

## Postdoc in use-wear analysis

Applications are invited from qualified and highly motivated candidates for a one-year research position (subject to renewal) as a post-doc in "Use-wear analysis of lithic and bone artefacts, ornaments, pigments and art objects from Middle-Upper Palaeolithic transition contexts" within the team led by Prof. Stefano Benazzi at the Department of Cultural Heritage, University of Bologna, Italy.

The candidate will join the project "Our first steps to Europe: Pleistocene *Homo sapiens* dispersals, adaptations and interactions in South-East Europe" funded by the European Research Council (ERC) under the European Union's Horizon Europe research and innovation programme (grant agreement No 101019659- FIRSTSTEPS) to prof. Katerina Harvati and prof. Stefano Benazzi. This interdisciplinary and multidisciplinary project aims to apply novel and cutting-edge methods from the fields of scientific archaeology, zooarchaeology, paleoanthropology, paleoecology and isotope analysis to understand 1) whether the presence of early *H. sapiens* in southern Europe, as suggested by Apidima, can be supported, 2) whether the adaptations of early *H. sapiens* differ from those of penecontemporaneous *H. neanderthalensis*, 3) the role of behavioural adaptations in the Late Pleistocene *H. sapiens*, and unravel the biological and/or cultural features that allowed them to disperse and establish a sustained presence in Europe, 4) whether there is fossil / archaeological evidence of cultural / biological interactions and exchange between modern humans and Neanderthals.

Applicants should have experience in the field of use-wear analysis or related areas and have a strong record of research productivity and publications especially in the fields of traceology, functional analysis and relating methodologies.

She/he should have research interests in the techno-economical, cultural and behavioural aspects of Palaeolithic populations. The ideal candidate is requested to have a general knowledge of Middle and Upper Palaeolithic in Italy, the experience of the stratigraphy and taphonomy of late Middle /early Upper Palaeolithic sites of Southern Italy and should be able to design use-wear analysis investigations at specific MP and UP contexts. In addition, the ideal candidate should have an in-depth knowledge of traditional microscopy and of the use of the digital microscope; should be able to integrate and cooperate with a multidisciplinary environment and work directly with Paleolithic archaeologists, Zooarchaeologists, Environmental archaeologists, Paleoanthropologists and Geochronologists.

The investigator is also requested to organize a permanent use-wear analysis Laboratory at the Department Cultural Heritage, Ravenna, with the creation of an experimental reference collection focused on MP-UP transition lithic and bone tools.

The candidate will be requested to carry out: detection and interpretation of use-wear (impact scars included) of lithic artefacts; detection and interpretation of use-wear and reconstruction of manufacturing processes of ornaments and bone tools; detection and localization of pigments on the studied artefacts; technological analysis of artistic engravings.