



The Max Planck Institute for the Science of Human History (MPI-SHH) is a new research institution in Jena, Germany, that is exploring the application of novel methods to the study of the past. The institution includes three research departments – in Archaeology, Linguistic and Cultural Evolution, and Archaeogenetics – as well as several independent research groups. The institution's approach is interdisciplinary, offering unique opportunities for bridging the humanities and natural sciences, and exploring the intersection of cultural, biological and ecological transformations over the long-term.

The newly-established Department of Archaeology, under the direction of Dr. Nicole Boivin, is offering post-doctoral positions in a number of key areas, to begin 1 September, 2016, and running for two years, with the possibility of extension. We seek outstanding candidates who are keen to undertake ambitious field and laboratory projects addressing archaeological questions in various regions of the globe. Candidates should present a willingness to push the boundaries of existing methods, develop interdisciplinary research areas, and advance methodological and theoretical applications in archaeology.

Candidates should have a strong record of research and international, peer-reviewed publication in their chosen research area.

We seek the following:

1) Post-doctoral Researcher in Stable Isotopes

The successful applicant will have extensive and diverse experience in the application of stable isotope analysis to archaeological questions. The applicant should demonstrate in-depth knowledge, and experience, of the relevant equipment, laboratory procedures, and potential methodological and interpretational complexities involved. The specific research undertaken will be defined in collaboration with the supervisor, but should involve a focus on the use of stable isotope analysis on organic and inorganic archaeological remains to develop one, or more, of the following: 1) an understanding of intra- and/or inter-societal differences in prehistoric and historical human diets over different temporal and geographical scales; 2) detailed human stable isotope ecologies in various environments; 3) an understanding of human mobility, and transitions in patterns of mobility, in particular temporal and geographical contexts; and/or 4) novel, 'on-site' palaeoenvironmental proxies.

2) Group Leader/Post-doctoral Researcher in Proteomics

The successful applicant will have a strong background in the application of proteomics in archaeology. An understanding of current methods (e.g., MALDI and MS/MS), developments and the diversity of potential applications of this approach are essential. The successful applicant will develop an ambitious program of research that addresses key archaeological and biological research questions and envisions new ways to apply proteomic tools and move the field forward.

3) Post-doctoral Researcher in Dental Calculus Studies

The successful applicant will have a thorough understanding of the possibilities and limitations



of dental calculus studies in archaeology, and experience in the application of the method to examine diet, disease, environment, life history, and/or other features of the past. The specific research undertaken will be defined in collaboration with the supervisor, but should address key research questions in African or Eurasian prehistory, and involve a clear and realistic plan for the acquisition of required samples. This post will involve collaboration with Dr. Christina Warinner (Oklahoma/MPI-SHH) and/or Dr. Alison Crowther (University of Queensland).

4) Post-doctoral Researcher in Archaeobotany

The successful applicant will have a strong background in archaeobotany, and particularly the use of advanced microscopic techniques to analyse starches, phytoliths and/or parenchyma. We particularly encourage applications from researchers with interest and experience in the study of tropical vegetative crops. The specific research undertaken will be defined in collaboration with the supervisor, but will ideally seek to contribute to better understanding of vegetative crop histories in regions of central interest to the Department, such as Africa or Asia. Potential projects might draw on samples available from Sealinks Project research in eastern Africa and Sri Lanka. This post will involve collaboration with Prof. Dorian Fuller (UCL, UK) and Dr. Alison Crowther (University of Queensland).

5) Post-doctoral Researcher in Pleistocene Archaeology

Candidates are sought to lead interdisciplinary, collaborative field projects in diverse regions. The successful applicant will have a strong background in field archaeology, with extensive experience of Pleistocene archaeological excavation, field supervision, report writing and publication. He/she must be able to demonstrate a thorough knowledge of key issues and debates in human evolutionary studies. Knowledge and experience of digital technologies and GIS is advantageous. This post will involve collaboration with Prof. Michael Petraglia (Oxford/MPI-SHH).

6) Post-doctoral Researcher in Holocene Archaeology

Candidates are sought to lead interdisciplinary, collaborative field projects in Africa and Central and Southern Asia. The successful applicant will have a broad knowledge of major issues in global archaeology, and an interest in developing, designing and directing field projects aimed at exploring major cultural transitions and demographic transformations in human history. Projects that engage with linguistic and genetic evidence, and that apply new methods in archaeological science are particularly encouraged. Candidates should have extensive experience of Holocene archaeological excavation, field supervision, report writing and publication. Knowledge and experience of digital technologies and GIS is advantageous.

7) Post-doctoral Researcher in Palaeoenvironmental Studies

Applications are sought from researchers with experience in the application of climatic data, particularly from palaeolake drilling projects, to address archaeological questions. The successful applicant will have a wide-ranging knowledge of different palaeoenvironmental proxies in marine and terrestrial sequences. The specific research undertaken will be defined in collaboration with the supervisor, but proposals in this area should focus on multidisciplinary approaches to linked palaeoclimatic, palaeoenvironmental, and



archaeological questions. This post will involve in-depth collaboration with Prof. Michael Petraglia (Oxford/MPI-SHH).

8) Post-doctoral Researcher in Computational Modelling

For this post we particularly encourage applications that take a quantitative modeling approach to understanding archaeological records through scenario development and hypothesis testing. The successful applicant will have a strong background in GIS and spatial modelling, and the ability to develop her/his own computer codes. Archaeological field experience is desirable, but not essential. The specific research undertaken will be defined in collaboration with the supervisor, but should involve the creation of novel datasets and collaboration with earth system scientists, e.g., paleoclimatologists, geomorphologists, etc. Potential projects include understanding the influence of Holocene climate change and the development of long-distance livestock trade on the land cover of central and southern Asia, or the mapping of demographic shifts and population movements through proxy data. This post will involve in-depth collaboration with Profs. Dorian Fuller (UCL, UK), Jed Kaplan (Lausanne, Switzerland) and Russell Gray (MPI-SHH).

How to apply

Please submit an application consisting of a letter of motivation, a CV, and a 2-page (max.) proposal in English to da-jobs@shh.mpg.de by **25 April, 2016**. This should be sent as a single pdf with the documents in the order listed above. Please indicate the specific post applied for in the subject line. Please also ask three referees to send confidential letters of reference in English to da-jobs@shh.mpg.de by the deadline.

The proposal should outline one or more projects that can be completed in a 2-year time frame, with details of intended outputs. Assessment of proposals will focus on the applicant's ability to design and effectively outline a project and research strategy, and may be refined in consultation with the supervisor and/or collaborators should the application be successful.

Preference will be given to proposals that:

- 1) Address one or more of the themes (http://www.shh.mpg.de/142379/research_themes) and/or key research topics (<http://www.shh.mpg.de/147998/topics>) of the Department of Archaeology
- 2) Employ an innovative approach to tackle an important research question or set of questions
- 3) Demonstrate strong theoretical grounding and an excellent research design
- 4) Involve interdisciplinary collaboration with researchers using other methods both within the Department of Archaeology and across the Max Planck Institute for the Science of Human History (MPI-SHH)
- 5) Have a broad geographic focus and/or a focus on Eurasia or Africa
- 6) Demonstrate ambitious aims and achievable outputs.

For **queries**, please contact Ms. Irene Weinzierl at weinzierl@shh.mpg.de.