

# **CZS Nexus**

Programme to encourage interdisciplinary post-doc groups

Published on: 1 September 2023

Deadline for project outline: 1 3 October 2023



## 1. Focus and objective

The programme offers postdoctoral researchers the opportunity to establish their own interdisciplinary research group over a period of five to six years. We are looking for outstanding young scientists who are aiming to embark on an academic career and who wish to implement exciting ideas at interfaces between various STEM fields. Precisely these technical interfaces offer enormous potential for scientific innovation. However, they are not given much consideration in conventional funding programmes. The CZS Nexus programme therefore consistently focuses on the connection between different disciplines. The interdisciplinary nature should be evident in the applicants' backgrounds, in the design of the research project, in the planned composition of team and in the institutional embedding of the group. The focus of the project can be both basic and application-orientated research. In addition to the interdisciplinary nature, the research topic must be related to one or more of the focus topics of the Foundation: "Artificial Intelligence", "Resource Efficiency" or "Life Science Technologies".

## 2. Scope and object of funding

Funding can be requested for up to a total of

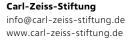
1,500,000 euros.

The funding period can be freely chosen between five or six years.

The earliest possible project start date is 1 October 2024 and the project must start by no later than 1 February 2025.

The following are supported

• the full position of the applicant postdoctoral researcher must be held for five to six years





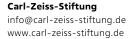
- personnel funds for scientific and technical personnel for the research group (e.g. postdocs, doctoral students, assistants)
- investment funds for large-scale equipment and research infrastructures
   (up to 20% of the total funding amount)
- material resources
- Funds for scientific communication, networking, transfer and outreach activities
- Relocation costs of the applicant: up to a maximum amount of 5,000 euros

Overhead costs will not receive funding.

## 3. Eligibility to apply

Applications must meet the following requirements:

- The funding applied for will establish an independent and autonomous working group at a state university or non-university research institution in Baden-Württemberg, Rhineland-Palatinate or Thuringia (host institution). The applicant can already be working at the institution in question at the time of application or relocate to the institution for the start of the project.
- The working group can be located at two scientific institutions at the same time (e.g. a university and a non-university research institution). In this case, however, the Foundation's funds are only allocated to one host institution. This host institution is then responsible for passing on funds to the other participating institution.
- The applicant holds a doctorate, has above-average scientific qualifications and can demonstrate their expertise through a corresponding track record of previous research work.
- The completion of the doctorate (date of the defence) did not take place more than four years ago (the deadline is the application deadline for the submission of the project outline). Interruptions in employment since the doctorate due to parental leave,





illness or care periods are taken into account. Similarly, part-time employment of less than 50% due to parental, sick or care leave is additionally counted as interruption periods. Both must be identified accordingly in the applicant's CV.

- The project is in the field of STEM at the interface between two or more subject areas and is related to the focus topics of the Carl-Zeiss-Stiftung. The STEM fields are the scientific disciplines 'Life Sciences', 'Natural Sciences' and 'Engineering Sciences' according to the DFG subject classification system (dfg.de). However, clinical medicine, veterinary medicine and architecture are excluded. The interdisciplinary nature must be at least between the corresponding subject areas of the DFG system.
- The project is at the interface between two or more subject areas. The interdisciplinary
  nature must be at least between the corresponding subject areas of the DFG system.
   The successful processing of an interface should be supported by the applicant's
  previous wide-ranging qualifications as well as by the planned multidisciplinary
  composition of the group and its institutional embedding.

#### Exclusion criteria:

- Postdoctoral researchers who are already funded by a similar programme (e.g. Emmy Noether Group, Leibniz Junior Research Group, Helmholtz Young Investigator Group, ERC Starting Grant) are not eligible to apply.
- Candidates who already hold a junior professorship or are habilitated are also excluded from applying.

### 4. Application and selection procedure

The application and selection procedure is divided into two stages: an outline phase and a full proposal phase:

#### Outline phase:

Any scientist who fulfils the basic application requirements (see point 3) may submit a

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project outline in accordance with the guidelines. All the submitted project outlines will be formally reviewed and evaluated by a selection committee. The best applications will be selected for the full proposal phase.

## Full proposal phase:

The best applicants will be invited to submit a full proposal in accordance with the guidelines.

- Independent scientists will scrutinise all the full proposals which are submitted in a
  written expert opinion. Based on the written expert opinions, a multidisciplinary
  committee selects the most promising applicants for the final selection round.
- The selected applicants will be invited to present their project to the selection committee and answer questions from the committee members. The Carl-Zeiss-Stiftung will make the final funding decision based on the recommendations by the selection committee.

There is no entitlement to funding. No justification will be provided for rejection decisions; in particular no information will be given about the assessors' evaluations.

#### 5. Evaluation criteria

In reviewing applications, priority will be given to the following

- The particular interdisciplinary or multidisciplinary approach of the application and the planned project,
- The link to the specified focus topics of the Foundation,
- The applicant's previous research achievements, scientific reputation and potential,
- The quality and originality of the proposed research project,
- The scientific and, if applicable, economic and/or social added value of the intended research results, as well as
- The organisation and management of the project.

## 6. Application

Project outlines/full proposals must be submitted exclusively digitally to the following address:

Carl-Zeiss-Stiftung

Ms Judith Hohendorff

foerderantrag@carl-zeiss-stiftung.de

For telephone requests: +49 (0) 711 162 213 – 12

The **deadline** for **project outline** submissions is

#### 13 October 2023.

A decision is expected in December 2023. The deadline for the submission of full proposals will be communicated individually to the selected applicants.

Applications received after the submission deadline will not be considered.

The personal presentation of the most promising applicants to the selection committee is planned for late June/early July 2024. A final decision is expected in July 2024.

Against the background of efforts to increase the proportion of women in scientific leadership positions in the STEM disciplines, female postdoctoral researchers in particular are invited to apply.

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## 7. Funding modalities

During the funding period, annual interim proof of use and interim reports must be submitted to the Carl-Zeiss-Stiftung. At the end of the funding period, a final proof of use and a final report on the project must be submitted.

In the event of an interruption of funding due to parental leave or care leave or a reduction in working hours to at least a 50% part-time position, a cost-neutral extension of the term by a maximum of up to two years is possible.

In the event of an appointment to a (junior) professorship during the funding period, it is possible, in consultation with the Carl-Zeiss-Stiftung, to retain the funds still available for the remaining term of the approved funding, provided that the (junior) professorship is at an academic institution in the states of Baden-Württemberg, Rhineland-Palatinate or Thuringia.

Equipment purchased during the funding period is generally the property of the host institution and can only be taken to a new institution with the latter's permission in the event of a transfer.





## **Application guidelines**

## 1. General formal requirements for project outline and full proposal

- Both can be written in German or English.
- Arial font, font size 12 and single line spacing must be used.
- The project outline and full proposal, including <u>all</u> the necessary documents, must be submitted to the Carl-Zeiss-Stiftung exclusively electronically: both, including all attachments, must be submitted as **one** PDF document without password protection or access restrictions on reading, copying and printing. The PDF must be made available to the Foundation on time by email (as an attachment or link).

#### 2. Documents to be submitted

The applicants are asked to provide the following documents and the completeness of these documents is a prerequisite for a funding decision:

## 2.1 Project outline

The project outline must be submitted by 13 October 2023 and include the following documents:

- 1. Master data (1 A4 page max)
  - a. Name and surname of the applicant
  - b. Current job/position incl. contact details
     (Please note that we primarily communicate via email in the application process.
     Please ensure that you provide us with an email address that enables reliable communication, with a particular focus on spam)
  - c. Name of the research project/application title
  - d. Lead host institution where the working group will be established
  - e. Total funds applied for including a brief description of how the funds applied for are expected to be used (e.g. how many staff will be hired, what level of qualification, equipment purchase, workshops planning etc.)
- 2. Project description/abstract (1 A4 page max)

  Short description of the research project and the objectives.
- 3. Presentation of interdisciplinary nature ( $\frac{1}{2}$  A4 page max)



Description of the interdisciplinary nature of your own career, in the composition of the planned group as well as in the content of the research project and the methods used. Presentation of the originality of the interdisciplinary project.

4. Presentation of the link to the specified CZS focus topics Artificial Intelligence, Resource efficiency and Life Science Technologies (¹/₂ A4 page max) To what extent does the research project relate to one or more focus topics? In what form is this link evident (qualification of staff, application of methods, transfer of results etc.)?

#### 5. Annex

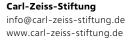
- a. 'Interdisciplinary nature' form: Information on the subject areas according to the DFG system to which the research project relates.
- Expert opinions (optional)
   Justified suggestions, in bullet points, of up to two assessors who have a relevant track record in the proposed subject area and are impartial according to DFG criteria. Good German skills are required.
- c. Formular CV: Please fill out the form fully, in accordance with the instructions therein.
- d. Copy of the applicant's doctorate certificate
- e. Letter of support from the host institution (a letter from the faculty, department or division is sufficient):

  The letter should state that the host institution will host the applicant and provide them with appropriate conditions for independent research (e.g. workplace, access to (large) equipment, etc). Furthermore, the letter must state whether and, if so, how the applicant will be involved in teaching.
- f. Consent DSGVO (signed)

## 2.2 Full proposal

The full proposal must be submitted in writing and signed, and must not exceed 15 A4 pages excluding annexes. It contains the following information in the order given:

1. Master data





- a. Information on the applicant
  - Name and surname
  - Current job/position incl. contact details
- b. Name of the research project/application title
- c. Host institution where the working group will be established. In the case of two host institutions, it must be made clear which one is responsible for the administration.
- d. Total funding requested
- e. Funding time period requested

## 2. Abstract

Clear summary of the project in German (maximum of half an A4 page).

- 3. Initial situation/research status
  - a. Significant national and international developments in the relevant research area. Presentation and justification of own working hypotheses and differentiation from/expansion upon existing research
  - b. List of important research groups/scientists and their work who are active in Germany and abroad in the relevant research field
  - c. Brief description of own preliminary work on the research project (if available)

#### 4. Objective

Intended scientific objectives and unique selling points of the proposed project

- 5. Work programme
  - a. Description of the planned procedure and presentation of the methods used, including the (expected) interim goals while the project is ongoing.
  - b. Task division within the working group
  - c. Milestone plan: Please include a milestone plan in table form in line with the template (Annex 1) as an attachment to the application.

#### 6. Interdisciplinary nature

Presentation of the interdisciplinary nature of the project:
Which interdisciplinary research questions will be answered? Which disciplines are involved and which methods from the different disciplines are used?
Involvement of different disciplines in the planned composition of the team.
How is the supervision of doctoral students who do not belong to your own discipline guaranteed (naming potential supervisors)?

- 7. Involvement of the working group
  - a. Involvement of the working group in the host institution(s)



b. If applicable, planned networking of the working group with external partners (e.g. research organisations or companies)

#### 8. Transfer

a. Social and economic relevance of the proposed project (e.g. transferability of research results into practice, knowledge and technology transfer between science and economy)

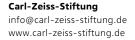
#### 9. Financing

- a. Basic facilities of the host institution What basic facilities (personnel, laboratory space, large equipment, etc.) will be provided by the host institution?
- b. Funding requested
  Specification of the requested funding, broken down by personnel,
  equipment and investment funds, incl. brief justification. In this context, it
  must also be briefly explained whether the requested staff funding will be
  used to advertise new positions or whether the staff are already available.
  Please enclose a financing plan with the application as an annex, which
  should be created as an Excel table using the template (see Annex 2).
- c. Forwarding of funding
  If the working group is to be located between two scientific institutions, it
  must be explained which institution will be the recipient of funding from the
  Carl-Zeiss-Stiftung and how the funding is divided between the two
  institutions.

#### Annex to the full proposal

Please attach the following documents to your application:

- 1. 'Interdisciplinary nature' form: Information on the subjects according to the DFG system to which the research project relates.
- 2. Formular CV: Please fill out the form fully, in accordance with the instructions therein.
- 3. Copy of the applicant's doctorate certificate
- 4. Milestone plan in accordance with Annex 1
- 5. Financing plan in accordance with Annex 2
  Please enclose a financing plan with the application as an annex, which should be created as an Excel table using the template and submitted as an xlsx file. The individual cost items should be rounded to the nearest 1,000 euros. The current DFG personnel average rates should be used as the basis for calculating staff costs.





- Expected rate increases/inflation adjustments during the funding period should be taken into consideration for calculating the requested funding amount.
- 6. Third-party funding in accordance with Annex 3: List of third-party funding acquired to date
- 7. If applicable, cooperation partners
  Planned cooperation partners (e.g. other higher education institutions, research
  organisations, companies) with the associated web links
- 8. Letter of support from the host institution/s (management level):

  The application must be accompanied by a letter of support from the host institution at which the postdoctoral researcher is to be employed and the working group is to be established. If the working group is to be located at several institutions, a letter of support from each host institution is required. In the letter, the host institution(s) undertake(s) to offer the applicant and their working group the appropriate conditions for independent research work, to grant budget autonomy within the scope of the legal provisions and to organise the administrative handling of the project (administration of funding, etc.).

  Furthermore, the letter must state whether and, if so, how the applicant will be involved in teaching and whether they are authorised to teach and examine in doctoral procedures.
- 9. Letter of recommendation for the research project and the applicant by a scientist who is neither employed at the applicant's current institution nor at the planned host institution.
- 10. Research data concept (concept for handling research data that accrues): Please prepare the concept in accordance with the corresponding checklist of the DFG (https://www.dfg.de/download/pdf/foerderung/grundlagen\_dfg\_foerderung/fors chungsdaten/forschungsdaten checkliste de.pdf)

