

9TH ANNUAL MEETING OF THE

European Society for the study of Human Evolution



19-21 September 2019
LIÈGE/BELGIUM



Thursday, September 19th

08:00	Meeting Registration	Palais de Congrès (Esplanade de l'Europe 2)
08:30	Official Meeting Opening	
08:45	Welcome Address by the "Agence wallonne du Patrimoine"	

Session 1 • Podium

9:00	Mateja Hajdinjak - Doubling the number of high-coverage Neandertal genomes.
9:20	Stéphane Peyrégne - Analysis of Nuclear DNA Sequences from the Neandertals of Hohlenstein-Stadel and Scladina Caves.
9:40	Benjamin Peter - Gene flow between hominins was common.
10:00	Benjamin Vernot - Neandertal population histories from sediment nuclear DNA.
10:20	Jean-Jacques Hublin - Away from Denisova.

10:40-11:00 Coffee Break

Session 2 • Pecha Kucha

11:00	Rachel Sarig - Population composition and possible origin of the Levantine Aurignacian culture: the dental evidence. Jonathan Haws - Modern human dispersal into western Iberia: The Early Aurignacian of Lapa do Picareiro, Portugal. Nils Vanwezer - 10,000 km and 21 flat tires: New interdisciplinary archaeological investigations of the palaeolakes and caves in the Gobi-Altai, Mongolia.
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Questions

11:25	Emily Hunter - The effects of environmental conditions and food manipulation on masticatory requirements: how hard is it for a primate to crack a nut? Evie Vereeke - An image-based approach to study hand function in primates. Maxine Whitfield - A cognitive forager's landscape? The profitability of marine and subterranean foods for chacma baboons and humans in South Africa.
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Questions

11:50	Paola Cerrito - The dentition of <i>Kenyanthropus platyops</i> : a comparative study. Thomas Davies - Endostructural morphology of the <i>Homo naledi</i> mandibular premolars. Shara Bailey - Rare dental trait is first morphological evidence of archaic introgression in Asian fossil record.
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Questions

12:15-14:00 Lunch and Poster Session 1

Session 3 • Podium

- 14:20 **Susana Carvalho** - Stone selection by Chimpanzees Reveals Parallel Patterns to Oldowan Hominins.
- 14:40 **David Braun** - Earliest known Oldowan Artifacts at >2.58 Ma from Ledi-Geraru, Ethiopia, Highlight Early Technological Diversity.
- 15:00 **Policarpo Sanchez Yustos** - Assemblage variability during the Oldowan-Acheulean transition at Olduvai Gorge (Tanzania). Techno-economic data from FLK West (Lower-Middle Bed II).
- 15:20 **Darya Presnyakova** - Lithic economy and hominin landscape use in the early Acheulean of Koobi Fora, Kenya.
- 15:40 **Ella Assaf** - Lower Paleolithic shaped stone balls were used for bone marrow extraction.

16:00-16:20 Coffee Break

Session 4 • Podium

- 16:20 **Cinzia Fornai** - *Australopithecus* variability at Sterkfontein, South Africa: evidence from the pelvic remains.
- 16:40 **Nicole Webb** - KSD-VP-1/1: The „Big Man“ Just Got Bigger.
- 17:00 **Pierre Frémondère** - Reviving australopithecine birth: contribution of numerical simulation.
- 17:20 **Nicole Grunstra** - Sexual dimorphism in the chimpanzee pelvis: Implications for understanding the human childbirth dilemma.
- 17:40 **Philipp Mitteroecker** - Biological evolution of *Homo sapiens* in response to medical and technological transitions: The shifting trade-off model.

Friday, September 20th

Session 5 • Podium

- 09:00 **René Bobe** - Gorongosa National Park: A new window on the late Miocene at the southern end of the African Rift Valley.
- 09:20 **Hervé Bocherens** - Isotopic tracking of the paleoecology of Late Miocene Ponginae (*Khoratpithecus*, *Sivapithecus*).
- 09:40 **Tina Lüdecke** - Is it possible to gain direct evidence of early hominin meat consumption? - A first approach using Pleistocene fossil tooth enamel nitrogen isotopic composition.
- 10:00 **A. Pascual-Garrido** - Living archaeology: Revealing plant technology in wild chimpanzees.
- 10:20 **Kate McGrath** - Facial fluctuating asymmetry tracks genomic diversity among gorilla subspecies

10:40-11:00 Coffee Break

Session 6 • Pecha Kucha

- 11:00 **Cosimo Posth** - Palaeogenomic investigations at the Troisième caverne of Goyet, Belgium.
Elena Zavala - Recovery of Ancient Hominin and Mammalian Mitochondrial DNA from High Resolution Screening of Pleistocene Sediments at Denisova Cave.
Diyendo Massilani - Genomic analyses of the 34,000-year-old Salkhit individual from Mongolia.

Questions

- 11:25 **Sarah Pederzani** - Contextualising Neanderthal behaviour during MIS 3 and 4 at La Ferrassie, France: Seasonal palaeotemperature reconstructions from oxygen stable isotopes.
Samantha Brown - Investigation into the subsistence strategies of hominins from Denisova Cave (Russia) based on stable isotope data.
Virginie Sinet-Mathiot - Using ZooMS to assess hominin subsistence behaviour during the Middle to the Upper Palaeolithic transition at Fumane (Italy).

Questions

- 11:50 **Manuel Will** - The role of climate in the evolution of body and brain size of *Homo* in the last 2 million years.
Alexandra Schuh - Neanderthal maxillary ontogeny at the micro- and macroscopic scales: an integrative approach to study facial growth.
Jaap Saers - Trabecular and cortical bone structure correlate differently with terrestrial mobility in the human first metatarsal. Implications for behavioural inferences in the fossil record.

Questions

12:15-14:15 Lunch

JHE Workshop • „What is research integrity and why you should care“ (Auditorium)

Session 7 • Podium

- 14:20 **Jérémy Dubeau** - The hominin footprints from Le Rozel (Manche, France): A snapshot to a Neandertal local group composition.
14:40 **Juan Luis Arsuaga** - *Homo steinheimensis*, a comparison between the Steinheim skull and the Atapuerca Sima de los Huesos fossils.
15:00 **Federica Landi** - The facial ontogeny of Neanderthals and *H. sapiens*.
15:20 **Philipp Gunz** - *Homo heidelbergensis* is not your ancestor.
15:40 **Sarah Freidline** - Reexamination of the Cranial and Mandibular *Homo sapiens* Fossils including a New Frontal Bone from Tam Pa Ling (Laos).

10:40-11:00 Coffee Break

Session 8 • Podium

- 16:20 **Omry Barzilai** - Back to Geula Cave: New insights on the Mousterian of north Mt. Carmel, Israel.
- 16:40 **Nicolas Zwyns** - The Mousterian from Trou al'Wesse (Modave, Belgium): lithic taphonomy, measures of assemblage curation and implications for Late Neanderthal mobility patterns.
- 17:00 **Naomi Martisius** - A comparative investigation into Neanderthal bone tool manufacture and use.
- 17:20 **João Marreiros** - Functional analysis on the lithic assemblage from Layer I (the Bachokirian) at the onset of the Upper Paleolithic in Bacho Kiro cave, Bulgaria.
- 17:40 **Andrey Sinitsyn** - New reflections on the EUP and AMH dispersal in Eastern Europe.

General Assembly • 18:10 Auditorium

Saturday, September 21st

Session 9 • Podium

- 09:00 **Nicholas Conard** - MSA deposits at Sibudu and Umbeli Belli in KZN, South Africa document cultural change in high resolution.
- 09:20 **Will Archer** - Environmental carrying capacity, population density and the later Pleistocene expression of backed artefact manufacturing traditions.
- 09:40 **Marjolein Bosch** - Ornament or not?: Investigating perforation locations in *Tritia gibbosula* and *Columbella rustica* shells at Ksâr, Akil (Lebanon) using Micro-CT data.
- 10:00 **Ana Marin-Arroyo** - Chronology, climate and environmental conditions during the Middle to Upper Paleolithic transition in NW Spain with relevance to the debate on the disappearance of the Neanderthals.
- 10:20 **Sahra Talamo** - How to improve the radiocarbon calibration in the Middle to Upper Paleolithic - RESOLUTION for the study of human evolution.

10:40-11:00 Coffee Break

Session 10 • Pecha Kucha

- 11:00 **Quentin Goffette** - Human exploitation of birds during the late Magdalenian at the Trou de Chaleux, Belgium.
- Mareike Stahlschmidt** - Preservation of Ancient DNA in Late Quaternary Stalagmites from Western Georgia.
- Isabella Reynard** - Bones of predation at Gorongosa National Park: insights into Plio-Pleistocene hominin resource exploitation.

Questions

- 11:25 **Guillermo Bustos-Pérez** - Degrees of rounding among lithic artifacts: experimental program and archaeological application.
- Alastair Key** - Controlled cutting tests reveal raw material optimisation in the Early Stone Age of Olduvai Gorge (Tanzania).
- Lisa Schunk** - Is a knife a knife? Testing bifacial backed knives in controlled experiments.

Questions

- 11:50 **Ivan Calandra** - Quantitative surface analysis: a collaborative endeavor between paleontology and archeology.
- Geeske Langejans** - A Neandertal tar-backed tool from the Dutch North Sea and Middle Paleolithic complex technology.
- N. Taipale** - Diverse means to an end: domestic tool hafting in the European Upper Palaeolithic.

Questions

12:15-14:00 Lunch and Poster Session 2

Session 11 • Podium

- 14:20 **Thibaut Deviese** - Dating the latest appearance of Neanderthals in Belgium.
- 14:40 **Helen Fewlass** - Radiocarbon dating small samples of Gravettian human remains from Dolni Vestonice II and Pavlov I (Czech Republic).
- 15:00 **Christoph Wißing** - When diet became diverse: Isotopic tracking of subsistence strategies among Gravettian hunters in Europe.
- 15:20 **Nicolas Bourgon** - Zinc isotopes in Late Pleistocene fossil mammal teeth as trophic level tracer.
- 15:40 **Frido Welker** - Multi-enzyme digestion of Pleistocene bone proteomes.

16:00-16:20 Coffee Break

Session 12 • Podium

- 16:20 **Jennifer Leichtliter** - Enamel-bound stable nitrogen isotopic composition preserves trophic information in modern and fossil mammalian teeth.
- 16:40 **Clément Zanolli** - Taxonomic revision of the initial Early Pleistocene HCRP-U18-501 hominin mandible from Malawi: a tooth internal structural perspective.
- 17:00 **Tara Chapman** - The gait of *Homo naledi*.
- 17:20 **Martin Hora** - Origins of fur loss in humans: effect of gait, sweating capacity, and exposure to direct solar radiation.
- 17:40 **Michael Westaway** - Island South East Asia and its important role in hominin speciation.

Closing Dinner • 19:30 Musée de la Boverie

Fire and short-term human occupations in Iberia during MIS 4: Evidence from Abric del Pastor (Alcoy, Spain)

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A relatively low amount of Middle Palaeolithic sites in Europe dating to MIS 4 and absence of anthropogenic fire in some of the sites brings to question the way in which this period of global cooling might have affected the Neanderthal population. The Iberian Peninsula is a key area to explore this issue, as it has been considered as a glacial refugium during critical periods of the Neanderthal time line and might therefore yield archaeological contexts in which we can explore possible changes in the behavior and settlement patterns among Neanderthal groups during MIS 4. Here we report recent data from Abric del Pastor, a small rockshelter in Alcoy (Alicante, Spain) with a stratified deposit containing Middle Palaeolithic remains. We present the results of our latest investigations at the site, which consist in: micromorphological data on site formation, absolute dates (optical stimulated luminescence and ESR/U-series) that frame the sequence within MIS4 and multi-proxy geoarchaeological evidence of in situ anthropogenic fire, including microscopic evidence of in situ combustion residues, wood ash and thermally altered sediment. We also present archaeostratigraphic evidence of recurrent, functionally diverse, short-term human occupation of the rock shelter that reveals similar settlement patterns to those documented in contexts from the following MIS 3 period. This data is complemented by a millennial scale record of past rainfall variability and local vegetation dynamics obtained through a multi-proxy paleoecological study in which we analysed sedimentary n-alkanes derived from leaf waxes, in addition to their associated carbon and hydrogen isotopic ratios ($\delta^{13}\text{C}$ wax and $\delta^2\text{H}$ wax), as proxies for past vegetation and rainfall variability. This was coupled with bulk organic geochemistry (TOC, %N, %S), anthracology, microfauna and macrofauna analyses as additional proxies for selected sub-units through the sequence. Our results suggest that Neanderthals occupied the Central Mediterranean coast of the Iberian Peninsula during MIS 4. These Neanderthals had activity-specific sites, were not undergoing climatic stress and were habitual fire users. Comparable high-resolution geoarchaeological data is needed for MIS 5 at a regional scale, as well as a geoarchaeological focus on the MIS 5/MIS 4 and MIS4/MIS 3 stratigraphic boundaries at different sites, which might conceal valuable paleoclimatic information and contribute to our understanding of associated human dynamics.

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