Call for Proposals as Part of the Berlin University Alliance

Objective 3: Advancing Research Quality and Value

Call for Proposals: Research Quality and Open Science

Start date of call for proposals: December 3, 2020

End date of call for proposals: January 28, 2021, extended to February 15th 2021

Expected start date of funding: April 15, 2021, latest date for project start September 2021

If you have troubles finding your application drafts, please follow this link to log in:

https://portal.bihealth.de/portal/SitePages/Home.aspx

Overview of Call for Proposals:	
Funding objective	Within two thematic lines "Research Quality and Open Science" funding will be provided to pro- jects from all disciplines that support the expan- sion and networking of scientific expertise on re- search quality and open science in the Berlin re- search area. Projects should contain a concept for implementing concrete measures to continu- ously safeguard research quality and to open up science within the alliance. New disciplinary ap- proaches as well as transfer capability to other disciplines are particularly welcome.
Addressees of call for proposals	Professors, post-doctoral researchers, as well as managerial staff and post-doctoral employees from research-support areas.
Terms	Max. two years
Earliest start date of funding	March 15, 2021; projects can specify the desired project start date in their proposals. Projects must start by September 2021 at the latest.
Amount of funding	Minimum 25,000 euros to maximum 150,000 eu- ros per annum
Object of funding	Human and material resources



Background: By founding the Berlin University Alliance, the partner institutions, namely Freie Universität Berlin, Humboldt-Universität zu Berlin, Technische Universität Berlin, and Charité — Universitätsmedizin Berlin, set themselves the ambitious target of working together to develop Berlin as an integrated research area with specific dedication and commitment to the topics of research quality and open science. By creating synergies and a balance between research and implementation, the aim is to bring sustainable improvement to the institutions of the Berlin University Alliance.

"Objective 3: Advancing Research Quality and Value" draws on and combines the various scientific expertise from the partner institutions and thus supports the Berlin University Alliance in implementing its objectives. The Center for Open and Responsible Research (CORe) channels this expertise to produce elements and guidelines for the development and establishment value-based research governance. This is supported by research activities within the field of Research and Reflection on Research Quality (R3Q). Research working groups will address questions concerning the quality and value of research, and will also test and evaluate the implementation of new measures. Ultimately, they aim to create a platform for researchers that stretches beyond disciplinary boundaries. The Berlin open science initiative OpenX will provide incentives for openness and transparency in research. In doing so, it aims to effect change in science and scientific practice in terms of its implementation, communication, accessibility, distribution, and evaluation, including the development of a new type of error culture. The CORe together with the research on and the development of measures for research quality and open science are key elements of the proposal as part of the Excellence Strategy of the Federal Government and States. They help support the integration of the Berlin research are.

Funding objective: With the two funding lines "Research Quality and Open Science", Objective 3 seeks to implement the goals in an open call for proposals. Funding will be provided to projects from all disciplines that support the expansion and networking of scientific expertise on research quality and open science in the Berlin research area. PRojects should also contain a concept for implementing concrete measures to continuously safeguard research quality and to open up science within the alliance. Here, new disciplinary approaches as well as transfer capability to other disciplines are particularly welcome.

Object of funding: Funding is provided to projects that conduct research on questions relevant to the topics of research quality and open science, and in doing so implement relevant methods and processes or prepare them for implementation. According to the goals of Objective 3, applicants from research, education, and services supporting research (e.g. libraries, data centers) are invited to submit their proposals. Projects should address one of the following lines but can also cover cross-cutting themes of research quality and open science.

In the event of a successful application, applicants must be prepared to network with other topicrelevant projects and/or objectives within the Berlin University Alliance, in particular Objective 5 – Sharing Resources or with the CCTs (Cross-Cutting Themes: Diversity and Gender Equality, Teaching and Learning, Internationalization).



Line 1: Research Quality

The Berlin University Alliance has set itself the objective of making an essential, integrative contribution to the current (international) discourse on research quality and promoting efforts to improve the frameworks for research culture.

The aim is to create both a theoretical and empirical basis that allows the multilayered construct of research quality to be realized by identifying relevant dimensions of research quality and developing and operationalizing criteria for analysis and evaluation. The aim is to develop on this basis processes of quality assurance and standards for research (for example, transparency, reproducibility of scientific research results, access to research data and documentation thereof) that support the safeguarding of sustainable research quality and also the establishment of an error culture. Disciplinary and research-cultural differences must be taken into account. In addition to the (comparative) exploration of understanding research quality across the various disciplines, there is a particular focus on creating new criteria for measuring and evaluating research quality. Traditional evaluation and selection methods (quantitative and qualitative) are to be examined in terms of their adequacy and in comparison, with new formats, in order to potentially assess and develop suitable quality criteria and evaluation procedures. Common practices used in the assessment and appreciation of research performance in the academic system are to be examined in order to ascertain the extent to which these adequately cover members as a whole and the specific consequences that result from potential inadequacy (e.g. concentration of publications in high-impact journals versus efforts to pursue open access publications, appreciating individual versus team performance, focus on evaluating research versus teaching performance, etc.). This also covers the area of professional development and decision-making relevant in this context (e.g. recruitment processes, decisions on removing time limits, appointment processes, etc.). In addition, the question of whether and which evaluation and incentivization procedures are sustainable and appropriate, and should be applied in an open and transparent system (keyword, among others, "responsible metrics") should be addressed.

The main objective of "funding line 1: Research quality" is developing and implementing strategies that enable research quality to be evaluated and, on this basis, result in a sustainable improvement of research quality at the institutions of the Berlin University Alliance. Against this background, the call is aimed at research-oriented project proposals with an application focus from the areas:

***Research quality in different disciplines**: discipline-specific dimensions of research quality, standards in research and research practice, quality criteria, infrastructures and processes of research quality assurance in different disciplines; comparative approaches are particularly welcome.

*Evaluation and assessment procedures: checking the adequacy of existing procedures or developing new procedures and indicators for transparent and appropriate assessment of research performance using qualitative, quantitative methods or mixed-method approaches.

Line 2: Open Science

Open science is a key topic and a strategic objective for the Berlin University Alliance, in order to promote processes of openness in science itself and vis-à-vis society, and also in order to contribute to improving research quality. Open science can be described as a general term for instruments and practices that seek to open up the entire research process and connect to economy, politics and society.



Generally, open science can be understood along three dimensions: a) Inclusion and collaboration as well as the comprehensive integration of diverse academic and non-academic actors. Particularly relevant here is the systemic integration of non-academic actors, for example, via platforms and infrastructures for collaborative work, as well as the question concerning suitable formats for bringing potential partners together and enable cooperation. However, topics like multilingualism and multiliteracy of research and metadata also play a role, not least in the context of international partnerships. b) Accessibility and subsequent use: The aim is to distribute research results and also research data to as broad a range of users as possible. Which channels might be suitable for communicating knowledge generated from research to actors from economy, politics, and civil society? In addition, their usage requirements have been largely ignored to date and require an innovative, methodological approach to understand how knowledge transfer to the public domain is taking place. At the same time, international initiatives are developing criteria that should ensure accessibility and subsequent use of research data including the FAIR data principles. The extent to which the research data pools of the Berlin University Alliance fulfill such criteria and are accessible remains open. c) Transparency and review are objectives that, among other things, contribute to the improvement of research results. Questions concerning the openness of peer review processes and open methodologies including their added value for the research process, among other things, are therefore relevant in this dimension. The three dimensions overlap, for example, with respect to the question concerning principle transparency and accessibility of research results, as well as the technical conditions regarding their review and subsequent usability.

Elements and practices of open science include, for example, open access to results, publications, and data of research, research data management and infrastructure development and access, use of open source software in the research process, open peer review processes, openly accessible educational resources for teaching or involvement of non-experts and amateur researchers in the formulation and implementation of scientific projects. Research or implementation-oriented projects can, for example, address one of the following topics and in the process apply quantitative, qualitative methods, or mixed methods.

The objective of "funding line 2: Open Science" is to develop and implement strategies that support processes of openness in science and contribute to their sustainable anchoring in the institutions of the Berlin University Alliance. In this respect, the funding line focuses in particular on:

* Funding of open science practices: development of experimental incentives, including open science elements and practices in individual and collective research practice. Among other things, citizen science components may be integrated into ongoing research projects.

* Analysis of disciplinary framework conditions for open science: research on differences in practice and in the administrative, regulatory, and technical framework conditions of open science in various disciplines, as well as developing proposals to overcome existing barriers.

* **Studies on science policy:** research on previous development and implementation of open science guidelines and practices at the four partner institutions, as well as analysis and development of concepts for potential cross-alliance measures.

Type, amount, and scope of funding: The projects funded in this call have a maximum term of 24 months. The funding amount per funded project is €25,000 up to a maximum of €150,000 a year; that



means a maximum amount overall of €300,000. Funding is provided in the form of budgetary funds at the partner institutions of the Berlin University Alliance in accordance with the earmarked purpose. Depending on the budgetary guidelines of the respective partner institution, funding can be requested for human resources for academic staff (including student staff members) and for material resources. Funding can also be provided for networking and activities enhancing public visibility. Projects can be extended at no extra cost due to illness or family-related matters (pregnancy, parental leave, caring for relatives, etc.).

Applications must contain a budget plan specifying how the funding will be split among the partners participating in the process. No major changes to this plan can be made following approval. Funds can be transferred to the next budget year at a maximum of 20% of the annual amount based on the project term on request and must be submitted by September 1 of the year in question.

Requirements / application eligibility: Proposals can be submitted by:

- professors,
- post-doctoral researchers
- managerial staff and post-doctoral employees from research-support areas

who work at one of the institutions of the Berlin University Alliance, namely Freie Universität Berlin, Humboldt-Universität zu Berlin, Technische Universität Berlin, and Charité – Universitätsmedizin Berlin. The proposed project should be based at two of the four institutions of the Berlin University Alliance at a minimum, that is, the (minimum two) project leaders are members of institutions of the Berlin University Alliance. Applicants can also submit project proposals for individual projects that will bring reasonable added value to the Berlin University Alliance. The project proposal must explicitly specify the institution as a collaboration partner and include a letter of intent (LoI).

Researchers from Germany and abroad as well as partners from politics, economy, and civil society can also participate as co-applicants, but <u>without</u> any entitlement to funding. They can then only take part as collaboration partners in the project using their own resources. If third parties are to be nominated as co-applicants, their own contribution must be stated in the proposal (alongside their financial participation, this can also be their own position). Furthermore, additional external parties that do not act as co-applicants can also be specified. They are not required to state their financial contributions in advance. However, under the allocation guidelines for budgetary funds of the respective partner institution, external awards (services) can be granted. Affiliated institutions ("An-Institute") of the alliance institutions are not permitted to apply per se. Individuals, e.g. professors of an "An-Institut", affiliated with a Berlin University Alliance's institution are eligible to apply.

Interdisciplinary concepts and the inclusion of cross-sector actors are welcome. Applicants cannot participate in more than one proposal.

Application process: Proposals can be submitted in German and English via the online portal: If you https://portal.bihealth.de/portal/SitePages/Home.aspx

The application process has one stage. Project proposals must be submitted by January 15, February at the latest. (Please also refer to the FAQs for the call for proposals on the Objective's website: https://www.berlin-university-alliance.de/en/commitments/research-quality/index.html).



Project proposals must be submitted by the project coordinators. The application must include a cover letter/cover page on which all project partners (usually the project leaders) confirm, by way of a legally binding signature, acknowledgment of the application and the accuracy of the details specified therein. In addition, the "Declarations for Information" of all institutions participating in the application must also be enclosed (see template on website).

Project proposals must be structured as follows:

- 1. General information
- * Acronym and title

* Name and addresses (including phone, fax, and email) of the project leader at the partner institutions; signature of project leaders

* Planned project term specifying desired project start date in 2021, no later than September 2021 however.

2. Description of research contents and other details

* Short description of the project with assignment to a topic specified in the call for proposals, description of the central research question or project goal (three pages max.)

* Positioning of the project in relation to the state-of-the-art of relevant international research (one page max.)

* Detailed work schedule including planned milestones, description of methods to be applied (including relevant risk assessment), information on the theoretical framing of the project, and also on access to the field if applicable (three pages max.)

* Information on potential use of scientific results; this includes an exploitation plan for the scientific results for academic and non-academic users (two pages max.)

* Description of practice-relevant research results and concept of implementation and dissemination of potential applications (two pages max.)

* Concept for planned collaboration with project partners, e.g. description of work or task allocation, information on reciprocal added value (one page max.)

* Description of planned measures for research data management and publication strategy. Publications and research data must be made accessible free of charge.

* If findings resulting from the research project are published as a contribution in a scientific journal, this must be done in such a way that free electronic access (Open Access) to such articles is provided. If the contribution does not initially appear in an electronic journal with free access to the public, the contribution shall – after an appropriate deadline has passed (period of embargo) if applicable – be made accessible to the public for free and in electronic form (secondary publication). In the case of a secondary publication, the period of embargo must not exceed 12 months.

* Data resulting from the project that might be relevant to and used by third parties following completion of the project must be provided to a suitable institution/research data center in a transferable form based on common standards. The objective is to enable long-term data security, secondary



analyses, or subsequent use. Conventional requirements for research data management must be considered.

* Annex: short CV of participating project leaders, publication list with a maximum of five topic-related publications from the last five years per project leader, information on relevant research projects or ongoing externally funded projects with titles, sponsors, and scope, letters of support/intent of the cooperating partner institutions if applicable (five pages max.).

The project proposal should not exceed 12 pages (without financial plan and annex).

Please write the project proposal in font size 12, Times New Roman with line spacing of at least 1.15.

3. Financial plan

* Resource planning, i.e. overview of human and material resources (subcontracts/purchases/travel) – details per year and overall amount per individual project.

Please use the usual rates for personnel remuneration following the DFG rates (https://www.dfg.de/formulare/60_12/).

All project proposals received are checked to make sure they are complete and meet the formal conditions of eligibility, and they are assessed by external reviewers (see section on evaluation criteria and selection below).

All project proposals and any additional documents submitted are not returned to the sender.

Evaluation criteria

- > Scientific excellence of the research project
- * Relevance of project to funding objectives and fulfillment of conditions of eligibility;
- * Innovation of the research program;

* Quality of the research design including appropriateness of selected research methods and handling of research-ethical aspects;

* Practical relevance of the research question or practical application

o Quality and validity of the implementation plan, also with regard to the objectives of this funding measure, including consideration of cooperative, socially responsible utilization approaches

- * Adequacy of the data collection and access;
- * If applicable: Quality of the data management plan;
- * Realistic planning in terms of tasks, time, and milestones;
- * Realistic plan for distributing research results;



> Composition/arrangement of project team

* Qualifications, expertise and track record of project leader(s) in the relevant theme or in related themes;

* Consideration of interdisciplinary approaches;

* Adequacy of integration into scientific structures and planned collaborations, in particular with reference to the partnership within the Berlin University Alliance (expertise cooperation partners) taking into account criteria such as interdisciplinarity, practical involvement, and/or internationality;

> Aspects relating to project organization

* Appropriateness of financial planning;

* Necessity, suitability, and eligibility with regard to requested funding.

Selection: In accordance with the criteria specified above, the project proposals are assessed by independent reviewers in an open peer review¹; a short list is created which is presented to the selection committee and then finally to the executive board of the Berlin University Alliance. The selection result is communicated to the applicants in written. Assessments can be made accessible to interested parties.

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¹ **Open Peer Review**: Open means 1) the names of the reviewers are known and 2) the written reviews are disclosed.