

**Postdoc position (TV-L E13, 100%)
Römisch-Germanisches Zentralmuseum (RGZM), Mainz, Germany**

Mathematical Modelling of Cultural, Environmental and Population Dynamics

The Römisch-Germanisches Zentralmuseum in Mainz, Germany, is an internationally operating Research Institute for Archaeology within the Leibniz Association.

In partnership with the department for Archaeogenetics at the Max Planck Institute for the Science of Human History (MPI SHH) in Jena, Germany, we offer a position for a Postdoc in Archaeology (TV-L E13, 100%) for two years, starting in early 2019, with the possibility of extension. The position forms part of an international collaboration project titled

'INTERACT - Human interactions during the Mesolithic-Neolithic transition in Western Europe: The dual perspectives of cultural and biological exchanges'

jointly funded by the Deutsche Forschungsgesellschaft (DFG) and the Agence Nationale de la Recherche (ANR). The research focus is human prehistory and gene-culture coevolution between the Mesolithic-Neolithic transition and the Late Neolithic in central and western Europe. Tasks involve the synthesis of archaeological, ecological and genetic data by establishing and using novel scientific and computational approaches.

The candidate will collate and augment existing databases of archaeological sites, radiocarbon data, genetic and isotopic studies, and general distribution information of archaeological cultures/entities for the entire study area (e.g. dASIS at RGZM/Mainz, CIMO Project, GDR Chasséolab, EUROEVOL, etc.). On the basis of these data, the candidate will develop research questions on regional and supra-regional scales, but also for key contact/exchange, to be investigated using demographic/spatial models. These results will serve as the basis for integrating archaeological narratives on the dynamics of migration, retreat, contact and exchange, with data from genetics.

Importantly, the empirical archaeological and genetic data will enable the testing of various detailed demographic, interaction and gene-culture coevolutionary scenarios. To this end, the candidate will develop and use advanced statistical methods to model and explore meaningful parameters in scenarios of diffusion through space and time.

The ideal applicant should have completed a PhD in mathematics, informatics, computer science or archaeology and relevant neighbouring disciplines, should have a strong computational or statistical background and experience working with large datasets. Ideally this would be combined with a demonstrable interest in the long-term human past. Prerequisites also include evidence of strong oral and written communication skills, team spirit, and the ability to complete tasks in a timely and structured fashion.

English is a prerequisite and French is desirable. A basic command of German would be helpful for administrative purposes.

You will partly also be based at the MPI SHH in Jena.

Advance inquiries about the position may be mailed collectively to:

Prof. Dr. Detlef Gronenborn, E-mail: gronenborn@rgzm.de

Dr. Wolfgang Haak, E-mail: haak@shh.mpg.de

Dr. Adam Powell, E-mail: powell@shh.mpg.de

The Römisch-Germanisches Zentralmuseum promotes women and encourages especially women to apply. Candidates with disabilities will be given priority in case of the same professional qualification. A part-time employment is principally possible and may be negotiated in accordance with the specific personal and employer requirements.

Please submit a letter of interest detailing how you meet the qualifications, curriculum vitae (indicating previous academic performance indicators, publication history, and prior research experience), and contact information for at least two references. All applications must be submitted via our web-portal: www.rgzm.de > ÜBER UNS > Stellenangebote .

Submission deadline is January 31st, 2019.