

**Human Evolution: Fossils, Ancient and Modern Genomes
20 – 22 November 2017****Wellcome Genome Campus,
Hinxton, Cambridge, UK****Conference Programme**

Monday, 20 November

- 12:00-13:20 **Registration and lunch**
- 13:20-13:30 **Welcome and introduction**
Programme Committee: Chris Tyler-Smith, Wellcome Trust Sanger Institute, UK
- 13:30-14:30 **Keynote lecture 1**
Ancient DNA and its application to human evolution
Svante Pääbo
Max Planck Institute for Evolutionary Anthropology, Germany
- 14:30-15:15 **Session 1: Apes and the origins of *Homo***
Chair: Chris Tyler-Smith, Wellcome Trust Sanger Institute, UK
- 14:30 Great ape diversity and population history
Tomas Marques-Bonet
Institut Biologia Evolutiva (UPF/CSIC), Spain
- 15:00 Reconstruction of the chimpanzee to human zoonotic transmission of Herpes Simplex Virus 2 (HSV2)
Simon Underdown
Oxford Brookes University, UK
- 15:15-15:45 **Afternoon tea**
- 15:45-17:45 **Session 2: Origin of modern humans and the importance of Africa**
Chair: Jaume Bertranpetit, IBE-Universitat Pompeu Fabra, Spain
- 15:45 Phenotypic evolution in Africans and the origins of modern humans
Brenna Henn
Stony Brook University, SUNY, USA
- 16:15 Fossil and archaeological evidence for the origins of modern humans
Marta Mirazon Lahr
University of Cambridge, UK
- 16:45 Talk title TBC
José Victor Moreno Mayar
University of Copenhagen, Denmark

- 17:15 Crossing the desert: Multidisciplinary perspectives on the dispersal of *Homo sapiens* into Asia
Huw Groucutt
University of Oxford, UK
- 17:30 Detecting introgressed archaic haplotypes in modern human genome sequences
Laurits Skov
Bioinformatic Research Center, Denmark

17:45-19:15 **Poster Session 1 (odd numbers) with drinks reception**

19:15 **Dinner**

Tuesday, 21 November

09:00-10:30 **Session 3: Spread of modern humans outside of Africa**
Chair: Molly Przeworski, Columbia University, USA

09:00 The Beaker phenomenon and the genomic transformation of Northwest Europe
David Reich
Harvard Medical School, USA

09.30 Bones, stones and genomes: constructing the narrative for the peopling of Sahul
Michael Westaway
Griffith University, Australia

10.00 Reconstructing Denisovan anatomy using DNA methylation maps
Liran Carmel
The Hebrew University of Jerusalem, Israel

10.15 Genetic history of late Neandertals
Mateja Hajdinjak
Max Planck Institute for Evolutionary Anthropology, Germany

10:30:11:00 **Morning coffee**

11:00-12:30 **Session 4: Into East Asia and the Americas**
Chair: Michael Westaway, Griffith University, Australia

11:00 The complex population history of Remote Oceania
Johannes Krause
Max Planck Institute, Germany

11:30 Uncovering the prehistory of East Asia through ancient nuclear DNA
Qiaomei Fu
Institute of Vertebrate Paleontology and Paleoanthropology, China

12:00 Population structure in pre-contact North America: a whole-genome ancient DNA study
Christiana Scheib
University of Cambridge, UK

12:15 The genetic origin and heritage of Bronze Age Canaanites
Shai Carmi
Hebrew University of Jerusalem, Israel

12:30-14:00 **Lunch**

14:00-15:15 **Session 5: Human adaptations and population admixture**
Chair: Yali Xue, Wellcome Trust Sanger Institute, UK

14:00 The implications of admixture between modern and archaic humans
Janet Kelso
Max Planck Institute, Germany

14:30 Evolutionary genetic dissection of the genus Homo and its immune response
Lluís Quintana-Murci
Institut Pasteur, France

15:00 Strong selection favouring Neanderthal-free segments on the X chromosome in out-of-Africa populations
Mikkel Heide Schierup
Aarhus University, Denmark

15:15-15:45 **Afternoon tea**

15:45-17:15 **Session 6: Human adaptations**
Chair: Janet Kelso, Max Planck Institute, Germany

15:45 Introgression and human physiological adaptation
Rasmus Nielsen
UC Berkeley, USA

16:15 Studying viability selection in contemporary humans
Molly Przeworski
Columbia University, USA

16:45 Genetic structure, diversity and adaptation in Ethiopia
Saïoa López
University College London, UK

17:00 Towards the understanding of the genetic bases of complex adaptations in humans
Jaume Bertranpetit
IBE-Universitat Pompeu Fabra, Spain

17:15-18:45 **Poster session 2 (even numbers) with drinks reception**

18:45 **Dinner**

Wednesday, 22 November

- 09:00-10:00 **Session 7: Human Evolution and disease**
Chair: Brenna Henn, Stony Brook University, SUNY, USA
- 09:00 The evolution and changing ecology of the human microbiome
Christina Warinner
Max Planck Institute, Germany
- 09:30 Metagenomic study of anthropogenic sediments: insights into public health and lifestyle
Thomas Collin
University College Dublin, Ireland
- 09:45 A population genetic approach to estimating the generation time in human evolution
Priya Moorjani
Columbia University, USA
- 10:00-10:30 **Morning coffee**
- 10:30-11:30 **Keynote lecture 2**
Human evolution during the last 500,000 years
Chris Stringer
The Natural History Museum, UK
- 11:30-11:45 **Closing remarks**
Programme Committee: Yali Xue, Wellcome Trust Sanger Institute, UK
- 11:45-13:00 **Lunch**
- 13:00 **Coaches depart to Cambridge City Centre and Train Station, Heathrow Airport via Stansted Airport**