National Research Programme NRP 79
"Advancing 3R – Animals, Research and Society"

Call document
Second call inviting proposals from the humanities and social sciences

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#### What are National Research Programmes (NRPs)?

Research carried out by National Research Programmes consists of research projects that contribute to the solution of contemporary problems of national importance. Under the provisions of Article 10, paragraph 2 of the Federal Act on Research and Innovation of 14 December 2012 (version of 1 January 2018), the Federal Council selects the topics and focus areas to be researched in NRPs and mandates full responsibility for implementing the programmes to the Swiss National Science Foundation.

The Federal Ordinance on the Federal Act on Research and Innovation of 29 November 2013 (version of 1 January 2018, Article 3) describes the NRP funding scheme as follows:

- <sup>1</sup> The National Research Programmes (NRPs) of the Swiss National Science Foundation (SNSF) are a means of generating and conducting coordinated research projects that pursue a common goal.
- <sup>2</sup> Topics of research are generally appropriate for National Research Programmes if:
  - a. Swiss research can make a significant contribution to the resolution of the problem;
  - b. solutions require research contributions from multiple disciplines;
  - c. research on the problem can be expected to produce research results that have practical applications within a five-year period.
- <sup>3</sup> In exceptional cases, an NRP may also be used for the targeted creation of additional research potential in Switzerland.
- <sup>4</sup> The following criteria are also taken into consideration in setting forth the topics of National Research Programmes:
  - a. the programmes can provide the scientific basis for decision-making by the government and administration;
  - b. the programmes can be conducted with international collaboration".

# **Preamble**

The aim of this second call for proposals in Module 3 "Ethics and society" is to increase the number of excellent projects in this target area of NRP 79. Building on the outcome of the first call for projects and the belief that insights from the humanities and social sciences (HSS) are key to the success of this NRP, this call expressly invites research with a background in the HSS. While interdisciplinary projects are important, projects that do not reach out to the natural sciences are also welcome. Hence, both monodisciplinary and interdisciplinary projects are accepted as well as projects involving national and/or international collaboration. Applicants who are new in the area of the 3Rs, early-career researchers' and experienced scholars in the field are equally encouraged to participate. Since societal issues are at the heart of Module 3, projects that involve research leading to outreach to citizens and relevant stakeholders and their involvement are particularly welcome. Consequently, a diversity of output types is encouraged, covering not only traditional research output but also "non-traditional research output", such as promoting and sustaining dialog and outreach.

# 1. Background

In terms of research involving animals, the Swiss Animal Welfare Act and the Animal Welfare Ordinance not only govern the conditions under which laboratory animals are kept, they require application of the 3Rs based on the work published by Russell and Burch in 1959. The 3Rs encapsulate efforts to replace animal testing by other experimental methods that do not use animals wherever possible, that reduce the number of animals used in experiments and that refine existing techniques so as to reduce the stress to animals. However, Swiss animal welfare legislation, research with animals, and the 3Rs are embedded in a dynamic history of societal change: changing attitudes, changing political demands, changing ethical arguments.

NRP 79 aims to examine in an innovative way the ethical, legal, social, historical and economic aspects of animal testing and the use of animals in science. The findings obtained during the projects may – particularly at the level of the synthesis report – contribute to advancing the 3Rs and to a more informed public debate on the sensitive issue of animal testing over the coming decades.

This translates into the programme's success criteria for advancing the 3Rs, which will be assessed from short-, medium- and long-term perspectives at research, institutional and policy levels:

- New and improved tools and methods that increase the probability of successful 3R implementation, as well as validation of existing tools and methods;
- Strategies to overcome the barriers to implementation; establishment of a system for monitoring the introduction or use of available 3R methods; overcoming practical obstacles: training, publication requirements, data sharing, costs, project registration, etc.;
- Initiatives to encourage greater 3R ambition at all sector levels (e.g. acknowledgement of achieved 3R improvements, rewarding system, career benefits);
- Demonstrated uptake of 3R tools and methods at all levels; inclusion in training programmes and curricula, in academia and regulatory bodies;
- Awareness-raising initiatives with policy makers to promote alternative methods and adapt regulatory procedures and legal requirements;

- Innovative tools to raise societal awareness and promote dialogue between researchers and citizens regarding normative issues in animal research.

#### Motivation for the second call:

Following the initial call for proposals, the Steering Committee short-listed 34 project preproposals. The Committee, however, is of the opinion that there are relevant gaps with regard to the topics addressed in the third Module, and agreed to invest the remaining Module 3 funding to support additional projects in the HSS. For this reason, the Steering Committee of NRP 79 has approved an amount of CHF 1.5 to 2.0 million to support further research projects in Module 3 on the basis of this second call for proposals. No additional funds are available for projects in Modules 1 and 2 and no further submissions for these modules are therefore possible.

# 2. Purpose and themes of the second call

# Module 3 - "Ethics and society"

The aim of Module 3 is to broaden the ideas and insights into 3R with research that goes beyond the natural sciences. Although innovation (Module 1) and implementation (Module 2) are unquestionably of great importance, the Steering Committee believes that 3R research in the HSS has not achieved its full potential yet. Therefore, the second call within the scope of NRP 79 expressly invites projects in Module 3 so as not to leave any potential unrealised. The impact on the 3Rs and relevance for the NRP 79 success criteria might be direct or indirect in nature and concern the past or the future of animal research from the perspective of the individual HSS disciplines.

The Steering Committee expects to finance further projects in Module 3 and has earmarked CHF 1.5-2.0 million for this second call. The average budget of a project is expected to lie at around CHF 300,000 – 500,000. Budgets below or above this range are not ruled out if sufficiently justified.

The aim of the module is to host projects in HSS investigating aspects of the 3Rs and the use of animals for scientific purposes, including in light of the evolution of human-animal relationships. All projects must specify how they contribute to the 3Rs and the NRP's focus, as outlined by the different aspects listed below. For projects addressing topics beyond these aspects, clarification of their impact or relationship to the NRP's objectives must be clearly explained.

- Legal and philosophical foundations, concerns and limitations of the 3R approach (e.g. instrumental vs goal-oriented necessity, harm-benefit analysis, national strategies vs. international developments, expansion of the 3Rs beyond research);
- History of and relevant data about public perception, public concerns, public hopes and public discourses concerning animal research and its future;
- The evaluation of new technological tools and methods in relation to the 3Rs and new ways of conceptualising humane animal experimentation that takes ethical aspects into account (e.g. animal disenhancement, animal enhancement, growing mini-organs, etc.);
- Procedural and institutional questions of the 3Rs (e.g. policy-making, review criteria and processes adopted by animal experimentation committees, problems associated with

outsourcing animal testing to countries with fewer regulatory requirements, or the analysis of the impact of animal welfare standards in Switzerland and other countries on medical and bioscience research);

- Raising awareness and the quality of public debate (e.g. innovative tools to deal with the ethical dilemma, animal interests and human interests, stakeholders and interest groups, opportunities and risks in scientific and public communication, etc.);
- The application of the 3Rs beyond laboratory research with animals (e.g. animal research in the wild, breeding animals for research and conservation research, the use of animals in agriculture, etc.).
- Ethics and epistemological strengths, challenges and limitations of biomedical models.

The main output of this module will comprise studies, including interventions that have a measurable societal impact (e.g. on stakeholders such as experimenters, industry, the general public, etc.), as well as philosophical analysis, new policies or other analyses addressing significant problems in the field.

Project selection criteria are described in chapter 4 "Submission procedure and project selection"

# 3. Characteristics of NRP 79

# Innovation and transferability to practice: Strengthening Module 3 – Ethics and society

The (non-)use of animals in research has long been an important topic, also with regard to research funding. NRP 17, which was launched in 1988, already addressed alternatives to animal experiments. Since then, the research landscape has changed significantly. With the advancement of new technologies, quantitative human biology data has become available; this has facilitated back-translation approaches that are expected to increase the translatability of animal to human data or obviate the necessity of animal studies for a particular aim. The current call for proposals intends to take these changes into account. Its aim is to strengthen the debate by taking into account the complexity and diversity of new factors that influence the perception and discussion of animal research.

# Intellectual property aspects

The development and implementation of new technologies may be jeopardised by premature disclosure (scientific or lay publications, printed or oral disclosure at conferences, workshops, etc.). Please contact the technology transfer office of your institution before disclosing the results of your work. Protecting your research results should not delay research progress. For additional information, please consult (<a href="https://switt.ch">https://switt.ch</a>) and (<a href="https://switt.ch">Swiss Federal Institute of intellectual property</a>).

### Promotion of early -career researchers: individual post-doctoral fellowships

NRP 79 also aims to increase research potential in the area of 3Rs and promulgate methods to replace, reduce and refine animal experiments in Switzerland by specifically promoting young researchers working or beginning to work in this area. On the one hand, the aim is to arouse the interest of young researchers with excellent projects but little experience in the field of 3Rs research

and, on the other hand, to retain or attract young up-and-coming researchers who already have a track record in a relevant discipline. For this reason, NRP 79 proposes fellowships for post-doctoral researchers with only initial experience in project management.

Within the framework of this fellowship, the research must be executed in Switzerland. 31They must document that they will be hosted by an institution for the duration of the project and that the availability of the necessary scientific infrastructure is guaranteed. Written proof of support by the host institution is required. The conditions favouring long-term integration of the applicant in the home institution need to be described.

In the context of this fellowship, the applicants can apply for their own salary, consumables and – where justified – for a technician and/or a PhD student as an assistant. The applicant's salary will be based on the standard salaries for corresponding positions at the home institution.

Additional requirements for this fellowship are as follows: researchers can apply if they obtained their doctorate no more than 5 years ago at the time of submission. Research topics should comply with the selection criteria defined in chapter 4 and with the goals of the programme. The proposed research projects must be limited to a maximum of 48 months. This fellowship does not overlap with existing SNSF funding tools, since it is designed for more junior candidates with the aim of specifically promoting the research covered by NRP 79. Similar SNSF funding tools are more selective and not linked to a particular theme.

#### International collaboration

In addition to strengthening 3Rs research at the national level, NRP 79 also intends to better embed and network this field of research at the international level. To this end, the NRP offers the possibility of supporting research groups whose project is part of an ongoing international programme.

#### Inter-, multi- and transdisciplinary collaboration

This call welcomes mono- and interdisciplinary projects centred in the HSS with traditional and/or non-traditional research output (such as events and tools promoting dialogue and outreach). Hence, although interdisciplinary projects are most welcome, projects in a single discipline are equally eligible. Participating in NRPs implies participation in a number of programme-specific activities. Researchers should plan a minimum of 2 weeks for these programme-specific activities, organised by the NRP management team.

# 4. Submission procedure and project selection

#### **General conditions**

Projects rejected after the first call for proposals in 2021 may be resubmitted, with appropriate revisions and provided they address the specifics of the present call.

Proposals are submitted and selected in a one-stage procedure. Full proposals are expected to be submitted in English.

Research projects conducted under NRP 79 should last from a minimum of 36 months to a maximum of 48 months. NRP 79 will not fund the fourth year of PhD students' salaries in projects

lasting under 48 months. Thus, projects lasting under 48 months and employing one or more PhD students must ensure their salaries are guaranteed for 48 months at project selection.

Collaboration with research groups in other countries is encouraged, provided the cooperation either generates significant added value that could not be achieved without cross-border cooperation or that it substantially enhances the proposed research with respect to content or methodology, or if the specific expertise of researchers from abroad is essential for the successful completion of the project. As a rule, the share of funding requested for researchers abroad may amount to 20 - 50% of the requested research budget. For applicants from abroad, the norms and salary rates of the relevant country will be applied mutatis mutandis, with the SNSF maximum rates as the upper limit. In accordance with SNSF guidelines, overhead costs are paid directly to the home institution and under no circumstances directly at project level. Before submitting a proposal with a cross-border component, please contact the programme manager of NRP 79.

To allow for optimal coordination, approved projects must start no later than six months after the approval date.

The original, first call for proposals and the present NRP 79 Call document, the Funding Regulations of the SNSF and the General implementation regulations for the Funding Regulations provide the legal basis for the call. All forms, rules, regulations and instructions for the submission of proposals can be found on the mySNF web portal under "Information/documents" after selecting the corresponding NRP and creating a new application.

# Online submission on mySNF

Full proposals must be submitted online via the mySNF portal (www.mysnf.ch). Applicants need to register as mySNF users before they can submit an application. User accounts obtained in the past remain valid and provide access to all SNSF funding schemes. It is advisable to request new user accounts as early as possible via the mySNF homepage.

#### **Full proposals**

The deadline for submitting full proposals is 29 September 2022, 17:00 Swiss local time.

Besides the administrative data and the data management plan to be entered directly in mySNF, the following documents need to be uploaded in PDF format:

#### Research plan

Applicants must use the template provided on the mySNF portal under "Information/documents" in their newly created proposal. The research plan must not exceed 20 pages, including the cover-page, tables, illustrations and the list of references.

#### · CVs and publication lists of all applicants

The CV and list of publications must be formatted as specified in mySNF, container "CV and publication list".

• **Supplementary documents** (support letters, confirmation of cooperation or co-financing, ethical approval, etc.) can be uploaded to the appropriate container in mySNF.

#### **Project selection procedure**

The Steering Committee evaluates the full proposals and reaches final decisions based on the selection criteria outlined below. In the process, it will refer to assessments provided by national and international reviewers.

Based on external reviews as well as on their own evaluation, the Steering Committee will recommend a selection of full proposals to be either approved or rejected by the National Research Council (Programmes division and Presiding Board) of the SNSF.

#### **Selection criteria**

The Secretariat of the Programmes' division checks whether the personal and formal requirements are met before forwarding the proposal for scientific review (cf. chapter 2 of the Funding Regulations of the SNSF). Full proposals that do not meet the personal and formal requirements will not be processed further.

Full proposals will be reviewed based on the following criteria:

- **Compliance with the goals of NRP 79**: Proposals must reflect the programme's objectives and research focus, as delineated in chapters 2 and 3, and comply with the programme's overall framework. This criterion is eliminatory.
- **Scientific quality:** Proposals need to be state-of-the-art and comply with international research standards in terms of scientific quality and methodology. Proposals must contain an innovative component and must be relevant to completed or ongoing research projects in the same field.
- Inter- and transdisciplinary projects, addressing questions from two or more modules: This call welcomes mono- and interdisciplinary projects with a clear focus in HSS, targeting the objectives of Module 3 and the relevant success criteria outlined above (page 4).
- **Application and implementation:** The potential for practical application and the implementation of results is a key element of NRPs. Projects with relevance to politics, society and practice, as well as projects that aim to develop answers to current and upcoming challenges in the Swiss economy and in society at large, are therefore given priority. The selection will also take into account whether the expected results from the programme can serve as a scientific basis for governmental and administrative decisions. Therefore, projects that go beyond academia by integrating stakeholder views, the general public or national authorities are very welcome. The success criteria must be clearly stated in the proposals.
- **Personnel and infrastructure:** Applicants must have a sound scientific track record. Adequate personnel resources and an adequate infrastructure must be secured for the project.

# Schedule and budget

The following schedule is envisaged for NRP 79:

Publication of the 1 <sup>st</sup> call for pre-proposals	18 May 2021
Deadline, 1 <sup>st</sup> call, submission of pre-proposals	
Deadine, 1 Cail, Submission of pre-proposals	3 August 2021
Selection meeting	18 October 2021
1 <sup>st</sup> call, Invitation to submit full proposals	2 November 2021
Deadline, 1 <sup>st</sup> call, submission of full proposals	25 January 2022
Selection meeting, 1 <sup>st</sup> call	26-27 April 2022
Final decision on full proposals, 1st call	9 June 2022
Communication of decisions, 1 <sup>st</sup> call	10 June 2022
Start of research, 1st call	mid-June to mid-December 2022
Publication of 2 <sup>nd</sup> call	10 June 2022
Submission of full proposals 2 <sup>nd</sup> call	29 September 2022
Selection of full proposals 2 <sup>nd</sup> call	31 January 2023
End of research, all projects	mid-December 2027
Publication of the programme synthesis report	mid-December 2028

Projects cannot be extended beyond the duration of the research phase and will submit their final scientific report at the end of this phase of the programme.

Research in NRP 79 will be carried out for a period of 5 years with a total budget of CHF 20 million. The individual projects of NRP 79 can have a maximum duration of 4 years. After project selection, research work must start within 6 months of the date of approval.

# 5. Contacts

For questions regarding the submission of full proposals, please contact the programme manager: Marjory Hunt, nfp79@snf.ch or  $+41\ 31\ 308\ 22\ 22$ 

For questions concerning salaries and eligible costs, please contact the Head of Finance: Roman Sollberger: roman.sollberger@snf.ch or +41 31 308 22 22.

# Technical help with mySNF and electronic submissions

Hotline:

Tel. + 41 31 308 22 99 (Français)

Tel. + 41 31 308 22 00 (Deutsch)

Tel. + 41 31 308 22 88 (English)

Email: <u>mysnf.support@snf.ch</u>

mySNF Homepage: www.mysnf.ch

# 6. Actors

# **Steering Committee of NRP 79**

Prof. Herwig Grimm, Messerli Research Institute, Department of Interdisciplinary Life Sciences, Veterinary University Vienna, Medical University Vienna, University of Vienna, Austria (President)

Prof. Thorsten Buch, Institute of Laboratory Animal Science, University of Zurich, Switzerland

Prof. Josep Call, School of Psychology & Neuroscience, University of St Andrews, Scotland, United Kingdom

Prof. Maik Dahlhoff, Institute of in vivo and in vitro Models, University of Veterinary Medicine, Vienna, Austria

Prof. Gail Davies, Geography Department, College of Life and Environmental Sciences, University of Exeter, United Kingdom

Prof. Olivier Guenat, Medical Faculty, ARTORG Center, University of Bern, Switzerland

Prof. Christine Nicol, Royal Veterinary College, University of London, United Kingdom

Prof. Anna Olsson, i3S – Institute for Research and Innovation in Health, University of Porto, Portugal

Dr. Elisa Passini, Department of Computer Science, University of Oxford, United Kingdom

Dr. med.vet. Elin Törnqvist, Department of Animal Health and antimicrobial strategies, National Veterinary Institute, Sweden

Prof. Markus Wild, Department of Arts, Media, Philosophy, University of Basel, Switzerland

#### Delegate of the Programmes division of the SNSF Research Council

Prof. Nikola Biller-Andorno, Institute of Biomedical Ethics and History of Medicine, University of Zurich, Switzerland

#### Representative of the Swiss Federal Administration

Dr. med. vet. Otto Maissen, Division Animal Experimentation and Evaluations, Federal Food Safety and Veterinary Office (FSVO), Bern, Switzerland

#### Representative of Innosuisse

Dr. Wilma Lukas, W Life Sciences, Nyon, Switzerland.

#### Representative of the Swiss 3R Competence Centre

Dr. Jenny Sandström, Swiss 3R Competence Centre, Bern, Switzerland

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