Virtual Summer School "Introduction to Ancient Metagenomics

The SPAAM Community (https://spaam-community.github.io/) is offering a new 5 day virtual summer school course sponsored by the Werner Siemens Foundation: Introduction to Ancient Metagenomics.

DATE AND SCHEDULE:

Online from Monday 1st to Friday 5th of August from 09:00 to 17:00 (CEST, Leipzig time zone).

ORGANISERS:

Dr. Christina Warinner (Harvard University, Max Planck Institute for Evolutionary Anthropology) and James Fellows Yates (Max Planck Institute for Evolutionary Anthropology, Leibniz Institute for Natural Product Research and Infection Biology Hans Knöll Institute).

INSTRUCTORS:

Dr. Aida Andrades Valtueña, Dr. Thiseas C. Lamnidis, Dr. Arthur Kocher, Dr. Alex Hübner, Dr. Irina Velsko, Dr. Alexander Herbig,

Megan Michels, Alina Hiß, Clemens Schmid, Maxime Borry (and more TBC)

COURSE OVERVIEW:

Ancient metagenomics applies cutting-edge metagenomic methods to the degraded DNA content of archaeological and paleontological specimens. The rapidly growing field is currently uncovering a wealth of novel information for both human and natural history, from identifying the causes of devastating pandemics such as the Black Death, to revealing how past ecosystems changed in response to long-term climatic and anthropogenic change, to reconstructing the microbiomes of extinct human relatives. However, as the field grows, the techniques, methods, and workflows used to analyse such data are rapidly changing and improving.

In this **hands-on summer school (block praktikum)** we will go through the main steps of ancient metagenomic bioinformatic workflows, familiarising students with the command line, demonstrating how to process next-generation-sequencing (NGS) data, and showing how to perform de novo metagenomic assembly. Focusing on host-associated ancient metagenomics, the course consists of a combination of

lectures and hands-on exercises, allowing participants to become familiar with the types of questions and data researchers work with. Round table discussions with experts at each stage of the workflow will be held to

allow participants to get advice on their own projects and research.

By the end of the course, participants will have an understanding of how to effectively carry out the major bioinformatic components of an ancient metagenomic project in an open and transparent manner. Attendees will be eligible for ECTS points (awarded by the JSMC Graduate School, Friedrich-Schiller University, Germany) or a certificate of completion (Max Planck - Harvard Research Center, MHAAM).

ELIGIBILITY:

The course is aimed at masters students and early-stage PhD students, to a maximum of 25 participants. Course instruction will

take place online. 5 places are reserved for members of JSMC.

APPLICATIONS:

Applications are open from April 19 to June 1 2022. To apply, please visit our website: https://spaam-community.github.io/wss-summer-school/

SUPPORT:

This summer school is financially support by The Werner Siemens Foundation, and institutionally supported by MPI-EVA, Leipzig;

Hans Knöll Institute, Jena; JSMC (Friedrich Schiller University), Jena; MHAAM (Harvard University), Boston.

For questions or more information, contact James Fellows Yates (<u>james_fellows_yates@eva.mpg.de</u>) or Christina Warinner (<u>christina_warinner@eva.mpg.de</u>)

Date and Time

August 1, 2022 - August 5, 2022

Location

Location: online