rogers State University

05.03.51 ~ Imported species of pathogenic Fusarium species from Central America differ from Fusarium species in Oklahoma

Cierra Soden - East Central University

05.03.52 Bacteriophage therapy against E. coli

Eric Paul - Southwestern Oklahoma State University

Brittney Le - Southwestern Oklahoma State University

05.03.53 ~ Telomere Length Predicts Life History Trade-Offs in Wild Female Tree Swallows (Tachycineta bicolor)

Tiana Sanders - Oklahoma State University

05.03.54 ~ Microenvironment Modulates the Phenotype of Ker-CT-Ras; Role of the

Alpha-6 Integrin Response

Zoe Andrews - University of Central Oklahoma

Mel Vaughan - University of Central Oklahoma

05.03.55 ~ Silverleaf: a New Mycobacteriophage Isolated and Sequenced from Oklahoma Soil

Raistland Valenzuela - University of Central Oklahoma

Hari Kotturi - University of Central Oklahoma

05.03.56 ~ Miaurora: New Microbacteriophage Isolated from Oklahoma Soil

Micah Byrne - University of Central Oklahoma

Zachary Stone - University of Central Oklahoma

Hari Kotturi - University of Central Oklahoma

05.03.57 ~ Antimicrobial Properties of Novel Silver(II) Cyanoximates

Erin Gallaway - Oklahoma State University

Marianna Patrauchan - Oklahoma State University

Treyon Grant - Oklahoma State University

Snow Popis - Missouri State

Nikolay Gerasimchuck - Missouri State

05.03.58 ~ Glycated Chitosan Inhibits Fibroblasts-mediated Compaction and Contraction of Collagen Lattices

Tu Doan - University of Central Oklahoma

Mel Vaughan - University of Central Oklahoma

Gang Xu - University of Central Oklahoma

Zheng Yie Yap - University of Central Oklahoma

05.03.59 ~ Using Microwaves for Organic Synthesis of Esters in Undergraduate Organic labs

Tolulade O. Adenuga Adenuga - Cameron University

Elizabeth Nalley - Cameron University

05.03.60 Antimicrobial properties of cinnamon oil nanoemulsion on isolates of Acinetobacter baumannii.

Taylor Jones - University of Central Oklahoma

05.03.61 DNA Extraction from Dried Testudine

Mariah Ewy - East Central University

05.03.62 ~ Analysis of the C. burnetii Type 4B Secretion System Homolog DotA During Infection and In Vitro Growth

Alicia Aguilar - Oklahoma State University

05.03.63 ~ Oka'Yanhli Nature Preserve Baseline Mammal Survey

Wendy Monterroso - University of Central Oklahoma

Victoria Jackson - University of Central Oklahoma

04 Botany

05.04.01 ~ The Association Between Soil Moisture and Ring-width: A Whole New Depth

Chad King - University of Central Oklahoma

Jordan Johnson - University of Central Oklahoma

05.04.02 ~ Preliminary Assessment of an Oak Savannah in Central Oklahoma for Fire Regime Analysis

Joe Buck - University of Central Oklahoma

Chad King - University of Central Oklahoma

05.04.03 ~ Using General Land Office Surveyor Notes to Estimate Forest Composition of 19th Century Ottawa County in Northeastern Oklahoma

Chad King - University of Central Oklahoma

David Seagle - University of Central Oklahoma

05.04.04 ~ Revisiting Palynology of the Domebo Site

Isaias Gonzalez - Cameron University

05.04.05 ~ Comparison of Burkholderia cepacia Complex Isolates from Cystic Fibrosis Patients Regarding Outer Cell Envelope Accessibility to Nonpolar Antimicrobial Agents

Alexandra Nichols - Northeastern State University

Sallie Ruskoski - Northeastern State University

Frank Champlin - Oklahoma State University

05 Chemistry

05.05.01 ~ Collaboration between Chemistry and Art in Teaching

Joanne Adams - University of Central Oklahoma

05.05.02 ~ A hydroxamate-containing compound inhibits Histone deacetylases

Luke Bayless - Northeastern State University

Sung-Kun (Sean) Kim - Northeastern State University

05.05.03 ~ Study of iodine distribution in western Oklahoma brine waters

jason wickham - Northwestern State University

Katrina Betz - Northwestern State University

Maxwell Archer - Northwestern State University

David Edlin - Iofina

05.05.04 ~ Purification and Characterization of Metallo-Beta-Lactamase from Klebsiella pneumoniae

Garrett Wood - Northeastern State University

Sung-Kun Kim - Northeastern State University

05.05.05 ~ Progress Towards the Photochemical Synthesis of Vitamin D Triene System

Dragos Albinescu - Northeastern State University

Luke Bigby - Northeastern State University

05.05.06 ~ Synthesis and Evaluation of Five Flexible Heteroarotinoids on Methicillin-resistant and Non-resistant Staphylococcus aureus Cell Viability

Hyun Meen Park - University of Central Oklahoma

Nhu Dang - University of Central Oklahoma

K. Berlin - Oklahoma State University

Dallas New - University of Central Oklahoma

Dana Rundle - University of Central Oklahoma

05.05.10 ~ E.coli Dihydrodipicolinate Synthase: A Target for Drug Design

Sidra Mesiya - University of Central Oklahoma

05.05.11 ~ Iron oxide nanoparticles from ferric and ferrous sulfate

Randall Maples - East Central University

05.05.12 ~ A Late Transition Metal Catalyzed Transesterification for the Organic Chemistry Laboratory

Daniel McInnes - East Central University

05.05.13 ~ Cellulase Activity in Oklahoma Grown Mushrooms

Madison Thomas - Northeastern State University

Chelsea Pierce - Northeastern State University

Ratnakar Deole - Northeastern State University

05.05.14 ~ Effectiveness of Dispersin B and Lysostaphin to Break Biofilm Formed by Staphylococcus aureus SA113

Kaylin Shackelford - Northeastern State University

Sung-Kun (Sean) Kim - Northeastern State University

05.05.15 ~ Determination of Water Hardness in Edmond Drinking Water Using Flame Atomic Absorption Spectroscopy

Sanjeewa Gamagedara - University of Central Oklahoma

Frances Matthews - University of Central Oklahoma

Deini English - University of Central Oklahoma

05.05.16 ~ The Fluorescence Labeling of Prostaglandin E2 (PGE2) using 4-Bromomethyl-7-methoxycoumarin for Microfluidic Quantification

Sanjeewa Gamagedara - University of Central Oklahoma

Maria Kunnel - University of Central Oklahoma

Ayana Sabu - University of Central Oklahoma

Mohammad Hossan - University of Central Oklahoma

05.05.18 ~ Biophysical Understanding of Dispersin B from Staphylococcus aureus

Jarrett Wingfield - Northeastern State University

Sung-Kun (Sean) Kim - Northeastern State University

05.05.19 ~ Identification of heptacoordinate hypercarbon in ionic hydrocarbon compounds

A.K. Fazlur Rahman - Oklahoma School of Science and Mathematics

George Wang - Oklahoma School of Science and Mathematics

Bing Wang - University of Oklahoma

05.05.20 ~ Europium (III) doped yttrium (III) oxide nanostructures for photonic applications: Synthesis and spectroscopic measurements

A.K. Fazlur Rahman - Oklahoma School of Science and Mathematics

William Wang - Oklahoma School of Science and Mathematics

Peifen Zhu Zhu - University of Tulsa

05.05.21 ~ Protein Purification and X-ray Crystallography of Histidine-tagged DapD

Cortney Schartz - University of Central Oklahoma

Richard Freeman - University of Central Oklahoma

Dr. Corey Johnson - Samford University

Dr. Leonard Thomas - University of Oklahoma

Dr. Lillian Chooback - University of Central Oklahoma

Jordan Staggs - University of Central Oklahoma

05.05.22 ~ Novel Cross-linking in Fo portion of E. coli ATP Synthase and Implications for Energy Generation

Aleigh Peirou - Cameron University

Kyle Moore - Cameron University

05.05.23 ~ Preparing a Unique Sponge Collection for Biomedical Assay Screening

Phu Dang - University of Central Oklahoma

Morggan Varley - University of Central Oklahoma

Michelle Pham - University of Central Oklahoma

Madilyn Scott - University of Central Oklahoma

Madelynn Short - University of Central Oklahoma

Amanda Waters - University of Central Oklahoma

05.05.27 ~ An ab initio Study of Gaseous Cobalt Hydroxides

Dwight Myers - East Central University

05.05.29 ~ Novel Visible Spectrum Approach to FeEnt Transport through FepA

Kyle Moore - Cameron University

Amarachi Oleru - Cameron University

Adewunmi Adebajo - Cameron University

05.05.30 ~ The Effects of Adding Raffinose Family Oligosaccharides (RFOs) and Inulin

to Fermented Yogurt

Phuong Dinh - University of Central Oklahoma

05.05.31 ~ Bioengineering: A tale of Two Methods for Studying and Making Biological Tools

Lori Gwyn - Southwestern Oklahoma State University

Micah Foale - Southwestern Oklahoma State University

Brooke Lizotte - Southwestern Oklahoma State University

Sequojah O'Neal-Johnson - Southwestern Oklahoma State University

Megan Oertel - Southwestern Oklahoma State University

Abbaglae Bond - Southwestern Oklahoma State University

Paul Vahchuama - Southwestern Oklahoma State University

Kathryn Walker - Southwestern Oklahoma State University

Madison Duckwall - Southwestern Oklahoma State University

05.05.32 ~ 1,4,7,10,13-Pentaazacyclopentadane: Streamlined Synthesis and Novel Transition Metal Complexes

Alina Shrestha - Southwestern Oklahoma State University

05.05.33 ~ 1,4,7,10,13-Pentaazacyclopentadane: Streamlined Synthesis and Novel Transition Metal Complexes

Alina Shrestha - Southeastern Oklahoma State University

Faith Okorocho - Southwestern Oklahoma State University

Timothy Hubin - Southwestern Oklahoma State University

Timothy Hubin - Southwestern Oklahoma State University

Timothy Hubin - Southwestern Oklahoma State University

05.05.34 ~ MICROWAVE SYNTHESIS OF TETRAPHENYLPORPHYRINS AND TETRAPHENYLPORPHYRIN DERIVATIVES,

Elizabeth Nalley - Cameron University

Kelley Vajgrt - Cameron University

Cayla Caveny - Cameron University

05.05.35 ~ A GREEN CHEMISTRY SYNTHESIS OF PRIMARY AMIDES USING MICROWAVES

Tochukwu Nwaiwu - Cameron University

Elizabeth Nalley - Cameron University

05.05.36 ~ USING MICROWAVES FOR SYNTHESIS OF BIODIESEL USING CALCIUM OXIDE AS THE CATALYST

Elizabeth Nalley - Cameron University

Tolulope Oyetoro - Cameron University

05.05.37 ~ Microwave Energy as a Rapid Alternative for Organic Syntheses

Michael Onyeizu - Cameron University

Elizabeth Nalley - Cameron University

06 Computer Science

05.06.01 ~ Automating Avionics Tests for the Space Launch System

Thomas Crews - Southwestern Oklahoma State University

05.06.02 ~ Implementing Software Design Patterns to Create an Arcade Style Space Shooter Game

Abigail Kern - University of Central Oklahoma

05.06.03 ~ PerfSonar and OFFN: Diagnosing and Testing Science DMZ Connections for the High-Speed Transfer of Large Data-sets on Oklahoma Friction Free Network

Dylan Ortega - Southwestern Oklahoma State University

05.06.04 ~ Using Design Patterns to Create Interchangeable Behaviors Greg Levy - Dr. Hong K. Sung (Faculty Advisor)

Greg Levy - University of Central Oklahoma

Hong Sung - University of Central Oklahoma

05.06.05 ~ A Novel Approach for Analyzing Power Wheelchair Movements Using Advanced Mathematics and Machine-Learning Techniques

Marcus Ong - University of Central Oklahoma

05.06.06 ~ A Literature Review of Research on the Cosmic Microwave Background

Hayden Webb - Southwestern Oklahoma State University

Jeremy Evert - Southwestern Oklahoma State University

05.06.07 ~ An Analysis of the Knee Injury Rehabilitation via a Mobile-Computing Approach

Yan Fay Chong - University of Central Oklahoma

05.06.08 ~ Making Connections Between Sexism in Gaming Culture and Gendered Social Stereotypes

Alexandra Cassidy - Southwestern Oklahoma State University

05.06.09 ~ Implementing a Web App for SQL Query Evaluation

Bikram Paudel - University of Central Oklahoma

Dr. Gang Qian - University of Central Oklahoma

05.06.10 ~ The Concepts of Quantum Computing

Christopher Hill - Cameron University

Sean Farrell - Cameron University

Jake Hill - Cameron University

Jean-Christian Sayeed - Cameron University

Jawad Drissi - Cameron University

05.06.11 ~ Big Data and It's Future

Gold Okorie - Cameron University
Shaylin Hale - Cameron University
Kirk Wallace - Cameron University
Jawad Drissi - Cameron University

05.06.12 ~ Augmented Reality in Surgery

Aayush Thapa - Cameron University
Justin Mckay - Cameron University
John Carmichael - Cameron University
Jawad Drissi - Cameron University

05.06.13 ~ 3D Printing Applications in Space

Mark Popp - Cameron University
Eric Kenney - Cameron University
Aaron Sanders - Cameron University
Jawad Drissi - Cameron University

05.06.14 ~ Crystal Memory, a solution to long-term Data Storage

Dakota Chandler - Cameron University
Jawad Drissi - Cameron University
Stephen McLain - Cameron University
Ryan Moe - Cameron University

05.06.15 ~ Unity 3D Platformer

Patrick Parizek - University of Central Oklahoma

05.06.16 ~ Examining the Scalability of NCAR-WRF on the OU Schooner Supercomputer

Jacob Miller - Southwestern Oklahoma State University

05.06.18 ~ Simplified Control of a Wheelchair-mounted Robotic Arm

Nicholas Clemmons - University of Central Oklahoma
Jicheng Fu - University of Central Oklahoma

05.06.19 ~ Blockchain technology and cryptocurrencies

Junu Sashankar - Cameron University
Suvi Shah - Cameron University
Anista Shrestha - Cameron University
Jawad Drissi - Cameron University

05.06.20 ~ Computer Vision for Artificial Intelligence

Sameer Maharjan - Cameron University
Babin Budha Chhetri - Cameron University
Swornim Bhandari - Cameron University
Jawad Drissi - Cameron University

05.06.21 ~ Analyzing Accelerometer and Gyroscope Data From a Smart Phone to Detect Movement Patterns

Abigail Kern - University of Central Oklahoma

Jicheng Fu - University of Central Oklahoma

05.06.22 ~ Utilizing XLSForm and Kobo ToolBox to Digitize the DATA for P.A.W.S

Billy Andrew - East Central University

05.06.23 ~ Use of recurrent neural network for distinguishing wheelchair movement data from non-movement data

John Tholen - University of Central Oklahoma

Jicheng Fu - University of Central Oklahoma

05.06.24 ~ There is a push in the aerospace industry to move more towards automated systems. This presentation displays a high-level overview to aerospace systems, autonomy, and artificial intelligence, as well

Patrick Perez - Cameron University

William Moon - University of West Virginia

Brent Horner - West Virginia University

Andrew Stephen - University of North Carolina Pembroke

Chao Zhao - Cameron University

Haidar Alqanbar - NASA Langley Research Center

Wilfredo Tomales-Pomales - NASA Langley Research Center

05.06.25 ~ Efficient On-Line Traffic Policing in Software Defined Network

Lie Qian - Southeastern Oklahoma State University

05.06.27 ~ Gordon, Jack, and Carl: Oklahoma High Performance Computing Competition Determinant Problem

Ethan Carpenter - Southwestern Oklahoma State University

Devin Smoot - Southwestern Oklahoma State University

Jeremy Evert - Southwestern Oklahoma State University

05.06.28 ~ Pyramid Fighter

Callie Driver - University of Central Oklahoma

05.06.29 ~ A Class Project - "A Three-In-One Symmetric-Key Cryptography Program using Additive Key, Auto Key, and Transposition Ciphers."

Michael Kellner - Southeastern Oklahoma State University

Ming-Shan Su - Southeastern Oklahoma State University

05.06.30 ~ Infrastructure and Safety for Autonomous Vehicles

Christopher Crismon - Cameron University

Jennifer Cox - Cameron University

Gregory Norton - Cameron University

Jawad Drissi - Cameron University

05.06.31 ~ “Fuel Calculator - MPG”, My First iOS-SWIFT App that Keeps Track of how Many Miles per Gallon a Vehicle is Getting

Esdras Teixeira - Southeastern Oklahoma State University
Ming-Shan Su - Southeastern Oklahoma State University

05.06.33 ~ Outreach to High School Students in Oklahoma Through Workshops in Introductory Raspberry Pi Programming

Sila Tamang - University of Central Oklahoma
Maryam Amighi - University of Central Oklahoma
Myung Ah (Grace) Park - University of Central Oklahoma

05.06.34 ~ Steganography, Stegodetection, and Steganalysis

Teko Bekkering - Northeastern State University
Naixue Xiong - Northeastern State University

05.06.35 ~ Replacing BlackBoard with Free and Low-cost Software

Teko Bekkering - Northeastern State University
Naixue Xiong - Northeastern State University

05.06.36 ~ Type 1 Diabetes Maintenance and Control Application

Rad Alrifai - Northeastern State University
Cody Stafford - Northeastern State University

05.06.37 ~ Arduino Temperature Sensor

Rad Alrifai - Northeastern State University
Jay Vang - Northeastern State University

05.06.38 ~ Ants, Flies, and Raspberry Pis: Oklahoma High Performance Computing Competition Traveling Salesman Problem

Adam Fuller - Southwestern Oklahoma State University
Lyle Schwemley - Southwestern Oklahoma State University
Jeremy Evert - Southwestern Oklahoma State University

05.06.39 ~ Developing an Effective Approach for Analyzing Wheelchair Users' Activities

Michael Keller - University of Central Oklahoma

05.06.40 ~ Polynomial Multiplication over Binary Fields

Upama Neupane - Cameron University

05.06.41 ~ Introducing HPC to Local High School Curriculums

Madison Matli - Southwestern Oklahoma State University
Devin Smoot - Southwestern Oklahoma State University

05.06.42 ~ The future of blockchain technology

Sweksha Poudel - Southwestern Oklahoma State University
Sushant Bhatta - Southwestern Oklahoma State University

07 Criminal Justice

05.07.01 ~ Higher Education and Felony Convictions

Melissa Inglis - East Central University
Terence Castoe - East Central University
Mellissa Telena - East Central University

05.07.02 ~ God v. Capital Punishment (BC-AD)

Velma Carriaga - Southwestern Oklahoma State University

08 Engineering

05.08.01 ~ Low- and High-Dose Laser Irradiation Effects on Cell Migration and Destruction

Elivia Layton - University of Central Oklahoma
Kyra Gallagher - University of Central Oklahoma
Sara Zukerman - University of Central Oklahoma
Brianna Stevens - University of Central Oklahoma
Feifan Zhou - University of Central Oklahoma
Wei Chen - University of Central Oklahoma

05.08.03 ~ Biomechanical Characterization of Engineered Dermal-Equivalent Tissue

Erin Drewke - University of Central Oklahoma
Gang Xu - University of Central Oklahoma
Ting Wei Law - University of Central Oklahoma

05.08.04 ~ Smart Fluid Damping System for HVAC Equipment

Rachael McDaniel - University of Central Oklahoma
Andrew Matli - University of Central Oklahoma
Blake Obr - University of Central Oklahoma

05.08.05 ~ MOBILIZATION OF 3D PRINTING USING IN-SITU MATERIALS

Tiler Rose - Southwestern Oklahoma State University

05.08.06 ~ Quantifying Flagella-Driven Cellular Motility in Increased Medium Viscosity

Kara Clark - University of Central Oklahoma
Gang Xu - University of Central Oklahoma

05.08.07 ~ Design and Fabrication of Microfluidic Channels for Studies, Simulations, and the Replication of Arterial Blood Vessels

Phillip Le - University of Central Oklahoma
Kole Forrest - University of Central Oklahoma

Mohammad Hossan - University of Central Oklahoma

05.08.08 ~ Repair of F-16 Nose Landing Gear Bushing Bore

Floyd Day - University of Central Oklahoma

Ryan Short - University of Central Oklahoma

Cade Wells - University of Central Oklahoma

Jacob Pinegar - University of Central Oklahoma

05.08.09 ~ Simulation of Dedicated Short Range Communication using Simulation of Urban Mobility, Open Street Maps, and Network Simulator 3

Floyd Day - University of Central Oklahoma

Min Bo Sim - University of Central Oklahoma

05.08.10 ~ Countermeasures to Immune Dysregulation in Space Flight Conditions

Kameron Gibson - Langston University

05.08.11 ~ A Music Performance Analyze System

JACK LI - Southwestern Oklahoma State University

Joseph Rymer - Southwestern Oklahoma State University

05.08.12 ~ Design of an in-vitro model for testing stress distribution and stability of a single dental implant system

Mohamat Eirban Ali Bin Kaja Najumudeen - University of Central Oklahoma

Abdellah Ait Moussa - University of Central Oklahoma

Amy Neal - University of Central Oklahoma

Paul Nuno - University of Central Oklahoma

Danny Le - University of Central Oklahoma

05.08.13 ~ Development of a Procedure for Quantification of the Mechanical Properties of Chordae Tendineae of the Atrioventricular Heart Valves

Colton Ross - University of Oklahoma

Chung-Hao Lee - University of Oklahoma

Yi Wu - University of Oklahoma

05.08.14 ~ Laser Sentry for Portable Radiographic Safety

Maesyne Hulsey - University of Central Oklahoma

Kristina Benton - University of Central Oklahoma

Kara Clark - University of Central Oklahoma

05.08.15 ~ Metamaterials-Inspired Smart Composite

James Manimala - Oklahoma State University

Vigneshwaran Krishnamurthy - Oklahoma State University

Jiameng Wang - Oklahoma State University

Timothy Emerson - Oklahoma State University

05.08.16 ~ Amplitude-Activated Mechanical Wave Manipulation Using Nonlinear Metamaterials

James Manimala - Oklahoma State University
Sabiju Valiya, Valappil - Oklahoma State University
Catherine Sheehan - Oklahoma State University

05.08.17 ~ Dynamic Characterization of Inertant and Quasi-Inertant Structures

James Manimala - Oklahoma State University
Karthik Madhamshetty - Oklahoma State University

05.08.18 ~ EFFECT OF LASER MICRO-GROOVING ON TITANIUM IMPLANT

Anindita Das - University of Central Oklahoma
Morshed Khandaker - University of Central Oklahoma

05.08.19 ~ DETECTION AND IMPACT OF 3-D ROUGHNESS ON PGE-M PROTEIN IMMOBILIZATION

Anindita Das - University of Central Oklahoma
Mohammad Hossan - University of Central Oklahoma

05.08.20 ~ An Examination of the Mechanical Properties and Morphology of Porcine Mitral and Tricuspid Heart Valves

Samuel Jett - University of Oklahoma
Devin Laurence - University of Oklahoma
Katherine Kramer - University of Oklahoma
Anju Babu - University of Oklahoma
Yi Wu - University of Oklahoma
Chung-Hao Lee - University of Oklahoma

05.08.21 ~ OCT-Based Tissue Microindentation for Mechanical Characterization of Fibroblast-Populated Collagen Lattices

Zheng Yie Yap - University of Central Oklahoma
Chen Wai Kok - University of Central Oklahoma
Kristen Stromsodt - University of Central Oklahoma
Gang Xu - University of Central Oklahoma
Mel Vaughan - University of Central Oklahoma

05.08.22 ~ Enhanced Learning for STEM Students: Using the Think Aloud Cognitive Process

Tiara Travis - University of Central Oklahoma

05.08.25 ~ Solar Powered Smart Street Lights

Shi Rui Yeoh - University of Central Oklahoma
Ka Hei Chan - University of Central Oklahoma
Nesreen Alsoub - University of Central Oklahoma

05.08.26 ~ A Smart Parking System using ARTIK Cloud

Mohamed Afify - University of Central Oklahoma
Floyd Day - University of Central Oklahoma
Nesreen Alsoub - University of Central Oklahoma

05.08.27 ~ 3D Lung Motion Platform Detection Device Using a Flexible Wireless Sensor Network

Amjad barghouthi - University of Central Oklahoma
Mohamed Afify - University of Central Oklahoma
Nesreen Alsbou - University of Central Oklahoma

05.08.28 ~ Mobility Modeling for Smart Parking

Mohamed Rishad Abdul Samad - University of Central Oklahoma
Nesreen Alsbou - University of Central Oklahoma
Mohammed Alhashem - University of Central Oklahoma

05.08.29 ~ Self-Powered Enlarging Smart Waste Bin

Mohamed Rishad Abdul Samad - University of Central Oklahoma
Nesreen Alsbou - University of Central Oklahoma
Alaeddin Abuabed - University of Central Oklahoma
Mohammed Alhashem - University of Central Oklahoma

05.08.30 ~ Numerical modeling and parametric study of laser ablation for fabrication in microfluidics

Matt Benton - University of Central Oklahoma
Mohammad Hossan - University of Central Oklahoma

05.08.31 ~ Effect of electric field on microfluidic cell manipulations

amelie Moyna - University of Central Oklahoma

05.08.32 ~ Effect of electric field on microfluidic cell manipulations

amelie Moyna - University of Central Oklahoma
Phillip Le - University of Central Oklahoma
Mohammad Hossan - University of Central Oklahoma
Mel Vaughan - University of Central Oklahoma

05.08.33 ~ Guidewire Detection in X-ray Fluoroscopy Images using Hessian Analysis

Yuhao Jiang - University of Central Oklahoma
Kushal Thapa - University of Central Oklahoma

05.08.34 ~ An Integrated Experimental-Computational Framework for Multiscale Modeling of Atrioventricular Heart Valves

Devin Laurence - University of Oklahoma
Yi Wu - University of Oklahoma
Chung-Hao Lee - University of Oklahoma

05.08.35 ~ Microfluidic Research

Jon Kamies - University of Central Oklahoma

05.08.36 ~ Layer-Specific Mechanical Responses and Morphological Structure of the Atrioventricular Valve Leaflets

Katherine Kramer - University of Oklahoma

Anju Babu - University of Oklahoma
Chung-Hao Lee - University of Oklahoma
Yi Wu - University of Oklahoma

05.08.37 ~ Campus Accessibility Map- Campus Navigation Map for People with Limited Mobility

Seth Howell - University of Central Oklahoma
Jicheng Fu - University of Central Oklahoma

05.08.38 ~ Design and Manufacturing of Bone Analogue models for the Mechanical Testing of Custom Medical Implants

Dakota Andrus - University of Central Oklahoma
Abdellah Ait Moussa - University of Central Oklahoma
Taylor Reed - University of Central Oklahoma
Brent Harrell - University of Central Oklahoma
Eric Hight - University of Central Oklahoma
Karidjatou Cisse - University of Central Oklahoma

05.08.39 ~ Design and Manufacturing of Bone Analogue models for the Mechanical Testing of Custom Medical Implants

Dakota Andrus - University of Central Oklahoma
Abdellah Ait Moussa - University of Central Oklahoma

05.08.40 ~ Automated Seizure Detection Device

Abdulelah Babhair - University of Central Oklahoma
Ali Almomen - University of Central Oklahoma

05.08.41 ~ Nanofiber production and Collecting Machine

Mohamed Rishad Abdul Samad - University of Central Oklahoma
Lokesh Raj Dhanasekaran - University of Central Oklahoma
Trenton Ellis - University of Central Oklahoma
Garrett Lorah - University of Central Oklahoma
Morshed Khandaker - University of Central Oklahoma

05.08.42 ~ Quantifying and Simulating Cancer Patient Lung Motion in CT Using Deformable Phantom

Allie Sikes - University of Central Oklahoma
Ali AlMasbah - University of Central Oklahoma
Lohitha Wickramasinghe - University of Central Oklahoma
Shuruq AlMuwallad - University of Central Oklahoma
Nesreen Alsbou - University of Central Oklahoma
Alaeddin Abuabed - University of Central Oklahoma

05.08.43 ~ Automated Vertical Garden

Hwee Chong - University of Central Oklahoma

05.08.44 ~ KC-135 AFT Trunnion Support Seized Fastener Improved Removal Equipment and Methods

Norris Dupré - University of Central Oklahoma
Dennis Williams - University of Central Oklahoma

05.08.45 ~ Experimental and numerical analysis of electrospun fiber anchored silicone intervertebral disc

Subhakar Tummala - University of Central Oklahoma
Morshed Khandaker - University of Central Oklahoma

05.08.46 ~ Radio Waves to Electricity: Tesla's Blueprint

Sean Jesse - East Central University

05.08.47 ~ Dielectrophoresis Effects on Cell Viability in Various Sugar Solutions

Nicholas Walker - University of Central Oklahoma
Mel Vaughan - University of Central Oklahoma
Mohammad Hossan - University of Central Oklahoma

05.08.48 ~ Effect of titanium surface activation by Tresyl chloride on fibronectin immobilization and cell viability

Sadegh Nikfarjam - University of Central Oklahoma
Morshed Khandaker - University of Central Oklahoma

05.08.49 ~ Investigation on the Essential Role of Glycosaminoglycans in Heart Valve Leaflet Biomechanics

Jacob Richardson - University of Oklahoma
Anju Babu - University of Oklahoma
Chung-Hao Lee - University of Oklahoma
Yi Wu - University of Oklahoma

05.08.50 ~ Untitled

Roberto Santana - University of Central Oklahoma

05.08.51 ~ Wind Power Energy Capture

Roberto Santana - University of Central Oklahoma
Brandon Ross - University of Central Oklahoma
Brent Gaddis - University of Central Oklahoma
Spencer Prudhomme - University of Central Oklahoma

05.08.52 ~ American Sign Language Translation Glove

Nam Truong - University of Central Oklahoma
Vlado Bilix - University of Central Oklahoma
Hieu Le - University of Central Oklahoma

05.08.53 ~ Cellular Responses Induced by Plasma and Cellular Fibronectin on Electrospun Nanofiber Membranes

Fariha Sultana - University of Central Oklahoma
Melville Vaughan - University of Central Oklahoma

Morshed Khandaker - University of Central Oklahoma

05.08.54 ~ Synthesis and Characterization of Aliphatic Urethane Shape Memory Polymers for Endovascular Embolization of Intracranial Aneurysms

Robert Kunkel - University of Oklahoma

Donnie Robinson - University of Oklahoma

Devin Laurence - University of Oklahoma

Joshua Scherrer - University of Oklahoma

Jingyu Wang - University of Oklahoma

Bradley Bohnstedt - University of Oklahoma

Yingtao Liu - University of Oklahoma

Chung-Hao Lee - University of Oklahoma

05.08.55 ~ Modeling and Simulation of Mixing in a Microfluidic Channel

Jefferson Hall - University of Central Oklahoma

Evan Lemley - University of Central Oklahoma

Mohammad Hossan - University of Central Oklahoma

Floyd Day - University of Central Oklahoma

Jon Kamies - University of Central Oklahoma

05.08.56 ~ Experimental Determination of Pressure Drop and Flow Field in Model Human Trachea

Mohamad keblawi - University of Central Oklahoma

05.08.57 ~ A Study on the Regional Variation in Mitral and Tricuspid Valve Material Properties

Cortland Johns - University of Oklahoma

Samuel Jett - University of Oklahoma

Colton Ross - University of Oklahoma

Jacob Richardson - University of Oklahoma

Yi Wu - University of Oklahoma

Chung-Hao Lee - University of Oklahoma

05.08.58 ~ Solid Stance: A Standing Assistance Aid for Physical Therapy Offices

Nneka Omeke - University of Central Oklahoma

Bassem Alabadi - University of Central Oklahoma

Dr. Charles Hughes - University of Central Oklahoma

Dr. Ronald Miller - University of Central Oklahoma

Alaa Alsalem - University of Central Oklahoma

05.08.59 ~ Interleaved Sampling for Hearing Loss

Zaher Alghamdi - University of Central Oklahoma

Ammar Alzuwaid - University of Central Oklahoma

Haidar Alqanbar - University of Central Oklahoma

Haidar Alqanbar - University of Central Oklahoma

Haidar Alqanbar - University of Central Oklahoma

05.08.60 ~ Physiological Monitoring System

Jacob Harris - University of Central Oklahoma
Sergey Antonyukov - University of Central Oklahoma
Josiah Harrison - University of Central Oklahoma
Mohammad Khaled - University of Central Oklahoma

05.08.61 ~ Hypothesis Study

Paul Cook - University of Central Oklahoma

05.08.62 ~ Cold Compression Therapy Wrap

Moaiid Almosalim - University of Central Oklahoma
Musalam Alshugaih - University of Central Oklahoma
Ali Alnakhli - University of Central Oklahoma

05.08.63 ~ Development of a biomimetic nanofiber-based anterior cruciate ligament for reconstructive surgeries

Austin Doughty - University of Central Oklahoma
Mika Barnes - University of Central Oklahoma
Bipin Pallipparambil Varghese - University of Central Oklahoma
Mel Vaughan - University of Central Oklahoma
Morshed Khandaker - University of Central Oklahoma

09 Environmental Science

05.09.01 ~ Seasonal variations in site occupancy and detectability of mesocarnivores, estimated using systematically baited camera traps in south-central Oklahoma

Dineesha Premathilake - University of Central Oklahoma
Victoria Jackson - University of Central Oklahoma

05.09.02 ~ Hydrologic and Sediment Yield Modeling of Prairie and Encroached Eastern Redcedar Watersheds

Rainee Deroin - Oklahoma State University

05.09.04 ~ Water Quality Analysis within Pawnee Nation of Oklahoma

Marly Fixico-Hardison - Oklahoma State University

05.09.05 ~ Investigation of Groundwater Fluctuation and Earthquake Activity in Oklahoma: How GRACE Data Can Help?

A.K. Fazlur Rahman - Oklahoma School of Science and Mathematics

05.09.06 ~ An Example of Energy-from-Waste (EfW): Covanta Tulsa, Oklahoma

Mai Anh Vu Tran - Northeastern State University
Bill Rosener - Northeastern State University
Matthew Newman - Covanta Tulsa

10 Forensic Science

05.10.01 ~ Analysis of Premature Fossilization in Marine Cetaceans from the Deepwater Horizon Oil Spill

Skye Wardell-Villarreal - University of Central Oklahoma

05.10.02 ~ The Bacterial Diversity Found in the Rhizosphere Between Soil Samples Taken From Ecological Niches Using 16S rRNA Genes

Ashley Kennedy - Tulsa Community College

Brian Forrester - Tulsa Community College

Diana Spencer - Tulsa Community College

05.10.03 ~ Forensic Analysis of Cigar Ash: Brand Determination Through Trace-Metal Analysis

Kara Sitton - University of Central Oklahoma

Thomas Jourdan - University of Central Oklahoma

11 Genetics

05.11.01 ~ Comparative Genetic Structure of Mediterranean geckos (*Hemidactylus turcicus*) Interstate 35 between Oklahoma and Texas.

Susan McKenna - University of Central Oklahoma

Kaitlin DeHart - University of Central Oklahoma

Emily Falcon - University of Central Oklahoma

Samah Houmam - University of Central Oklahoma

Laura Kimmel - University of Central Oklahoma

Allyson Fenwick - University of Central Oklahoma

05.11.02 ~ Population genetics of an independent invasion of Mediterranean Geckos (*Hemidactylus turcicus*) at the University of Oklahoma

Samah Houmam - University of Central Oklahoma

Susan McKenna - University of Central Oklahoma

Emily Falcon - University of Central Oklahoma

Laura Kimmel - University of Central Oklahoma

Kaitlin DeHart - University of Central Oklahoma

Allyson Fenwick - University of Central Oklahoma

05.11.03 ~ Documenting the Established Population of Mediterranean Geckos (*Hemidactylus turcicus*) Near the University of Central Oklahoma

Emily Falcon - University of Central Oklahoma

Samah Houmam - University of Central Oklahoma

Susan McKenna - University of Central Oklahoma

Kaitlin DeHart - University of Central Oklahoma

Laura Kimmel - University of Central Oklahoma

Allyson Fenwick - University of Central Oklahoma

05.11.04 ~ Assessing Multiple Paternity in Eastern Red Bats, *Lasiurus borealis*, with Microsatellite Loci

Brittney Jones - Cameron University

Morgan Holt - Cameron University

Samuel Harrison - Angelo State University

Loren Ammerman - Angelo State University

Dana Lee - Cameron University

05.11.05 ~ Characterization of an X-Linked Microsatellite in Eastern Red Bats (*Lasiurus borealis*) to Determine Genetic Variability Among Offspring

Morgan Holt - Cameron University

Brittney Jones - Cameron University

Dana Lee - Cameron University

Loren Ammerman - Angelo State University

05.11.06 ~ Utilizing Cytochrome c Oxidase I (COI) for Microgenomic Identification of Osteichthyes Obtained from Rural and Urban Ponds in the Oklahoma Central Plains

Melissa Gates - Tulsa Community College

Alissa Eberhard - Tulsa Community College

05.11.07 ~ Genetic Variation in a Caffeine Metabolism Gene in Human

Muatasem Ubeidat - Southeastern Oklahoma State University

Evan Hermann - Southwestern Oklahoma State University

Anthony Ngugen - Southwestern Oklahoma State University

05.11.08 ~ Two Novel Adenoviruses Found in Cave *Myotis* Bats (*Myotis velifer*)

Meagan Angiel - Cameron University

Dana Lee - Cameron University

05.11.09 ~ Nutrient-sensing pathways affect tumor growth in *Drosophila*

Hayley Fischer - Northeastern State University

Joseph Ahlander - Northeastern State University

05.11.10 ~ Expression of Human Papillomavirus Oncogene Increases Tumor Rates in *Drosophila*

Jennifer Harris - Northeastern State University

Joseph Ahlander - Northeastern State University

13 Mathematics

05.13.01 ~ Algebra Review Activities for High School Calculus Classes

Katie Klossner - University of Central Oklahoma

Kristi Karber - University of Central Oklahoma
Carol Lucas - University of Central Oklahoma

05.13.02 ~ Mathematical Models of Rat Behavior Modification by the Parasite *Toxoplasma gondii*

Emily Kelting - University of Central Oklahoma

05.13.03 ~ Modeling Giraffe Protein Absorption and Overall Health

Kristina Benton - University of Central Oklahoma

05.13.04 ~ Exploring Differential Regulation of Blood Clot Degradation

Brittany Bannish - University of Central Oklahoma

05.13.05 ~ Mathematical Models of the Mammalian Circadian Oscillator and Alcohol Dependency

Grace Kelting - University of Central Oklahoma

05.13.06 ~ Determining Algebra Concepts Necessary for Calculus Success

Liz Lane-Harvard - University of Central Oklahoma

Brad Paynter - University of Central Oklahoma

Carol Lucas - University of Central Oklahoma

05.13.07 ~ Modeling the Treatment of HIV in Children

Kelley France - University of Central Oklahoma

05.13.08 ~ Using Regression Analysis to Predict Database Usage

Samuel Harris - East Central University

05.13.09 ~ The Permutations Project

Wade Peterson - Southeastern Oklahoma State University

05.13.10 ~ Spatial Reasoning at the Central Oklahoma Math Circle

Erica Bajo Calderon - University of Central Oklahoma

05.13.11 ~ Developing a Mathematical Model for Chickasaw Laundry

Ashley Keenan - East Central University

Sebastian Sabisch - East Central University

05.13.12 ~ Hedonic Pricing Model to Value Water

Starla Demings - East Central University

Kayden Hardcastle - East Central University

05.13.13 ~ Updating Literacy Estimates in the Oklahoma City MetroOlivia Campos - University of Central Oklahoma

Alkin Huggins - University of Central Oklahoma

Nelly Sime - University of Central Oklahoma

Tracy Morris - University of Central Oklahoma

05.13.14 ~ Zika: Geographical Approach to Modeling

Amanda Kramer - East Central University

Kay Woodring - East Central University

Leon Hamby - East Central University

05.13.15 ~ The Existence of Solutions to an Even-Order Boundary Value Problem

Daniel Brumley - University of Central Oklahoma

Britney Hopkins - University of Central Oklahoma

05.13.16 ~ A Probability Analysis on Dungeons and Dragons 5th Edition

Amanda Kramer - East Central University

05.13.17 ~ Predicting East Central University Class Enrollment

Timothy Goodwin - East Central University

Starla Demings - East Central University

Khuyen Tran - East Central University

Samuel Harris - East Central University

05.13.18 ~ Carathéodory: Mathematician, Mentor, and Administrator

Charlotte Simmons - University of Central Oklahoma

John Barthell - University of Central Oklahoma

05.13.19 ~ Impact of Software Use on Learning in Mathematics Courses

Sean Laverty - University of Central Oklahoma

05.13.20 ~ Quantum circuits for arithmetic operations over binary field.

Samundra Regmi - Cameron University

15 Pharmacy

05.15.01 ~ The Hassle of Remembering: Do Sustained Release Drugs Help with Compliance?

Sierra Mullen - Southwestern Oklahoma State University

Hardeep Saluja - Southwestern Oklahoma State University

Brooke Lizotte - Southwestern Oklahoma State University

05.15.02 ~ Drug-Disease State Interactions: Development of a Quick Reference Guide for Healthcare Professionals

Victoria Thompson - Southwestern Oklahoma State University

Michelle Bannon - Southwestern Oklahoma State University

Claire Bullard - Southwestern Oklahoma State University

Mercedes Coster - Southwestern Oklahoma State University

Les Ramos - Southwestern Oklahoma State University

05.15.03 ~ Validation of 2D fingerprint similarity-based method for in silico virtual

screening of LDH-A inhibitors

Horrick Sharma - Southwestern Oklahoma State University

Mustafa Alsunni - Southwestern Oklahoma State University

Jordan Lai - Southwestern Oklahoma State University

16 Physics

05.16.01 ~ Absorption Sensing in a Microresonator System Using Non-Adiabatic Tapered Fibers

Sreekul Raj Rajagopal - Oklahoma State University

Albert Rosenberger - Oklahoma State University

05.16.04 ~ Autonomous Vehicles

Sushant Bhatta - Southwestern Oklahoma State University

Sweksha Poudel - Southwestern Oklahoma State University

05.16.05 ~ Examination of the Acoustic and Mass Attenuation Coefficients of Lead and Aluminum

Karen Williams - East Central University

05.16.06 ~ Rotating Electric Field Generator

Sydnee Thornburg - University of Central Oklahoma

Christopher Sharp - University of Central Oklahoma

05.16.07 ~ Writing a Velocity Density Function with Edgeworth Expansion

Matthew Henry - East Central University

05.16.08 ~ Synthesis, Characterization, and Potential Applications of Low-Cost Photoluminescent Nanocrystals via Saponification

Saroj Thapa - University of Tulsa

Preston Vargas - University of Tulsa

Gopi Adhikari - University of Tulsa

August Bont - University of Tulsa

Peifen Zhu - University of Tulsa

Hongyang Zhu - University of Tulsa

05.16.10 ~ Low Dimensional Materials for White Light-Emitting Diodes

Hongyang Zhu - University of Tulsa

Peifen Zhu - University of Tulsa

Gopi Adhikari - University of Tulsa

Preston Vargas - University of Tulsa

August Bont - University of Tulsa

Saroj Thapa - University of Tulsa

05.16.11 ~ Untitled

Wayne Trail - Southwestern Oklahoma State University

Jaxon Taylor - Southwestern Oklahoma State University
Daniel Gassen - Southwestern Oklahoma State University
Boubacar Wane - Southwestern Oklahoma State University
Emily Trail - Southwestern Oklahoma State University
Terry Goforth - Southwestern Oklahoma State University
Tony Stein - Southwestern Oklahoma State University
Garet Crispin - Southwestern Oklahoma State University

05.16.12 ~ Softball Bat Performance after Contact with Softball

Breecia Crawford - East Central University
Reid Kinder - East Central University

05.16.13 ~ The Effects of Temperature on the Attenuation Coefficient of Ultrasound

Maranda Clymer - East Central University

17 Psychology

05.17.01 ~ Legitimacy of LGBTQ+ Fears in the Current Political Climate: Predictors of Attitudes towards Sexuality and Homosexuality

Rebecca Young - University of Central Oklahoma

05.17.02 ~ I Know it When I Read it: Perception of Reliability and Credibility of News Sources

Emily Burgess - Southwestern Oklahoma State University
Aaron Cornell - Southwestern Oklahoma State University

05.17.03 ~ Traumatic Events Predicting OCD Symptomology

Addie Beller - University of Central Oklahoma

05.17.06 ~ After Trauma: how Demographics Affect Shame and Guilt Proneness

Rebekah Phillips - University of Central Oklahoma
Shelby Weaver - University of Central Oklahoma
Laura Oden - University of Central Oklahoma

05.17.07 ~ Counselor Values and Protected Clients: Appropriately Assuaging Value-Based Conflicts

Taylor Randolph - Northwestern State University

05.17.08 ~ Can we predict how people respond to news on social media?

Theresa Paramore - University of Central Oklahoma

05.17.09 ~ The Effects of Social Interaction on Sports Teams

Baylie Wilson - Northwestern State University

05.17.10 ~ Effects of Alcohol on Academics in Higher Education

Amber Andrews - Northwestern State University

05.17.11 ~ Ambient/Horrific: Why is Music Scary? Inciting Fear through the Power of Music

Cody Walsh - Cameron University

John Geiger - Cameron University

05.17.12 ~ Stop Boring Me to Death: The Role of Interest in Student Success

Cassandra Olmstead - University of Central Oklahoma

Thomas Hancock - University of Central Oklahoma

Cayla Checorski - University of Central Oklahoma

Cassidy McKnight - University of Central Oklahoma

05.17.13 ~ Measuring Feminist's Emotional Reaction to the Presidential Election of Trump Through Word Choice Analysis

Angela Knight - University of Central Oklahoma

Casey Skalla - University of Central Oklahoma

Madison Taber - University of Central Oklahoma

05.17.14 ~ Implicit Caricatures of Native Americans

Ashtin Dunham - University of Central Oklahoma

Kaitlyn Harkey - University of Central Oklahoma

Jesus Ramones - University of Central Oklahoma

Theodore Mofle - University of Central Oklahoma

05.17.15 ~ Good Game! The Effect of Video Games on College Student Academia

Chad Woods - Northwestern State University

05.17.16 ~ Students' opinions about college in the context of resiliency theory

Alicia MacKay - Tulsa Community College

Jerilyn Schultz - Tulsa Community College

Rosa Zavaleta - Tulsa Community College

Karrie Stallings - Tulsa Community College

05.17.17 ~ Correlations Between Social Media Site Usage and Interpersonal Relationships at Home

Milissa Britt - Northwestern State University

05.17.18 ~ Mindfulness in Obsessive-Compulsive Disorder: A Randomized Controlled Trial

Riley Smith - Oklahoma State University

05.17.19 ~ Online Mindfulness to Reduce Anxiety: A four week trial

Deah Abbott - University of Central Oklahoma

05.17.20 ~ The Effect of Visual and Cognitive Distraction on Pain Tolerance

Maddison Knoch - University of Central Oklahoma

05.17.21 ~ Determining the Relationships with Self-Perception

Cassidy McKnight - University of Central Oklahoma

05.17.22 ~ Determining College Students' Attitudes Toward Survivors of Sexual Assault

Carly Montgomery - University of Central Oklahoma

Nora Gayzur - University of Central Oklahoma

05.17.23 ~ Body Awareness and the Perceived Location of Self

Jesus Ramones - University of Central Oklahoma

Kaitlyn Harkey - University of Central Oklahoma

Theodore Mofle - University of Central Oklahoma

Ashtin Dunham - University of Central Oklahoma

Jennifer Haddock - University of Central Oklahoma

05.17.24 ~ The Association Between Personality Traits and Satisfaction in Parental Role

Shelly Pierce - Southwestern Oklahoma State University

05.17.25 ~ Detecting Deception in Time Series Data

Theodore Mofle - University of Central Oklahoma

Jesus Ramones - University of Central Oklahoma

Kaitlyn Harkey - University of Central Oklahoma

Ashtin Dunham - University of Central Oklahoma

Mickie Vanhoy - University of Central Oklahoma

05.17.26 ~ Stress in college: How each gender is affected by stress in different aspects of life

Shanely Russo - Northwestern State University

05.17.27 ~ Will College Students Prefer Online Classes or Traditional Classes?

Tommie Beard - Northwestern State University

05.17.28 ~ Overall Health of College Student Athletes Compared to Non-Athletes

Kylee Wallace - Northwestern State University

05.17.29 ~ Qualities That Influence Successful Workplace Leadership

Melissa Pipestem - Northwestern State University

05.17.30 ~ The Effect of Sleep on College Students' Overall Health

Jordan Gomes - Northwestern State University

05.17.31 ~ How Does Social Media Affect Working Memory in College Students?

Asher Khan - University of Central Oklahoma
Asheley Middleton - University of Central Oklahoma
Vickie Jean - University of Central Oklahoma
Cierra Jones - University of Central Oklahoma
Megan Cowan - University of Central Oklahoma

05.17.32 ~ The Association between Young Adult Relationship's with Parents and Depression

Hattie Click - Southwestern Oklahoma State University

05.17.33 ~ Association between Mistreatment by an Adult as a Child and Romantic Relationships in Young Adults

Dacia Mooter - Southwestern Oklahoma State University

05.17.34 ~ Young Adults of Divorced Families: Commitment to Marriage or Serious Relationships

Sierra McKinnon - Northwestern State University

05.17.37 ~ Interactions between number of ACE exposure, treatment effects, and teenage pregnancy.

Whitney Hake - Northwestern State University

05.17.38 ~ "I Think, Therefore I Am"---Or, Rather, Not: A Look at Radical Behaviorism

Patricia Pixler - Northwestern State University

05.17.39 ~ The Relationship Between Authoritarian Religious Parenting Styles and Suicide With Young Adults

Dana Norris - Southwestern Oklahoma State University

18 Statistics

05.18.01 ~ The Hospitalized Diabetic – It's Complicated

TIEN NGUYEN - University of Central Oklahoma
Cynthia Murray - University of Central Oklahoma

05.18.02 ~ Recovery: Mental and Substance Use Disorders in Oklahoma

Giang Doan - University of Central Oklahoma
Haidar Alqanbar - University of Central Oklahoma
Cynthia Murray - University of Central Oklahoma

05.18.03 ~ A Comparison of Robust Logistic Regression Methods

Xiaoya Meyer - Cameron University
Hong Li - Cameron University

05.18.04 ~ Is Heisman Trophy voting influenced by the media? A statistical analysis

of Heisman winners since 2004

Jessica Sanders - University of Central Oklahoma

Tracy Morris - University of Central Oklahoma

05.18.05 ~ Detecting Spatial Clusters of Schizophrenia in Oklahoma

Trinh Hang - University of Central Oklahoma

Tracy Morris - University of Central Oklahoma

05.18.06 ~ Detecting Spatial Clusters of Schizophrenia in Oklahoma

Trinh Hang - University of Central Oklahoma

05.18.07 ~ Determining Factors for Elderly Independent Living

Emily Kelting - University of Central Oklahoma

Lloyd Arrowood - University of Central Oklahoma
Lauren Brown - University of Central Oklahoma

Lorena Lerma - University of Central Oklahoma

Kayley McCullough - University of Central Oklahoma

David Seagle - University of Central Oklahoma

Macey Skidgel - University of Central Oklahoma

Dr. Tyler Cook - University of Central Oklahoma

Dr. Pamela Rollins - University of Central Oklahoma

05.18.08 ~ Clinical Trial Registries in Otolaryngology Studies

Wade Arthur - Oklahoma State University

Kaleb Fuller - Oklahoma State University

Jonathan Riddle - Oklahoma State University

Matt Vassar - Oklahoma State University

05.18.09 ~ Improving the election process, voter access, and informed voter engagement: What do Oklahomans think?

Tu Doan - University of Central Oklahoma

Gabriella Oliver - University of Central Oklahoma

Tracy Morris - University of Central Oklahoma

19 Zoology

05.19.01 ~ Wintering Yellow Rail Habitat Surveys in Southeastern Oklahoma

Erin Lehnert - University of Central Oklahoma

Christopher Butler - University of Central Oklahoma

05.19.02 ~ Using stable isotopes to identify migratory and resident Black Rails (*Laterallus jamaicensis*)

Chris Butler - University of Central Oklahoma

Amber Lemons - University of Central Oklahoma

Susan McKenna - University of Central Oklahoma

05.19.03 ~ Timing and Duration of Avian Migration Through the Oklahoma City Area in Fall 2018 Using NOAA Weather

Data Jennifer Prophet - Southwestern Oklahoma State University

Zach Jones - Southwestern Oklahoma State University

05.19.04 ~ The effects of behavioral interactions on the feeding habits of amphipod species

Arissa Mercer - Southwestern Oklahoma State University

Rickey Cothran - Southwestern Oklahoma State University

05.19.05 ~ Complementary foraging preferences in the aquatic hemipterans *Belostoma* sp. and *Ranatra* sp.: A tale of coexistence

Allison Statton - Southwestern Oklahoma State University

Rickey Cothran - Southwestern Oklahoma State University

05.19.06 ~ Do interspecific differences in personality patterns contribute to species coexistence?

David Castellanos - Southwestern Oklahoma State University

Rickey Cothran - Southwestern Oklahoma State University

05.19.07 ~ Preliminary Investigations into One Trial Learning in Snakes

Willow Gahr - Northwestern State University

05.19.08 ~ Spatial evaluation of activity patterns along the Grand Lake shoreline by gray bats (*Myotis grisescens*) and northern long-eared Bats (*Myotis septentrionalis*)

Craig Zimmermann - Rogers State University

Keith Martin - Rogers State University

05.19.09 ~ Coastal Migration of the Black Land Crab on Grand Cayman Island

Kinsey Tedford - University of Central Oklahoma

David Bass - University of Central Oklahoma

05.19.10 ~ Ultra-structural Analysis of the Distribution of Vascular Canals in the Carapace of *Chrysemys picta* (Testudines)

Madison McNeill - East Central University

Kay Woodring - East Central University

MacKenzie Gragson - East Central University

05.19.11 ~ A survey for rare mayfly and caddisfly species of greatest conservation need

Ruchina Shakya - Southwestern Oklahoma State University

Rickey Cothran - Southwestern Oklahoma State University

05.19.12 ~ Social Dynamics of Captive African Painted Dogs

Rikki Curto - University of Central Oklahoma

Victoria Jackson - University of Central Oklahoma

05.19.13 ~ Human Development on Wildlife Diversity in Urban Wooded Ecosystems

Chirstie Nesbit - Tulsa Community College

Brian Cosby - Tulsa Community College



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