

PhD Position in Paleogenomics and Geochemistry – Pinhasi Lab, University of Vienna
Application Deadline: June 20, 2025

Start Date: As early as July 1, 2025

Supervisors: Prof. Ron Pinhasi (primary), Dr. Pere Gelabert (co-supervisor), Prof. Stephan Krämer (co-supervisor)

Program: Vienna Doctoral School of Ecology and Evolution

Funding: Fully funded for 3 years

FWF-funded project; Geochemical Enhancement of Ancient DNA from Sediments (GENESIS)

The Pinhasi Lab is inviting applications for a fully funded PhD position to join the GENESIS project pioneers innovative methodologies to enhance the recovery of ancient DNA (aDNA) from challenging archaeological substrates such as sediments, coprolites, and other non-skeletal sources.

The project seeks to overcome persistent limitations in aDNA research—namely, low DNA yield and inhibition from organic-rich materials—through advanced geochemical and molecular techniques.

The goal is to recover various host-DNA sources from complex environments suitable for genomic and metagenomic analyses. The successful candidate will develop and optimize protocols involving heavy liquid density separation of samples, inhibition assays tailored for aDNA pipelines, authentication methods for detecting modern contamination, and other geochemically-informed customised protocols.

In addition to the wet-lab component, the research involves metagenomics (human and animal ancient gut and oral microbiomes, pathogens, food sources, etc.) and genomic analysis of human and specific pathogens and parasite taxa.

Candidate Profile:

Required:

- MSc in Biology, Archaeological Science, or Biological Anthropology

Preferred:

- Experience with next-generation sequencing (NGS) and paleogenomics
- Background in bioinformatics and data analysis
- Background in molecular experiments

Research activities will include:

- Sequencing and analysis of ancient human DNA
- Metagenomic analysis of ancient microbiomes (oral and gut)
- Pathogen and parasite DNA analysis

Application Requirements:

- **Curriculum Vitae:** Maximum 4 pages, **including contact details of at least two academic referees**
- **Motivation Letter:** Maximum 1 page

How to Apply:

Submit the required documents via email to: **ron.pinhasi@univie.ac.at**