

**American Association for Anatomy
Regional Meeting**

PALEO CONNECTED



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ANATOMY

Paleontological
SOCIETY

AR

October 3 – 4, 2025
University of Missouri, Columbia, MO

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American Association for Anatomy

Paleontological Society

The Anatomical Record

University of Missouri College of Arts & Science

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Paleo Connected meeting logo by Evan Alger-Meyer

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Jim Schiffbauer, Department of Geological Sciences, Arts & Science

Tara Selley, Department of Geological Sciences, Arts & Science

Carol Ward, Pathology & Anatomical Sciences, School of Medicine

Paleo Connected Schedule

Friday October 3

11:00 AM	Check-in
11:50 AM – 12:00 PM	Welcome Casey Holliday & MUI Paleobiology, host
12:00 PM	Introductions Anne Burrows, AAA President
12:15 PM – 12:30 PM	Anatomical and Vascular Characterization of a Horseshoe Kidney: Preventing Iatrogenic Injury Through Structural Insight Vedant Soni, A.T. Still University of Health Sciences
12:30 PM – 1:00 PM	Histological and Anatomical Characterization of Severe Aortic Stenosis in a Cadaveric Specimen: Advancing Structural Insight Through 3D Modeling and Osteopathic Education Meghan Ott, A.T. Still University
1:00 PM – 1:15 PM	Effect of Transitioning to Virtual Asynchronous Lectures on Student Outcomes in Anatomy Assessments Mohamed Abdelhady, Oakland University William Beaumont School of Medicine
1:15 PM – 1:30 PM	From CT to Classroom: 3D Printing the Pterygopalatine Fossa as a Teaching Tool Jacob Meier, A.T. Still University of Health Sciences - Kirksville College of Osteopathic Medicine
1:30 PM – 1:45 PM	Break
1:45 PM	Enhancing Neuroanatomy Education through 3D-Printed Models and Adaptive Learning: A Multi-Modal Approach to Support Comprehension and Retention in Osteopathic Medical Training Nicholas Weinman, A.T. Still University of Health Sciences
2:00 PM	Evaluating BMX-001 Efficacy: A SOD2 Mimetic Approach to Mitigate Myocardial Ischemia-Reperfusion Damage Nitish Bhargava, A.T. Still University
2:15 PM	Evaluating Anatomy Bootcamp Formats and Their Effects on OMS-1 Transition and Performance Joanne Peterson, Arkansas College of Osteopathic Medicine

Friday October 3

- 2:30 PM **Three-dimensional printing of Le Fort fracture models: a multimodal approach to neuroanatomy and trauma education**
Brianna Scivinsky, A.T. Still University of Health Sciences - Kirksville College of Osteopathic Medicine
- 2:45 PM **Off the Beaten Arch: A Study of Left Vertebral Arteries Originating Directly from the Aorta**
Rosemary Josenkoski, Midwestern University, Downers Grove
- 3:00 PM – 3:15 PM Break**
- 3:15 PM – 3:30 PM **Improved Craniofacial Growth Standards: Skeletal Maturation-Based Models**
Richard Sherwood, University of Missouri School of Medicine
- 3:30 PM – 3:45 PM **Integrating Morphology and Machine Learning: CNN-Based Taxonomic Identification of Crocodylian Skull Diversity**
Joshua Gullace, New York Institute of Technology College of Osteopathic Medicine
- 3:45 PM – 4:00 PM **Finite Element Modeling Reveals the Effect of Jaw Muscles on Intramandibular Joint Flexibility and Strain in Taxa with Differently Built Mandibles**
John Fortner, University of Missouri
- 4:00 PM – 4:15 PM **Metacarpal cortical bone reflects signals of thumb musculature in *Homo*, *Pan* and *Sapajus***
Nadine Steer, University of Missouri – Columbia
- 4:15 PM – 4:45 PM **Preserving the Past, Inspiring the Future: Paleobiology in Mizzou's Department of Geological Science**
Jim Schiffbauer, University of Missouri

6:00 PM – 8:00 PM Reception at the Museum of Anthropology

Saturday October 4

- 8:00 AM** **Continental breakfast**
- 8:30 AM – 8:45 AM **Anatomy Uncovered: CT Imaging Techniques for Fossil Analysis**
Tara Selly, University of Missouri - Columbia
- 8:45 AM – 9:00 AM **Were Uintatheres Sexually Dimorphic? Using Novel Statistical Approaches to Revisit a Classic Paleontological Hypothesis**
Kevin Mulcahy, The University of Kansas
- 9:00 AM – 9:15 AM **Quadrant Orientation and Joint Reaction Force Underwent Correlated Evolution During Suchian Evolution**
Kaleb Sellers, University of Illinois- Chicago
- 9:15 AM – 9:30 AM **A new species of the omomyid *Tetonius* (Mammalia, Primates) from the early Eocene of the Great Divide Basin, Wyoming and implications for anaptomorphine phylogenetics**
Parker Rhinehart, University of Kansas
- 9:30 AM – 9:45 AM **Vertebrate Microfossil Paleocology at the End of the Triassic: Evidence for Marine Refugia?**
Lydia Tackett, Missouri State University
- 9:45 AM – 10:00 AM **Refining Methods for Analyzing Bone Sorting and Burial in Fluvial Environments via Actualistic Experimentation**
Michael Chiappone, University of Minnesota
- 10:00 AM – 10:15 AM** **Break**
- 10:15 AM – 10:30 AM **Plumbing the Depths of the Niobrara: Prey Size and Preservation in Coprolites of the Smoky Hill Chalk Member**
Logan Flynn, University of Missouri
- 10:30 AM – 10:45 AM **1,000 Ways Not to Model an Opossum Jaw: Challenges and Insights of a Validated FEM of the Mandible of *Didelphis***
Alec Wilken, University of Chicago
- 10:45 AM – 11:00 AM **A rare sandownid fossil turtle jaw from the Lewisville Formation (Cenomanian) of Texas**
Heather F. Smith, Midwestern University
- 11:00 AM – 11:30 AM** **Digital Morphology, Biomechanics, and Evolutionary Biology at Mizzou**
Casey Holliday, University of Missouri
- 11:30 AM – 12:30 PM** **Lunch**
- 12:30 PM – 2:00 PM** **Poster Session**

Saturday October 4

- 2:00 PM – 2:15 PM **Amateurs, Assemble: How a Missouri Facebook Group Became an Anatomy and Paleontology Research Pipeline**
Asa Kaplan, Missouri Institute of Natural Science
- 2:15 PM – 2:30 PM **3D visualization of internal pneumatic structures in an apatosaurine sauropod dinosaur using CT-segmentation**
Alexander Claxton, Oklahoma State University Center for Health Sciences
- 2:30 PM – 2:45 PM **Everything is bigger in Texas: Biogeographic implications of a new species of *Swaindelphys* (Mammalia: Metatheria) from the Paleocene of Big Bend National Park, Texas**
Kristen Miller, University of Kansas
- 2:45 PM – 3:00 PM **Ground truthing muscle reconstructions: A comparison between Myogenerator and segmented muscles**
Evan Alger-Meyer, University of Missouri - Columbia
- 3:00 PM – 3:15 PM **Milestones in turtle eye evolution: insights from crown and stem Archelosauria shed light on transformations in nictitating apparatus**
Donald Cerio, Kirksville College of Osteopathic Medicine
- 3:15 PM – 3:30 PM **Craniomandibular Character Variation in Protoceratopsidae (Dinosauria, Neoceratopsia): Taxonomic and Biostratigraphic Implications**
Minyoung Son, University of Minnesota
- 3:30 PM – 3:45 PM Break**
- 3:45 PM – 4:00 PM **Collecting fossils from waterways in Texas**
Matthew Brown, University of Texas
- 4:00 PM – 4:15 PM **Inner ear anatomy and paleobiology of *Tetonius homunculus* (Anaptomorphinae, Primates) from the Willwood Formation (early Eocene) in the Bighorn Basin, Wyoming**
Kathleen Rust, University of Kansas
- 4:30 PM – 4:45 PM **A Reevaluation of “*Sunosuchus*” shunanensis and the Diversity of Hsisosuchid Crocodyliforms**
Eric Wilberg, Stony Brook University
- 4:45 PM – 5:00 PM **Changing views of early human evolution: insights from paleontological fieldwork at Lomekwi, Kenya**
Carol Ward, University of Missouri
- 6:00 PM – 8:00 PM Dinner & Keynote: Missouri Dinosaurs and Their Place in Cretaceous Ecosystems**
Peter Makovicky, University of Minnesota

Posters

A statistical overview of biotic interactions victimizing cephalopods throughout deep time

Zachary Burman, University of Missouri

Delineating causes of horn remodeling in Ceratopsidae

Brian Conway, University of Wisconsin-Osh Kosh

Vertebrate anatomy collections in Integrative Anatomy

Corrinne Cranor, University of Missouri

A forelimb myology of *Allosaurus* provides evidence for an ontogenetic niche shift

Andy Danison, Oklahoma State University

Form, function, or fossilization? Decoding internal features in *Pteridinium* from Stanly County, North Carolina

Gigi Feltman, University of Missouri

Fostering interprofessional collaboration in gross anatomy: A pilot program integrating dental and medical students

Darah Fontanez, Ponce Health Sciences University

Evolving attitudes toward cadaveric dissection and body donation in first-year medical students

Hanna Foster, Arkansas College of Osteopathic Medicine

Comparative microCT Analysis of tadpole CNS morphology in contaminated and pristine habitats

Megan Hostetter, Midwestern University

Coiled Coprolites from the Smokey Hill Chalk Member of the Niobrara Formation

Sarah Jacquet, University of Missouri

Diaphonization: The transparency of histotechnology

Joshua Jefferson, University of Mississippi Medical Center

Brains over brawn: size constraints and compromises in the heads of geckos

Amy Lagorio, University of Missouri

A Tale of Two Scalids: Priapulid Affinity with a Cambrian Cone

Clare Mate, University of Missouri

Comparison of deep learning to traditional statistical models for cranial growth prediction

Kevin Middleton, University of Missouri

Posters

A reassessment of the Eocene crocodylid *Asiatosuchus grangeri* and the anatomical transition to modern crocodiles

John Joseph Nguyen, University of Iowa

A novel science education opportunity via the St. Louis Prehistoric Life Show

Jon Porter, Washington University

Morphological assessment of Eocene Crocodylians of western North America reveals cryptic diversity and yields phylogenetic implications for the origins of Crocodylidae

Austin Shaffer, University of Iowa

Additions to the White River Fauna from Northeastern Colorado

Lauren Thompson, University of Kansas

Evolution of proximal femoral cartilage in ornithischians: Implications for joint function and locomotor divergence

Henry Tsai, Missouri State University

Taphonomy at the turn: Early Cambrian cloudinomorpha from Estonia's Blue Clays

Haley Vantoorenburg, University of Missouri

New Mississippian trilobite assemblage from the Borden Formation of central Kentucky

Kai Weaver, Kentucky Paleontological Society

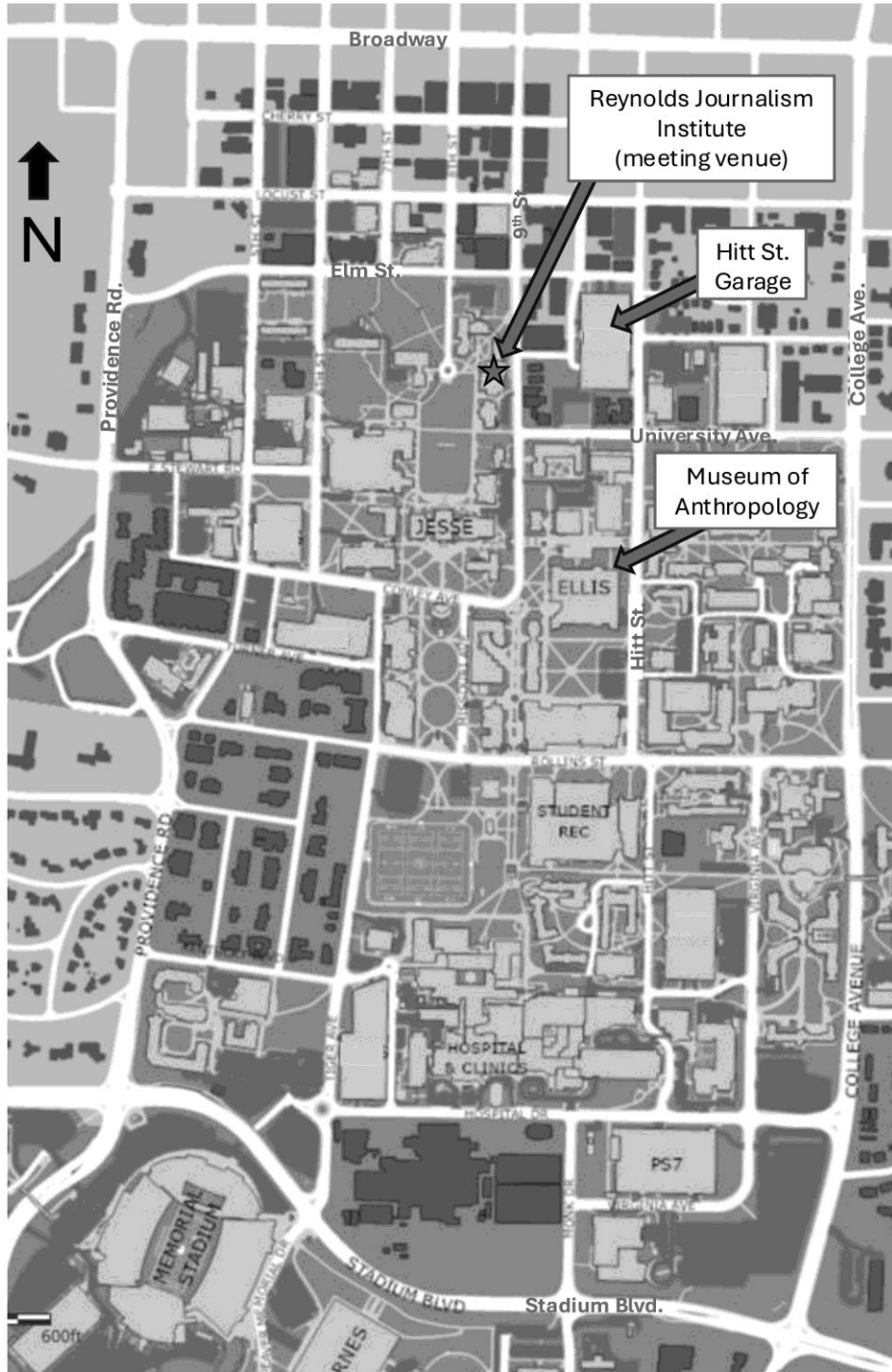
Preliminary interpretations on the sedimentary geology of the Cretaceous-aged Chronister Dinosaur Quarry, Missouri

Jelle Wiersma, Oakton College

3D architecture and biomechanics of snake palatal and pterygoideus musculature

Christopher Zobek, University of Missouri

Map of MU Campus & Relevant Locations



Notes

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