

Faculty/Department:	Humanities
Seminar/Institute:	Asien-Afrika-Institut

Pending funding, Universität Hamburg invites applications for a Research Associate for the **project "The Early Islamic Empire At Work"** in accordance with § 28 (3) of Hamburg's Higher Education Act (HmbHG^{*}). The position commences on April 1, 2015.

It is remunerated at the salary level TV-L and calls for 39 of work per week.

The short-term nature of this contract is based upon § 2 of the Academic Short-Term Labor Contract Act (WissZeitVG). The term is fixed 1 year, with possible extension.

The University aims to increase the number of women in research and teaching and explicitly encourages women to apply. Equally qualified female applicants will receive preference in accordance with Hamburg's Higher Education Act (HmbHG).

<u>Tasks:</u>

Duties include academic services in the project named above. Research associates can also pursue independent research and further academic qualifications.

Area(s) of Responsibility:

The Early Islamic Empire at Work is a historical research project based at Hamburg University and focused on the question of how the early Islamic empire (7th-10th century CE) functioned on the ground in five of its provinces. The main task of the applicant will be to develop and implement a database in close cooperation with the research team. The database will contain data on the political and economic elites in the project areas. It will use the MyCoRe platform (www.mycore.de), developed by a number of German institutions, in order to guarantee the maintenance of the database by the University after the end of the project. The database will run on the servers of Hamburg University so it can be accessed by all members of the research project at the same time.

A preliminary schema for the database has been developed, and first experiments with data input through Excel-based forms have been carried out. This data is currently stored in CSV format and will have to be incorporated into the database. The applicant will have to devise, in cooperation with the team, a well-suited data-input procedure and a user interface.

A crucial aspect of the research undertaken in the project involves the spatial analysis of data. The software of choice for this task is QGIS. Therefore, another important task will be the development of an API that connects the database system with QGIS, so we can make queries against the database that can be geographically displayed. In addition, we plan to use the D3.js library for data visualization using maps.

Most of the data used in this project will be in Arabic, so basic familiarity with this language is an advantage, and willingness to get acquainted with the basics is a fundamental requisite. As the project's working language is English, a very good working knowledge of English is absolutely

* Hamburg Higher Education Act

** Full-time positions currently comprise 39 hours per week.



essential. The documentation for MyCoRe is currently only available in German, so a good reading knowledge of German is also indispensable.

Other tasks in the project will include occasional help with the development of the project website and assisting staff with the development of data mining tools implemented in Python.

We offer a challenging and interactive, research-driven working environment. You will be working in a friendly and cooperative team that works closely together to reach its research goals. The team is also foraging into uncharted terrain in the Digital Humanities, developing data mining tools for Arabic texts. The applicant will contribute to this groundbreaking work, and will have the opportunity to co-author publications on this subject.

Requirements:

A university degree in a relevant subject Working experience in database development, e.g. db2 or PostgreSQL Experience with repository systems (e.g. Fedora), preferably MyCoRe Knowledge of Java and JavaScript

Ability to work in an interdisciplinary team Willingness to learn fast Good analytical skills Ability to communicate efficiently about technical issues with project members less versed in information technology Very good working knowledge of German and English

ADDITIONAL DESIRABLE SKILLS AND KNOWLEDGE: Basic knowledge of a Semitic language, preferably Arabic Previous cooperation with scholars in the Humanities Experience with Apache Solr / Lucene Experience with data visualization GIS XML databases: knowledge of XML schema definition, data modeling, and XML-related technologies (XSLT, XQuery, XPath, XSL)

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact <u>mailto:stefan.heidemann@uni-hamburg.de</u> or consult our website at <u>http://www.islamic-empire.uni-hamburg.de/</u>.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is March 15, 2015. Please send applications to: stefan.heidemann@uni-hamburg.de