



## SPLIT SUMMER SCHOOL STSS2022

### COURSE: Introduction to Ancient DNA Analysis (2 ECTS)

**Contact person:** Željana Bašić  
phone: +385 98679458  
mail: zeljana.basic@unist.hr

Ivan Jerković, ivan.jerkovic@unist.hr  
Elena Zavala, elena\_zavala@eva.mpg.de

#### Main topics:

- The generation and evaluation of ancient DNA data
- Introductions to working with R and Linux
- Evaluating genetic relationships using mitochondrial and nuclear DNA



#### Programme structure:

- 5-day course
- Sample data will be provided for practice (If students would like to bring their own data, please let the organizers know)
- Students will present on the results of their data analysis

#### Important dates:

Course dates: June 28<sup>th</sup> to July 2<sup>nd</sup>, 2022  
Deadline for application: April 15<sup>th</sup>, 2022  
Payment due by: June 1<sup>st</sup>, 2022  
Confirmation of the course: June 5<sup>th</sup>, 2022

**Price of the course:** 300 € (tax included) Note: Room and Board is not included  
**Students are expected to bring their own laptops**

#### Programme plan:

##### Day 1

- Introduction to ancient DNA
- Introduction to working in the terminal

##### Day 2

- Generation of ancient DNA data
- Introduction to R
- Computation of basic summary statistics
- Evaluating aDNA data

##### Day 3

- Techniques for challenging samples (use of capture and impacts of contamination)
- Mitochondrial DNA: consensus sequences and tree building (MEGA)

##### Day 4

- Nuclear DNA: using R to evaluate relationships between ancient samples

##### Day 5: Special Topics and Presentations

- Alternative sources of ancient DNA
- Evaluating population turnovers
- High and low coverage genomes

#### Programme lecturers:

Elena Zavala, Master of Professional Studies in Forensic Science; Max Planck Institute for Evolutionary Anthropology  
Laurits Skov, PhD; Max Planck Institute for Evolutionary Anthropology  
Mateja Hajdinjak, PhD; Ancient DNA Laboratory, The Francis Crick Institute  
Benjamin Vernot, PhD, Max Planck Institute for Evolutionary Anthropology

Note: Due to COVID19, traveling restrictions may apply.