

# DZG Innovation Fund - Call 2023/2024

#### **Background**

The goal of the six German Centers for Health Research (DZG) is to combat particularly common diseases - the widespread diseases - more effectively. With the establishment of the DZG Innovation Fund (DZGIF), the DZG aim to strengthen networking between its members, facilitate collaborative research of its members and thus, within the German research landscape and to create interdisciplinary synergies in order to tackle the challenges posed by the widespread diseases.

## Topic 2023/2024: Microbiome

therapies.

Microbiomes influence human well-being and contribute to a wide range of diseases of virtually any organ system. 'Dysbiosis' of microbiomes has been causally linked for instance to malignant, metabolic, and neurological disorder. Moreover, all of the notoriously antibiotic-resistant bacterial pathogens use human microbiomes as reservoirs for the establishment of severe invasive infections. The metabolic and immunomodulatory capacities of microbiome members on human gastrointestinal and airway epithelia and on skin have both, local and systemic consequences thereby affecting for instance circulatory, inflammatory, and mental processes. Moreover, gut microorganisms contribute substantially to the turnover or even activation of therapeutic drugs. The clear association of microbiome signatures with susceptibility to diseases has led to growing interest in mechanisms that shape bacterial competition and microbiome dynamics and govern microbiome-host communication. Accordingly, the field of microbiome science is currently moving forward from largely descriptive to functional and therapy-related approaches. These realizations offer new avenues for personalized prevention and therapy and for monitoring the spread of disease-causing bacteria, based on metagenome analysis of patient microbiome samples. Ultimately, 'microbiome editing' approaches will allow to repair microbiome dysbiosis and eliminate pathogenic and disease-causing bacteria from human body surfaces. Implementation of a joint DZG research agenda in the field of translational microbiome science

- requires coordinated actions:

   Elucidate biomarkers associated with susceptibility to major diseases and response to
  - Identify bacteria and bacterial networks associated with beneficial or detrimental microbiome
  - Implement metagenome-based analysis pipelines for personalized diagnostics and risk assessment.
  - Develop microbiome-based intervention strategies based on specific exclusion or introduction of disease promoting or preventing bacteria, respectively.
  - Harness metabolic properties of microbiome members for the prevention and therapy of metabolism-associated diseases.
  - Systematic analysis of the interdependence of microbiome and host metabolome to identify novel targets for therapy of major diseases.



### **Eligibility**

In every application at least 3 DZG must be represented with one principal applicant each. The following are eligible to be a principal applicant:

- DKTK: DKTK Faculty & DKTK Investigators

- DZD: DZD Scientists

- DZHK: DZHK Principal Investigators and DZHK Scientists

DZIF: DZIF Principal Investigators
 DZL: DZL Principal Investigators
 DZNE: DZNE Principal Investigators

#### **Funding**

1.458.000,00 € for a period of two years (prolongation not possible) are available under the 2023/2024 call for a maximum of two projects. The funds are to be used – unless individual centers decide otherwise – at institutions that are members of the respective funding DZG.

	Total provided by each DZG for 2023/2024 call
DZD	€ 270.000,00
DZHK	€ 455.000,00
DZIF	€ 433.000,00
DZL	€ 175.000,00
DKTK	€ 125.000,00
Total	€ 1.458.000,00

Since the DZNE as a Helmholtz center receives its funding within the framework of the Pact for Research and Innovation of the Helmholtz Association and can therefore not generally financially contribute to the DZGIF the DZNE will financially participate only in-kind.

### **Basic criteria**

The DZGIF seeks for applications that will exploit the unique potential of DZG's broad interdisciplinary expertise for highly innovative, disease-overarching translational research. The money from the DZGIF is intended to provide seed funding, i.e. the project should have a perspective to be financed later from other DZG sources or third parties.

- At least 3 DZG participating in the project
- Grantees will need to provide joint reports in the context of the annual DZG-Reporting as well as
  a joint funding report to all funding parties
- Participation in the online partnering day is obligatory
- All publications resulting from the funded research must acknowledge all funders. Grantees are requested to inform the DZG media teams of upcoming publications or other public-facing activity relating to the grant



**Application and decision process** 

Please submit expression of interest (see template) until 23.09.2022 to <a href="mailto:office@deutschezentren.de">office@deutschezentren.de</a>. The partnering day will take place online on 14.10.2022.

August 2022 14th October 30th November February March 2023 March/April 1st June 23rd September 2023 2023 2022 2022 2022 2023 Partnering Day Application of the call in DZG Board interest (except DZNE)