

CALL REQUIREMENTS

Call Title: **BIOCULTURAL ROOTS OF DIVERSITY AND INEQUALITY IN MEXICO: 500 YEARS OF MESTIZO STORIES**

Contact person: Cristina Valdiosera

Department: History, Geography and Communication

Category: Researcher

Others

Workday: Full time

Part time

Aim: The University of Burgos announces a PhD position in Bioarchaeology within the AdMEXture Project, funded by the European Research Council (ERC). This multidisciplinary project aims to investigate the complex processes of social, cultural, and biological admixture that began 500 years ago during the colonization of the Americas. The PhD candidate will focus on analyzing diet types and food processing through stable isotope and dental microwear analysis on human remains. They must analyze and contextualize the biological data within the historical and cultural dynamics of Mesoamerica, contributing to the understanding of the sociocultural identities of the protagonists of the history of admixture in Mexico and the demographic transformations through time.

Key Responsibilities:

- Conduct bioarchaeological analyses of human remains excavated from key archaeological sites in the context of the AdMEXture Project. These analyses include collagen extraction for stable isotopes, macro and micro dental wear, electron microscopy, and 3D scanning.
- Perform stable isotope analysis of specific compounds from collagen samples.
- Develop analytical frameworks for the analysis of stable isotopes of specific compounds, including the development of "Bayesian mixing models" (e.g., FRUITS, MixSIAR) for data interpretation.
- Collaborate with an international and diverse team of researchers, including geneticists, archaeologists, historians, and bioanthropologists, to integrate bioarchaeological findings with genetic and sociocultural data.
- Lead and contribute to the preparation of research articles for publication in specialized journals and present the results at national and international conferences.
- Participate in scientific outreach events related to the AdMEXture project.

Requirements of the candidate:

- Bachelor's degree in biology.
- Master's degree in Bioarchaeology, Geochemistry, Biochemistry, Archaeology or a related field.
- Familiarity with bioarchaeological methodologies and analytical techniques.
- Excellent written and verbal communication skills in both Spanish and English.
- Strong commitment to interdisciplinary collaboration and ethical research practices.

Desired Skills:

- Knowledge of statistical analysis and computer applications related to bioarchaeology (R, SPSS, SAS, PAST, PYTHON).
- Understanding of the historical and cultural dynamics that influence population changes, especially in the context of colonization and population mixing.

Duration: Until February 28, 2029

Gross monthly remuneration: 1516 euros

Application submission deadline: January 22, 2026

Documents to be provided: Copy of valid National Identity Document or equivalent

- Curriculum Vitae
- Copy of the qualification requested in the call for applications.
- Academic certificate of the required qualification.
- two reference letters
- Any other documentation that can accredit the criteria required in the call for applications.