

CEIPEX MU TOPIC 14

Položka / Field	Obsah / Content
NAME	prof. RNDr. Zbyněk Zdráhal, Dr.
CEIPEX RESEARCH TOPIC LEVEL2	Genomics & Proteomics of Plant Systems: functional genomics, proteomics
NAME OF THE RESEARCH GROUP	Proteomics
TOPIC	Method development in palaeoproteomics
ABSTRACT	Methodological advancement in palaeoproteomics, the study of ancient proteins, has accelerated significantly over the past decade. New instrumentation and sample preparation techniques now enable protein analysis further back in time and across diverse contexts, including zooarchaeology by mass spectrometry (ZooMS), sex identification from dental enamel, and complex substrates like human dental calculus. The primary goal of this project is to advance these methodologies, focusing specifically on understudied materials that have not yet received adequate attention. One such material is textiles, where the project aims to determine whether ancient human proteomes and necrobiomes can be recovered from archaeological textile remains. This holds wide-ranging applications for contexts where skeletal material is scarce, absent, or inaccessible for sampling. If successful, this research will establish textiles as a feasible yet unexplored reservoir of ancient human and microbial biomolecules, opening new avenues for archaeology, forensic anthropology, and mummy studies.
WEBPAGE OF THE RESEARCH GROUP	https://www.ceitec.eu/proteomics/rg49