

# Call for proposals

Evaluation of use-inspired basic research at the SNSF

## 1. Context

The Swiss National Science Foundation (SNSF) funds scientific research in all disciplines through a wide range of funding schemes.

Scientific research seeking fundamental knowledge without aiming at a specific application is called **"basic research"**. However, if scientific research is primarily motivated to solve concrete problems or to develop a specific application, it is called **"applied research"**. For research involving both types of methods, the term **"use-inspired basic research"** was introduced by Donald E. Stokes<sup>1</sup> in his book *Pasteur's Quadrant*. The naming of scientific research in between basic and applied research is also known as practice-oriented research, use-inspired research, translational research (in medicine) or oriented basic research. The SNSF has decided to use the term **"use-inspired basic research"** for research projects that bridge the gap between pure basic research and pure applied research. The SNSF is aware of the difficulty of classifying research projects clearly in one or the other category.



Grafic 1: adaptation of Pasteur's Quadrant: Basic Science and Technological Innovation, Stokes 1997

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<sup>1</sup> Donald E. Stokes: Pasteur's Quadrant – Basic Science and Technological Innovation, 1997.

The category "use-inspired" was introduced as of summer 2011 due to the integration of the DORE programme<sup>2</sup> into the SNSF's regular project funding. Since then, researchers of all disciplines and from all higher education institutions can declare an application to be use-inspired (self-declaration). The SNSF considers a project to be use-inspired if the following criteria<sup>3</sup> apply:

- there is a need for research from a practical point of view;
- the research results must be transferable to the practical realm, although not directly,
- the research has the potential to make a broader impact.

The new category "use-inspired basic research":

- recognises that research which combines the aspect of gaining scientific knowledge with an orientation towards application is becoming increasingly important both nationally and internationally;
- ensures the adequate evaluation of use-inspired applications by taking into account their "broader impact" as an evaluation criteria and by engaging external reviewers from the practical realm.

## 2. Questions for analysis

As stated in the [Multi-Year Programme 2012 – 2016](#) the equal treatment of use-inspired applications needs to be monitored on a regular basis (see page 28). The main goal of the study is to evaluate if the SNSF's aim **of ensuring an adequate evaluation of use-inspired basic research** has been reached.

The study focuses on the following issues:

- Understanding of the concept of use-inspired basic research among researchers (applicants), members of the National Research Council (including experts of evaluation bodies) and the SNSF Administrative Offices.
- Handling of the use-inspired projects during the various stages of the evaluation by the SNSF Administrative Offices, external reviewers, members of the National Research Council: submission, external reviewing, evaluation and outputs.
- Criteria and recommendations for an appropriate evaluation as well as external measures to be taken.

The study will address the following questions:

### Definition and understanding of use-inspired basic research:

- What is the understanding of the concept of use-inspired projects among applicants, the Research Council, experts of evaluation bodies and the SNSF Administrative Offices? Does it mean different things for each party and, if so, where do the differences lie (different normative concepts)?
- What is the understanding of an adequate evaluation by the SNSF?
- Can different typologies of arguments be distinguished that might lead a researcher to declare his/her application as use-inspired (depending on discipline and type of university)?

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<sup>2</sup> Between 2004 and 2011, the SNSF supported practice-oriented research at universities of applied sciences and universities of teacher education. The DORE (DO REsearch) programme provided funding for practice-oriented research projects on various topics in the fields of social work, arts/design, health, education, music/theatre, applied psychology and applied linguistics.

<sup>3</sup> [http://www.snf.ch/SiteCollectionDocuments/foerderung\\_projekte\\_howto\\_forschungsplan\\_e.pdf](http://www.snf.ch/SiteCollectionDocuments/foerderung_projekte_howto_forschungsplan_e.pdf)

- What types of outputs do use-inspired projects generate compared to basic research? What is the impact (e.g. societal or political benefits, technology transfer, etc.) of the promotion of use-inspired research?
- How has the SNSF informed (internally and externally) about the main elements of use-inspired basic research in the past, and how does it inform at present?
- Success rate: How can the lower success rates of use-inspired applications be explained compared to basic research projects?

#### Handling during evaluation phases:

- Is each use-inspired application declared as such? Is there any reason not to declare a use-inspired project as such or vice versa?
- What are the specific procedures to handle a use-inspired application at the Administrative Offices? Are there any differences in handling such projects depending on the funding scheme or the research funding divisions?
- Are use-inspired applications assessed by practice-oriented external reviewers and members of the National Research Council coming from universities of applied sciences or universities of teacher education? How do they perceive their roles?
- How is “broader impact” reflected in the external reviewers’ and the Research Council’s assessment?
- Does the life-time management of use-inspired projects differ from basic research projects?

#### Criteria and recommendations for an appropriate evaluation and measures to be taken during the evaluation and communication phase:

- Should the SNSF revise its understanding of use-inspired basic research and find a different name for use-inspired basic research? Should the SNSF adapt the concept of broader impact?
- Does the SNSF evaluate use-inspired applications adequately? If not, what would be the measures to be taken?
- Is the SNSF communication regarding the concept of the submission and evaluation of use-inspired basic research appropriate, transparent and clear?
- Which measures have to be taken by the SNSF as a consequence of the study on the SNSF’s evaluation procedure and its communication?

### **3. Data provided by the SNSF**

The SNSF will make its data available to the persons in charge of the study:

- grant applications:
  - research plan including declaration of broader impact
  - external (and internal) reviews
  - assessments by referees
  - minutes of the evaluation meeting
  - decisions (approvals and refusals, including direct rejections and non-consideration)
  - correspondence
- data from the GA administration tool (success rates and statistics)
- data from the public [SNSF Grant database P3 Projects](#)
- information gleaned from interviews with employees at the Administrative Offices (regarding internal workflow processes, evaluation processes, handling of direct rejections and non-consideration)

- SNSF report “Bericht zur Einführung der Kategorie anwendungsorientierte Grundlagenforschung” (July 2013)
- SNSF report „Le positionnement de la recherche issue des HES/HEP au sein du FNS: un état des lieux pour 2015“

## 4. Advisory group

The evaluation process will be coordinated by the Administrative Offices of SNSF. An advisory group will ensure the quality of the evaluation with the following tasks:

- Feedback on the content of the call before it is launched
- Selection of a proposal
- Kick-off meeting with chosen contractor
- Presentation of interim results if necessary
- Discussion of final results and recommendation

## 5. Schedule

|                 |   |
|-----------------|---|
| April 2016      | Call for proposals  |
| End of May 2016 | Deadline for the submission of concepts                     |
| June 2016       | Evaluation of concepts submitted to the SNSF                |
| July 2016       | Start of the study  |
| December 2016   | Presentation of the main findings and measures to implement |
| January 2017    | Submission of the report to the SNSF                        |

## 6. Call for proposals

In order to respond to the evaluation questions, the agency mandated to conduct the evaluation has to elaborate an adequate methodology. It is imperative that all statutory requirements are respected, in particular those relating to data protection and confidentiality. The final report must be written in English, with summaries in German, French and Italian.

### 6.1. Content of the proposal

Proposals (5–10 page outlines) must be submitted to the SNSF by 30 May 2016 to [in-grid.kissling@snf.ch](mailto:in-grid.kissling@snf.ch) and contain the following elements:

- Approach and methods for the analysis,
- Information and resources required from the SNSF to carry out the mandate,
- Time frame and budget,
- Brief description of project team and references.

The selected agency will also be invited to revise the concept, taking into account any suggestions made by the SNSF.

### 6.2. Finance

Each concept must contain a brief draft budget relating to the proposed study. The total amount must not exceed CHF 60,000 (VAT included).