



Postdoctoral Research Fellowship in Palaeoproteomics/ZooMS (f/m/d)

The Max Planck Society is one of Europe's premier research organisations, with a talented, multinational workforce. Based in Jena, Germany, the Max Planck Institute for the Science of Human History is a leading global centre for the study of the human past. The institute's Department of Archaeology is focused on developing and implementing cutting-edge new methods for exploring our species' evolutionary origins and development. To do this, we work at the interface of multiple disciplines, including archaeology, biology, ecology, and evolutionary studies. We benefit from rich international partnerships, and exceptional research facilities. Our student and post-doctoral community is international and diverse, and we are committed to attracting, retaining and developing the best global talent within an environment that enables our staff to realize their full potential. Our working language is English.

Our Palaeoproteomics Group employs novel analytical advances in palaeoproteomics to explore diverse topics from the Late Quaternary extinction of megafauna to the prehistoric origin and spread of dairying and lactase persistence. We draw upon LC-MS/MS data to reconstruct evolutionary relationships and identify proteins to reconstruct ancient diet, health and lifestyle. We also employ peptide mass fingerprinting to rapidly identify collagen-containing material in the archaeological record, including fragmented and worked bone, leather, and ivory. We draw on these identifications to examine diverse evolutionary and ecological issues, including human-mediated species extinctions, extirpations, translocations, the spread of domesticated animals, reconstruction of species diversity, and the distribution and dispersal of archaic and extant Homo lineages.

We are recruiting a **Postdoctoral Research Fellow in Palaeoproteomics, ideally with an emphasis on Zooarchaeology by Mass Spectrometry (ZooMS)** to join our Palaeoproteomics team. We seek an ambitious and highly-motivated scientist to develop and apply collagen fingerprinting-based methods to the analysis of archaeological remains. The Postdoctoral Research Fellow will perform collagen extraction and purification from bones and other collagenous samples, and undertake analysis of MALDI-TOF-MS data for taxonomic classification, and LC-MS/MS data for the development of new ZooMS reference markers. Successful candidates will undertake their own cutting-edge research in ZooMS, collaborate on department and partner projects, and participate in further development of palaeoproteomics methods as part of the team. They will be expected to co-supervise students and support ZooMS training within the broader Palaeoproteomics team.



The Max Planck Institute for the Science of Human History provides a research-focused environment for scholars to develop innovative, world-leading projects. Research Fellows are expected to publish findings in top-tier, international research journals, and to support media interest in their research. The successful applicant will be responsible for independent research and data analyses, supervision, planning, collaborations and outreach. The Research Fellow will join a multidisciplinary, international team of researchers and PhD students, and will be encouraged to work with other researchers in the Department as well as internationally.

Qualifications

We seek a Research Fellow with a passion for cross-disciplinary, team-oriented research, and an ability to work efficiently and complete projects in a timely manner. The successful applicant will have a proven track record of peer-reviewed publication in their relevant discipline.

Essential qualifications:

- Have or about to obtain a PhD in Archaeological Science, Archaeology, Bioinformatics, Proteomics, Computational Biology, or related natural science discipline
- A strong record of peer-reviewed publication
- Proficiency in working with protein bioinformatics tools including at least one of the following programs: MASCOT, Byonic, MaxQuant, TPP, mMass, FlexAnalysis
- Demonstrated strong programming skills in at least one scripting or programming language (e.g. R, shell scripting, Python, Perl, etc.)
- An interest in developing and advancing the study of ancient proteins
- Effective time management skills and ability to efficiently coordinate research analyses through to publication
- Excellent communication and presentation skills with proficiency in written and oral English
- Absolute reliability and a strong sense of responsibility
- Experience and interest in training students in proteomic methods and theory
- Ability to work independently
- Ability to multi-task, find creative solutions to problems when necessary, and meet tight deadlines.

Our offer

- A full-time 3-year position (with the possibility of extension as well as



promotion to Group Leader) within an exciting, international and diverse professional environment promoted by an open culture and a spirit of community. Remuneration will follow the public service pay scale (TVöD), according to the candidate's qualifications and experience. In addition, social benefits are offered as per the regulations of the German Civil Service.

- A lively, friendly, and active working environment within an Institute that hosts a broad variety of projects, workshops, conferences, meetings, speakers and other events.
- Membership of a Department that prioritises training students and postdoctoral researchers not only in research methods and skills, but in all aspects of academic life, including professional development training to ensure our students and postdoctoral researchers reach their best potential, and are fully prepared for the job market, for applying for funding, and for dealing with the challenges of academic life. The success of this approach is reflected in our placement rates; although we are a young department, we have a strong record of placing postdoctoral researchers in tenure-track and other academic positions.
- A flexible start date, though we ideally aim to fill the position as soon as possible. A remote start due to the pandemic might be possible in certain circumstances.
- The successful candidate will be based at the Department of Archaeology, Max Planck Institute for the Science of Human History, Jena, Germany.

The Max Planck Institute for the Science of Human History is located in the university town of Jena, situated in the heart of Europe. The second largest city in Thuringia, Jena is a centre of education and research, and home to one of Germany's oldest universities as well as several other Max Planck institutes and research centres. The Institute's facilities are set in the environment of a clean, green city set within the Saale river valley. Public transit links to nearby towns, including the UNESCO-listed cultural centre of Weimar, are excellent. Jena is ranked amongst Germany's most family-friendly cities.

The Max Planck Institute for the Science of Human History offers flexible work hours and terms of employment that promote in as far as possible employee work-life balance. Education and training are also provided based on employee needs. The Institute assists incoming staff members and their families in settling in their new location.

Application

The Max Planck Society is committed to employing more individuals with disabilities and especially encourages them to apply. The Max Planck Society also

Max-Planck-Institut für Menschheitsgeschichte

Max Planck Institute for the Science of Human History



MAX-PLANCK-GESELLSCHAFT

seeks to increase the number of women in the sciences and therefore explicitly encourages women to apply. We are committed to encouraging diversity and actively challenging biases based on gender, nationality, ethnicity, sexual orientation, religion and other components of identity.

To apply, please submit by 19 January, 2021 a cover letter outlining your motivation for applying for the position, a Research Statement indicating your experience and interests with respect to palaeoproteomics (2 pages maximum, not including references and figures), your CV, and your undergraduate, Master's and PhD transcripts. Three referees should also submit reports by the deadline and it is the candidate's responsibility to request these. They should be submitted through the application portal. Applications without a cover letter, a Research Statement and at least 2 reference letters will not be considered.

Submissions will only be accepted if they are sent through the online application portal and are received in full by **19 January, 2021**.

https://lotus2.gwdg.de/mpg/mjws/perso/shh_p035.nsf/application

If you have any questions about the application process, please contact dasecretary@shh.mpg.de. For questions about the research and position, please contact Professor Nicole Boivin (boivin@shh.mpg.de), Director of the Department of Archaeology.