

## Max-Planck-Institut für evolutionäre Anthropologie - Zentrales Bewerbermanagement

The Max Planck Institute for Evolutionary Anthropology unites scientists in the natural sciences and humanities to investigate the history of humankind from an interdisciplinary perspective, with the help of comparative analyses of genes, cultures, cognitive abilities, languages and social systems of past and present human populations as well as those of primates closely related to human beings.

# Postdoctoral position on "The Evolutionary Dynamics of Multilingualism" (m/f/d)

City: Leipzig; Starting Date: At the earliest possible; Duration: 2 years;

Renumeration: TVöD; Reference number: FT-21-2024; Closing date: 20/12/24

## **Working field**

Dr Heidi Colleran is seeking qualified applicants for a fully-funded two-year postdoctoral project on "The Evolutionary Dynamics of Multilingualism". This postdoctoral project is the core modelling component in the multi-sited ERC-funded project "Multilingual worlds – neglected histories. Uncovering their emergence, continuity and loss in past and present societies" (MULTILING-HIST), led by Principal Investigator Prof Justyna Olko at the University of Warsaw https://culturalcontinuity.al.uw.edu.pl/projects/multilingual-worlds-neglected-histories-uncovering-their-emergence-continuity-and-loss-in-past-and-present-societies-multiling-hist/.

The position is based at the Max Planck Institute for Evolutionary Anthropology in Leipzig, in the BirthRites Lise Meitner Research Group, hosted by the Department of Human Behavior, Ecology and Culture.

The MULTILING-HIST project explores multi-level dimensions of historical and contemporary multilingualism: (1) the presence of multilingualism in local and regional settings; (2) the characteristics and dynamics of such multilingual settings, in other words, societal multilingualism. The fundamental aim of the project is to reconstruct, explain and better understand the mechanisms and causality of the processes behind the emergence, continuity, reduction and loss (as well as possible re-emergence) of multilingualism in differing historical, geographical, social, political and cultural contexts. The project studies historical and contemporary multilingual milieux from four regions relevant for understanding the causal structure of multilingual trajectories: Central-Eastern Europe, Mesoamerica, South Africa and the Archipelago of Vanuatu. The case studies also offer a novel possibility to study the 'invisibility' of multilingualism and uncover its neglected history(ies). A multidisciplinary approach combines historical and present-day data, qualitative, quantitative and experimental methods, as well as mathematical and simulation modeling, data-driven mapping and GIS based analyses.

#### Requirements

Suitable candidates trained in computer science, computational (social) science, or any



relevant discipline involving micro-or macro-simulation are strongly encouraged to apply. Candidates interested in transitioning to industry following the position are also welcome.

#### Essential

- PhD in a relevant field at the start of position
- excellent programming skills, ideally in Python, Julia or C++
- experience developing simulation models from scratch, ideally in a social science domain
- experience collaborating with researchers in behavioural / social sciences or humanities
- excellent communication, documentation and presentation skills
- ability to work with an international team, including with non-modellers
- ability to work with other modellers and computational scientists, especially to collaborate on joint workflows, integrated coding and existing software infrastructures
- willingness to travel to and participate in international workshops
- demonstrated problem-solving ability

## Desirable

- experience with generative inference methodologies
- experience working on linguistic, anthropological, demographic or evolutionary research topics
- knowledge of literature in cultural evolution, evolutionary anthropology, linguistics or demography
- interest in dynamics of multilingualism both historically and in contemporary contexts, sociolinguistics, inter-group interactions, cultural and linguistic diversity
- interest in public and community outreach and collaboration

#### **What We Offer**

#### Aims:

The aim of this project is to develop generative simulation models of the dynamics of historical and / or contemporary multilingualism, informed by historical and present-day data as well as informal models from published literatures in linguistics, anthropology and other humanities and social science fields.

## Project tasks include:

- The instantiation of a qualitative arguments (informal models) into modeling assumptions for use in either micro or macro-simulation projects.
- The use of generative (forward) simulation and inference methods.
- Ideally interfacing with primary data collected in our core study sites using mixed-methodologies related to: social, demographic, historical and economic factors relevant to multilingualism; language attitudes, behaviours, identities and ideologies; experience of and (strategic) use of multiple languages in real-world contexts.
- Preparation of co-authored publications resulting from the research.
- Collaboration with other team members in an international and multidisciplinary project, including basic training in modelling.

The candidate will be a core member of an international research team focused on the MULTILING-HIST project aims, and will participate in the broader activities of the group (including travel to joint meetings). In addition to their individual research, the candidate will have opportunities at MPI-EVA to develop collaborative projects in the BirthRites Lise Meitner Research Group led by Dr Heidi Colleran, and to interact with world-class researchers in the fields of human behavior, cultural evolution, computational social science and anthropology.

#### Funding:

The postdoctoral candidate will be fully funded by the MULTILING-HIST project. Salaries are determined according to the German public service pay scale (TVöD).



## **Application**

Applications should include:

- Cover letter describing how you meet the essential and / or desired requirements, including details of past research projects and relevant experience (not more than 2 pages)
- Curriculum vitae, including the names of three professional references
- Reprints of two selected publications or writing samples
- Short description of any software or modelling solutions developed (including examples of challenges faced in implementation and problem-solving approaches used)

All electronic applications received by December 20th 2024 will be considered. Current PhD students finishing in 2024 are also encouraged to apply. Since our timeline is fixed, the start date is ideally beginning of 2025.

Please apply online via our online application system (link via the job ad on our career website). Only complete submissions via this link will be taken into consideration. Deadline for applications is 20 December, 2024.

The Max Planck Society is committed to equal opportunities and to employing individuals with disabilities and explicitly encourages them to apply. Additionally, the Max Planck Society wishes to increase the proportion of women in areas in which they are underrepresented; women are therefore explicitly encouraged to apply. Finally, we wish to encourage researchers from underrepresented countries in the Global South, as well as from any other underrepresented demographic, to apply.

Further information on the institute is available at http://www.eva.mpg.de/. Information on the BirthRites research group is available at https://www.eva.mpg.de/birthrites/.

Weitere Informationen unter <a href="https://stellenticket.de/189612/">https://stellenticket.de/189612/</a> Angebot sichtbar bis 21.12.2024

