

## **Research Programme**

## **Microbiome**

# 1 March 2021 (amended 4 May 2021)

## Contents

| 1 | Preamble                         | 2 |
|---|----------------------------------|---|
| 2 | Aim and Subject of the Call      | 2 |
| 3 | Eligibility                      | 3 |
| 4 | Terms and Conditions             | 3 |
| 5 | Application Process              | 4 |
| 6 | Deadlines                        | 4 |
| 7 | Scope and Content of Application | 5 |
| 8 | Project Management               | 6 |



#### 1 Preamble

Every single human being consists of more than 30 trillion cells. According to recent estimates, they harbor 1.3 times as many microorganisms, which are located in the intestine, on the skin and other parts of the body. Today, it is known that this huge microbial community - called the microbiome - influences humans in many ways, for example in the digestion of food or in the activity of the immune system. A number of diseases are also associated with an altered microbiome. However, microorganisms do not only play an important role in humans and animals. Microorganisms also colonise the root and leaf surface of plants, among other places. The microbiome protects against parasites in the root zone, for example, and supports plant growth.

Due to its significant influence on the health of the host, microbiome research has developed into a forward-looking field of research, particularly in the last decade, which offers a wide range of potential applications in health research, but also for livestock, plant cultivation and also for the biotechnology.

The state of Baden-Württemberg recognized the importance of this research field early on and initiated research projects in the past. Due to its broad research landscape of academic and non-academic institutions, there is a great potential to make a sustainable contribution to the research of the microbiome through innovative research projects to further assure the national and international competitiveness of the location in this research field. With the Research Programme Microbiome, the Baden-Württemberg Stiftung would like to strengthen excellent research on host-microbiome interactions in the state and further expand existing competencies in the field of microbiome research. The programme is intended to finance projects with a focus on application-relevant topics.

The research of the microbiome is very complex and requires the integration of different disciplines. The program will also contribute to this goal and enable stronger interdisciplinary networking of research groups from Baden-Württemberg.

### 2 Aim and Subject of the Call

The aim of the call is to fund internationally visible and competitive microbiome research projects in order to further advance and connect the research field in Baden-Württemberg.

The primary aim is to gain a deeper understanding of host-microbiome interactions at the molecular and cellular level. The research is not limited to the host (e.g. humans,



animals or plants). However, the call for proposals is intended to open up links for application in biomedicine, agriculture or biotechnology in perspective. Consequently, the projects should follow a clear application-oriented question.

Modern molecular, cell biological and bioinformatic methods offer a great potential for microbiome research. For this reason, we are particularly looking for projects in which state-of-the-art methods are already being used. Only in justified exceptional cases, developments of new experimental or bioinformatic methods can be subject of the project work. It is a precondition that the methodological developments are essential for the investigation of host-microbiome interactions in order to address the application-oriented question of the project.

Projects that focus exclusively on the detection and description of the composition of a microbiome are not included in the call. Also, projects focused on clinical studies or field trials are excluded from the call.

Microbiome research requires interdisciplinary collaboration between different experts. In addition, the research program is to support the networking of the research field in Baden-Württemberg. For this reason, the research projects are to be carried out in cooperation. In addition to interdisciplinary projects of individual institutions, which have all the necessary expertise, a cooperative approach of up to three different institutions with complementary project parts is possible. The prerequisite is that the research groups have already worked on the project topic in an internationally competitive manner and that the cooperation generates clear synergy effects.

#### 3 Eligibility

All universities located in Baden-Württemberg and all non-profit non-university research institutions based in Baden-Württemberg are eligible to participate.

#### 4 Terms and Conditions

The research is conducted on behalf of Baden-Württemberg Stiftung gGmbH on the basis of a contract with the research institution (contract research). All rights to the results are reserved by Baden-Württemberg Stiftung gGmbH.

The starting point of each research project should be a particular research issue that fits the objectives of the call. In addition, the research objectives should have concrete exploitation potential that could result to an application in the medium term. The most important evaluation criteria are scientific excellence and a level of innovation that will



lead to an economic added value for the federal state of Baden-Württemberg as well as the degree to which they stand out from the state of the art.

Financing will be provided for personnel and material costs, travel expenses, and – in duly justified cases – investment costs in the form of depreciation throughout the project.

Applications can be submitted by individual working groups/research institutions or by consortia of different research institutions. Required by the research issue, an interdisciplinary approach is obligatory. Applications must always specify to what extent the competence required to conduct the research project are already in place.

If several research institutions are involved, then a jointly appointed project leader must be named as a contact person for Baden-Württemberg Stiftung who will act as coordinator for the research institutions and will be responsible for the overall execution of the project.

A one-stage application procedure is envisaged. Applications must be submitted by the date specified below and will be evaluated by an independent panel of experts that will provide Baden-Württemberg Stiftung with recommendations for a decision.

Projects within the scope of this call for applications can be rejected without giving reasons. There is no entitlement to funding. By submitting a project description, applicants agree to these terms and conditions.

The project duration should not exceed 3 years. Baden-Württemberg Stiftung has up to € 4,15 million at its disposal for this research programme Microbiome.

#### 5 Application Process

All applications from universities must be submitted by their rectorates. Applications from non-university research institutions must be submitted by their management

#### 6 Deadlines

Applications in German or English must be received by the project management organization by <del>07 May 2021</del> 25 May 2021, 16:00 (cut-off period).

Applications must be submitted electronically via Project Management Jülich's Internet portal <u>https://submission-bws.ptj.de/methodenentwicklung</u>. The PDF document "Approval of legally binding" signed by the rectorate of the university or the management of the research institutions must be uploaded to the portal. The signature in the PDF is sufficient. The signed document must not be submitted by post or fax.



### 7 Scope and Content of Application

The outline of the project application is specified in the online submission tool (<u>https://submission-bws.ptj.de/mikrobiom</u>) and includes the following points:

- General information (coordinator, partner, institution, title and acronym of project, legally valid signature)
- Summary: brief, generally comprehensible description of the project in German
- Objectives of the project
- Innovation and relevance of the project compared to the current state of the art
- Scientific background (own project-related preliminary work, publications and existing infrastructure)
- Patent situation
- Detailed presentation of the work plan
- Milestone Plan: verifiable Milestones every six months for each project partners involved
- Exploitation plan
- Financial plan: Breakdown of net costs, indicating VAT separately (if no VAT is specified, Baden-Württemberg Stiftung will assume costs to be gross amounts incl. VAT):
  - Personnel costs incl. person months and pay groups (financing is available for a maximum of € 74,100/a for postdocs, € 68,400/a for doctoral researchers, and € 51,000/a for technical employees each plus VAT)
  - o Itemized material costs (small instruments up to € 5,000, consumables, travel expenses)
  - Investment costs in justified exceptional cases (applicable to new investments of € 5,000 or more, depreciation period according to official depreciation table, billable depreciation only for the period of use during project)
  - Overview of total costs
  - For cooperation projects, a clearly differentiated financial plan must be provided that logically presents the items and resources planned for each partner.

Each application field in the submission tool is limited by characters.

The requirements for applications are outlined in the guidelines (see <u>https://submis-sion-bws.ptj.de/methodenentwicklung</u>).



#### 8 Project Management

Baden-Württemberg Stiftung gGmbH has commissioned Project Management Jülich (PtJ) with the implementation and monitoring of the research programme. Project Management Jülich is responsible for the organizational aspects of the programme and is the key contact for all applicants.

Contact details for PtJ:

Project Management Jülich Life Sciences and Health Research (LGF) – Molecular Life Sciences (LGF 2) – Forschungszentrum Jülich GmbH 52425 Jülich Germany

Dr. Sigrid Grolle Tel.: 02461 61-8602 Fax: 02461 61-9080 s.grolle@fz-juelich.de

Dr. Björn Dreesen-Daun Tel: +49 2461 61-8704 Fax: +49 2461 61-9080 b.dreesen@fz-juelich.de

https://www.ptj.de/en