



Financing of networks: the innovations in project funding include new options for international collaboration.

# International activities

The SNSF has introduced new mechanisms for funding international collaborations in Switzerland as well as the funding scheme PROMYS at European level.

**S**cientific research builds on the exchange of ideas and practices beyond national borders. Public funding limits research to a national dimension that can be a constraint on the freedom of researchers. Therefore, the SNSF supports international cooperation and the removal of research obstacles in order to facilitate mobility and the exchange of ideas and practices beyond the borders of Switzerland.

## Changes in project funding

The changes in project funding have created new mechanisms for funding international collaborations. As of October 2016, researchers can apply for networking costs when submitting a project funding proposal to the SNSF. Fundable costs include travel expenses, costs for conferences and workshops as well as research costs generated by project partners.

## Activities in Europe

Switzerland is located at the heart of Europe and, apart from some partnerships in the US, Canada and Australia, the majority of international collaborations are with European partners.

In 2015, the SNSF launched the first call for the Promotion of Young Scientists in Eastern Europe (PROMYS) and, with its partner organisation in Croatia, started to prepare a call for joint research projects in the context of the EU enlargement contribution. In addition, the SNSF embarked on exploratory discussions with Belgium for an agreement to facilitate cross-border research between the two countries. This would be the fifth cross-border agreement of its kind.

For many years, the SNSF has been participating in European bodies and organisations to create the best conditions for researchers. A key member of Science Europe and its working groups (e.g. cross-border collaboration, Horizon 2020), it also took part in a public consultation on the ex-post evaluation of the 7<sup>th</sup> framework programme (FP7) of the European Commission in 2015.

## Aim: full association with Horizon 2020

Bilateral agreements with partner organisations cannot replace direct access to European research programmes. For this reason, Swiss politics must strive to secure full association with the European framework programme Horizon 2020. This programme

complements national research funding as offered by the SNSF and the Commission for Technology and Innovation (CTI). The opportunities to participate in European schemes and establish international collaborations add to the appeal of doing research in Switzerland. When fully associated, Switzerland will be able to participate in shaping European research policies. This will include contributing to the thematic definition of programmes as well as engaging in fundamental discussions, such as the debate about open science (see article on page 6).

Temporary ERC Backup Schemes

## No loss of funding thanks to Transfer Grants

In February 2015, the SNSF awarded 21 SNSF Consolidator Grants to outstanding researchers, thereby concluding its Temporary Backup Schemes (TBS), launched as a substitute for the ERC grants from which Swiss-based researchers were temporarily barred. The over 250 TBS applications – of which 48 were approved with a total budget of CHF 92 million – are a clear indication that these short-term transitional measures were a necessary step. In addition, the SNSF introduced Transfer Grants in September 2015; they allow researchers abroad who had won an ERC Starting or Consolidator Grant in 2014 to accept an academic post in Switzerland without any loss of funding.



Bilateral research programmes

## Support for 49 bilateral projects

In the context of the bilateral research programmes of the federal government, the SNSF launched several calls for joint research projects in 2015: with South Korea (12 projects approved), Russia (25 projects) and the state of Rio de Janeiro (12 projects). The applications were evaluated whenever possible in collaboration with the partner organisations of the SNSF. Most of the projects will be implemented jointly over a three-year period. Towards the end of 2015, the SNSF launched a joint call together with a Chinese funding body.



Humanities and social sciences

## Greater international focus thanks to ERA-NETs

Research in the Humanities and Social Sciences is becoming more international. This is reflected in the SNSF's participation in a number of ERA-NET initiatives which aim to improve research cooperation among EU members and associated states. Since April 2015, the SNSF has been a full member of the ERA-NET NORFACE (New Opportunities for Research Funding Agency Co-operation in Europe), which is dedicated to strengthening international cooperation in the social sciences. The SNSF is also participating in the ERA-NET HERA (Humanities in the European Research Area), which aims to strengthen the humanities at European level. As a result, researchers in Switzerland were able to submit proposals to the 2015 call of the joint research programme "Uses of the Past", which focuses on pressing societal questions of identity, integration, political legitimacy and cultural dynamics. More than 80 pre-proposals with Swiss participation were submitted.

# National Research Council: keeping a watchful eye over basic research in Switzerland

The approximately one hundred members of the National Research Council play an important role in maintaining high-quality standards in Swiss basic research. Acting in a part-time capacity, they are committed to guaranteeing research excellence and diversity.

**T**he SNSF is of eminent importance to the Swiss research scene, promoting the diverse range of basic research activities being carried out in Switzerland. The nerve center of the SNSF is the National Research Council (NRC). With a membership of almost one hundred scientists, it meets around ten times per year for long, in-depth meetings in Bern to arrange funding for the best projects and junior researchers, using international reviews as the basis for its decision-making.

The NRC members are grouped into four divisions: three discipline-based divisions (Humanities and Social Sciences; Mathematics, Natural and Engineering Sciences; Biology and Medicine) as well as the Programmes division. There are also three specialised committees spanning all of the divisions (International Cooperation, Careers and Interdisciplinary Research). All of the members are distinguished researchers in their particular field. They are supported in their work by the SNSF Administrative Offices.

## Productive appreciation

For many of the members, their work on the National Research Council is very close to their hearts. Talking to the 98 members, most of whom teach at Swiss higher education institutions, it is clear that they are very appreciative of the SNSF. Time and



**“The Swiss National Science Foundation is one of the best funding organisations for research in the world.”**

**Ursula Keller, physicist at ETH Zurich and member of the Research Council in the Mathematics, Natural and Engineering Sciences division**

time again, they stress how important it is to them that they are able to give something back to the SNSF, and thus to the Swiss research community, in return for what they have been given during their careers.

Their voluntary commitment to the Research Council is a clear manifestation of this gratitude. It is certainly the case that sitting on the Council brings a great deal of renown and a high level of influence, with the members ensuring high-quality research in their disciplines and helping to shape Swiss research. However, members also have to commit to a great deal of work and to giving up a lot of their time. Thousands of projects need to be assessed every year. Anyone who chooses to sit on the Research Council needs to make sacrifices elsewhere, including giving up some of their leisure time.

## Supporting the full range of research

The Research Council members also pursue overarching objectives through their work. Franz Caspar, for example, psychology professor at the University of Bern and Research Council member in the Humanities and Social Sciences division, also supports subjects from the humanities that are deemed to be more exotic, despite carrying out very



**“The National Centres of Competence in Research have created the scope for a new approach to research in social sciences by establishing longitudinal studies.”**

**Fabrizio Butera, social psychologist at the University of Lausanne and member of the Research Council in the Programmes division**



**“We are not looking to promote the latest research trends, we want to support original research.”**

**Franz Caspar, psychologist at the University of Bern and Research Council member in the Humanities and Social Sciences division**

use-inspired research himself. It is, he says, much easier to highlight the benefits of studies that save infants' lives than those concerned with the religious history of pre-historic cultures. But this work too is valuable to society. He believes it is the Research Council's role to promote research in all of its breadth.

Beatrice Beck-Schimmer, anaesthesiology professor at the University of Zurich and member of the Research Council in the Biology and Medicine division, is keen to see greater support for clinical research, an area that is still very much in the fledgling stage in Switzerland. She also believes in the importance of scientists being given enough time to carry out research, despite the many administrative tasks that are also required of them, and wants to see further improvements in equal opportunities, removing disadvantages for women. As the President of the Specialised Committee Careers, she is committed to ensuring that evaluations are carried out without any gender bias.

### Improved mentoring

The SNSF supports many young aspiring researchers. These researchers represent the future of Swiss science. Ursula Keller, professor of physics at ETH Zurich and a member of the Research Council in the Mathematics, Natural and Engineering Sciences division is calling for the higher education institutions to improve their mentoring of

young up-and-coming researchers. If these young scientists are insufficiently prepared for submitting their applications, they will be forced to revise their proposals and re-submit them, needlessly wasting time. Fabrizio Butera, professor in social psychology at the University of Lausanne and member of the Research Council in the Programmes division, is driving forward the implementation and evaluation of the National Centres of Competence in Research (NCCRs). These, he explains, have proved to be an excellent tool for the promotion of Swiss research in all disciplines. He is convinced that the practice of using longitudinal studies for investigating social and individual transformation processes in the social sciences would not exist today, were it not for the “LIVES”, “Democracy”, “Affective Sciences” and other NCCRs. Swiss research benefits greatly from the work of the Research Council and the dedicated commitment and careful work of its members.



**“As a member of the Research Council, I have become entirely familiar with the political aspects of research, and now I can help shape these.”**

**Beatrice Beck-Schimmer, anaesthesiologist at the University of Zurich and member of the Research Council in the Biology and Medicine division**

Funding policies

## DORA declaration

In June 2014, the SNSF signed the San Francisco Declaration on Research Assessment (DORA). The declaration consists of a set of recommendations with regard to the assessment of scientific output. It calls for scientific performance to be judged not on the basis of the impact factor of journals; instead a wide range of scientific output should be considered and evaluation criteria published. DORA was initiated by the American Society for Cell Biology (ASCB) together with a group of editors and publishers in December 2012. More than 600 organisations have signed the declaration so far.

In order to integrate the DORA recommendations into its evaluation procedure, the SNSF defined a range of measures in February 2016. New guidelines will make it clearer which kinds of output (e.g. patents, prizes and science communication) will be considered in the category **track record** alongside publications. The forms and guidelines for evaluators will be published on the SNSF website.

When assessing **peer-reviewed publications**, experts need to consider their quality and scientific impact, but not the overall total or annual number of publications. The reputation of the journals in which the articles are published can serve as an indicator of quality. Impact can be inferred from article-based metrics, if this is beneficial in a specific research area. Journal-based metrics should not be considered, however.



National Centres of Competence in Research

## SSIC: positive report on structural impact

The Swiss Science and Innovation Council (SSIC) analysed the impact of the first series of NCCRs. They were launched in 2001 and came to an end in 2013. In its report, published in December 2015, the SSIC rates the structural impact of the NCCRs very highly, but it also gives recommendations for future adjustments. Some of these innovations have already been implemented in the three following series of NCCRs. For instance, the SNSF asked the NCCRs to bring their goals more closely into line with the research topics and actively promoted scientific exchanges between the NCCRs.



Evaluation of infrastructures: focus on scientific aspects

Research strategies

## The SNSF should focus on its core competencies

The Swiss Science and Innovation Council (SSIC) has evaluated the SNSF's strategic funding of research infrastructures and disciplines. In its report, it advises the SNSF to focus on scientific aspects when evaluating research infrastructures and to continue the established practice of funding basic research. It also suggests looking into the possibility of introducing a new funding scheme for high-risk/high-reward research. These recommendations have been considered in the SNSF's multi-year programme.

Project funding

## Innovations as of October 2016

In 2012, the SNSF set out to assess its project funding scheme. Based on internal analyses, external evaluations and a survey among researchers, it is now introducing various changes that will apply as of the submission deadline in October 2016: more diversity in research, clearer scientific responsibilities, more comprehensive funding for longer periods and more flexible use of funds. The changes are also expected to reduce the administrative workload.

→ Further information:  
[www.snsf.ch](http://www.snsf.ch) › Funding › Projects

Biobanks

## Coordination platform for data quality and data access

After successfully establishing the Swiss Clinical Trial Organisation and its nationwide network of Clinical Trial Units, the SNSF embarked on another coordination task: to improve the quality of research data and data access, it created the Swiss Biobanking Platform (SBP). The SBP is a national coordination platform for biobanking activities in all research areas. It offers a wide range of services such as advice on legal and ethical questions when establishing and running biobanks, information on biobanks and data collections worldwide as well as support regarding biobanking methodology and IT solutions. By offering these services, it contributes to harmonising biobanking procedures and making the corresponding data and samples available for future research projects.

