

1 February 2018

Call for accompanying study:

Interdisciplinarity in research on antimicrobial resistance

National Research Programme "Antimicrobial Resistance" (NRP 72)

1. Introduction: National Research Programmes

National Research Programmes (NRP) provide answers to questions arising in society, politics and the economy. They are approved by the Federal Council, last from 4 to 5 years and are funded with CHF 5 to 20 million. The problems NRPs are investigating are generally very complex and most of them can only be dealt with by integrating several research perspectives. Therefore, NRPs are interdisciplinary and aim to achieve a defined, overall goal through coordination of individual research projects. Furthermore, they put a strong focus on the knowledge transfer of their results.

2. The National Research Programme "Antimicrobial Resistance" (NRP 72)

All over the world, more and more pathogens are becoming resistant to today's antibiotics. Because medicines are losing their effectiveness, once easy-to-treat infections are turning into deadly diseases. The National Research Programme "Antimicrobial Resistance" (NRP 72) investigates possible counteractions to this development. For this purpose, it brings together human and veterinary medical practitioners, biologists and environmental scientists to work in an interdisciplinary setting. The One-Health approach is pivotal: When it comes to antibiotic resistance, the health of humans is linked very closely with the health of farm animals as well as with the environment, for instance through the transmission of resistant germs in wastewater.

NRP 72 considers three main aspects:

- Increasing knowledge about resistance development and transmission mechanisms in order to interrupt these processes;
- Development of rapid diagnostic techniques and discovery of novel antimicrobial molecules to improve the treatment of humans and animals;
- Proposal of recommendations and intervention measures for human and veterinary medical practitioners and farmers for a more targeted use of antibiotics.

After two calls for projects from NRP 72 and after NRP 72 incorporated projects of two calls of the Joint Programming Initiative on Antimicrobial Resistance (JPIAMR), the programme consists of 42 projects. Another 3-6 will follow at the end of 2018 with the current JPIAMR call. All projects of NRP 72 are conducted at universities and higher education institutions throughout Switzerland and will be completed by the end of 2021. One year later, by the end of 2022, NRP 72 will present its final programme synthesis.

More detailed information about NRP 72 and its research projects are available online on www.nrp72.ch.

3. Objectives of this call

3.1 Subject of the study

NRP 72 puts a strong focus on the One-Health approach. Within this context, interdisciplinarity plays a central role. The tendered project is intended to gain an understanding of the features and challenges of interdisciplinarity in current AMR research in NRP 72. It should reveal how interdisciplinarity is implemented and show ways to strengthen interdisciplinary practice in the context of the One-Health approach. The outcome is expected to help the Steering Committee of NRP 72 to support interdisciplinarity during the research phase of NRP 72 and to conceptualise the following programme synthesis.

The implementation of interdisciplinarity is to be considered on four levels: First, on the level of individual projects chosen from all three programme modules and including JPIAMR projects; second, on the level of the programme modules; third, on the level of the entire research programme; and forth, on the level of the international integration with the JPIAMR programme.

3.2 Timeframe

The Steering Committee of NRP 72 will decide until end of April on the submitted proposals. The study may start any time after the administrative details are settled and should be realised until the end of 2018, with a written final report delivered until the end of January 2019.

At this point in time, it cannot be decided if further accompanying research following this study will be conducted. However, the study realised in the frame of this call should foresee the possibility to be the base for further research.

3.3 Expected product

- A final report (written in English), which presents the findings and the conclusions in a generally intelligible way.
- Presentation of the findings to the Steering Committee of NRP 72 and to the researchers of NRP 72 (at the annual Programme Meeting 2019) as required.

4. Eligibility, structure of the proposals and costs

- All persons or teams with experience in science studies are eligible to submit an offer.
- Excellent working knowledge of the Swiss context at a scientific and socio-political level is a precondition.
- The candidate or team must be independent, with no direct link to NRP 72, whether as researchers or members of the steering committee or through active participation in the knowledge transfer activities of the programme.

Short proposals written in English may be submitted until 20 March 2018 to barbara.flueckiger@snf.ch.

We recommend the following structure:

- Concept
- Methodology
- Timetable and roadmap
- Budget
- Documentation and resources expected from NRP 72
- CVs and references of the person or persons involved

The costs must be presented in detail, indicating the hourly rates applied.

5. Contact

For administrative questions, please contact the Programme manager, Barbara Flückiger Schwarzenbach: barbara.flueckiger@snf.ch. For scientific and strategic questions, please contact Prof. Christoph Dehio, President of the steering committee of NRP 72: christoph.dehio@unibas.ch