

Information

Submission of a proposal for the Junior Research Group „Digital Methods and Research Quality“ (Reference: Rf. 313) of the Objective 3 – Advancing Research Quality and Value of the Berlin University Alliance

I. Aim

The funding is aimed at outstanding early-career researchers in the natural sciences, life sciences, engineering, social sciences, and humanities. Within the framework of a four-year junior research group, they will be given the opportunity to develop and implement their own research project on a topic in the field of research quality or related topics such as “Open Science” or “Responsible Research and Innovation.” A particular focus is directed at the strengthening of structures and processes of the partner institutions of the Berlin University Alliance, which, as a new compound in the German-speaking area provides a theoretical and empirical framework for several institutions. Against this background, the Junior Research Group to be funded will have to develop adequate and complementary measures for the continuous safeguarding and improvement of research quality at the Alliance’s institutions and beyond.

II. Content

The increasing digitization of science raises pressing questions about the relationship of digital methods and infrastructures to research quality, while promising solutions to the crises within science. The topic of digitization and research quality is also changing the research process itself and touches on essential aspects of the scientific production process, including ensuring research quality through public pre-registration, transparent electronic lab books, through quality criteria for data quality such as the FAIR initiative, digital infrastructures and tools, and the reusability of research data within science and society. In addition, digital research practice also changes the requirements imposed on researchers, e.g. with regard to skills and resulting potential needs for training and further education, new technical challenges, or changed incentive structures for career-relevant data curation. However, the potential gains from incorporating digital methods and tools in the research process are also faced with barriers, for example, due to questions of archiving, reusability, etc.

The digitization of the research process does not only concern the technical dimension of automatically generated data, data collections and the integration of data and their validation in digitally conducted experiments or surveys. It also touches questions on aspects such as the evaluation, reflexivity and further development of digital approaches and their interactions with the research process itself. With the aim of contributing to the continuous improvement of research quality, problems of data governance, especially with regard to the legally compliant usage of digital methods and the subsequent use of data over a multitude of disciplines and research questions will be brought into focus. Another task is to ensure the transparent integration of non-scientific actors and their needs in digitized research processes and thus to enhance science communication.

Against this background, the announced junior research group should meet the following criteria:

- The junior research group will contribute to the research and better understanding of practices, infrastructures, and processes by means of which digital methods and tools influence, for example, the generation, collection, validation, accessibility, reusability (including reproducibility) of research results and thus their research quality (e.g., initiatives for the automated verification of research results or the evaluation and maintenance of research data based on new criteria).

- In particular, it should integrate meta-studies and approaches from computer science to work on the research project and contribute exemplarily to a deeper understanding of the application of digital methods, infrastructures, and tools of a discipline or research field (e.g., possible solutions for subject-specific data in rare formats (languages/scripts/etc.) whose curation and sustainability cannot be guaranteed with common models/standards).
- The research topic of the junior research group should go beyond basic research and have or establish an application reference, i.e., the transfer and implementation of the findings into university or research practice should be considered from the beginning in the research design, also with regard to the potential of digital methods for initiating and supporting research cooperation and networking (especially of smaller subjects with internationally dispersed institutions).

The junior research group is to be established at one of the partner institutions of the Berlin University Alliance whose profile can make a substantial contribution to the general topic of the group as well as to the specific research project. The receiving institution must provide evidence in a cover letter that the junior research group will be integrated into the institution's research program in terms of structure and content. The group leader designs the project independently and assumes responsibility for the professional management of the group.

In agreement with the supervising institution, the head of the research group should assume the supervision of the doctoral candidates assigned to it. In the cover letter of the receiving institution, it must be stated to what extent the group leader will be given the opportunity to guide doctoral candidates from the junior research group to doctoral studies. If it is not possible to transfer the right to award doctoral degrees to the group leader, it must be explained in detail how supervision will be ensured.

Where possible, the gender ratio within the research group should be balanced.

III. Pre-requisites / Eligibility

The Junior Research Group's call for proposals is aimed at outstanding researchers with a doctorate who would like to establish a junior research group in the field of research quality and open science, affiliated with a partner institution of the BUA. The junior research group leader is employed at the institution with which the junior research group leader is affiliated. Employment is for a period of 4 years and 2 months. The employment relationships of the junior research group leaders are contractually agreed as guest lectureships and include a teaching obligation.

Researchers with a doctorate whose degree was awarded no more than 4 years ago are eligible. Deviations from this threshold are possible in exceptional cases (childcare or nursing periods, professional activity outside the research sector)

Researchers who have already completed their habilitation cannot be considered; the same applies to researchers who are already supported by another funding organization as junior research group leaders (e.g., DFG Emmy Noether Program, ERC Grants, Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung, BMBF*)).

Applicants must include a Letter of Intent (LoI) from the institution where the group is to be located (depending on responsibility, department/faculty/institute/campus). This institution must be part of a partner institution of the BUA. The following aspects are to be addressed in this LoI:

- Assurance of support for the junior research group leader in all project-related matters as well as the work opportunities required for the implementation of the project (premises, access to research literature and infrastructure, access to further education opportunities, etc.); statement of the extent to which the junior research group will be integrated into the research program of the institution in terms of structure and content.

- Explanation of whether the junior research group leader is given the opportunity to guide doctoral candidates from the junior research group to the doctorate or presentation of how supervision is guaranteed as an alternative. Demonstration of how doctoral students will continue to be supervised should the junior research group leader leave the institution before the end of the funding period.

Fundable costs:

1. Lump sum for position of junior research group leader based on TV-L EG 14/15. Job share 100 %, incl. compensation for VBL-benefits. Compensation is based on the rules of the institution with which the junior research group is affiliated.

2. Staffing of the junior research group

Research assistant [1.5 FTE] (pre- or postdoc level)

Employment of personnel shall be in accordance with the specifications of the receiving institution. Research assistants have regular teaching responsibilities. Upon request and subject to available funds, up to 0.5 FTE administrative staff may be applied for.

3. Material costs can be applied for as follows:

A lump sum of 20,000 euros per year is available to the junior research group for material costs, e.g., for travel and accommodation expenses for the academic staff, smaller equipment and soft-ware, publications, and other material costs (contract awards, funds for further training, etc.). The funds are managed in accordance with the budgetary requirements of the State of Berlin.

Personnel and material costs (2 and 3) are eligible for cover.

The following documents need to be submitted (please find all templates mentioned below on the website of the Objective 3:

<https://www.berlin-university-alliance.de/en/commitments/research-quality/jrg-digital/index.html>)

- Proposal with a maximum of 15 pages (font size 11, Arial with a minimum line spacing of 1,15 x).
 - Please confer section 6.3 of the call for the structuring of your proposal
- Financing plan (please use the template “budget” on the website of the Objective 3)
 - For the remuneration of the staff, please use the personnel rates of the German Research Foundation (https://www.dfg.de/formulare/60_12/60_12_en.pdf).
- CV of the group leader (please use the template “CV” on the website of the Objective 3) including:
 - publication list highlighting the ten most relevant publications
 - research data generated and published
 - details of relevant research projects
- Detailed statement of the receiving institution (Letter of Intent)
 - Please conf. call junior research group “Research Quality in and across Disciplines”, section 6.3 / 4.3. for more detailed information on the draft of the LOI
- If applicable: Letter(s) of support of the affiliated institution(s) of the Berlin University Alliance
- Draft of job offer for proposals for the positions of doctoral candidates / postdoctoral researchers
- Other supporting documents / references / letters of intent

Application deadline is 1 August 2021

For any questions concerning the call, please contact the CORE team (Dr. Sybille Hinze, Head of CORE; Dr. Stefan Skupien, Scientific Coordinator Open Science; Nele Albrecht, Scientific Coordinator Research Quality) at:

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