Posters

Tuesday, March: 28  4:00 – 6:00
Plaza Ballroom

How do we interpret elevated Neanderthal δ15N levels?
Alexander Allan, Jonathan Harding, Dennis Sandgathe, Mark Collard

An experimental investigation into the impact of point dimensions, haft morphology and fixing method on the effectiveness of Neanderthal spears
Philippe Aubin

A high resolution microtomographic study of the StW 578 Pliocene hominid cranium from Sterkfontein Cave
Amélie Beaudet, Jason L. Heaton, Travis R. Pickering, Dominic Stratford, Ron J. Clarke

Paleoecology across the Pleistocene- Holocene: The small mammal assemblage of Kotias Kide, Georgia
Miriam Belmaker, Geordon Taylor, Nino Jakeli, Tengiz Meshveliani, Anna Belfer-Cohen, Ofer Bar-Yosef

The implications of faunal abundance for Pleistocene paleoenvironments in the Turkana Basin, Northern Kenya
Lorena Benitez, Catherine Llera, Maryse Biernat, David R. Braun, Ashley S. Hammond, David B. Patterson, W. Andrew Barr

Txina Txina: a Later Stone Age site from the Limpopo basin in southern Mozambique
Nuno Bicho, João Cascalheira, Jonathan Haws, Célia Gonçalves, Mussa Raja, Lino André, Michael Benedetti, Ana Gomes, Milena Carvalho, Brandon Zinsious
Archaeological support for the Beringian standstill hypothesis: human occupation of the Bluefish Caves site (Yukon Territory, Canada) during the Last Glacial Maximum
Lauriane Bourgeon, Ariane Burke, Thomas Higham,

?Pre MIS 3 occupation of Mochena Borago Rockshelter, SW Ethiopia
Steven A Brandt, George A. Brook, Minassie Girma Tekelemariam, Nathan Lawres, Abebe Mengistu Taffere, Ben Smith, Ralf Vogelsang

Technological variability in the Middle Stone Age of Mozambique: preliminary results
Joao Cascalheira, Nuno Bicho, Celia Goncalves, Jonathan Haws, Mussa Raja

The depositional context and spatial patterning in the hominin-bearing layers of Block 2 at Dmanisi, Georgia
Reed Coil, Martha Tappen, Reid Ferring, Maia Bukhsianidze, David Lordkipanidze

Foraging along blue highways: preliminary faunal and taphonomic investigations at SM-1, a late Middle Stone Age site in the Blue Nile Basin of Ethiopia
Christopher A. Davis, John Kappelman, Lawrence Todd

Middle and Upper Paleolithic in Southeastern Europe: preliminary results from excavations at two newly discovered sites in Serbia
Tamara Dogandžić, Sahra Talamo, Vesna Dimitrijević, Tobias Lauer, Vera Aldeias, Shannon P. McPherron, Dušan Mihailović

Percussion technology and the potential for residue analysis at FLK N, Olduvai Gorge
Julien Favreau, Makarius Itambu, Patrick Lee, Robert Patalano, Laura Tucker, Enrique Ba quedano, Manuel Domínguez-Rodrigo, Audax Mabulla, , Julio Mercader

Preliminary findings from Sare River, an early Pleistocene Oldowan site on the Homa Peninsula, Kenya
Emma M. Finestone, Thomas W. Plummer, Peter W. Ditchfield, Elizabeth Whitfield, Thomas Vincent, Scott A. Blumenthal, Laura C. Bishop, James S. Oliver, David R. Braun, Jonathan S. Reeves, Raquel Lamela-Lopez, Jennifer A. Parkinson

Applying systematic sampling survey to evaluate Stone Age settlement in the Elephant River, Limpopo basin, SW Mozambique
Celia Goncalves, Ana Gomes, Joao Cascalheira, Mussa Raja, Nuno Bicho, Jonathan Haws

Assessing the effects of fluvial abrasion on bone surface modifications using high-resolution 3-D scanning
Merve Gumrukcu, Matthew Muttart, Michael Pante
Insights into the importance of raw material availability for Paleolithic settlement: survey results from the Resava and Jasenica River Valleys, Serbia
Eric Heffter, Dušan Mihailović

Stratigraphy and new ESR mollusc dates for Middle and Late Pleistocene deposits at Bir Tarfawi, Western Desert, Egypt

Breakage patterns of long bone articular ends, Hadar, Ethiopia: Implications for assessing cause of death of A.L. 288-1 (‘Lucy’)
Matthew Hill, John Kappelman, Lawrence Todd, Fantahun Zelelew

The evolution of throwing: the current state of knowledge
Gabrielle Jackson, Mark Collard, Dennis Sandgathe

Inferring Early Stone Age tool type from cut marks on fossil bones using high-resolution 3-D scanning
Trevor L. Keevil, Michael C. Pante, Jay S. Reti

Evaluating language-related asymmetry in endocasts using non-rigid diffeomorphic image registration
Lindsey Kitchell

Early Acheulean large flake prepared core technology: debating the distinctiveness of The Victoria West method
George M Leader

Digging for the past, present, and future: bridging Maasai and paleoanthropological practices in Olduvai Gorge, Tanzania
Patrick Lee, Robert Bird, Mariam Bundala, Julien Favreau, Makarius Itambu, Samson Koromo, Charles Mather, Robert Patalano, Laura Tucker, Enrique Baquedano, Manuel Domínguez-Rodrigo, Audax Mabulla, Julio Mercader

Local raw material utilization at the Upper Paleolithic site of Shuidonggou Locality 2, Ningxia (China)
Sam C. Lin, Fei Peng, Nicolas Zwyns, Jialong Guo, Huimin Wang, Xing Gao

3D fracture patterns in the lumbar vertebra and tibia of A.L. 288-1 (‘Lucy’) are consistent with perimortem trauma
Janet M Mattox, Christopher A. Davis, Brett Nachman, Daniel L. Petersen, Wiley Akins, Mulugeta Feseha, Matthew Hill, Richard A. Ketcham, Lawrence Todd, Adrienne P. Witzel, Fantahun Zelelew, John Kappelman
A Late Middle Stone Age lithic landscape in the Eastern Lake Victoria Basin
Alison F. Mant-Melville, Nicholas Blegen, J. Tyler Faith, Christian A. Tryon, Kirsten H. Jenkins, Emily J. Beverley, Daniel Peppe

Time-averaging and the spatial scale of regional cultural differentiation in Paleolithic assemblages
Galen Miller-Atkins, L.S. Prem,

Macroscopic investigation of raw material properties: comparisons with mechanical properties tests
Joanne Munga, David Braun

Amino acid racemization (AAR) dating of ostrich eggshell (OES): experimental testing of the effect of natural campfire burning on OES values
Serrina Nasrollahi, Chris Florian, Gifford H. Miller, John Kappelman, Lawrence Todd

Hominin, gorilla, and chimpanzee opponens pollicis crest morphological variation
Wesley Niewoehner

A quantitative assessment of trampling-induced modification to bone surfaces
Emily Rebecca Orlikoff, Trevor L. Keevil, Michael C. Pante

Assessing likelihood of convergence in flake attributes
Jonathan Paige, Charles Perreault

That high lonesome sound: Last Interglacial lithic technologies from Melikane Rockshelter, Lesotho
Kyra Pazan, Brian A. Stewart

Effect of wrist extension on human throwing accuracy: a case study with implications for Australopithecus
Angela Pena, Alison Brooks

EcoPlis: human occupations in the Pleistocene ecotones of River Lis (Portugal): the 2015-2016 results
Telmo Pereira, Vania Carvalho, Trenton Holliday, Eduardo Paixao, Patricia Monteiro, Joao Marreiros, Sandra Assis, Marina Evora, Rita Dias, Carlos Duarte, Roxane Matias, David Nora, Joana Pereira

Settlement dynamics in Eastern Germany during the Middle Paleolithic
Andrea Picin

Bipedalism evolved from knuckle-walking: evidence from 3D geometric morphometric
analyses of thoracic and lumbar vertebral shape of *Homo sapiens, Pan troglodytes, Pongo pygmaeus*, and *Papio hamadryas*
Kimberly A. Plomp, Una Strand Vidarsdottir, Darlene Weston, Keith Dobney, Mark Collard

A promising new and simple estimator of initial mass for retouched flake tools
Cornel M. Pop, Will Archer, Zeljko Rezek, Marcel Weiß, Tamara Dogandžić, Sam Lin, Shannon P. McPherron

**GaJj17: an MSA lake shore site at East Turkana**
Kathryn L. Ranhorn, Tamara Dogandžić, Silindokuhle S. Mavuso, Ssebuyungo Christopher, Logan Van Hagen, Courtney E. Jirsa, Michael J. Ziegler, Shannon L. Warren, J.W.K. Harris, David R. Braun

The relevance of ‘precious’ raw material engagements to discussions of group cohesion and interaction in the French Upper Paleolithic
Sarah Ranlett

Preliminary study of bioavailable strontium (87Sr/86Sr) and assessment of diagenesis at Olduvai Gorge, Tanzania: proposed research and methodology
Laura Tucker, Julien Favreau, Makarius Itambu, Patrick Lee, Robert Patalano, Enrique Baquedano, , Manuel Domínguez-Rodrigo, Audax Mabulla, , Julio Mercader

Selectivity among Early Pleistocene hominins: new evidence from the Koobi Fora Formation
Kristen Tuosto, Samantha Ascoli, David Braun, Susana Carvalho, Rene Bobe, Mark Sier, Jonathan Wynn, Jack W. K. Harris ,Matthew Caruana, David Patterson

Volumetric differences in the upper ribcage of extant hominoids with implications for hominin evolution
Jeanelle Uy, John Hawks

U-Th dating of ostrich eggshell: understanding the relationship between eggshell microstructure and diffusion and implications for sample preparation
Jessica Valdes, Staci L. Loewy, Jay L. Banner, John Kappelman, Lawrence Todd

The Pleistocene and early Holocene archaeological record of Barrow Island, northwestern Australia: early and sustained evidence for mixed use of coastal and arid interior settings
Professor Peter Veth, Dr Tiina Manne, Kane Ditchfield, Fiona Hook, Ingrid Ward, Mark Basgall, David Zeanah, Jane Skippington, Chae Byrne

Human pelvic morphology from an integrative context
Cara Wall-Scheffler, Helen Kurki, Ben Auerbach,
The North of Kuruman project: newly discovered Middle and Later Stone Age rockshelter deposits in the Kalahari Basin at Gamohana Hill, Northern Cape, South Africa
Jayne Wilkins, Benjamin J. Schoville, Kyle S. Brown, Robyn Pickering, Andy I. R. Herries, Benjamin Collins

Ancient Middle Stone Age climates at SM-1 in NW Ethiopia as revealed by stable isotopic sclerochronology
Lani Wyman, Neil Tabor, John Kappelman, Lawrence Todd,

Oral Presentations

Tuesday, March 28: 9:00 – 12:15
Georgia A/B

9:00 Introduction

9:15 Pleistocene habitat suitability correlated with genetic variation in the Southern African baboon (*Papio ursinus* sensu lato): implications for hominin demography in southern Africa
Benjamin J Schoville, Riashna Sithaldeen,

9:30 Primate stone tool use for paleoanthropologists
Michael Haslam

9:45 The siliciclastic deposits of Jacovec Cavern, Sterkfontein: Reconstructing depositional environments in karst systems.
Silindokuhle Siyabonga, Dominic Justin

10:00 *Australopithecus anamensis* paleoenvironments in the Omo-Turkana basin using stable isotope analysis of tooth enamel from mixed feeding taxa
Laurence Dumouchel, Jonathan G. Wynn, René Bobe, Michelle S. M. Drapeau, Denis Geraads

10:15 Using tephr stratigraphy to link cores to outcrops at Olduvai Gorge, Tanzania
Lindsay J. McHenry, Jackson K. Njau, Ian G. Stanistreet, Harald Stollhofen, Alan Deino, Kathy Schick ,Nick Toth

10:30 Discussion
10:45 Phytolith Palaeolandscape during Bed II at Olduvai Gorge (Tanzania)
Makarius Peter Itambu, Manuel Domínguez-Rodrigo, Audax Mabulla, Charles Egeland, Fernando Diez-Martin, Alfredo Pérez González, Manuel Santonja Gomez, Julien Favreau, Laura Tucker, Patrick Lee, Robert Patalano, Julio Mercader

11:00 Taxonomic distinctions in the 3-D micromorphology of tooth marks with application to feeding traces from Middle Bed II, Olduvai Gorge, Tanzania
Matthew V Muttart, Michael C Pante, Ignacio de la Torre, Jackson K Njau

11:15 The feeding behavior and ecology of early Homo at HWK-EE, Bed II, Olduvai Gorge
Michael Pante, Jackson Njau, Ignacio de la Torre, Lindsay McHenry

11:30 FwJj70 – a butchered bone surface assemblage from the Okote Member of Koobi Fora, Kenya
Stephen R. Merritt, Eleanor A. Cordiner, Silindokuhle Mavuso, Kelly Fetchenhier, Elliot Greiner

11:45 Site formation and integrity of FxJj20 AB, Koobi Fora, Kenya: implications for interpretation of Oldowan hominin fire use in the Early Pleistocene
Sarah K Hlubik, David R Braun, Francesco Berna, Craig Feibel, JWK Harris

12:00 Discussion

Tuesday, March 28: 2:00 – 4:00
Georgia A/B

2:00 Fire and Genus Homo: new evidence from ESA contexts at Wonderwerk Cave, South Africa
Francesco Berna, Robert Jacob, Liora Kolska-Horwitz, Candice Koopowitz, Michael Chazan

2:15 Molecular isotopic analysis reveals details on the environmental context of the earliest Acheulean at Olduvai Gorge
Robert Patalano, Julien Favreau, Makarius Itambu, Patrick Lee, Laura Tucker, Enrique Baquedano, Fernando Diez-Martin, Manuel Domínguez-Rodrigo, Audax Mabulla, David Manuel Martín Perea, David Uribelarrea, Julio Mercader

2:30 The cultural material from the Lower Palaeolithic site of Marathousa 1, Megalopolis, Greece: preliminary results
Vangelis Tourloukis, Nicholas Thompson, Eleni Panagopoulou, Domenico Giusti, Panagiotis Karkanas, Georgios Konidaris, Katerina Harvati
2:45 ESR dating ungulate tooth enamel within the Paleolithic Layers at Velika Balanica, Serbia
Bonnie A.B. Blackwell, Kalyani Gopalkrishna, Dušan Mihailović, Mirjana Roksandic,
Joel I.B. Blickstein, Anne R. Skinner

3:00 Early and Middle Stone Age survey in the upper reaches of the Fourth Cataract, Sudan
Deborah I. Olszewski, Sidney Rempel, Bülent Arikan, Brenda J. Baker

3:15 Paleoenvironmental reconstruction of the Florisbad spring site based on a micro-geoarchaeological approach
Michael B. Toffolo, James S. Brink, Cornie van Huyssteen, Francesco Berna

3:30 Discussion

Poster Session 4:00 – 6:00
Plaza Ballroom

Wednesday, March 29 9:00 – 12:15
Georgia A/B

9:00 Temporal link established between two Middle Stone Age sites (south coast, South Africa) using the Toba Isochron
Eugene Smith, Simen Oestmo, Jayne Wilkins, Racheal Johnsen, Minghua Ren, Amber Ciravolo,
Shelby Fitch, Zenobia Jacobs, Panagiotis Karkanas, Erich Fisher, Curtis Marean

9:15 Open-air in situ 72-thousand-year old stone tool knapping events at Vleesbaai, Pinnacle Point, South Africa
Simen Oestmo, Jayne Wilkins, Josh Giesken, Jamie Hodgkins, Zenobia Jacobs,
Panagiotis Karkanas, Curtis W. Marean

9:30 The Symbolic Response: Middle Stone Age ochre use in its social and environmental context at Pinnacle Point 5-6, Western Cape Province, South Africa
James R. McGrath, Jocelyn Bernatchez

9:45 Middle Stone Age ochre contexts in Blombos Cave, South-Africa: a macro- and micro-contextual investigation
Magnus M. Haaland, Christopher E. Miller, Karen L. Van Niekerk, Christopher S. Henshilwood
10:00  Ethnography of red ochre use by pastoralists and hunters in Kenya
Stanley H. Ambrose, Andrew M. Zipkin, Mercy Gakii, David Coulson, Matthew W. Magnani

10:15  Construction of an ochre source strontium isoscape in the Kenya Rift Valley for provenience studies of archaeological and rock art mineral pigments
Andrew M. Zipkin, Stanley H. Ambrose, Craig C. Lundstrom, Gideon Bartov, Mercy Gakki

10:30 Discussion

10:45  Through a volcanic glass darkly: viewing modern human origins with the lens of raw material transport.
Nick Blegen, Frank Brown

11:00  The archaeology of the 1929-1932 excavations at Skhul (Israel)
Christian Tryon, Ravid Ekshtain, Paul Goldberg, Laure Metz,

11:15  A case for a natural history of the Neanderthals
Mark Collard, Dennis Sandgathe

11:30  A semiotic approach to the evolution of symboling capacities with implications for claims of ‘modernity’ in early human groups
Elisabeth V Culley

11:45  You know the drill: a new method of differentiating stone age bead making techniques
Jennifer Miller, J Jeffrey Werner

12:00 Discussion

Wednesday, March 29 2:00 – 6:00
Georgia A/B

2:00  C and N stable isotopes in Late Pleistocene - Holocene ostrich eggshells reveal distinct local paleoenvironments in East Africa during the MSA-LSA transition
Elizabeth M. Niespolo, Warren D. Sharp, Christian A. Tryon, J. Tyler Faith, Jason Lewis, Todd E. Dawson

2:15  Manot 1 calvaria and recent modern human evolution: an anthropological perspective
Israel Hershkovitz, Bruce Latimer, Omry Barzilai, Ofer Marder

2:30  Synthesizing the evidence on Middle and Upper Paleolithic diets in Europe and SW Asia
Eugène Morin, John D. Speth, Julia Lee-Thorp,
2:45  Arma Veirana: a new site in Liguria (northwestern Italy) preserving the Middle-to-Upper Paleolithic transition
Jamie Hodgkins, Caley M. Orr, David Strait, Christopher E. Miller, Fabio Negrino, Julien Riel-Salvatore, Marco Peresani, Stefano Benazzi, Geneviève Pothier Bouchard, Claudine Gravel-Miguel, Dominique Meyer

3:00  Lithic miniaturization, bipolar reduction, and late Pleistocene lithic technology at Boomplaas Cave, South Africa
Justin Pargeter

3:15 Discussion

3:30  Animal exploitation strategies during the Early Upper Paleolithic: the EUP fauna from Mughr el-Hamamah, Jordan (45-39 kcal BP)
Jamie L. Clark

3:45  Living and dying in the Epipalaeolithic: a 20,000-year-old cremation from Eastern Jordan
Lisa A. Maher, Danielle A. Macdonald, Jay T. Stock

4:00  A geometric morphometric and non-metric analysis of the Oase 1 and Muierii 1 mandibles from Romania
Katerina Harvati, Mirjana Roksandic

4:15  A comparative empirical analysis of Uluzzian lunates and coeval backed pieces
Julien Riel-Salvatore

4:30  Magdalenian images and notations
Andrea Castelli

4:45  Exploring technological organization through geometric morphometrics: the case of Aurignacian projectile points made of antler, bone and ivory
Luc Doyon, Ariane Burke, Francesco d’Errico, Heidi Katz Knecht

5:00  A chronological framework connecting the early Upper Palaeolithic across the Central Asian piedmont
Kathryn E. Fitzsimmons, Radu Iovita, Tobias Sprafke, Michelle Glantz, Katharine Horton, Tyler Beeton, Saya Alipova, Galymzhanzan Bekseitov, Yerbolat Ospanov, Jean-Marc Deom, Renato Sala, Zhaken Taimagambetov
5:15 Discussion

5:50 Business meeting