

Paleoanthropology Society  
2020 Annual Meeting  
April 14 and 15  
JW Marriott Los Angeles (LA Live) Hotel

Program

POSTERS

**Tuesday April 14: 4:00 – 6:00**

**Platinum Ballroom**

Mosarwa Babutsi, Kudakwashe Jakata, Kimberleigh Tommy, Jakobus Hoffman, Mirriam Tawane, Bernhard Zipfel, Amélie Beaudet

Locomotor behaviour of Plio-Pleistocene cercopithecoids: evidence from trabecular bone properties

Niguss Gitaw Baraki, David R. Braun, Jonathan S. Reeves, Will Archer

Reduction intensity in Oldowan assemblages: perspectives from BD 1 at Ledi-Geraru, Afar, Ethiopia

Alex Bertacchi, Douglas Kennett, Elizabeth Gomani-Chindebvu, Jessica C. Thompson

Taphonomic pathways, chronology and formation processes at Hora 1, Malawi

Nuno Bicho, Jonathan Haws, Matthieu Honegger

Preliminary results of a Middle Stone Age survey in the Kerma region, northern Sudan

João Cascalheira, Nuno Bicho, Milena Carvalho, Jonathan Haws, Sadamo Muchongo, Roberto Mussibora, Mussa Raja

Zimua: a new stone age site in the Save river valley (Southern Mozambique)

Breanne Clifton, Gideon Hartman

Effects of differential hydration on phytolith development in C3 and C4 grasses

Reed Coil

The effects of carnivore richness, diversity, and species evenness on scavenging opportunities during Out of Africa I

Stefania Cucuteanu

The paleoecology of Bovidae fauna at Olduvai Gorge, Beds I-IV: the abiotic and biotic interactions in Plio-Pleistocene faunal communities

Sabrina Curran, Scott Simpson, Jay Quade, H. Said

Preliminary taphonomic and paleoecological assessment of Galili, Ethiopia: a comparison of three localities

Hallie M. Edmonds, E.S. Daly, Irene E. Smail

An assessment of zygomatic root position and its utility for reconstructing diet in the primate fossil record

Elizabeth Nicole Fillion, Terry Harrison

Regional patterns of paleoenvironmental change in the Late Pliocene of eastern Africa

Alexandru Hajdu, Robert Kaplan

Rocks fall, everyone dies: an actualistic experiment in Identifying the taphonomic signature of rock fall

Jonathan Haws, Michael Benedetti, Sahra Talamo, Grace Ellis, Nuno Bicho, Milena Carvalho, João Cascalheira, Lukas Friedl, Brandon Zinsious

The Early Aurignacian technocomplex at Lapa do Picareiro (Portugal) and the arrival of modern humans in southwestern Iberia

Isabel D Hermsmeyer, Peter J. Fashing, Nga Nguyen, Margaret J. Schoeninger

An investigation of *Theropithecus gelada* as a modern analog for *Paranthropus boisei* through comparison of four dietary indicators

Brigitte Holt, Diane Waddle, Elena Rossoni-Notter, Olivier Notter, Kader Moussous

Taxonomic evaluation of a partial human femur from Grotte du Prince (Balzi Rossi, Ventimiglia, Italy)

Sydney E. James, Jonathan S. Reeves, Phillip M. Kyule, Matthew J. Douglass, David R. Braun

The influence of raw material availability on Pleistocene lithic assemblages in the Koobi Fora Formation (Kenya)

Whitney M. Karriger

Similar craniofacial growth trajectories among three species of *Macaca*

Brady Kelsey, Steven Brandt, Andrew Zipkin, Evan Wilson

Provenance of Late Pleistocene ochre from Mochena Borago Rockshelter, SW Ethiopia

Brittany Kenyon-Flatt, Mark A. Conaway, Evan A. Simons, Noreen von Cramon-Taubadel

The taxonomic efficacy of catarrhine femoral shape: testing the effect of variable landmarking schemes

Jeanwon Kim, Oumeyma Ben Brahim, David Braun, Sarah Hlubik

Fabric analysis of in- and ex- situ artifact assemblages from the Koobi Fora region of northern Kenya

Susan E. Lagle, Jean-Christophe Castel, Dennis M. Sandgathe, Alain Turq, Teresa E. Steele

Preliminary zooarchaeological report on the complete Roc de Marsal Layer 4 faunal assemblage

Emily Lange, Braenn Smith, Chadi el Mohtar, Christopher A. Davis, Mulugeta Feseha, Lawrence Todd, John Kappelman

Implications of soil compaction studies on the displacement, breakage, and disarticulation of artifacts and faunal remains at SM1, an open air MSA Site in NW Ethiopia

Austin B. Lawrence, Ashley S. Hammond, Carol V. Ward

Acetabular orientation in hominins

Naomi L. Martisius, Alex Mackay, Patricia McNeill, Teresa E. Steele

The pigments from the Middle and Later Stone Age site of Varshe Rivier 003, South Africa

Eric J. Mazelis

Identification of isolated fossil cercopithecoid molars using 3D GM

Ipyana Francis Mwakyoma, Michael Pante, Trevor Keevil, Jackson Njau, Nick Toth, Kathy Schick

New insights into Pleistocene hominin butchery and tool choice from a 0.8 Ma fossil assemblage from the HEB site, Olduvai Gorge, Tanzania

Tewabe Negash, Mulugeta Fesseha, Ignacio Lazagabaster, Jessica Thompson

Application of bone surface modification analysis as a new method to reconstruct the paleohabitat of Pliocene Hadar

Alexandra Norwood, Briana Pobiner

Tracking climate seasonality in equid teeth through serial sampling of enamel isotopes

Georgia Oppenheim, Tamara Capps, Rahab Kinyanjui, David Braun, Sarah Hlubik

Experimental investigation of phytoliths and combustion features and their relevance for ancient fire studies

Shelby S. J. Putt, Lana Melanie Ruck, Zara Anwarzai, P. Thomas Schoenemann

Investigating language-relevant brain activation for Paleolithic toolmaking via Functional Magnetic Resonance imaging

Keenan J. Riordan, Daniel Dalmas, Mulugeta Feseha, Marvin Kay, Agazi Negash, Lawrence Todd, John Kappelman

A 3D digital geometric morphometric analysis of Late Stone Age Stone points from the SM1 site, found in Northwestern Ethiopia

Amanda N. Rossillo

A 3D geometric morphometric analysis of the effects of genetics and activity patterns on first metacarpal variation in the Spitalfields skeletal collection

Warren D. Sharp, Elizabeth M. Niespolo, Christian A. Tryon, Karen L. Van Niekerk, Nick T. Blegen, J. Tyler Faith, Christopher S. Henshilwood

Th/U burial dating of ostrich eggshell: a geochronometer for Pleistocene archaeological sites

Anne Skinner, Terence Mensah, Gabrielle Wolfe, Pamela Willoughby

An ESR dating mystery solved?

Elena Skosey-LaLonde, Gideon Hartman  
Experimental evidence for chemical and structural alteration of bone carbonate-apatite crystals during diagenesis using S-TEM EDS and FT-IR analyses

Teresa E. Steele, Alex Mackay, Simon Armitage, Alex Blackwood, Naomi L. Martisius, Patricia J. McNeill, Mareike C. Stahlschmidt  
Life in the margins: the pre-Still Bay deposits from Varsche Rivier 003, southern Namaqualand, South Africa

Michaela Zewdu Tizazu, Sylvia Wemanya, Jonathan S. Reeves, Matthew J. Douglass, David. R. Braun  
A novel approach to measuring tool reduction intensity from geometric attributes

Zewdi J. Tsegai, Tracy L. Kivell, Matthew M. Skinner  
Locomotor signals in the trabecular bone structure of the hominoid metatarsal head

Sara Watson, Sonya Crocker, Tamara Dogandzic, Nicolas Zwyns  
Technological strategies for small tool production in the Howiesons Poort of Montagu Cave: analysis of Horizon 6/7 of the C.M. Keller collection

Katrina Yezzi-Woodley, Jiafeng Lee, Cora Brown, Carter Chain, Thomas Huffstutler, Alexander Terwilliger, Pedro Angulo-Umaña, Jeff Calder, Reed Coil, William Leeb, Peter Olver, Martha Tappen  
Using machine learning to determine actors of none breakage and to identify specific hominin approaches to bone breakage

Alexandra J Zachwieja  
Hindcasting Late Pleistocene human land use in temperate zones: an Australasian test case using Maxent

## **ORAL PRESENTATIONS**

**Tuesday, April 14: 9:00 – 12:15**

**Diamond 6-7**

9:00 Introduction

9:15 Amélie Beudet, Jason Heaton, Travis Pickering, Ronald Clarke, Lunga Bam, Luc Van Hoorebeke, Dominic Stratford  
Trabecular bone structural variation in the vertebral column of *Homo*, *Pan* and *Papio*: taxonomic and functional perspectives in paleoanthropology

9:30 Rutger J. W. Jansma

Untangling ape origins and diversification: examining the impact of a priori factors

9:45 Deming Yang, Antoine Souron, Job Kibii, Asli Pisano

Built to last? Ontogenetic changes of occlusal morphology in the third molars of Plio-Pleistocene African suids

10:00 Kimberly K. Foecke, Alison S. Brooks, Christine A. M. France

Species variation in  $\delta^{15}\text{N}$  response to pre-consumption processing— implications for paleodietary reconstruction

10:15 Discussion

10:30 Joshua J Porter, Alison Brooks, Linda Perry, Scott Whittaker, John Yellen

Analysis of a Jun/wasi nut cracking stone from Western Ngamiland, Botswana: Implications for the origins of hominin technology

10:45 Julia Aramendi, Paul O'Higgins, Manuel Domínguez-Rodrigo, Enrique Baquedano

A combined geometric morphometric and machine learning approach to the study of Early Pleistocene hominin fossil long bones

11:00 Tina Lüdecke, Jennifer Leichliter, Nicolas Duprey, Ottmar Kullmer, Dominic Stratford, Hubert Vonhof, Marion Bamford, Andreas Mulch, Alfredo Martínez-García

First enamel nitrogen isotope data of early hominins: trophic level reconstruction of *Australopithecus* in the Early Pleistocene (Sterkfontein Member 4, South Africa)

11:15 Yohannes Haile-Selassie, Stephanie Melillo, Timothy Ryan

Did *Australopithecus anamensis* and *Australopithecus afarensis* overlap? A closer look at the fossil evidence from Woranso-Mille and Laetoli

11:30 Andrew Du, Eric Friedlander, Zeresenay Alemseged

Placing probabilities on whether *Paranthropus* was truly absent from individual sites in the Afar Depression, Ethiopia

11:45 Thomas W. Plummer, Laura C. Bishop, Emma Finestone, James S. Oliver, Peter W. Ditchfield, Elizabeth Whitfield, Jennifer Parkinson, Shara Bailey, Scott Blumenthal, Cristina Lemorini, Rahab Kinyanjui, Thomas Vincent, Fritz Hertel, David Braun, Jonathan S. Reeves, Andy I. R. Herries, Youjuan, Richard Potts

Oldowan tools, fauna and hominins at the Plio-Pleistocene locality of Nyayanga, southwestern Kenya

12:00 Discussion

## **Tuesday April 14: 2:00 – 3:45**

### **Diamond 6-7**

2:00 Emma Finestone, Thomas Plummer, David Braun, Jonathan Reeves, Peter Ditchfield, Cristina Lemorini, Laura Bishop, Rick Potts

Lithic technology at the Plio-Pleistocene locality of Nyayanga, southwestern Kenya

2:15 Jonathan S. Reeves, David R. Braun, Thomas W. Plummer, Emma Finestone, Laura Bishop, Peter Ditchfield

Technological diversity at Kanjera South: an integrated approach

2:30 James S. Oliver, Thomas W. Plummer, Fritz Hertel, Laura C. Bishop

Bovid mortality patterns from Kanjera South, Kenya and FLK-Zinj, Tanzania: Habitat-mediated variability in Oldowan hominin hunting and scavenging

2:45 Lana Melanie Ruck, Edward Herrmann, Michael Pante, Jackson K. Njau, Kathy Schick, Nicholas Toth  
Preliminary results of renewed excavations at the HEB site, Olduvai Gorge, Tanzania

3:00 Julien Favreau, María Soto, Kathryn Campeau, Tristan Carter, Pastory M. Bushozi, Paul R. Durkin, Stephen M. Hubbard, Rajeev Nair, Julio Mercader

Multi-analytical study of raw material sources at Oldupai Gorge (Tanzania): implications for artifact sourcing

3:15 Silindokuhle Mavuso, Zubair Jinnah, Robyn Pickering, Wendy Khumalo, Shannon Warren, Emmanuel Ndiema, David Braun

Reconstructing Pleistocene diachronic palaeogeography in the Turkana Basin: a sequence stratigraphic approach

3:30 Discussion

## **Poster Session 3:45 – 6:00**

### **Platinum Ballroom**

## **Wednesday April 15: 8:30 – 12:15**

### **Diamond 6-7**

8:30 Sileshi Semaw, Michael Rogers, Gary Stinchcomb, Isabel Caceres, Naomi Levin, Scott Simpson, Jay Quade

Acheulian and Oldowan stone tool assemblages associated with ~1.6-1.2 Ma *Homo erectus* crania from Gona, Afar, Ethiopia

8:45 Mohamed Sahnouni, Mathieu Duval, Lee Arnold, Josep Maria Pares, Jan Van der Made, Alfredo Pérez-González, Zoheir Harichane, Salah Abdessadok, Razika Chelli-Cheheb, Isabel Cáceres, Antonio Rosas, Kamel Boulaghraif, Nadia Saidani, Yasmine Mouhoubi, Joseba Rios Garaizar, Jordi Agusti, Abdelkader Derradji, Farah Chemerik, Mohamed Medig, Nacim Mazouni, Yasmine Bouharaoua, Chibane Saloua

The hominin site of Tighennif (ex. Ternifine, Algeria) revisited: new multidisciplinary investigations at this Lower Pleistocene site

9:00 Christian Sánchez-Bandera, Hugues-Alexandre Blain, Iván Lozano-Fernández, José F. Bisbal-Chinesta, Jordi Agustí, Oriol Oms, Stefania Titton, Alexia Serrano-Ramos, Carmen Luzón, Deborah Barsky, José A. García-Solano, Mikael Fortelius, Juan M. Jiménez-Arenas

New data for the ecology of Early Pleistocene hominins from the Orce sites

9:15 Zachary Cofran, Daniel García-Martínez, Caroline VanSickle, Christopher Walker, Reynaldo Valenzuela

Primitive ilium anatomy in juvenile *Homo naledi*

9:30 Alison S. Brooks, John E. Yellen, David M. Helgren

Human origins in a Kalahari paleowetland? A review of the archaeological data

9:45 Discussion

10:00 Richard Potts, Anna Kay Behrensmeyer, Alan L. Deino

The role of environmental instability in the adaptive transition from Acheulean to Middle Stone Age: Evidence from the southern Kenya rift

10:15 John Yellen, Alison S. Brooks

The earliest Middle Stone Age: potential insight from the Olorgesailie Kenya Paleolake Basin

10:30 John F. Hoffecker, Ian Torao Hoffecker

Modern humans and ancient machines: The archaeology of computational complexity

10:45 Curtis W. Marean, Richard M. Cowling, Janet Franklin

A paleoecological model for the Palaeo-Agulhas Plain, a crucial ecosystem for early modern humans on the South Coast of South Africa

11:00 Elizabeth Marie Niespolo, Warren D. Sharp, Graham Avery, Richard Klein, Todd E. Dawson

Ysterfontein 1 midden records use of marine resources and millennial-scale paleoenvironmental change after the Last Interglacial

11:15 Mathilde Ribordy, Kathryn Ranhorn, David Braun, Kaedan O'Brien, Silindokuhle Mavuso, Debra Colarossi, Tamara Dogandzic, Tamara Dogandzic, Christopher Ssebuyungu, Shannon Warren, Jack Harris, Emmanuel Ndiema

The Aquatic Fauna of GaJj17, a Late Pleistocene site at Koobi Fora, Kenya, and the implications of aquatic resources for human evolution

11:30 Nick Blegen, J. T. Faith, Alison Mant-Melville, Daniel J. Peppe  
Tephrostratigraphy and archaeology in the Nyanza Rift, Kenya

11:45 Larissa Silva, Anne R. Skinner, Bonnie A.B. Blackwell, Bojana Mihailović, Senka Plavsić, Dušan Mihailović, Vesna Dimitrijević, Joel I.B. Blickstein, Justin K. Qi, Gligor Daković  
ESR dating the Mousterian layers at Šalitrena Pećina, Serbia

12:00 Discussion

## **Wednesday April 15: 2:00 – 4:30**

### **Diamond 6-7**

2:00 Bonnie A.B. Blackwell, Clara L.C. Huang, Mehak F. Kazi, Ekaterina V. Doronocheva, Liubov V. Golovanova, Vladimir B. Doronichev, Impreet Singh, Joel I.B. Blickstein  
Sedimentary dosimetry in a lava tube in the north-central Caucasus: The effect on ESR dating at the Middle Paleolithic site at Saradj-Chuko Grotto, Russia

2:15 Michael Pante, Connie Fellmann, Michelle Glantz, Davorka Radovčić  
The taphonomy of the Neandertals from Krapina

2:30 Stanley Ambrose  
Sexual selection for endocrine and epigenetic differences in Neanderthal and modern human cranial and vocal tract morphology

2:45 Isabelle Crevecoeur, Raphaël Pinson, Pauline Colombet, Carolina Mallol, Dominique Todisco, Cosimo Posth, Brad Gravina, Priscilla Bayle, François Bachelier, Cédric Beauval, Armelle Couillet, Jean-Philippe Faivre, Guillaume Guérin, François Lacrampe-Cuyaubère, Christelle Lahaye, Josserand Marot, Eugène Morin, Xavier Muth, Johannes Krause, Brunoa Maureille, Hélène Rougier  
Contextualization of the two Neandertal perinates from La Roche-à-Pierrot (Saint-Césaire, Charente-Maritime, France)

3:00 Helen Fewlass, Sahra Talamo, Lukas Wacker, Bernd Kromer, Thibaut Tuna, Yoann Fagault, Edouard Bard, Shannon P. McPherron, Vera Aldeias, Raquel Maria, Naomi L. Martisius, Lindsay Paskulin, Zeljko Rezek, Virginie Sinet-Mathiot, Svoboda Sirakova, Geoff M. Smith, Rosen Spasov, Frido Welker, Nikolay Sirakov, Tsenka Tsanova, Jean-Jacques Hublin  
New high-resolution radiocarbon chronology for the Middle to Upper Palaeolithic transition at Bacho Kiro Cave, Bulgaria

3:15 Discussion

3:30 Christian A Tryon, Shara E Bailey  
Lost and found: New descriptions of Upper Paleolithic humans from Ksar Akil, Lebanon and their relevance to circum-Mediterranean dispersals of early *Homo sapiens*

3:45 Andrew Michael Zipkin, Gwyneth Gordon, Martin Hipondoka, Polly Wiessner  
Radiogenic strontium isoscape construction in the Kalahari Desert for provenience studies of ethnographic and archaeological ostrich eggshell



4:00 Melanie Lee Chang, April Nowell, Cindy Huang  
The Vulva Monologues: A census of women in the Upper Paleolithic

4:15 Rose Nyaboke Juma, Job Munuhe Kibiii, Susan Njuguni Kabacia  
Fungal infestation: A new challenge in fossil collection management at the National Museums of Kenya

4:30 Business meeting