

A casting call for the best research projects

Thousands of researchers submit applications to the SNSF each year. All of them want to convince the evaluators that they are worthy of financial support. But it's not an easy task.

6,041
submitted applications

23,761
requests for external reviews

8,802
external reviews

2,971
approved projects

2017 figures

Candidates who answer a casting call or audition for an orchestra attempt to outdo their rivals with their technique, musicality and artistic interpretation. Those who want money from the SNSF, with their research project and their scientific track record. "Our decisions are based solely on the quality of the project and the researchers' qualifications," says Matthias Egger, President of the SNSF Research Council.

The decision-making process

Project selection starts with researchers submitting their project proposals on the online platform *mySNF*. The SNSF Administrative Offices check whether the submitted project proposals meet the formal requirements. Subsequently, each application is peer-reviewed by at least two external experts. Based on the reviews, two members of the Research Council assess the proposals and make a written recommendation. The Research Council compares all applications and decides which projects deserve to be funded. This selection process usually takes six months.

Young researchers who apply for career funding are additionally invited for an interview at the SNSF. The figure on page 7 illustrates this expanded process, taking the Ambizione funding scheme as an example.

Strengths of the SNSF procedure

"To select the best projects, our evaluation procedure must also be the best it can be," says Matthias Egger. This is how the SNSF endeavours to achieve this:

Clear criteria

The SNSF evaluates the applications on the basis of clearly defined criteria that are also commonly used internationally. Why is the project relevant for science and – in the case of use-inspired research – for the economy and society? How original and topical is it? Have the applicants proposed suitable methods? Is the project financially feasible in view of the given funding period? What scientific achievements do the applicants already have under their belt? The evaluation provides detailed answers to these questions.

- Comparability of reviews
- International standards

Competitors from the whole of Switzerland

All researchers in Switzerland are eligible to submit applications. Projects proposed by higher education institutions, government research centres and private research institutes all compete for the same funds. The competition is prolonged and intense.

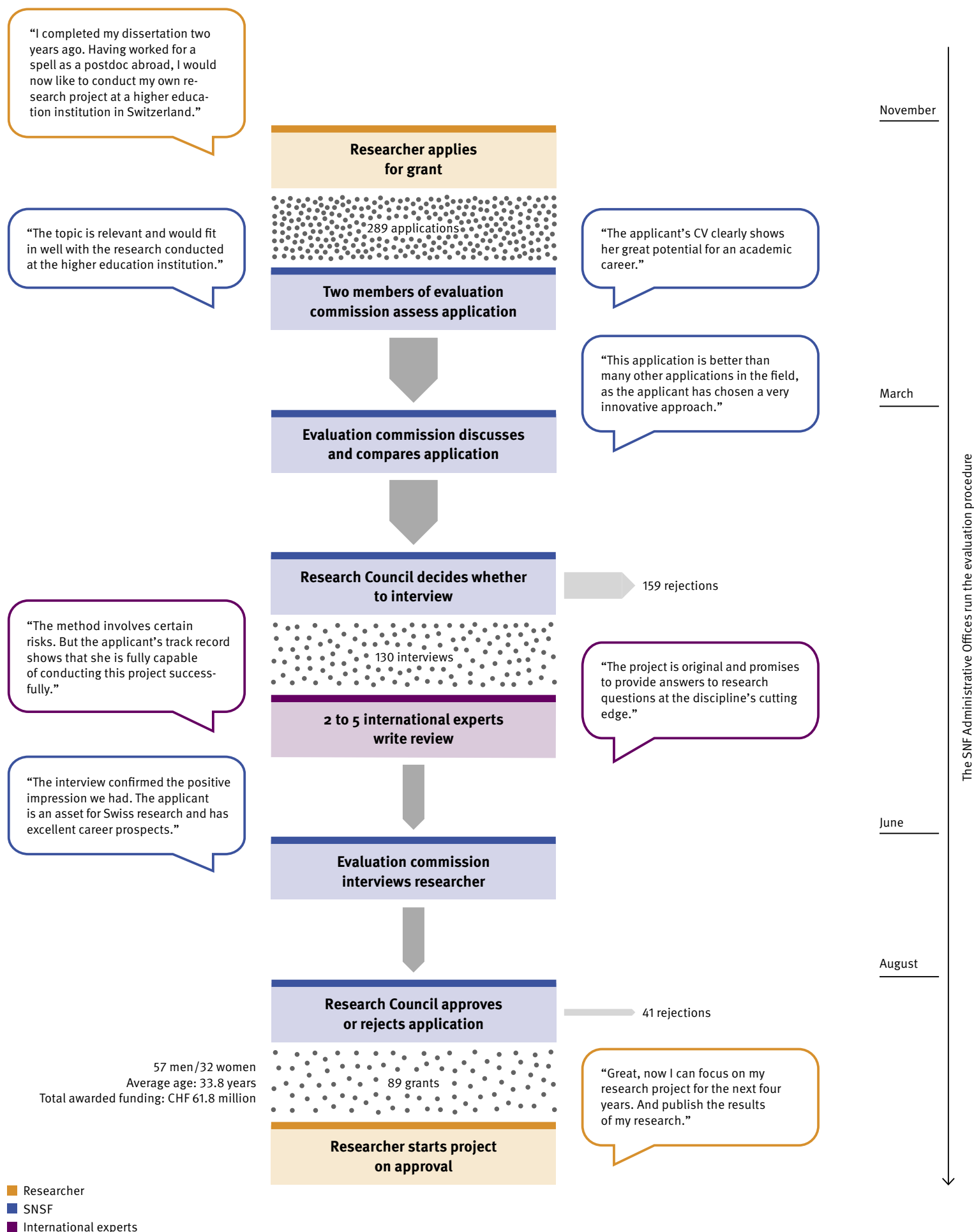
- Equal opportunities for government funding
- Quality assurance

"To select the best projects, our evaluation procedure must also be the best it can be."

Matthias Egger,
President of the National Research Council
of the SNSF

This is how the SNSF selects young researchers

Ambizione funding scheme 2017



International reviews

The SNSF obtains the majority of reviews from experts abroad (see figure). On the one hand, because it wants its evaluation procedure to be international. On the other hand, because in Switzerland researchers working in the same field often know each other and their impartiality might therefore be at risk.

- Pool of international experts
- Input for Swiss research from all over the world

Decisions made by researchers

The Research Council is composed of 100 researchers, all of whom are employed at higher education institutions and research centres. They evaluate research proposals for the SNSF in a part-time capacity. This also applies to the 700 researchers that make up the various evaluation commissions supporting the Research Council. Hence applications submitted by researchers are also assessed by researchers, and not by the SNSF Administrative Offices, corporate representatives or politicians.

- Scientific expertise
- Credible decisions

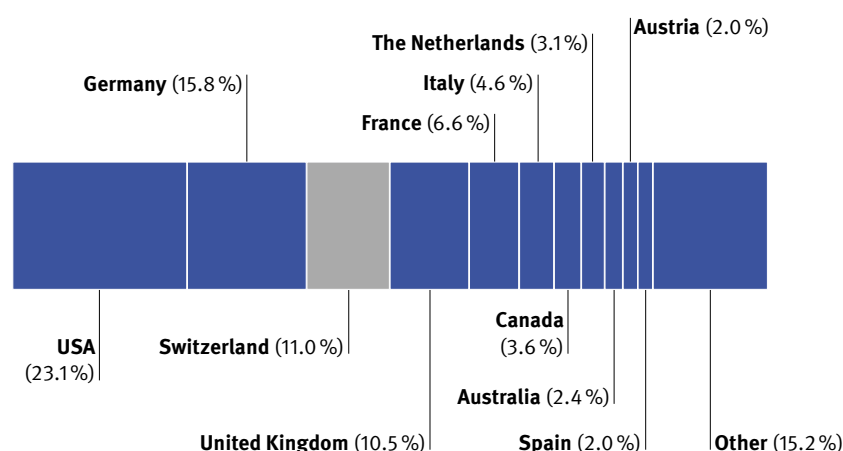
Maximum benefit

"All the approved applications have convinced evaluators of their high scientific quality," says Matthias Egger. "This ensures that government money generates maximum benefits for science, the economy and society."

Only one participant in a casting call or in orchestra audition actually wins. Thanks to the selection process conducted by the SNSF, around 3,000 new research projects were funded in 2017. They will enable Swiss research to maintain its leading position in the international science world.

"We adapt our funding schemes as early as possible, so that we will be fit to support excellent research also in ten years' time."

Angelika Kalt,
SNSF Director



The external experts who wrote 8,802 reviews for the SNSF in 2017 came from these countries.

Everything great? Well, not quite...

In spite of its excellent evaluation procedure, the SNSF faces a number of challenges, just as any other funding agency. "We are constantly developing the procedure based on the insights gained from scientific evaluation research," says director Angelika Kalt.

The SNSF is implementing DORA – the Declaration on Research Assessment – step by step. This international declaration aims to broaden the criteria used to assess scientific quality. The number of citations in certain journals should no longer be the key criterion.

The SNSF wants to support research projects that can be completed successfully. How can it also fund projects that involve certain risks, but have the potential to obtain exceptional results? One answer to this question is: with Sinergia, the SNSF funding scheme for research projects with breakthrough potential.

The SNSF would like to receive more applications from universities of applied sciences and universities of teacher education. To improve this situation, the SNSF is bringing its funding schemes more closely into line with the particularities of their research and has intensified its communication with these universities (see page 11).

It isn't always easy to find a sufficient number of external reviewers. In 2017, the SNSF Administrative Offices had to contact 23,761 persons to obtain 8,802 reviews.

Women should not be at a disadvantage in the race for government funding. For this reason, the SNSF regularly analyses the success rates of women and men. It also strives to steadily increase the share of women in the Research Council and the evaluation commissions.

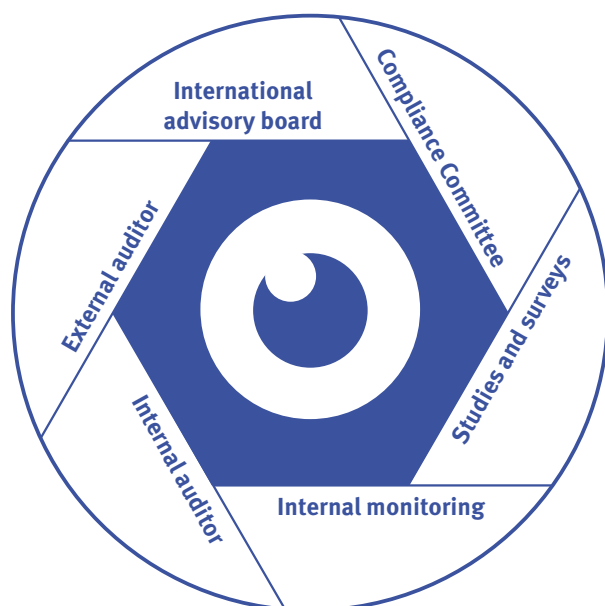
Researchers receive funding for a maximum of five years. What happens then? Does career funding have a long-term impact? The SNSF is tracking the careers of young researchers, in particular, so that it can adapt its evaluation procedure and funding schemes if necessary.

Last but not least: how does the SNSF ensure that its selection procedure is really as good as it can be (see page 9)?

"We adapt our funding schemes as early as possible, so that we will be fit to support excellent research also in ten years' time," says Angelika Kalt.

All eyes on quality

Is the evaluation procedure fair and transparent?
Do the Administrative Offices work efficiently?
The SNSF has introduced a host of measures to assess the quality of its funding activities.



The *Compliance Committee*, appointed by the SNSF Foundation Council, does random checks to ensure compliance with the relevant laws and regulations. One of its tasks has been to examine whether the SNSF communicates transparently, understandably and in the same manner with all of its applicants. For example, many researchers approach the SNSF with questions before submitting their application. The Administrative Offices are allowed to provide formal information, but no advice on scientific matters as this might give them an unfair advantage over other applicants. It can be difficult to draw a clear line between information and advice. Nonetheless, the Compliance Committee has commended the Administrative Offices in this respect. At the same time, it has recommended making employees more aware of this issue and putting informal rules down in writing. The committee is also examining processes to ensure that projects are always selected in accordance with the rules. "The SNSF makes every effort to protect the rights of researchers and provide high-quality fund-

ing services," says the president of the committee, Franciska Krings. "And as a researcher, I am happy to play a part in this."

Studies and surveys

The SNSF has commissioned *studies and surveys* to analyse certain aspects of its funding activities. In 2016, a Norwegian institute examined the evaluation procedure for National Centres of Competence in Research (NCCRs). The study praised the procedure, describing it as efficient and fit for purpose, but also made a number of recommendations. One of the recommended measures was to have each application assessed by at least three experts. The SNSF implemented the recommendations for the 5th series of NCCRs, for which it launched a call in October 2017.

Monitoring and revision

The SNSF conducts a detailed *internal monitoring* of its decisions on an ongoing basis. For instance, it probed whether Research Council decisions show a preference for certain universities. No such tendencies were detected.

The *internal audit* takes a close look at the efficiency and effectiveness of processes. An example: how efficient are the SNSF Administrative Offices in checking whether applications meet the formal requirements? The Swiss Federal Audit Office (SFAO) checks the annual financial statements of the SNSF. Although the SNSF is a foundation under private law, it is funded by the Swiss federal government and therefore falls under the remit of the SFAO as *external auditor*.

International advisory board

In 2018, the SNSF will appoint an *international advisory board* composed of experts from the world of science and research funding, non-profit organisations and private companies. Their task will be to pinpoint any weaknesses in the SNSF's funding activities and make proposals for strategic development.



"The SNSF makes every effort to protect the rights of researchers and provide high-quality funding services."

Franciska Krings,
University of Lausanne,
President of the Compliance
Committee of the SNSF