



SPAAM 2016

Standards Precautions
and Advances in
Ancient Metagenomics

DAY 1 **Wednesday, March 16th**

1:00pm Johannes Krause, Alexander Herbig
Welcome at MPI-SHH and Introduction

Metagenomic Applications in Paleogenetics

1:30-2:15pm Hernán Burbano
*Mining ancient microbiomes using selective enrichment
of damaged DNA molecules*

2:15-3:00pm Christina Warinner
*Data generation from ancient microbiota: laboratory
strategies and considerations*

3:00-3:30pm **Coffee break**

3:30-4:15pm Simon Rasmussen
*Reconstructing ancient pathogens – discovery of *Yersinia
pestis* in Eurasia 5,000 Years Ago*

4:15-5:00pm Martin Kircher
*NGS Sequencing: Diverse applications of Sequence,
Counts and Structure*

5:00-6:00pm **Discussions**

6:00pm **Welcome reception at MPI-SHH**

DAY 2 Thursday, March 17th

Metagenomic Tools and Frameworks

- 9:00-9:45am Ludovic Orlando
Computational approaches in ancient genomics and metagenomics
- 9:45-10:30am Alice McHardy
The CAMI Initiative - Critical Assessment of Metagenome Interpretation
- 10:30-11:00am **Coffee break**
- 11:00-11:45am Alexander Herbig
MALT: Fast alignment and analysis of metagenomic DNA sequence data
- 11:45-12:30pm Daniel Huson
Efficient analysis of very large microbiome sequencing projects
- 12:30-2:00pm **Lunch break**

Practical Session

- 2:00-4:00pm Mikkel Schubert, Ludovic Orlando
PALEOMIX and metaBIT, two user-friendly pipelines for characterizing ancient genomes and metagenomes
- 4:00-4:30pm **Coffee break**
- 4:30-5:15pm Alexander Herbig, Clemens Weiß
Analysis of ancient microbiomes with MALT and MEGAN
- 5:15-6:00pm Mohamed El-Hadidi, Sina Beier
MEGAN6 for taxonomic and functional analysis of metagenomic data
- 6:00-6:45pm Jon Sanders
Finding, visualizing, and remembering unique 16S sequences to explore coevolution and contamination
- 7:00pm **Dinner at Restaurant**

DAY 3 **Friday, March 18th**

Applications and Techniques

9:00-9:45am Pamela Weisenhorn
*Evolution of energy metabolism in human
associated microorganisms*

9:45:10:30am Ruben Garrido Oter
*Functional overlap of the Arabidopsis leaf and root
microbiotas*

10:30-11:00am **Coffee break**

11:00-11:45am Jon Sanders
*Working below the OTU in 16S analyses:
contamination, coevolution, and more*

11:45-12:30pm **Final Discussions and Closing Remarks**

12:30pm **Lunch and Departure**