





ERC-Funded PhD position on (Re)Constructing the Archaeology of Mobile Pastoralism (CAMP) Bringing the site level into long-term pastoral narratives

We invite applications for a funded, full-time, 3-year PhD position in the context of an ERC Consolidator Grant (101088842) project led by Stefano Biagetti titled: (Re)Constructing the Archaeology of Mobile Pastoralism (CAMP) Bringing the site level into long-term pastoral narratives. The doctorate will be a joint program between Universitat Pompeu Fabra (Barcelona, Spain), and University of Parma, and will develop in collaboration with Geosciences Barcelona (GEO3BCN-CSIC). The student will be enrolled at both Universities and will receive, at the end of the 3 years, two PhD degrees: one in History from Universitat Pompeu Fabra and one in Earth Sciences from the University of Parma.

The successful candidate will be based at the Department of Humanities at the Universitat Pompeu Fabra, which hosts Stefano Biagetti's ERC-funded project. During the next two years, the group will include other new post-doctoral researchers and PhD students. The project will be carried out mainly within the Culture and Socio-Ecological Dynamics research group (CASEs) of which Stefano Biagetti is a member, and at GEO3BCN-CSIC, where specific tasks will be carried out as well, and finally within the Earth Science dept at the University of Parma. CASEs research group approaches the study of human past by developing research beyond disciplinary boundaries and combining visions from both the archaeology and the natural sciences. The doctoral student will be integrated in the research group and exposed to a lively and productive research environment.

1. Further details about the PhD topic area

The successful applicant will undertake research related to Work Package 2 of the project CAMP on the development of a specific X-ray fluorescence (XRF) methodology for the analysis of the anthropogenic sediments. The archaeological use of portable X-ray fluorescence devices (pXRF) is rapidly growing because of the advantages offered by this type of devices, which provide cheap and fast geochemical (multielemental) data. Nevertheless, two major drawbacks have been identified. The first is that pXRF results are not as accurate as those from other analytical techniques. The second, and key to the methodological development of this proposal, is that current built-in pXRF calibrations in portable instruments are not designed to cope with the whole chemical diversity of anthropogenic sediments. Therefore, developing a specific calibration that is fully optimized for the characteristics of anthropogenic deposits is paramount to provide more reliable and accurate elemental data in archaeology and for fully exploiting the potentials of pXRF analysis in such contexts.







2. Key responsibilities

The successful candidate will be expected to:

- Organise and run the X-ray fluorescence analysis of sediment samples using different devices (portable and bench-top XRF) and techniques (ICP-MS) under the direction of his/her supervisors.
- Learn state-of-the-art statistical methods, including machine learning techniques, which will be employed to analyse the XRF results obtained from the studied sediment samples.
- Apply, when necessary, other analytical tools (geochemical, mineralogical, etc.) to complement the XRF studies.
- Complete a successful PhD thesis at the end of the three years.
- Partake in the seminars and conferences organised around the ERC project.
- Publish in high-impact journals.
- Candidates will also be encouraged, during their PhD, to participate in other relevant events at UPF, to participate in relevant academic conferences in Spain and/or elsewhere, and to publish articles.

3. Profile of candidates

Candidates must have:

- 1. A Master's degree in geoarchaeology, geology, chemistry, earth sciences, possibly with previous experience in XRF analyses and with programming skills.
- 2. Excellent oral and written English.

Women and minority candidates are especially encouraged to apply. Interest and experience in archaeology will be considered an advantage.

4. Terms and Conditions

The PhD bursary is regulated by a pre-doctoral labour contract for research staff at the Pompeu Fabra University. It is a fixed-term, full-time contract. The gross annual value of the bursary would be of approximately epsilon17,000, or epsilon1400 per month gross. The candidate is supposed to spend 9 months in the University of Parma. All expenses for travel, including visas, and accommodation while on transfer will be paid by the project.

The successful candidate will also have access to funding to participate in conferences in the 2nd and 3rd year of the PhD.

Good command of English is mandatory. Knowledge of Spanish, Italian, and Catalan is not a requirement, but the successful candidate will be encouraged to acquire at least a minimal competence in one of these languages so as to be able to participate in some locally organised events.

The successful candidate will have a working space at the Universitat Pompeu Fabra, in the Mercè Rodoreda building, Campus de la Ciutadella, in a shared office with other members of the group.

Starting date: November 2023.







5. Applications

Applicants must submit:

- 1. An academic curriculum vitae.
- 2.A statement of interest.
- 3. A transcript of the grades obtained in the MA degree.
- 4. The names and addresses of two academic referees.
- 5. All applications must be submitted by email (<u>seleccio.humanitats@upf.edu</u>)
 Before 17.00 (GMT time) of **7**th **of July 2023**.
- 6. Shortlisted candidates will be notified no later than 7 days after the deadline and asked to have an online interview. This would be held 14 days after the application deadline, at a time and date to be agreed, between 10:00 and 17:00.
- 7. Candidates will be notified of the result of the selection process 1 week at the latest after the interviews.

6. Information

For academic questions about the project and the position, please contact Stefano Biagetti (stefano.biagetti@upf.edu). For practical information about the position and the application process, please contact Meritxell Canals (seleccio.humanitats@upf.edu).