

September 26th, 2024

9:30-11:30 Session 1 – Introduction to Palaeoproteomics

Chair: Zandra Fagernäs

Invited talk:

Samantha Brown, University of Tübingen - ZooMS (Zooarchaeology by Mass Spectrometry): 15 years of peptide mass fingerprinting the past

Invited talk:

Beatrice Demarchi, University of Turin - Shotgun proteomics - not quite bulletproof!

Invited talk:

Jessica Hendy, University of York - Applications of palaeoproteomics

Invited talk:

Matthew Collins, University of Copenhagen/University of Cambridge - The future of palaeoproteomics

12:30-13:15 **Session 2 – Extraction methods**

Chair: Jan Dekker

Jakob Hansen - A comparative study of commercially available, minimally invasive, sampling methods on Early Neolithic humeri analysed via palaeoproteomics

Ilaria Serafini - A new approach for single extraction of dyes and proteins of archaeological keratin-based textiles: method development and its application to charred mock-ups

Zandra Fagernäs - Improving analysis of Pleistocene bone proteomes through consecutive digestion with multiple proteases

13:30-14:50 Session 3 – Bioinformatics

Chair: TBA

TAG-team:

 $\label{lem:carrillo} \textbf{Guillermo Carrillo Mart\'in} \ - \ \text{ProteoParc: A bioinformatic tool to generate reference databases for paleoproteomics data analysis \&}$

Jan Dekker - Smaller databases; more identifications in less time

Johanna Krueger - A scoring system for ion series completeness

Baltazart Karl - In silico methods for deep time protein sequence reconstruction

Miranda Evans - The Re-amidator: a tool for screening deamidation-induced alternate peptide taxonomy in ancient protein studies

TAG-team:

lan Engels & Alexandra Burnett - ClassiCOL: LC-MSMS analysis for ancient species classification via collagen peptide ambiguation

15:00-16:15 **Session 4 – Hidden gems**

Chair: Louise Le Meillour

TAG-team:

Laura Viñas Caron - Fashioning Sudan: identification of ancient animal species used for wool and skin production &

Youri van den Hurk - Palaeoproteomics of Andean Camelid Fibers

TAG-team:

Daphne Simard & **Sarah Sunne** - Palaeoproteomic insights into health in Early Medieval England

Helan Mary Abin - Collagen Fingerprinting on Mesolithic Bone points

TAG-team:

Tuuli Kasso & **Caterina Zaggia** - NovorCloud vs. MaxQuant: Insights on Proteins in Egyptian Plasters

16:30-17:50 **Session 5 – PAASTA salad**

Chair: TBA

Shana Wernado - At Home in the Neolithic: ZooMS analysis of fauna from a potential Starčevo house in the South Morava Valley, Serbia

Louise Le Meillour - Building -obvious- bridges: combined palaeogenomic and palaeoproteomic analysis for the study of Caprinae early domestication

Oded Rimon - The Power of Palaeo Proteomics: could ancestries of early hominins be resolved using proteomics?

Carli Peters - ProteoBank: an open-access, community-curated database of ZooMS peptide markers

TAG-team:

Ryan Paterson & **Raman Umamaheswaran** - Investigating the limits of ancient protein preservation within a diagenetic framework