



## United Kingdom Archaeological Sciences 2019 – Manchester, UK

24<sup>th</sup>-26<sup>th</sup> April: Manchester Institute of Biotechnology

### WEDNESDAY 24<sup>th</sup> APRIL

#### 10.00 Registration and Coffee

10.30 Opening remarks

#### Palaeoclimate and Environmental Change

- 10.40 Rhiannon Stevens – UP North: colonisation, cultural diversification and climate change after the Last Glacial Maximum
- 11.00 Sarah Pederzani – Using isotope zooarchaeology to reconstruct late Pleistocene climate and seasonality: new evidence from La Ferrassie, France
- 11.20 Kate Britton – Shifting baselines: exploring plasticity in herbivore dietary ecology in late Pleistocene France using stable isotope analysis
- 11.40 Jennifer Jones – Adaptability, resilience and environmental buffering during the late Pleistocene in Northern Spain: a biomolecular approach
- 12.00 Seren Griffiths – Events and processes: the importance of competing analytical scales in palaeoenvironmental and geochronological analysis. Holocene case studies from the Republic of Ireland and the United Kingdom

#### 12.20 – 13.20: Lunch

- 13.20 Elizabeth Stroud – Early medieval agriculture: exploring evidence for open field systems
- 13.40 Michell House – Exploring cattle management and procurement at Great Zimbabwe (AD1200–1700) using stable isotope analysis
- 14.00 Emma Loftus – Stable isotope investigations of Later Stone Age shellfishing and local climate changes on the South African west coast
- 14.20 Ayusha Nayak – Tales of resilience: stable isotope approaches to cultural change and dietary reconstructions in South Asia
- 14.40 Gundula Müldner – Putting SW England on the (Sr isotope) map: insights from the Exeter: A Place in Time project

#### 15.00–15.30: Coffee

### **Post-Domestication Adaptations**

- 15.30 Loïc Harrault – Animal domestication in the high Arctic: integrated science and ethnography applied to the interpretation of Yarte VI on the Yamal Peninsula, northwest Siberia
- 15.50 Andrew Hare – The origin and spread of sheep using ancient DNA
- 16.10 Michael Wallace – Going beyond barley: adaptation and importation of barley varieties to northern Scotland
- 16.30 Michael Scott – Whole genome sequence from 3000-year-old Egyptian emmer wheat reveals dispersal and domestication history

### **Evening event – Manchester Museum (Fossil Gallery) wine reception 19.00**

#### **THURSDAY 25<sup>th</sup> APRIL**

##### **Diet and Subsistence**

- 9.10 Simon Hammann – Investigating intra-site dietary variations at the Roman-British defence fort of Vindolanda
- 9.30 Caitlin Greenwood – Dairying in the Roman Cirencester hinterland.
- 9.50 Alice Ughi – Investigating revolution or transition in agriculture, animal husbandry and human diet in medieval Sicily: a stable isotope approach
- 10.10 Alison Harris – Accessing the childhood diets of Bering Sea coast hunter-gatherers through carbon isotope analysis of dental collagen amino acids
- 10.30 Vaughan Grimes – ... and (no) thanks for all the fish! Diet reconstruction in Medieval to post-Medieval Belgium using carbon isotope analysis of bone collagen amino acids

##### 10.50–11.20: Coffee

- 11.20 Orsolya Czére – Ploughing the waves: reconstructing urban dietscapes in Medieval maritime Scotland
- 11.40 Emma Lightfoot – Isotopic variation in foxtail millet (*Setaria*) with variety and watering regime
- 12.00 Jack Dury – Consideration of freshwater and multiple marine reservoir effects: dating of individuals with mixed diets from northern Sweden
- 12.20 Efrossini Viki – What to feed a baby in the Greek Bronze Age: first incremental  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  dentine results demonstrate breastfeeding and childhood diets
- 12.40 Lisa Lodwick - Agricultural economies at Roman villas: Isotopic and archaeobotanical evidence for changes in cereal production strategies in Iron Age and Roman Britain

##### 13.00–14.00: Lunch & Poster session 1 (odd numbered posters)

- 14.00–14.30 Plenary lecture by Prof. Richard Evershed

##### **Biomolecular Archaeology**

- 14.30 Madeleine Bleasdale – The proteomic analysis of ancient dental calculus from Eastern Africa: current applications, pitfalls and future prospects
- 14.50 Abigail Ramsøe – DeamiDATE 1.0: Site-specific deamidation as a tool to assess authenticity of members of ancient proteomes

15.10–15.40: Coffee

- 15.40 Carla Soto Quintana – Archival proteins: parchment manufacturing and its effects on collagen degradation
- 16.00 Kristine Korzow Richter – Integrating molecular identification techniques into site interpretations
- 16.20 Sam Leggett – Why we should ‘play’ more with stable isotope data – an adventure in multivariate statistics and Anglo-Saxon teeth
- 16.40 Angela Lamb – Simultaneous  $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$  and  $\delta^{34}\text{S}$  analysis of 1 mg of bone collagen: analytical improvements

**Evening events:**

**Davison presentation on Temperance Movement to be held at local microbrewery (Talk: 18.30-19.00)**

**Campus tour with the Browns (20.00)**

**FRIDAY 26<sup>th</sup> APRIL**

**Mobility and Migrations**

- 9.10 Shevan Wilkin – Pastoralism and agriculture on the ancient Eastern Eurasian Steppe through multi-proxy archaeological data sets
- 9.30 Alcàntara Fors – Keeping tabs on cattle mobility through geometric morphometrics, finite-element analysis and cross-sectional properties
- 9.50 Judith Muñoz Sogas – Travelling amphorae and thirsty seafarers at the temple of Kommos
- 10.10 Christopher Snoeck – Stonehenge rising from the ashes

10.30–11.00: Coffee

**Imaging and Chemical Analysis in Archaeology**

- 11.00 Kate Fulcher – Molecular analysis of ritual black liquids applied to ancient Egyptian coffins
- 11.20 Ki Suk Park – Application of image analysis for the identification of the ceramic pottery production technologies of the North Caucasus (Russia) in the Bronze/Iron Age
- 11.40 Alastair Key – Replica Acheulean handaxes reveal shape thresholds in Lower Palaeolithic artefacts
- 12.00 Patrick Randolph-Quinney – Application of advanced tomographic imaging to understand the origin and evolution of human cancer: issues of quantitative histopathology, homology, and clinical validation

12.20–13.20: Lunch & Poster session 2 (even numbered posters)

- 13.20 Jennifer Wakefield – Looted ancient Egyptian tomb – mummy restoration in ancient times
- 13.40 Yali Yun – Scientific analysis of metal objects and glass unearthed from the Han Zunian tomb of the Northern Qi Dynasty (550AD–577AD), China

- 14.00 Barbara Veselka– Debunking the dentine: micro-CT and histological assessment of a mineralisation defect in teeth attributed to vitamin D deficiency in two 17<sup>th</sup>–19<sup>th</sup> century Dutch communities
- 14.20 Helen Whelton – Faecal biomarker analysis of coprolites as a means of investigating the nature and timing of the earliest human occupation of North America

14.40–15.00 Coffee

**Biological Anthropology**

- 15.00 Jessica Munkittrick – Exploring sources of lead in children during colonial settlement of Northeastern North America during the 18<sup>th</sup> and 19<sup>th</sup> centuries
- 15.20 Richard Madgwick – Mortuary practices in Iron Age South West England: a multi-scalar approach
- 15.40 Sina White – Survival comparative of a medieval hospital and lay cemeteries
- 16.00 Eleanor Joan Green – London through the ages: a genetic investigation of the Thames skull collection
- 16.20 Yaowu Hu – Osteobiography of a potter near the Oupan kiln, Anhui, China during the early Tang Dynasty (544–644 cal AD) by osteological and multistable isotopes approach
- 16.40 Lara Cassidy – The genomics of megaliths: exploring social structure in Irish Neolithic civilization through ancient DNA analysis
- 17.00 *Concluding remarks and prizes*

**Social event – Conference dinner in Christie’s Bistro (19.00)**

