PhD fellowship in Archaeology with specialization in Palaeoproteomics

PhD position

The Centre for Early Sapiens Behaviour (SapienCE) invites applications for a PhD fellowship in palaeoproteomics for understanding early human behaviour. The fellowship will be part of the European Training Network (ETN) PUSHH.

About CoE schemes, SapienCE and PUSHH:

SapienCE is a Centre of Excellence (CoE) funded by the Research Council of Norway, and based at the Department of Archaeology, History, Cultural Studies and Religion (AHKR) at the University of Bergen (UiB). The centre is directed by Professor Christopher Henshilwood and focuses on behavioural evolution of Homo sapiens in southern Africa between 100,000-50,000 years ago. SapienCE comprises an inter-disciplinary team of scientists at the University of Bergen and international partner organisations. Homo sapiens were anatomically modern by ~300 thousand years ago (ka) in Africa, but there is no evidence indicating that behaviour was modern at that time. Current archaeological evidence highlights the 100-50 ka interval as a juncture for human cognitive, technological and social development. The fundamental causes of this critical transformation remain unclear, with competing theories stressing changing cognitive capabilities or the need to adapt to rapidly changing environmental conditions. The overall aim of SapienCE is to integrate high-resolution records of early human cultural, social, technological and subsistence behaviours with innovative geospatial, cognitive capabilities or the need to adapt to rapidly changing environmental conditions. The overall aim of SapienCE is to integrate high-resolution records of early human cultural, social, technological and subsistence behaviours with innovative geospatial, climate and cognitive data models. This holistic approach will provide ground-breaking insight into the behavioural evolution of Homo sapiens. Read more about SapienCe at: https://www.uib.no/en/sapience.

This fellowship is also a part of the European Training Network (ETN) PUSHH: “Palaeoproteomics to Unleash Studies on Human History - PUSHH”, funded by the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 861389. The PUSHH project will provide international doctoral training on palaeoproteomics applied to palaeontology, palaeoanthropology and archaeology. It builds on the recent exciting advances in palaeoproteomics, i.e. mass spectrometry-based ancient protein sequencing. PUSHH will develop new proteomic methods, optimised for ancient protein analysis, that will be applied to address outstanding evolutionary questions in human and hominoid evolution. Read more about the network at: www.pushh-etn.eu.

About the position:

The main purpose of the PhD position is to complete a doctoral thesis, which qualifies for independent research and for other forms of employment that demand specific competency, and to complete PhD courses or other equivalent education corresponding to approx. 30 ECTS points. The duration of the PhD position is 3 years

The PhD position demands that the applicant has his or her regular workplace at the University of Bergen, SapienCE CoE offices, and that the incumbent at all times complies with the guidelines that always apply to the position.

Research area of the doctoral fellowship:

The processes that have led human populations of the past to develop the cultural innovations that make us different from our phylogenetically closer relatives (e.g., making composite tools, creating symbolic items, developing numerical symbol systems etc.) are the subject of an intense debate. The emergence of cultural innovations implying the use of organic material (resins for hafting, poison for hunting, binders to produce paints, etc.) are highly relevant to these debates since the preparation of such compounds is often cognitively demanding and complex to transmit to new generations. We know that complex organic compounds were produced by both Middle Stone Age populations in Africa and Neanderthals in Europe and the Near East since at least 180 ka, but evidence for these innovations remains circumstantial. The PUSHH doctoral fellow will substantially contribute to filling this gap by conducting analyses on key artifacts and introducing new standards in the study of ancient material culture. As part of the application process, candidates are required to devise a project using palaeoproteomic methods to further our understanding of the use of organic compounds in the African Middle Stone Age. Potential research aims might include: 1) Identification of the protein binders used liquefied ochre-rich mixtures from Blombos Cave, South Africa, dated to ~100 ka ago and considered among the first hallmarks of complex modern human cognition and/or 2) Analysis of the inner surface of ostrich eggshells from the key site of Klipdrift, South Africa, to identify possible protein residues deriving from foodstuff or beverages originally contained in the eggshells.

Qualifications and personal qualities:

- The candidate must have a master’s degree or equivalent in a relevant discipline and a background in biomolecular archaeology. Demonstrated experience in ancient protein and/or ancient DNA analysis applied to archaeological remains represents a valuable plus. Applicants who do not have a Norwegian master’s degree will be evaluated according to the regulations of the Norwegian Agency for Quality Assurance in Education (NOKUT).
- The applicant cannot have resided or carried out their main activity (work, studies, etc.) in Norway for more than 12 months in the past 3 years
- The applicant cannot have been awarded a doctoral degree previously and must be in the first four years (full-time equivalent research experience) of his/her research career, as of September 1st 2020.
- The candidate must demonstrate a strong commitment for scientific research, be able to work independently, in a structured manner and interactively in a team setting, be responsible, and have a high work capacity.
- The candidate must be willing to participate in the excavation of our Middle Stone Age archaeological sites in South Africa.
The candidate must demonstrate proficiency in both written and spoken English.

As Early Stage Researcher in PUSHH you are also expected to:

- Actively attend the mandatory network-wide activities.
- Travel for a mandatory secondment period (usually of the duration of a few months) at another institution within the consortium.

**We can offer:**

- A supportive, yet professionally challenging working environment.
- Salary at pay grade 54 (Code 1017/Pay range 20, alternative 10) in the state salary scale, currently NOK 479.200 gross p.a.
- Following ordinary merit regulations.
- Enrolment in the Norwegian Public Service Pension Fund.
- A position in an inclusive workplace (IA enterprise).
- Good welfare benefits.

**How to apply for the job:**

Please apply electronically via the link «APPLY FOR THIS JOB». The application must include:

- A dissertation proposal that also includes a presentation of the applicant's qualifications, research interests and motivation for applying for the position (max 5 pages).
- CV
- The names and contact information for two reference persons. One of these must be a supervisor from the master’s programme.
- An electronic version of the master’s thesis
- Scanned versions of original or certified copies of all academic diplomas and transcripts.
- Relevant certificates/references.
- List of academic publications (if any).

The application and appendices with certified translations into English must be uploaded at Jobbnorge. The enclosures can be submitted as Word- or pdf-files.

**General information:**

Principal supervisor is Professor Christopher Henshilwood, Department of Archaeology, History, Cultural Studies and Religion, University of Bergen. Christopher.Henshilwood@uib.no.

Start: Tentatively September 1st, 2020, but can be negotiated to be earlier or later.

Further information about the position can be obtained by contacting the Director of Centre for Early Sapiens Behaviour, Professor Christopher Stuart Henshilwood, tel. +47 55 58 90 99, e-mail: Christopher.Henshilwood@uib.no, or the Head of Department, Professor Jan Heiret, by e-mail jan.heiret@uib.no or telephone +47 55 58 97 62.

General information about PhD study at the Department of Archaeology, History, Cultural Studies and Religion, University of Bergen is available here: https://www.uib.no/en/hf/25050/doctoral-education-faculty-humanities.

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions. Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

The best qualified candidates for the position will be invited to an interview.

Questions or queries about the electronic application process can be directed to fakadm@hf.uib.no.

Further information about the appointment process here.

**Application deadline: 21 June 2020**

**UIB-ID: 20/5029**

**About The University of Bergen**

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdsheyden, Haukeland, Marineholmen, Mollelalsveien and Årstad.

There are four departments and four centres at Faculty of Humanities. Read more about the faculty and departments.

Jobbnorge-ID: 187813, Søknadsfrist: 21. juni 2020