

**Paleoanthropology Society
2018 Annual Meeting
April 10 and 11
Austin Hyatt Regency**

Posters

**Tuesday, April 10 4:00 – 6:00
Texas Foyer**

Limb bone lengths and diaphyses, but not joints, reflect neutral among-population relationships

Gina Marie Agostini

Calibrating the Chronology of Late Pleistocene Modern Human Dispersals, Climate Change and Archaeology with Geochemical Isochrons

Stanley H. Ambrose

Absolute and Relative Diaphyseal Long Bone Lengths of Juvenile Neanderthals Suggest that Neanderthal Growth and Development Closely Resembles that of Modern Arctic Populations

Mallory Grace Irene Atell, Natalie Symchych, Bence Viola

Taphonomic and Fossil Reconstructive Analyses of the Ngaloba (LH 18) Skull

Kersten Bergstrom, Lauren Butaric, Agness Gidna, Charles Musiba, Robert Z. Selden, Cassian Magori

Least Cost Path and Agent Based Models for hominin dispersal routes out of East Africa into the Levant

Justin Hall, Amanuel Y Beyin, Erik Otárola-Castillo, Christopher C. Lanza, Christopher Andrew Day

Regional differences in faunal communities around Lake Lorenyang between ~2.0 and 1.4 Ma

Maryse D. Biernat, Amanda B. Gurerro, David R. Braun, David B. Patterson,

The rise and expansion of anatomically modern humans out of Africa in the context of climate variability using new quantifying methods and a multi-regional approach

Anne Billingsley, Chad L. Yost, Kayla Worthey, Brendan Fenerty, Jennifer Kielhofer, Mathew L. Fox, Zachary Naiman, Andrew S. Cohen, Steven L. Kuhn, Henry F. Lamb,

ESR Dating Teeth from Šalitrena Pećina, Serbia: Implications for the Middle/Late Paleolithic Transition

Bonnie A.B. Blackwell, Justin K. Qi, Bojana Mihailovic, Dusan Mihailovic, Joel I.B. Blickstein, Anne R. Skinner, Senka Plavsik, Gligor Dakovic

A Paleoenvironmental Reconstruction Using Stable Isotopes of Red Deer (*Cervus elaphus*) Enamel at Lapa do Picareiro (Portugal)

Milena Carvalho, David Meiggs, Jonathan Haws

Assessing the development of societal complexity at the Middle to Later Stone Age transition in the context of the Economic Defensibility Model: Evidence from Knysna, coastal South Africa

Naomi E. Cleghorn, Hannah M. Keller, James McGrath, Christopher M. Shelton, Sara Watson, Benjamin Schoville, Daniel Peart, Nathan Bickerton,

Renewed explorations of the Mid-Pleistocene site, Isimila, Tanzania

Sabrina C. Curran, Paul E. Patton, Cassy Mtelea,

Taphonomy and early human foraging behavior at SM1, a late Middle Stone Age site in northwestern Ethiopia

Christopher A. Davis, John Kappelman, Lawrence Todd

Non-random variation in human mandibular molars: implications for selection of analogue species for fossil hominin taxonomic assessments

Susan J. Dykes

Size and shape variation among femora attributed to early Homo

Lesley H. Eason

Estimating Interproximal Wear in Upper First Molars

Jennifer Eyre

Geometric morphometric reassessment of the Omo 323-78-898 Talus with a large Catarrhine sample

Aileen Fernandez, William E.H. Harcourt-Smith, Kevin Turley, Evan A. Simons, Stephen R. Frost

Human adaptive responses to abrupt climate change during the Late Pleistocene

Jonathan Haws, Michael Benedetti, Milena Carvalho, Nuno Bicho, João Cascalheira, Lukas Friedl

Variability Among African and Eurasian Homo erectus Sites

Blaire Hensley-Marschand, P. David Polly

Trinil's Main Bonebed (Java) and Homo erectus paleobiogeography

O. Frank Huffman, John de Vos, Paul C. H. Albers, A. W. J. Berkhout

Where are all the Neanderthals? An archaeological and paleoanthropological survey of Palaeolithic cave sites in Britain

Kevin L. Kuykendall, Andrew Reid, Chris Breeden, Tim Cockrell

An ecomorphological analysis of the metacarpal of extant African antelopes using photogrammetry

Raquel Lamela Lopez, Frances Forrest, Thomas W. Plummer, Laura C. Bishop, Fritz Hertel, Rachel Sender

Differences in bilateral asymmetry of the femur between recent and archaeological human populations using multivariate measures

Amanda B Lee, Lyle W Konigsberg

Women in Human Evolution Redux

Sang-Hee Lee, Dānae G. Khorasani

Paleoecology of OGS-12, an Early Acheulian archaeological site at Gona, Ethiopia.

Amanda C. Leiss, Isabel Cáceres, Michael J. Rogers, Jan van der Made, Sileshi Semaw

U-series dating calcrete: a new palaeo-hydrological tracer for Middle Stone Age archaeological sites in the Northern Cape, South Africa

Jessica von der Meden, Robyn Pickering, Benjamin Schoville, Kyle Brown, Jayne Wilkins

A new reconstruction of the forearm of A.L. 288-1 ("Lucy") and functional interpretations

Brett Nachman, Christopher A. Davis, Wiley Akins, Mulugeta Feseha, Richard Ketcham, Christopher Ruff, Lawrence Todd, Adrienne Witzel, John Kappelman

Vegetation structure study in Gorongosa National Park, Implications for Hominin ecospace

Enquye Negash, Marion Bamford, Tongai Castigo, Jörg M. Habermann, Tina Lüdecke, Jonathan Wynn, René Bobe, Susana Carvalho

Misgrot Cave: an actualistic model of a modern baboon sleeping site.

Jaspm Charné, Jason L., G. Colin

A Newly (Re)discovered Paleoamerican Cranium from Catlow Cave, Southeastern Oregon

Greg C. Nelson, Andrew R. Boehm, Jon M. Erlandson

Early Aurignacian Coloring Materials in Evolutionary Context

Joelle Nivens

Early Pleistocene grassland dynamics at East Turkana: Indications from shifting patterns of mesic- and xeric-adapted ungulates and new insights into ungulate niche preference

Kaedan O'Brien, Amanda McGrosky, Kayla Allen, Lauren Anderson, Maryse Biernat, David R. Braun, Amanda "Billie" Guerrero, Laura Hunter, Jeffrey Seckinger, Felipe Torres, R. Brendon Zeller, Degsew Zerihun, David B. Patterson

Quantitative analysis of the micromorphology of trampling-induced abrasion and stone tool cut marks on bone surfaces

Emily R. Orlikoff, Trevor L. Keevil, Michael C. Pante,

GUImorph: A user-friendly R package with a graphical user interface to digitize and conduct geometric morphometric analyses of 2D and 3D landmark, curve and surface data.

Melissa G. Torquato, Erik R Otarola-Castillo

Drone mapping of Isimila, Tanzania: The Implications for Future Research into Mid-Pleistocene Homo Behavior

Alex J. Pelissero, Kersten Bergstrom, Lauren J. Hammond, Austin B. Lawrence, Henry T. Bunn, Charles M. Musiba

A single-event Middle Stone Age occupation site in the lowlands of northwestern Ethiopia

Keri Porter, Sissi Janet Mattox, Lawrence Todd, John Kappelman

Vultures Moving In: Fossil Birds Suggest A More-Open and Heterogeneous Landscape During the Oldowan-Acheulean Transition (Middle Bed II) at Olduvai.

Kari A. Prassack, Michael C. Pante, Jackson K. Njau, Lindsay J. McHenry, Ignacio de la Torre,

ESR Dating Teeth from Medzhibozh, Ukraine, a Middle Pleistocene Paleolithic Open-air Site

Justin K. Qi, Bonnie A.B. Blackwell, Impreet Singh, Vadim N. Stephanchuk, Joel I.B. Blickstein, Jonathan A. Florentin, Anne R. Skinner

Homo floresiensis: where does it stand?

Christopher Rathbone

Giant African Land Snails: Their Relevance to Archaeological Contexts.

Amy Reedman

Divergent diversification histories of large mammals across two sedimentary basins in eastern African over the last 7 Myr

John Rowan, Andrew Du

Testing the methodological utility of trace element analysis for detecting dietary differences in fossil fauna from Turkana

Christina Ryder, Rhonda Quinn, Jason Lewis, Jean-Philip Brugal, Sonia Harmand, Hélène Roche, Fredrick Kyalo Manthi, Matt Sponheimer

Digitally-empowered Learning: Teaching Archaeology through Virtual Reality and Game-Based Learning

Laura Shackelford, Wen-Hao Huang, Alan Craig, Steve LaValle, Cameron Merrill, Yixiang Zeng

Biomechanics of the sloping supraorbital torus of *Paranthropus boisei*

Amanda L. Smith, David S. Strait

Rhyolite Cryptotephra Identified in Mousterian Deposits at Arma Veirana, Italy

Eugene Smith, Racheal Johnsen, Jayde Hirniak, Shelby Fitch, Caley M. Orr, Minghua Ren, David Strait, Christopher E. Miller, Fabio Negrino, Julien Riel-Salvatore, Marco Peresani, Stefano Benazzi, Claudine Gravel-Miguel, Curtis W. Marean, Jamie Hodgkins

A Quantitative Assessment of Percussion-Induced Modification to Bone Surfaces

April Tolley, Michael Pante, Adrian Arroyo, Ignacio de la Torre

New excavations at Sel'ungur cave, Kyrgyzstan

T. Bence Viola, Tamerlan Charginov, Maciej Krajcarz, Magdalena Krajcarz, Svetlana Shnaider, Kseniya Kolobova, Andrei I. Krivoshapkin

Laser Scanning Confocal Microscopy as a Tool to Distinguish Use-wear Traces

Joseph Jeffrey Werner

Comparative taphonomy of two landscape bone assemblages in the Ngorongoro Conservation Area, Tanzania

Faith Wilfong, Charles P Egeland, Cynthia M. Fadem, Anisha Dongol, Ryan M. Byerly, Victoria P. Johnson, Manuel Dominguez-Rodrigo, Audax Mabulla, Enrique Baquedano,

The Iringa Region Archaeological Project: recent results and future plans

Pamela R Willoughby

Intratooth isotope profiles of fossil suids: environmental variability in the Pleistocene deposits of the Koobi Fora Formation

Deming Yang, Kevin T. Uno

Oral Presentations

Tuesday, April 10: 9:00 – 12:15

Texas 1

9:00 Introduction

9:15 **Testing the hypothesis of multiple genera in Proconsul**

Varsha Pilbrow

9:30 **Developing a Geospatial Paleoanthropology: An Example from Vertebrate Paleontology**

Robert Anemone, Charles Emerson, Jordan Crowell, Brett Nachman

9:45 **Emergence of the functionally modern ungulate community in eastern Africa**

J. Tyler Faith, Andrew DuJohn Rowan

10:00 **The past, present, and future of bone surface modification research**

Michael Pante, Trevor Keevil, Matthew Muttart, Emily Orlikoff, April Tolley, Jackson Njau, Briana Pobiner

10:15 **Differentiating between cutting actions on bone using geometric morphometric and Bayesian analysis of complete 3D cut mark surfaces**

Erik R Otarola-Castillo, Melissa G. Torquato, Hannah C. Hawkins, Emma James, Jacob A. Harris, Curtis W. Marean, Shannon P. McPherron, Jessica C. Thompson

10:30 Discussion

10:45 **A novel method for reconstructing habitual manual activity based on human hand muscle attachments**

Fotios Alexandros Karakostis, Gerhard Hotz, Heike Scherf, Joachim Wahl, Katerina Harvati

11:00 **Origins of the human predatory pattern: The transition to large animal exploitation by early hominins**

Jessica C. Thompson, Susana Carvalho, Curtis W. Marean, Zeresenay Alemseged

11:15 **To walk or to run: Derived skeletal traits in early Homo and the transition to endurance locomotion**

James T. Webber, David A. Raichlen

11:30 **Investigating raw material properties: Interaction between knapper skill and rock mechanical properties.**

Joanne U. Munga, David R. Braun, Bisrat Gebreegziabher, Fikeru Mekonnen, Thomas Plummer

11:45 Frequency and duration of U-Pb dated flowstone growth intervals in South African early hominin caves reflect Early Pleistocene climate variability.

Robyn Pickering

12:00 Discussion

Tuesday, April 10: 2:00 – 4:00

Texas 1

2:00 Robust australopith paleobiology: The biogeography and paleoenvironments of eastern and southern African Paranthropus

Amy L Rector, Kaye E Reed

2:15 Hominin cranial fragments from Milner Hall, Sterkfontein, South Africa

Amélie Beaudet, Jason L. Heaton, Travis R. Pickering, Dominic Stratford

2:30 Sexual dimorphism in the lower back of Australopithecus sediba and Homo naledi

Scott A. Williams, Marc R. Meyer, Tierra Nalley, Marina Elliott, Peter Schmid, Steven E. Churchill, John Hawks, Lee R. Berger

2:45 Termite-associated hydrocarbons and the detection of C4 resources within the Zinjanthropus horizon at Olduvai Gorge, Tanzania

Julie J. Lesnik, Robert C. O'Malley, Audax Z.P. Mabulla, Enrique Baquedano, Manuel Domínguez-Rodrigo, Clayton R. Magill

3:00 Reassessing the Ursid Hypothesis for the Laetoli "A" Bipedal Trackway

Ellison J. McNutt, Benjamin Kilham, Jesse J. Casana, Kevin G. Hatala, Austin C. Hill, Camille Johnson, Phoebe Kilham, John Reader, Nathan E. Thompson, Jeremy M. DeSilva

3:15 Implications for interpreting time-averaged fossil assemblages from an analysis of spatiotemporal scaling relationships in species richness for the Amboseli large mammal fauna, southern Kenya

Andrew Du, Anna K. Behrensmeier

3:30 Community Archaeology in Kondoa: New Excavations from the Late Pleistocene-Holocene Sequence at Kisese II Rock Shelter, Tanzania

Kathryn L. Ranhorn, Julius Ogotu, Ilaria Patania, Husna Mashaka, Sara Molel, Neema Munisi, Jason Lewis, Christian Tryon

3:45 Discussion

Poster Session 4:00 – 6:00

Texas Foyer

Wednesday, April 11 8:30 – 12:15

Zilker 4

8:30 Australopithecus anamensis paleoecology in the Omo-Turkana Basin using fossil Suidae (Mammalia, Artiodactyla)

Laurence Dumouchel, René Bobe, Jonathan G. Wynn, Michelle S. M. Drapeau, Denis Geraads

8:45 Dietary ecology of Pliocene suids and hominins in Kanapoi and Hadar

Ignacio A. Lazagabaster

9:00 Estimating the timing of and placing confidence intervals on the origination and extinction of the Australopithecus anamensis-afarensis lineage

Zeresenay Alemseged, Andrew Du, John Rowan, Bernard A. Wood

8:45 Continuity and change: A diachronic technological analysis of the earliest Acheulean at Kokiselei in Turkana, Kenya (1.8-1.76 Ma)

Hilary Duke, Sonia Harmand

9:00 Identification of possible cut marks on an early Pleistocene hominin tibia from Turkana, Kenya

Briana Pobiner, Michael Pante, Trevor Keevil

9:15 Turkana's return to woody cover during the Mid-Pleistocene Climate Transition and the extinction of Paranthropus boisei

Rhonda L. Quinn, Christopher J. Lepre

10:00 Discussion

10:15 A modern human-like one million-year-old partial pelvis from Buia, Eritrea

Ashley S. Hammond, Sergio Almécija, Yosief Libsekal, Lorenzo Rook, Roberto Macchiarelli

10:30 Tubers in Winter: Implications for early hominin seasonal migrations

Amanda G. Henry

10:45 Hominins on the western periphery of the Red Sea: New Acheulean occurrence in coastal Sudan and associated implications

Amanuel Beyin, Parth R. Chauhan

11:00 High-resolution environmental record of the Acheulean-to-Middle Stone Age transition in the southern Kenya rift

Richard Potts, René Dommain, Jessica Moerman, Alan Deino, Brenhin Keller, Emily Beverly, Rahab Kinyanjui, Anna Kay Behrensmeyer

11:15 Multivariate analyses of lithic variability in the MSA of Kenya and Ethiopia prior to 100 ka.

Alison Mant-Melville

11:30 Large-Scale Anthropogenic Landscape Change in the Middle Stone Age of Malawi

David K. Wright, Jessica C. Thompson, Sarah J. Ivory, Menno Welling, Jeong-Heon Choi, Andy Cohen, Wan Fadillah, Flora Schilt, Arjun Heimsath, J Ramon Arrowsmith, Susan Mentzer, Christopher Miller, Elizabeth Gomani-Chindebvu

11:45 Cold Adaptation and the Neandertal Face

Todd R. Yokley, Nathan E. Holton, Fred H. Smith

12:00 Discussion

12:15 Business Meeting

Wednesday, April 11 2:00 – 5:00

Zilker 4

2:00 Alternatives to Neanderthal Hypercarnivory - Experimental Study of the $\delta^{15}N$ Values of Meat During Putrefaction

Kimberly K. Foecke, Alison S. Brooks, Christine France

2:15 Excavating the archives: The 1947 campaign at Ksar Akil (Lebanon)

Christian A Tryon, Laure Metz, Ludovic Slimak

2:30 The MIS 3 Occupation at Erfkroon and the Early Later Stone Age in Southern Africa

Britt Bousman, James Britt, Mark Bateman, Holly Meier, Lloyd Rossouw, Chris Ringstaff, Louis Scoff, Senna Thornton-Barnett

2:45 Size doesn't matter: OES bead diameter in the Stone Age of eastern and southern Africa

Jennifer Midori Miller

3:00 Constructing strontium isoscapes to test models of terminal Pleistocene and early Holocene forager social and territorial organization in northern Malawi

Andrew M. Zipkin, Stanley H. Ambrose, Gideon Bartov, Zachary Benmamoun, Elizabeth Gomani-Chindebvu, Jessica C. Thompson

3:15 Discussion

3:30 New Excavations of the Late Pleistocene sediments at "Gramly's Site" (GvJm-22), Lukenya Hill, southeastern Kenya.

Nick Blegen, J. Tyler Faith, Jessica McNeil, Christian Tryon

3:45 Tick shells, personal ornamentation, and marine resource exploitation during the Late Pleistocene at Contrebandiers Cave (Temara, Morocco)

Teresa E. Steele, Esteban Álvarez-Fernández, Emily Hallett-Desguez, Vera Aldeias, Mohamed Abdeljalil El Hajraoui, Harold Dibble

4:00 The first paleoecological analysis derived from small mammal remains from the Late Pleistocene of South China: Results from Yahuai Cave and implications for modern human dispersal into East Asia

Miriam Belmaker, Guangmao Xie, Minghui Yu, Xiaoying Chen

4:15 Ecological niche models of human land use at the Last Glacial Maximum in Southeast Asia: A comparison of GARP and MaxEnt

Alexandra J Zachwieja, Laura L Shackelford

4:30 Discussion