

# Annual Report

## 2014



SWISS NATIONAL SCIENCE FOUNDATION

**“Our vision: young researchers can conduct independent research at an early stage in their careers and realise their own ideas.”**

Front page

Vanessa Wood is in charge of the Laboratory for Nanoelectronics at ETH Zurich. When she was 27, she became the youngest woman in the last decade to obtain a project funding grant of the SNSF. In 2014, her latest project was among the first six precoR proposals to be approved (see p. 11).

## Annual Report 2014

## Foreword

# There is no way around internationality

Ladies and gentlemen, dear researchers  
and friends of research

Events in 2014 have cast a shadow over Swiss research. The acceptance of the popular initiative “Stop mass immigration” put research in Switzerland, and in particular its international orientation, under immense pressure. The main article of this report, on the SNSF Starting and Consolidator Grants, describes how the impact and repercussions of the yes vote have affected Swiss research and the SNSF.

In this foreword, however, we would like to look ahead and stress that a lot more will be at stake in the future than the international standing of Swiss research. The acceptance of the mass immigration initiative reflects the tensions between local and international concerns, which are becoming both more numerous and more aggravated. This development has a particularly strong impact on research.

**“Research excellence can only  
be achieved internationally –  
compromises in this area are not  
an option.”**

Science is becoming increasingly internationalised. A study published in “Nature” called our era the “fourth age of research” – and this for good reason: the number of research publications in western countries has continued to rise in recent years, mainly due to the publications being produced in the context of international collaborations. In contrast, the number of purely national publications has increased only marginally. Nowhere is this more true than in Switzerland, with more than two-thirds of Swiss scientific publications

now having at least one non-Swiss co-author. These publications create added value because they are – unsurprisingly – cited more frequently than those that are purely national. The attitude of the Swiss people therefore raises a fundamental question for research and for society at large: how can the tensions between internationally oriented top-notch research and local interests be resolved to everyone’s satisfaction?

It is clear to the SNSF that science cannot be expected to make any compromises in this respect: research excellence is only achievable at an international level. The cross-border exchange of knowledge and of researchers has always been one of the drivers of progress in science. Conversely, research has never excelled in national isolation – all the greats of Swiss science either came from abroad or worked in another country for some time. As far as research and innovation go, there is no way around internationality.

It is therefore paramount for Switzerland to be part of the European research area – or else our country’s prosperity will be at risk. New discoveries, developments and technologies make it possible to create jobs and open up new vistas for commerce. They are the driving force of a society such as ours, whose prosperity – despite scant natural resources – is built on science and knowledge.

  
Gabriele Gendotti

  
Martin Vetterli

  
Daniel Höchli



Federal Councillor Johann Schneider-Ammann visited the SNSF in April 2014:  
“We remain committed to a full association with Horizon 2020.”

from left to right:

Daniel Höchli, Director of the Administrative Offices  
Johann N. Schneider-Ammann, Federal Councillor, Head of the EAER department  
Gabriele Gendotti, President of the Foundation Council of the SNSF  
Martin Vetterli, President of the National Research Council of the SNSF



## The Swiss National Science Foundation ...

### ... funds scientific research in Switzerland

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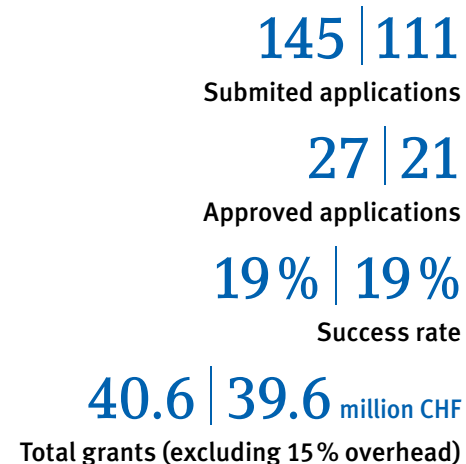
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**SNSF Starting and Consolidator Grants**

# Research in Switzerland under threat: countermeasures by the SNSF

International competition plays an important role in generating research excellence. After the yes vote in the referendum on “mass immigration”, researchers in Switzerland were temporarily unable to apply for the prestigious grants awarded by the European Research Council (ERC). Aiming to maintain the international competitiveness of research conducted in Switzerland, the SNSF offered its own Starting Grants and Consolidator Grants as a stop-gap solution for 2014.

SNSF Starting Grants | Consolidator Grants



Switzerland has always been a highly coveted place to do research for top-rated scientists from around the world. This has propelled Switzerland to a leading position among research-intensive countries. After the acceptance of the popular initiative “Stop mass immigration” on 9 February 2014, the country was faced with a dual challenge.

**Restrictions on the free movement of people and exclusion by the ERC**

On the one hand, the narrow yes vote by the Swiss electorate will limit the free movement of people in the future. This poses a problem for research centres across Switzerland, which are heavily dependant on cross-border mobility. On the other hand, because it is politically linked to the freedom of movement agreement, the result of the referendum jeopardised Switzerland’s planned participation in the European framework programme Horizon 2020 and eventually resulted in the country being excluded by the EU. One of the numerous repercussions was that researchers in Switzerland were no longer eligible to apply for the prestigious and generously funded ERC grants. This called for urgent measures to be taken to underpin the competitiveness and productivity of Swiss research until a political solution with the EU could be found.

**The SNSF bridges the gap: Temporary Backup Schemes**

Soon after the vote, the SNSF launched a scheme intended to prevent any potential decline in Swiss research capacities: the Temporary Backup Schemes (TBS) were devised, set up and launched in a matter of weeks in consultation with the State Secretariat for Education, Research and Innovation. Intended as a transitional measure, TBS enabled excellent researchers at Swiss research institutions, who were no longer eligible to apply for ERC grants, to acquire such grants from the SNSF within the same time frame. A call for SNSF Starting Grants was opened in March 2014, followed by the SNSF Consolidator Grants at the end of April. TBS gave researchers in Switzerland the opportunity to apply for grants that were very similar to those of the ERC in terms of the funding goals, the funding amount and the evaluation of proposals.

**Researchers made the most of TBS**

A large number of researchers responded to the two calls: all in all, the SNSF received over 250 applications for SNSF Starting and Consolidator Grants. The demand for these grants was even slightly higher than the demand for ERC Starting and Consolidator Grants had been the year before (approximately 240 applications from scientists who wish to do research at a Swiss institution). The success rate, i.e. the share of approved applications, was 19% for the SNSF >



To prevent any potential decline in Swiss research capacities, the SNSF set up and launched in a matter of weeks the Temporary Backup Schemes (TBS), which attracted a great deal of attention from the media.



Federal Councillor Johann N. Schneider-Ammann welcomed the SNSF's Temporary Backup Schemes.

> Starting Grants; this was lower than the average annual success rates (over 21%) achieved by Swiss researchers applying for ERC Starting Grants from 2007 to 2013. The success rate of 19% recorded for SNSF Consolidator Grants also lay below Switzerland's success rate in relation to the ERC Consolidator Grants in the previous year (21%; introduced by the ERC in 2013). The maximum grants per project amount to CHF 1.5 million for SNSF Starting Grants and CHF 2 million for Consolidator Grants, with projects due to run for up to five years. In addition, each higher education institution received a further 15% to cover overhead costs.

**Additional federal funds to finance TBS**

Additional funds from the Swiss federal government made it possible for the SNSF to offer the SNSF Starting and Consolidator Grants. Last year in June, the Federal Council asked parliament to approve a budget transfer of CHF 94 million to finance the SNSF's Temporary Backup Schemes as a replacement for the ERC calls. This request was formally approved by parliament on 1 December 2014.

**"Switzerland needs a long-term solution"**

In September 2014, Switzerland and the EU reached an agreement that allowed for partial association with Horizon 2020 by the middle of the same month. Researchers in Switzerland could now again participate in ERC calls. The SNSF subsequently shelved its plans to launch a call for SNSF Advanced Grants. The temporary partial association until the end of 2016 is not a fully satisfying solution for Martin Vetterli, president of the National Research Council: "The SNSF is relieved to have found this stop-gap solution, but Switzerland will again face the threat of exclusion from Horizon 2020 in 2017. We are therefore still very concerned about the long-term competitiveness of research in Switzerland. A permanent solution is needed." From the SNSF's point of view, full participation in Horizon 2020 without any time limits must continue to be the goal in further negotiations with the EU. The SNSF will be observing developments in this area very closely. If matters should take a turn for the worse, it will take steps to mitigate the negative impacts of any further exclusion from Horizon 2020 on Swiss research. <



**"The voice of science and research should make itself heard more effectively in society."**

Felix Gutzwiller, Councillor of States

**Political support for research in Switzerland**

In mid-April, Federal Councillor Johann Schneider-Ammann met senior figures from the SNSF. During his visit, he stressed the importance of the Temporary Backup Schemes: "I welcome the SNSF's initiative as a temporary measure to prevent any detrimental effects on researchers in Switzerland." The Federal Councillor was impressed by the speed at which the SNSF had set up transitional measures helping Switzerland to maintain its international competitiveness as a centre of research and innovation.

**Greater public commitment**

At the annual meeting of the National Research Council (Séance de réflexion), the SNSF had the opportunity to welcome another renowned politician. The expert on preventive medicine and member of the Council of States, Felix Gutzwiller, explained the current challenges faced by Swiss research policy makers. He argued that openness to the world had always been a crucial factor in Switzerland's success as a centre for research and innovation. "This openness is now under siege!", he maintained. The result of the referendum on "mass immigration" made it questionable whether Switzerland would still be able to recruit top-rated researchers from all over the world. "The voice of science and research should make itself heard more effectively in society," Gutzwiller said. A stronger public and political commitment by the researchers and the ERI institutions was therefore of great importance.

**Top-level research in Switzerland needs to compete in and with Europe!**

Outstanding researchers in Switzerland who aim to produce excellent work need to collaborate internationally and they must compete with other scientists across national borders. They can only advance their research if they pit themselves against the best in their field.

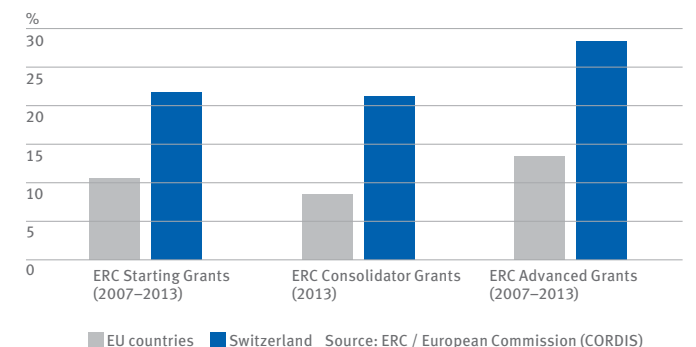
**ERC grants: Switzerland with highest success rate**

Since 1987, researchers based in Switzerland have had the opportunity to apply for European funding. The European Research Council (ERC), which funds basic research just like the SNSF, was only created in 2007. The first few years of coexistence have shown that researchers working in Switzerland are remarkably successful in the competition to secure research funding from Europe. Between 2007 and 2013, ERC proposals from Switzerland enjoyed a higher success rate than those from any other country, with 23% of proposals being funded (see graph). Thanks to this impressive performance by Swiss researchers, a high amount of funds has flowed back from the ERC to Switzerland in the past years: during the 2007–2013 period, the ERC funding obtained by Swiss researchers was more than twice as high as in a scenario where the allocation of money is proportional to the individual countries' financial contributions to the ERC.

**The SNSF as the gateway to Europe**

The success of Swiss science at European level is due not least to a strong national research funding system: over 90% of researchers in Switzerland who have been funded by the ERC since 2008 had received prior funding from the SNSF. The excellence criteria applied by the SNSF boost the international competitiveness of researchers in Switzerland and help them to successfully make the transition to the European arena. The SNSF is thus pursuing a funding policy that generates sustainable impacts and optimally complements the policies of the ERC.

**ERC grants: average success rates**



**Overview of funding**

# CHF 849 million for scientific research

In 2014, the SNSF funded 3,469 research proposals with grants worth CHF 849 million in total. A further CHF 92 million was allocated to the Temporary Backup Schemes (TBS). About a third of the researchers based at universities and federal institutes of technology are “clients” of the SNSF.

In 2014, the SNSF awarded a total of CHF 849 million to researchers, 4% more than in the previous year. This figure does not include the Temporary Backup Schemes (see p.6ff. and p.50f.). The distribution of the CHF 849 million is comparable to that of the previous years: 50% were allocated to project funding – the SNSF’s main funding scheme – 23% to career funding, 23% to programmes and 3% to infrastructure funding.

The responsive-mode funding schemes at the core of the SNSF’s portfolio, open

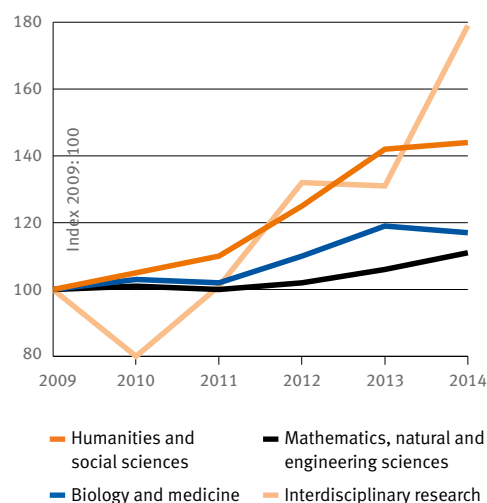
to all research disciplines and topics and without structural requirements, accounted for more than 80% of total funding in 2014, including career funding.

**SNSF coverage of university researchers in Switzerland**

The SNSF is only one of several funding sources for researchers in Switzerland. Overall, SNSF funding accounts for approximately 15% of research funding at Swiss universities. According to the SNSF’s calculations, around one third of researchers employed at

the universities, the ETHZ and the EPFL submit proposals to the SNSF, or benefit from ongoing grants. Coverage is highest in the MINT disciplines (mathematics, informatics, natural sciences and technical sciences), followed by biology and medicine, and heterogeneous in the humanities and social sciences. Thus the potential of many disciplines within the humanities and social sciences remains largely underdeveloped. <

**Project funding: development of approved grants by science area**



Since 2009, the largest increases in project funding awarded by the SNSF have been recorded in the humanities and social sciences (46%) and in interdisciplinary research (79%). In mathematics, the natural and the engineering sciences, and in biology and medicine, project funding increased by 12% and 16% respectively. Similar increases in the demand for funding have been observed in the past few years: the number of applications rose more strongly in the humanities and social sciences and in interdisciplinary research than in the other two areas. The distribution of funds across the large science areas is therefore mainly based on demand.

In absolute figures, biology and medicine received the largest portion of the CHF 427 million earmarked for project funding in 2014, namely 38%, followed by mathematics, the natural and the engineering sciences with 34%. The humanities and social sciences were granted 23% and interdisciplinary research 5%.

**CTI and SNSF as partners**

# A bridge between basic research and innovation

The Commission for Technology and Innovation (CTI) and the SNSF are collaborating closely on a number of special programmes. In 2014, the two agencies analysed their respective funding schemes with the aim of filling any funding gaps identified between basic research and innovation.

The SNSF and the CTI are important partner institutions as well as drivers of scientific innovation in Switzerland. Their funding activities are complementary: the SNSF finances research aimed at generating new knowledge, while the CTI supports the development and market launch of products and services based on research results. In addition, the two organisations frequently collaborate on joint projects.

**Streamlining the path from research results to innovation**

The National Research Programme “Smart Materials” (NRP 62) is a case in point. Representatives of the CTI have been on the Steering Committee ever since the programme was first conceptualised. The second phase of the programme focuses primarily on developing new products that are use-inspired. During the year under review, the NRP succeeded in developing a number of patents and partnerships with industry. This has made it possible for some NRP 62 projects to submit a request for funding to the CTI.

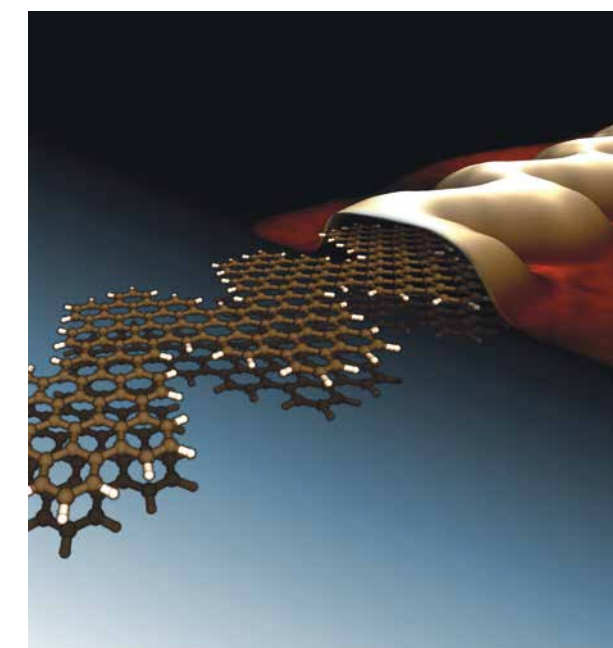
The NRPs “Resource Wood” and “Healthy Nutrition and Sustainable Food Production” as well as the two

NRPs on energy (see p. 23) are also taking account of the CTI in their organisation. This will allow for the technologies developed by these programmes to be put into practice both efficiently and profitably.

Finally, within the scope of the precoR programme for funding basic research geared to future commercial application, a panel consisting of representatives of the CTI, the SNSF and industry partners evaluated the 27 applications submitted in response to the initial call for proposals in March 2014. Six outstanding research projects offering a well-defined vision of an original and innovative product were awarded a grant. A second call for proposals was launched in December.

**New joint programme**

The SNSF and the CTI analysed their collaboration in 2014. Although the SNSF focuses particularly on use-inspired basic research, a gap is still in evidence for projects that no longer involve research in the strict sense, but are not yet sufficiently advanced to merit cooperation with industry partners or access to CTI funding. For this reason, the SNSF and the CTI are plan-



Structural model and three-dimensional representation of the image of a graphene ribbon obtained from a scanning tunnelling microscope: “Advancing Graphene Nanoribbons from Lab to Fab” is one of the six precoR projects approved in 2014.

ning a joint programme, which will be included in the multi-year programmes of the two organisations for the period 2017–2020. <



“My vision: the SNSF no longer needs a gender equality commission because women are on an equal standing with men in all aspects of research.”

Susan Gasser, director of the Friedrich Miescher Institute for Biomedical Research, has presided over the Gender Equality Commission of the SNSF since 2014.



## Gender equality

# “It is the right time for change”



**“Hidden assumptions can hold women back from outstanding careers in academia.”**

Susan Gasser, director of the Friedrich Miescher Institute and professor of molecular biology at the University of Basel, is also the president of the newly elected Gender Equality Commission of the SNSF. This independent body composed of international experts advises the SNSF on gender equality issues and helps in developing new strategies.

*Susan Gasser, what were the decisive factors that prompted you to take up the position of president of the newly formed SNSF Gender Equality Commission?*

To me it was very important to realise that Martin Vetterli, the president of the SNSF Research Council, is personally very interested in gender equality

issues. This made me think that the commission would not only be a symbol for change but would actually get things moving. Years ago, I experienced myself that it is not always easy to manage family and career and, now, I live through this repeatedly with my female PhD students and postdocs. There are many female students in Switzerland but the dropout rate in academia is still very high for women between 28 and 35. That is when they reach the delicate point of becoming independent researchers, which is a crucial step towards becoming principal investigators or professors. Far too often, at that point, they either change career or move to a country where female career paths are common. Finally, I am convinced that this is the right time for a change in Switzerland.

*What was the outcome of the first meeting of the SNSF Gender Equality Commission in July 2014?*

The seven members of the newly formed Gender Equality Commission have very different backgrounds and diverse experiences from their home countries with respect to gender equality issues. We therefore discussed concrete actions that support women in science and rather quickly came up with the idea of a new programme. We felt that after twenty years the Marie Heim-Vögtlin grants might be a little outdated and no longer effective. The new programme, Promot-

ing Women in Academia (PRIMA), is aimed at young female researchers who are excellent and have a very high potential of becoming professors.

*What concrete ideas did you discuss for the new programme?*

PRIMA should be as flexible as possible. We want to send a strong message that having a successful career and family is manageable for both men and women – with dual career couples being a common theme. We want to provide add-ons that make it easier to combine career and family and we must encourage women not to give up. Mentoring should play a very important role in the programme as should helping women to network successfully in their field. Fellowships for women that allow them to stay put rather than move – something disruptive for family life – is another goal. The idea is to be more flexible during the childbearing years with the requirements that are commonly applied for career progression.

*What actions does the Gender Equality Commission suggest the SNSF could take to drive the development towards equality in research funding?*

It is important to sensitise the SNSF staff, the Research Council and members of evaluation panels in general to hidden gender biases. In addition, we think the SNSF could assume the task of

## Lively discussions about gender and excellence

About 200 people attended the event “Gender and Excellence: Challenges in Research Funding”, which was hosted by the SNSF at the Kursaal in Berne. The event was opened by a speech by Susan Gasser, president of the SNSF Gender Equality Commission of the SNSF. Subsequently, Priyamvada Natarajan from Yale University and Claartje Vinkenborg, associate professor of organisational behaviour at VU Amsterdam gave their talks. The highlight of the event was a panel discussion – including audience participation – between the speakers, two young researchers, Claire Gervais (SNSF professor, Bern University of Applied Sciences) and Andréas Stauder (professor at the Ecole des Hautes Etudes in Paris), and Martin Vetterli, president of the National Research Council.

rendering successful women more visible. We need role models for women to show them that it is very rewarding to pursue a scientific career. We should foster a leadership feeling in women through such role models and help them learn to enjoy having responsibility and power.

*What are in your opinion the main challenges when looking at equal opportunities in academia?*

Societal change tends to be very slow, so we have to be both patient and persistent with our aspirations. In addition, there is a certain resistance to input from outside when it comes to the universities and what they should do to support women more effectively. They do not want the SNSF to tell them what to do. And finally I think women should be much more aware that a successful career in research is perfectly suited to female traits. Usually you do not start your career by thinking you want to become a professor. However, by just taking it step by step, one can actually get very far. <



Claartje Vinkenborg from VU Amsterdam stressed that highly diverse career paths can lead to success.

Priyamvada Natarajan from Yale University called for active mentoring and networks for women.

The audience was eager to contribute to the panel discussion.

### Optimising project funding

## The SNSF asks researchers about their needs

Aiming to optimise its main funding scheme, the SNSF carried out a client survey on project funding and set up an internal working group. In 2014, it began planning adjustments to project funding based on the insights gained in the survey.

The researchers are on the whole satisfied with project funding and with the Sinergia scheme aimed at funding collaborative research. This is one of the findings of the survey conducted by the Nordic Institute for Studies in Innovation, Research and Education (NIFU) on behalf of the SNSF. The aim of the survey was to gain a better understanding of the needs of potential applicants to the mentioned funding schemes.

#### Researchers with different needs

The survey questionnaire was sent to a representative sample of 8,000 researchers who work in Switzerland, have a doctorate or equivalent degree and can therefore apply for project funding and Sinergia grants. The survey generated some interest, with about half of the contacted researchers taking

part. The response rate among researchers who had already received funding from the SNSF was higher than among those who remained unfunded – a frequently observed phenomenon. While the survey is therefore not as representative as it could be, the results do show that researchers have different demands depending on their institution, research field and position.

For instance, they have very different views regarding local research infrastructures, such as laboratory space and equipment, the computers at their disposal, and libraries. On average, the two federal institutes of technology got the best and the universities of applied sciences the lowest ratings in this context.

#### Extending the running time of projects to four years

The survey results show that the time spent by scientists on a research project varies between less than one year and ten years. Over 60 percent stated that they generally work on a research theme for more than five years. For this reason, the SNSF has decided to increase the maximum running time of projects from three to four years, most likely as of 2016.

#### Desire for more flexible use of grants

The SNSF aims to expand the scope of project funding in response to requests from researchers for more flexibility when it comes to using the grants. In the future, grantees should be able to use their grants to finance workshops, networking activities, the direct costs of using infrastructure, and career measures for project staff. This will also reduce administration tasks as the funds will not need to be applied for separately.

#### Reducing the workload

While the survey was dedicated exclusively to researchers' needs, the SNSF-internal working group additionally focused on the feasibility of potential optimisations and the resultant workload for applicants, evaluation bodies and reviewers. The changes to project funding, which will be fully fleshed out in 2015 and implemented at the earliest in 2016, are intended to make the SNSF's main funding scheme simpler and more attractive for researchers.

#### Clearer positioning of Sinergia

With project funding primarily geared to single projects, the SNSF's Sinergia programme is to be positioned more clearly as a funding scheme for collaborative, multidisciplinary research. In addition, Sinergia will be used to create better funding options for "high risk / high reward" research – another demand put forward by the researchers who completed the survey. Sinergia is to be modified accordingly in 2015 and implemented in its new form in 2016 at the earliest.

### In brief

#### Conclusion of two NRPs

The National Research Programme "Gender Equality" (NRP 60) submitted its synthesis in May 2014. They came to the conclusion that gender equality, though enshrined in legislation, has only been partially achieved in reality. However, if gender equality were to be adequately put into practice, this would not only create a more just society – it would also benefit the economy.

In November 2014, NRP 61 "Sustainable Water Management" presented its conclusions after six years of research involving 150 scientists: water management in Switzerland is not adequately prepared for the social and climatic changes of the future. However, if Switzerland can strengthen regional cooperation, manage conflicts sustainably and pursue efforts to protect rivers and lakes, it will continue to have enough water.



#### Bilateral programmes of the federal government

Under the bilateral programmes of the Swiss federal government, the SNSF launched two calls for joint research projects (JRPs) in 2014, one with India, the other with China. The funded projects will be conducted in collaboration with partners in India and China, most of them for a period of three years. At the end of the year, a further call was opened in collaboration with South Korea.

#### Signing of DORA declaration

In June, the SNSF officially signed the San Francisco Declaration on Research Assessment (DORA). The declaration recommends that evaluators refrain from using journal-based metrics as a surrogate for measuring the quality of individual research. In particular, it demands that funding organisations explicitly indicate the criteria used to evaluate the scientific productivity of researchers applying for funding, that they state unequivocally that the content of an article is much more important than publication metrics, and that they take account of the value and impacts of all research results.



"Today our team is made up of researchers from Azerbaijan, Georgia and Russia. Our common interest in the geology of this region has overcome the political boundaries."  
Jan Mosar, SCOPES project leader, University of Fribourg

### 25 years of cooperation with Eastern Europe

## The fall of the Berlin Wall revives research

After the Berlin Wall fell on 9 November 1989, the opening of borders paved the way for cooperative research with Eastern Europe, something that had previously been unthinkable. For the last 25 years, Switzerland has been supporting this cooperation through the SCOPES programme.

After the fall of the Iron Curtain in 1989, many countries of Eastern Europe were faced with economic melt-down. Swiss parliament approved financial aid to these beleaguered countries to help them overcome the crisis. Plans to use part of the money to strengthen the scientific community in Eastern Europe were made at an early stage. In 1990, the SNSF and the Swiss Agency for Development and Cooperation jointly launched the SCOPES programme (Scientific Cooperation between Eastern Europe and Switzerland), whose total financing has amounted to CHF 81 million so far.

### Rewarding partnerships

Several hundred SCOPES projects have helped to advance science in Eastern Europe and the former Soviet Union so that researchers from these regions can become more competitive in the global arena. The supported teams act as seeds of change and innovation.

The client survey carried out in 2014 confirmed earlier findings according to which SCOPES has been beneficial to both sides. Eastern Europe can access urgently needed research funding and obtain valuable input on reforming its academic system and making it more

competitive in the long term. Switzerland, for its part, can tap the wealth of knowledge to be found in Eastern Europe and gain access to unique archives, collections, archaeological sites and ecosystems.

SCOPES will come to an end in 2016, but interest in the programme remains undiminished. The SNSF plans to continue its cooperation with the countries of Eastern Europe in one form or another.

Dossier on cooperation with Eastern Europe:  
[www.snsf.ch](http://www.snsf.ch) > Research in Focus > Dossiers

### Promoting young scientists

## SNSF schemes under the microscope

How can young talents be attracted to science and encouraged to do research? This was the key question to which the SNSF continued to devote its attention in 2014. It closely examined its career funding schemes and began outlining specific optimisation measures.

The career prospects of young scientists in Switzerland have to be improved. This is the conclusion reached by representatives of the political and higher education realms, as well as the SNSF and the researchers themselves. The Federal Council proffers much the same opinion in its 2014 report, which includes a roster of measures and recommendations. The SNSF contributed to the report and will also be participating in the joint effort.

### Creating incentives

Promoting young researchers is largely a core task of the higher education institutions. The SNSF, for its part, has career funding schemes in place aimed at creating incentives and supporting the Swiss academic system in a targeted

manner. One of the objectives is to enable young talents to plan the stages of their scientific or academic career as early as possible. After conducting an in-depth analysis in 2014, the SNSF acknowledged that there is still room for optimising its portfolio.

### Prioritising young researchers

The SNSF is of the opinion that researchers should already be encouraged to pursue excellence and independence at doctoral level. To this end, young talents in all disciplines should be able to apply for their own salaries in order to complete their doctoral thesis on a subject of their own choice. At postdoc level, the external evaluation of the Ambizione funding scheme has, on the whole, delivered very satisfying results:

the scheme clearly boosts the scientific independence of grant holders and has a positive effect on their careers. This view is shared by 90% of grant holders. Longer grant durations, however, would strengthen the position of postdocs aiming for a research career.

As for the SNSF professors, another funding scheme under the microscope, the results of the evaluation are also mainly very positive. Of the interviewed former grantees, 94% have obtained an assistant or full professorship. In 88% of cases, the researchers experienced a veritable career leap when they gained a permanent post. The SNSF hopes to complete its funding portfolio for this career level by helping to create posts for tenure track assistant professors. Finally, it aims to continue its efforts to promote women, notably by introducing a postdoc scheme that is flexible and geared to excellence (see p. 14). The promotion of young researchers will continue to be one of the SNSF's top priorities and a main point of focus in its multi-year programme 2017–2020. <

### Promotion of young researchers: facts and figures

In 2014, the SNSF supported a total of 4,500 doctoral students and 2,500 postdocs via projects and programmes. In addition, it evaluated more than 2,400 applications and supported 1,150 young researchers with career funding grants worth CHF 189 million in total. Other measures in 2014 included raising the salaries of doctoral students by approximately 7% and introducing "protected time" equivalent to at least 60% of a full-time job in order to enable doctoral students to dedicate more working time to their thesis.

“My vision is for cancer patients and their families to have a say in selecting research topics. This would allow them to participate in shaping the cancer treatments of the future.”

Viviane Hess is head of an interdisciplinary clinical research team at Basel University. She is studying new drug-based cancer treatments and investigating to what extent the effect of a drug is influenced by factors such as physical movement and stress.



## New funding policy for book publishing

# Research results: systematically dismantling access barriers

Research results funded with public money should also be accessible publicly and free of charge – according to this principle, the SNSF in 2014 extended its Open Access policy to the publication of books. It now also funds the digital version necessary for Open Access.

The SNSF's funding policy with regard to the publication of books is now focused on Open Access (OA) and digital distribution. It is thus matching the current funding policies of other European funding organisations (e.g. FWF) and the European Research Council (ERC). They too have made free internet access to publications produced with their support a precondition for funding.

### The changes at a glance

The SNSF made three key changes to its publication funding as of 1 July 2014:

- Expansion of the Open Access policy in force since 2008 to include the publication of books
- Financing of digital book publications instead of contributions to printed books
- Contribution of lump sums towards the production costs of a digital version

Monographs and editions financed by the SNSF must now be freely accessible in a repository after an embargo period of 24 months. Exceptions are possible in the event of insurmountable legal or technical obstacles. The SNSF assumes a share of the production costs of digital book publications by making contributions towards typesetting, layout and proofreading costs and other expenses. By substantially co-financing the pre-printing phase, it continues to support the production of printed books.

### Twin approach to financing scientific publications

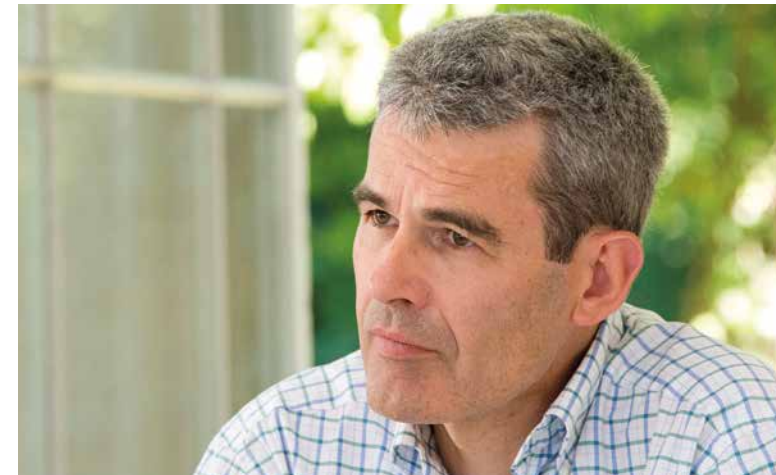
Since July 2014, the SNSF has been offering researchers two funding options for the digital publication of books:

- Publication funding in the context of SNSF grants
- The "Publication grants" funding scheme (as until now) for digitally published books that are not the products of SNSF-funded research

Funding requests for the publication costs of scientific books can be included already in the main grant application. This simplifies the procedure for applicants by obviating the need to submit a separate application for publication costs. On the other hand, applicants need to think about how they wish to have their results published at an early stage. Last year, the SNSF supported the publication of 167 scientific books with grants worth about CHF 1.9 million in total via its "Publication grants" funding scheme.

### Free choice of publisher remains in place

The extension of the SNSF's OA policy to the publication of books entails that all SNSF grantees must make their research results available in an Open Access publication. However, as is the case for journal articles, researchers remain free to choose a suitable publisher also for their monographs and editions. If the choice of publisher puts any legal obstacles in the path of OA publication, but the publication is not co-financed by the SNSF, all the researchers have to do is inform the SNSF. However, in the case of books co-financed by the SNSF, they must apply for exemption and provide reasons why they wish to withdraw from their OA commitment.



Paul Schubert is professor of ancient Greek at the University of Geneva and president of the Humanities and Social Sciences division of the SNSF.

## “Pursuing the transformation process while preserving the common interest”

*Mr Schubert, the SNSF requires all its grantees to make their research results available in an OA publication. How important is Open Access for the science community?*

Open Access allows for the diffusion of research results funded by the taxpayer within the science community and among the general public. This is a way of increasing the visibility of the latest discoveries made by our researchers. Such improved communication further galvanises scientific exploration.

*What does the modernised funding policy, geared as it is to digitisation, mean for publications in the humanities and social sciences and for the publishing houses operating in this area?*

Digitisation opens the doors to new forms of publication, such as audiovisual presentations and multimedia publications. It also offers opportunities for young researchers who are inventing a new form of scientific communication.

*By integrating publication costs into the main grant applications, is the SNSF trying to get researchers to think about the publication of results early on?*

The SNSF aims to support researchers at all stages in their work. The new model is meant to encourage researchers to disseminate their research results more effectively. It is up to them to make the most of the new possibilities on offer.

*Where in your opinion is the trend towards Open Access and digitisation in science leading to?*

It seems clear that digitisation will continue and even gain further momentum: this trend is confirmed by other research institutions abroad. Our mission is not to destroy an existing model, but to pursue the transformation process while preserving the common interest. <

### The SNSF and publishers launch joint pilot project

In June 2014, the SNSF and interested publishers decided to carry out a pilot project to support the publishing houses in tackling future challenges. Different OA models for the parallel publication of printed books and digital versions will be tested during the project. The aim is to generate a reliable body of data on the use, sale and production costs of digital and printed books. A call for the OAPEN-CH pilot project was launched by the SNSF in February 2015.

## In brief

### Energy research

In the context of promoting young energy researchers, the SNSF launched two calls for proposals in 2014. After the first, it awarded five researchers an Assistant Professor Energy grant. These grants are addressed to recently engaged assistant professors, usually within the scope of developing the Competence Centers for Energy Research (SCCERs). Four Ambizione Energy grants were also approved, three of which are associated with an SCCER. At the recommendation of the steering committees of the NRPs “Energy Turnaround” and “Managing Energy Consumption”, the SNSF allocated grants worth CHF 36 million to projects that will generate knowledge needed for the implementation of “Energy Strategy 2050”.



### Social innovation

Society faces numerous challenges (an ageing population, climate change, etc.) that cannot be mastered in isolation. In this context, institutions, enterprises and independent organisations are joining forces to propose innovations considered to be “societal”, both in terms of the means employed and the targets set. In view of the next multi-year programme 2017–2020, the think tank W.I.R.E. compiled a report on social innovation in Swiss science based on a mandate from the SNSF. The report (available at [www.snsf.ch/publications](http://www.snsf.ch/publications)) comes to the conclusion that Switzerland must intensify research in this domain and play a more active role in the international science community.

### Joint research programmes in the humanities

The ERA-NET HERA (Humanities in the European Research Area) has launched a joint research programme called “Uses of the Past”, which studies societal questions such as identity, integration, political legitimacy and cultural dynamics. This is the first time the SNSF is participating in a HERA programme. A matchmaking event was held on 29 January 2015 in Tallinn with the aim of establishing links between researchers working in the same field.

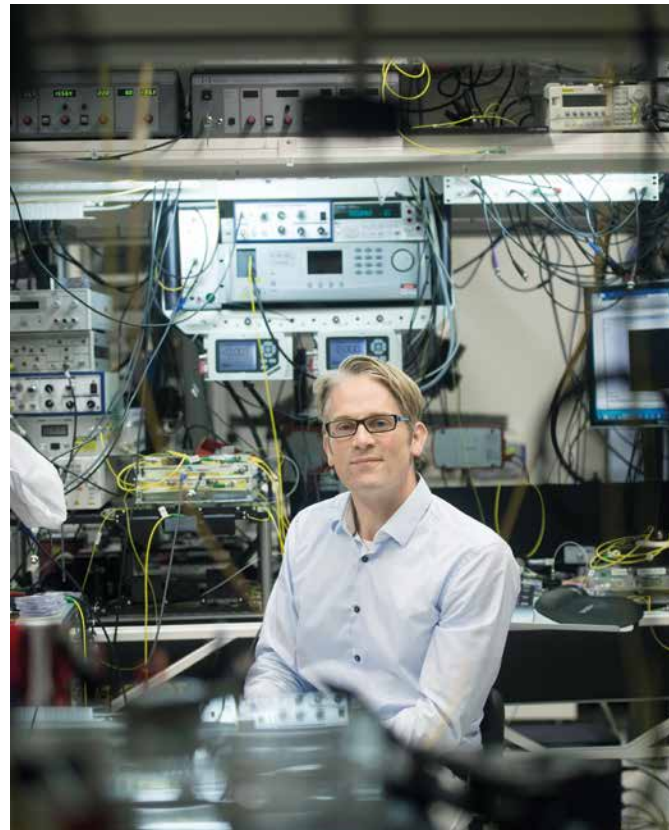
## Calendar

## Key events in 2014

## Physicist receives National Latsis Prize 2014

They are only just visible, the molecular “cages” in which the thirty-eight-year-old physicist Tobias Kippenberg from “Ecole Polytechnique Fédérale de Lausanne” lets atoms and elementary particles oscillate. The optical and mechanical properties of these so-called oscillators obey the laws of quantum physics, where the laws of ordinary physics do not apply.

In recognition of his innovative work, the president of the National Research Council, Martin Vetterli, presents him with the National Latsis Prize in January 2015 at the Rathaus in Berne in the presence of State Secretary Mauro Dell’Ambrogio, president of the Council of States, Claude Hêche and former Federal Councillor Pascal Couchepin. The prize, worth CHF 100,000, is one of the most prestigious academic awards in Switzerland. It is bestowed each year by the SNSF on behalf of the Latsis Foundation to honour outstanding achievements by researchers who are not over forty and work in Switzerland.



## Fields Medal for former SNSF fellowship holder

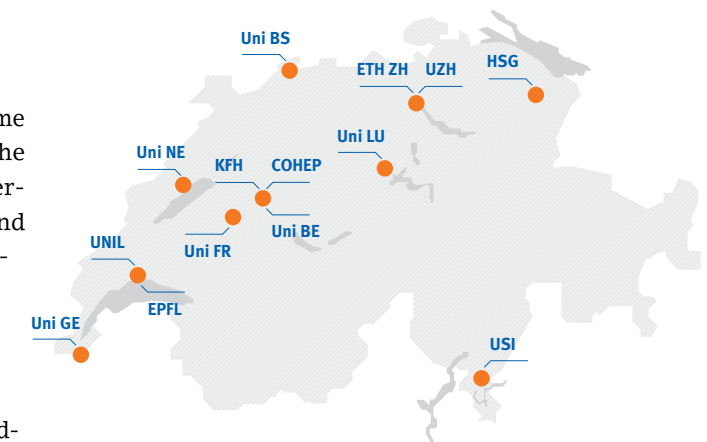
The former SNSF fellowship holder Martin Hairer is awarded the Fields Medal in August, the highest honour a mathematician can achieve. Hairer made a major breakthrough in the study of stochastic partial differential equations. He is Regius Professor of Mathematics on a chair founded by Queen Elizabeth II. at the University of Warwick.

“The SNSF fellowship enabled me to start my career working as an independent researcher in one of the best institutes in my discipline.”

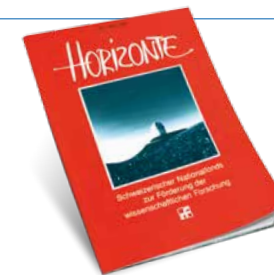
Martin Hairer

## “Tour de Suisse” of the SNSF

During the preparation phase for the multi-year programme 2017–2020, the SNSF presents its planned measures to the governing bodies of universities and the Rectors’ Conferences of the Universities of Applied Scientists (KFH) and the Universities of Teacher Education (COHEP). Participants discuss their expectations and needs at the 14 meetings held during the “Tour de Suisse”, which takes place every other year. Special attention is given to the promotion of young researchers. In addition, the SNSF communicates important decisions with respect to its funding portfolio, such as the redesign of its main funding scheme, project funding, as well as proposals concerning gender equality put forward by the Gender Equality Commission of the SNSF. A further highly topical discussion



point are the Temporary Backup Schemes, which were launched by the SNSF at short notice following Switzerland’s exclusion from the Horizon 2020 programme, and warmly welcomed by the higher education institutions.



## 1 March

The SNSF first published *Horizons, the Swiss research magazine*, in 1988. To commemorate the 100<sup>th</sup> issue of Horizons, an electronic English edition and an app are made available besides the traditional German and French print versions.

## 13 April

At the [annual reception hosted by SwissCore and the SNSF](#), Martin Vetterli, president of the SNSF Research Council, welcomes approximately 120 guests. Roberto Balzaretto, the Swiss ambassador to the EU, reminds those present of Switzerland’s most important goal: full association with Horizon 2020 and Erasmus+. The Empa director, Gian-Luca Bona, delivers a talk on the topic “From Research to Innovation in Materials Science and Technology”.

## 6 June/3 September/26 November

On Research Day, held at Bern University and ETH Zurich, scores of young researchers seize the opportunity of obtaining first-hand information about SNSF funding schemes. Advanced researchers congregate on [Advanced Researchers’ Day](#) at the Administrative Offices of the SNSF in Bern.



## 8 September

SwissCore and the Mission of Switzerland to the EU organise a [Science Briefing](#) on the topic of Digital Humanities. ETH professor Frédéric Kaplan and Dorit Raines, assistant professor at the University of Venice, present the project “The Venice Time Machine”. The goal of the project is to digitise the historical archives of Venice in order to gain new insights into the past.

## 21/22 October

At its annual conference ([Séance de réflexion](#)), the Research Council of the SNSF discusses some highly topical subjects: following an appeal by Councillor of States Felix Gutzwiller to actively support Switzerland’s openness as a hub of knowledge and research (see p. 9), attention turns to the search for exoplanets (see p. 26), and gender equality in research funding (see p. 15).

## 12 November

After a ten-year journey, the [Rosetta orbiter’s Philae lander](#) touches down softly on comet 67P/Churyumov-Gerasimenko: never before has such an extraordinary feat been accomplished. The SNSF has been supporting the Rosetta mission for many years and has allocated several million francs to the project until now.

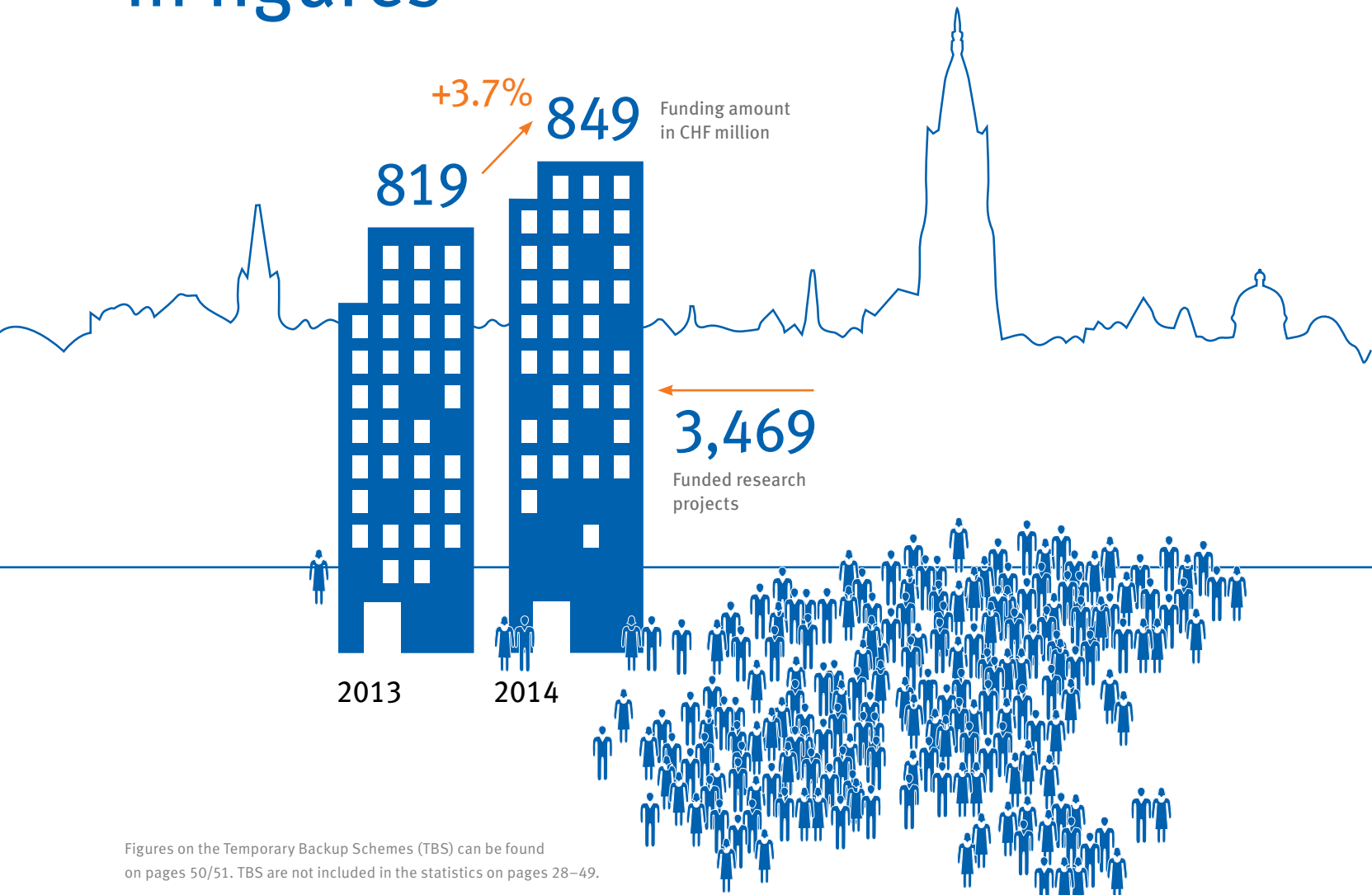




“My vision is for us to be able to pass on our enthusiasm for research to everyone. The fascinating search for life in the universe can kindle such enthusiasm.”

Michael Mayor from Geneva University captivated his audience at the Séance de réflexion of the SNSF Research Council with his research into extrasolar planets. The science journal “Nature” included him in its list of the ten most important scientists of 2013.

# 2014 – Research funding in figures



Figures on the Temporary Backup Schemes (TBS) can be found on pages 50/51. TBS are not included in the statistics on pages 28–49.

The statistics include all applications processed and approved during the financial year as well as contributions paid out in the area of National Centres of Competence in Research in 2014. Additional grants are not treated as separate applications but are included in the approved amounts. The gender statistics refer to the share of responsible applicants. Some of the total amounts may contain rounding differences.

The data in the statistical part of the annual report is not comparable with the figures in the annual statement.

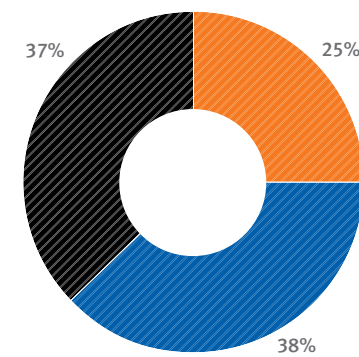
Full version of the statistics: [www.snsf.ch/statistics](http://www.snsf.ch/statistics)

## 1. Overview of funding

### 1.1 Funding by research area

Amounts in CHF million

#### Distribution of the approved amounts



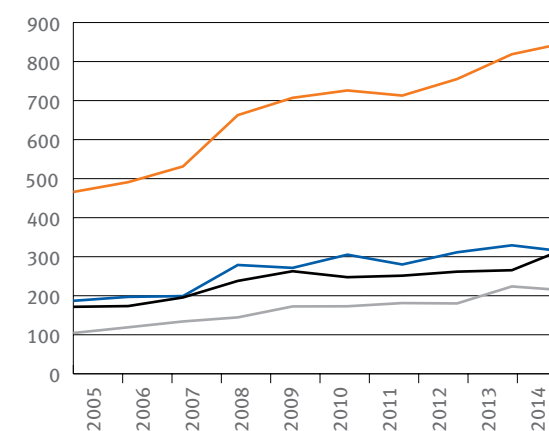
- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine

	Amount	Male (%)	Female (%)
Humanities and social sciences	213.5	36%	64%
Mathematics, natural and engineering sciences	322.1	13%	87%
Biology and medicine	312.7	21%	79%
Unapportionable	0.2		
<b>Total</b>	<b>848.5</b>	<b>22%</b>	<b>78%</b>

Compared to the previous year, the share of mathematics, natural and engineering sciences rose by five percent. It is thus higher than the share of biology and medicine for the first time in years. The main reason for this lies in the launch of the new National Research Programme “Energy Turnaround” and the new series of National Centres of Competence in Research.

#### Approved amounts since 2005

CHF million



- Total
- Biology and medicine
- Mathematics, natural and engineering sciences
- Humanities and social sciences

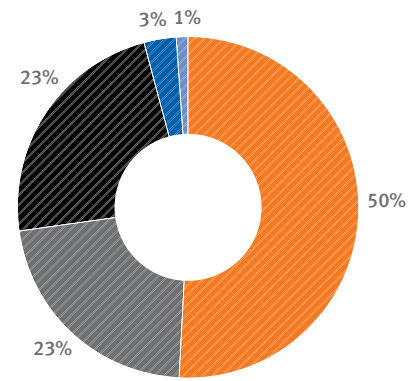
The distribution of funds across the three research areas is based largely on demand.



### 1.2 Funding by scheme

Amounts in CHF million

Distribution of the approved amounts



- Projects
- Careers
- Programmes
- Infrastructures
- Science communication

	Number	Amount
Projects	1,165	426.8
Careers	1,111	189.4
Programmes	685	197.5
Infrastructures	72	27.4
Science communication	436	7.4
<b>Total</b>	<b>3,469</b>	<b>848.5</b>

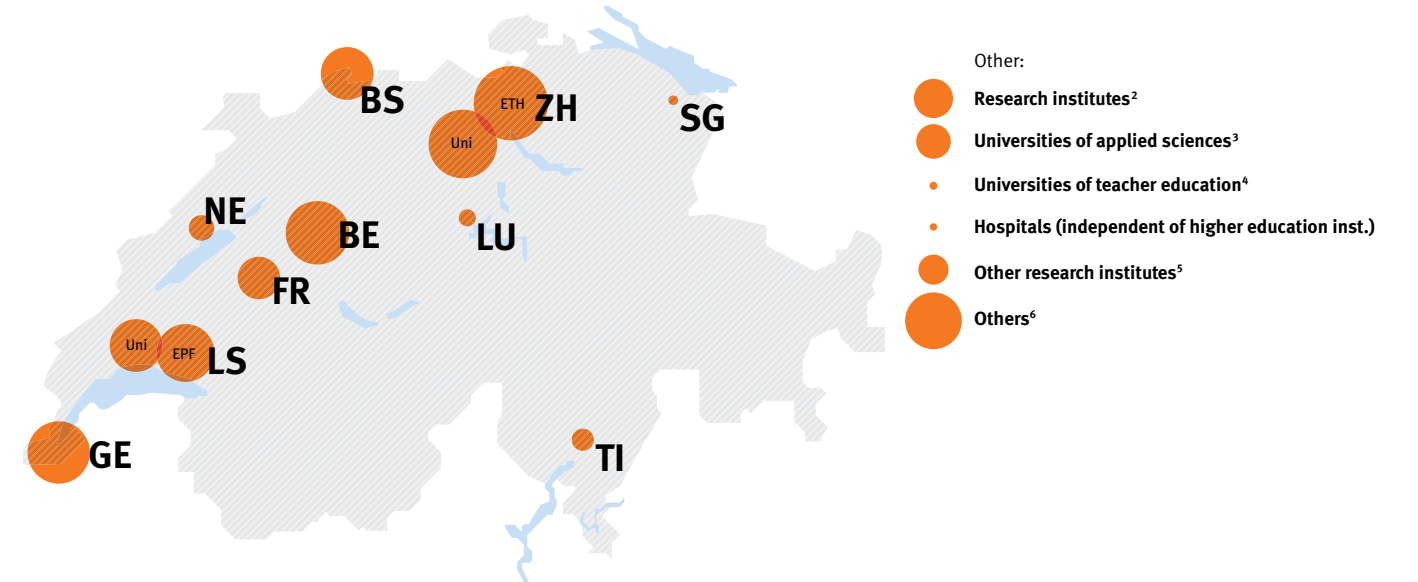
In 2014, the SNSF allocated approximately half of its total budget to its main funding scheme, project funding.

Compared to the previous year, the share of programmes was four percent higher due to, in particular, the new series of National Centres of Competence in Research and the newly launched National Research Programme “Energy Turnaround”.

### 1.3 Funding by institution and research area

Amounts in CHF million

Distribution of the approved amounts (incl. overhead)<sup>1</sup>

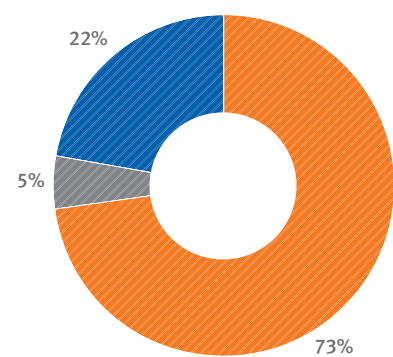


Institution	Humanities and social sciences	Mathem., natural and engineering sciences	Biology and medicine	Unassignable	Total in CHF million	Total in %	Overhead	Total incl. overhead
<b>Universities</b>	<b>152.7</b>	<b>112.5</b>	<b>215.6</b>		<b>480.8</b>	<b>57%</b>	<b>61.2</b>	<b>542.0</b>
Berne (BE)	29.1	24.4	38.2		91.8	11%	10.4	102.1
Basel (BS)	14.9	15.4	30.4		60.7	7%	8.7	69.4
Fribourg (FR)	15.4	15.5	10.5		41.5	5%	3.2	44.6
Geneva (GE)	23.2	29.1	35.9		88.2	10%	10.5	98.6
Lucerne (LU)	7.0	0.0	—		7.0	1%	0.2	7.2
Lausanne (Uni LS)	17.4	2.8	42.0		62.3	7%	8.3	70.5
Neuchâtel (NE)	8.6	2.3	4.2		15.1	2%	1.8	16.9
St. Gallen (SG)	2.0	—	—		2.0	0%	0.3	2.3
Ticino (TI)	3.4	3.8	3.4		10.6	1%	1.5	12.1
Zurich (Uni ZH)	31.8	19.2	50.8		101.8	12%	16.4	118.1
<b>ETH Domain</b>	<b>13.5</b>	<b>167.3</b>	<b>56.2</b>		<b>237.0</b>	<b>28%</b>	<b>23.8</b>	<b>260.8</b>
EPF Lausanne (EPF LS)	1.8	55.9	17.3		75.0	9%	9.7	84.7
ETH Zurich (ETH ZH)	10.6	86.2	30.0		126.8	15%	11.2	138.0
Research institutes <sup>2</sup>	1.0	25.2	8.9		35.2	4%	2.9	38.1
<b>Universities of applied sciences<sup>3</sup></b>	<b>15.5</b>	<b>8.8</b>	<b>3.0</b>		<b>27.3</b>	<b>3%</b>	<b>2.6</b>	<b>29.9</b>
<b>Universities of teacher education<sup>4</sup></b>	<b>1.3</b>	<b>—</b>	<b>—</b>		<b>1.3</b>	<b>0%</b>	<b>0.3</b>	<b>1.6</b>
<b>Hospitals (independent of higher education institutes)</b>	<b>—</b>	<b>—</b>	<b>1.0</b>		<b>1.0</b>	<b>0%</b>	<b>0.3</b>	<b>1.3</b>
<b>Other research institutes<sup>5</sup></b>	<b>6.2</b>	<b>3.7</b>	<b>10.7</b>		<b>20.6</b>	<b>2%</b>	<b>2.3</b>	<b>22.8</b>
<b>Others<sup>6</sup></b>	<b>24.3</b>	<b>29.8</b>	<b>26.2</b>	<b>0.2</b>	<b>80.6</b>	<b>9%</b>	<b>0.5</b>	<b>81.1</b>
<b>Total</b>	<b>213.5</b>	<b>322.1</b>	<b>312.7</b>	<b>0.2</b>	<b>848.5</b>	<b>100%</b>	<b>91.0</b>	<b>939.5</b>

<sup>1</sup> If no application was presented by the respective institution, this is denoted by a dash. Amounts lower than CHF 0.05 million are shown as zero.  
<sup>2</sup> Research institutes in the ETH Domain (EMPA, EAWAG, PSI, WSL)  
<sup>3</sup> BFH, FHNW, FHO, HES-SO, HSLU, SUPSI, ZFH, Kalaidos. You will find the breakdown by institution in the web version.

<sup>4</sup> Without universities of teacher education of FHNW and ZFH  
<sup>5</sup> SIAF, AORI, BITG, EHB, Agroscope, FiBL, IRO, FMI, IDIAP, IHEID, IST, IUKB, PMOD, FORS, SPF, SIK-ISEA, CSEM, SIB and other research institutes  
<sup>6</sup> Museums, libraries, individuals, companies, non-profit organisations and not assignable to an institution (e.g. Doc.Mobility, Early/Advanced Postdoc.Mobility)

### 1.4 Use of approved amounts



Total: CHF 848.5 million

- Salaries and fellowships (incl. social security contributions)
- Materials of enduring value
- Research funds

As in previous years, the approved funds were used by the researchers mainly to cover personnel costs, whether for the financing of individual salaries/fellowships in the context of career funding or for the appointment of personnel in research projects.

### 1.5 Personnel in research projects

14,010 researchers were involved in SNSF-funded projects in 2014. This figure consists of applicants and their staff. All in all, the SNSF funded approximately 9,200 members of personnel: 5,600 via project funding, 1,000 via career funding and 2,600 through programmes. They comprise:

	Total	Female	Male
Scientists <sup>1</sup>	34%	42%	58%
Personnel at doctoral level	51%	44%	56%
Technicians, support staff	15%	64%	36%
<b>Total</b>	<b>100%</b>	<b>46%</b>	<b>54%</b>

<sup>1</sup> Senior researchers and postdocs

Funding for research projects primarily benefits the promotion of young scientists in Switzerland. Thus 76% of the collaborators are 35 years old or younger.

### 1.6 Success rates

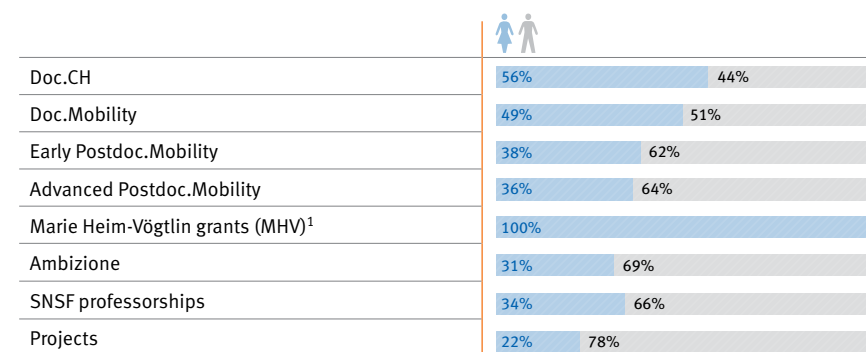
Amounts in CHF million

	Success rate <sup>1</sup>			Number of applications submitted			Number of applications approved			Approved amount
	Total	Women	Men	Total	Women	Men	Total	Women	Men	
<b>Projects</b>	<b>52%</b>	<b>46%</b>	<b>53%</b>	<b>2,249</b>	<b>491</b>	<b>1,758</b>	<b>1,165</b>	<b>226</b>	<b>939</b>	<b>426.8</b>
Humanities and social sciences	45%	43%	46%	706	230	476	320	99	221	96.6
Mathematics, natural and engineering sciences	60%	55%	61%	784	102	682	470	56	414	147.0
Biology and medicine	50%	43%	52%	652	135	517	329	58	271	162.3
Interdisciplinary research	43%	54%	40%	107	24	83	46	13	33	20.9
<b>Careers<sup>2</sup></b>										
Doc.CH	34%	34%	34%	121	68	53	41	23	18	7.4
Doc.Mobility	60%	60%	60%	338	166	172	202	99	103	9.9
Early Postdoc.Mobility	55%	55%	55%	643	242	401	353	134	219	28.1
Advanced Postdoc.Mobility	49%	47%	49%	301	108	193	146	51	95	16.5
Marie Heim-Vögtlin grants (MHV)	24%	24%	—	152	152	—	36	36	—	7.8
Ambizione	20%	21%	20%	294	90	204	60	19	41	32.1
SNSF professorships	15%	20%	13%	259	89	170	40	18	22	77.5
<b>Programmes</b>										
National Research Programmes <sup>3</sup>	29%	28%	29%	361	40	321	103	11	92	36.0
Sinergia	39%	27%	41%	89	11	78	35	3	32	54.5
SCOPEs	26%	25%	26%	394	73	321	103	18	85	11.7
r4d programme <sup>4</sup>	13%	14%	13%	62	7	55	8	1	7	13.5
<b>Infrastructures</b>	<b>62%</b>	<b>30%</b>	<b>65%</b>	<b>116</b>	<b>10</b>	<b>106</b>	<b>72</b>	<b>3</b>	<b>69</b>	<b>27.4</b>
<b>Science communication</b>	<b>85%</b>	<b>88%</b>	<b>83%</b>	<b>515</b>	<b>202</b>	<b>313</b>	<b>436</b>	<b>177</b>	<b>259</b>	<b>7.4</b>

<sup>1</sup> Ratio of the number of applications approved to the number of applications submitted  
<sup>2</sup> Success rates without follow-up applications  
<sup>3</sup> Based on pre-proposals for NRP 70 and 71  
<sup>4</sup> Based on pre-proposals for the thematic modules Ecosystems and Food Security

The SNSF analyses the differences between the success rates of female and male applicants every year. For this purpose, it has introduced a gender equality monitoring system that examines the differences and attempts to identify the determining factors.

### Submitted applications by gender



<sup>1</sup> The proportion of female applicants is 100% as the MHV grant is a programme for women scientists.

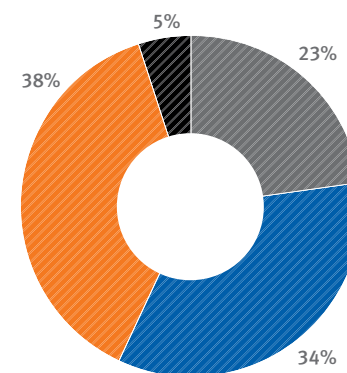
## 2. Projects

The SNSF supports research projects of high quality across all disciplines. The topics are selected by the researchers. The awarded grants mainly cover staff salaries and research costs.

### 2.1 Funding by research area

Amounts in CHF million

Distribution of the approved amounts



- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine
- Interdisciplinary research

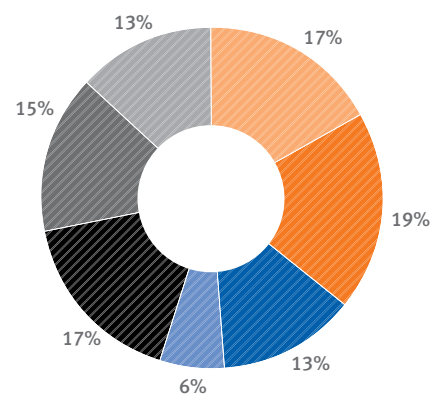
	Amount
Humanities and social sciences	96.6
Mathematics, natural and engineering sciences	147.0
Biology and medicine	162.3
Interdisciplinary research	20.9
<b>Total</b>	<b>426.8</b>

## 2.2 Funding by group of disciplines

Amounts in CHF million

### Division I: Humanities and Social Sciences

Distribution of the approved amounts



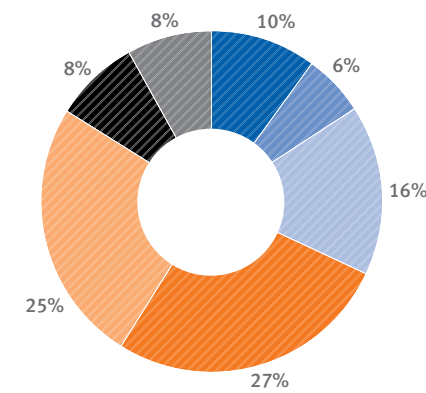
	Number	Amount
Theology and religious studies, history, classical studies, archaeology, prehistory and early history	56	16.3
Linguistics and literature, philosophy	50	18.4
Art studies, musicology, theatre and film studies, architecture	40	12.9
Ethnology, social and human geography	16	6.0
Psychology, educational studies	59	16.0
Sociology, social work, political sciences, media and communication studies, health	50	14.3
Economics, law	49	12.8
<b>Total</b>	<b>320</b>	<b>96.6</b>

- Theology and religious studies, history, classical studies, archaeology, prehistory and early history
- Linguistics and literature, philosophy
- Art studies, musicology, theatre and film studies, architecture
- Ethnology, social and human geography
- Psychology, educational studies
- Sociology, social work, political sciences, media and communication studies, health
- Economics, law

The Humanities and Social Sciences division awarded project grants worth CHF 96.6 million, a higher amount than ever before. The social sciences and the humanities were each allocated approximately half of the sum.

### Division II: Mathematics, Natural and Engineering Sciences

Distribution of the approved amounts



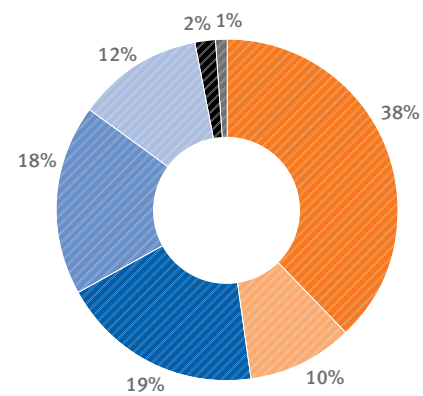
	Number	Amount
Mathematics	49	14.7
Astronomy, astrophysics and space sciences	19	8.7
Chemistry	64	23.1
Physics	105	39.4
Engineering sciences	143	36.4
Environmental sciences	49	12.1
Earth sciences	41	12.4
<b>Total</b>	<b>470</b>	<b>147.0</b>

- Mathematics
- Astronomy, astrophysics, space sciences
- Chemistry
- Physics
- Engineering sciences
- Environmental sciences
- Earth sciences

The distribution of the approved amounts reflects demand in the respective groups of disciplines and remains largely unchanged year-on-year.

### Division III: Biology and Medicine

Distribution of the approved amounts



- Basic biological research
- General biology
- Basic medical research
- Experimental medicine
- Clinical medicine
- Preventive medicine
- Social medicine

	Number	Amount
Basic biological research	109	61.1
General biology	34	17.0
Basic medical research	62	31.1
Experimental medicine	64	29.8
Clinical medicine	50	19.4
Preventive medicine (epidemiology/early diagnosis/prevention)	9	3.5
Social medicine	1	0.4
<b>Total</b>	<b>329</b>	<b>162.3</b>

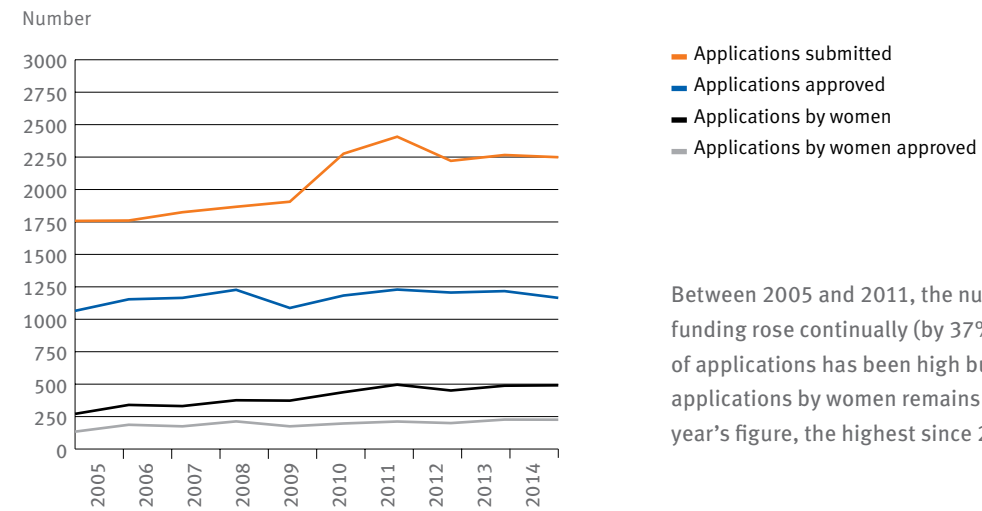
The funds of division III are mainly allocated to basic biological and medical research. Fewer applications are submitted and grants approved in more practice-oriented areas such as clinical medicine or social and preventive medicine.

### 2.3 Grants, reductions and rejections

Amounts in CHF million

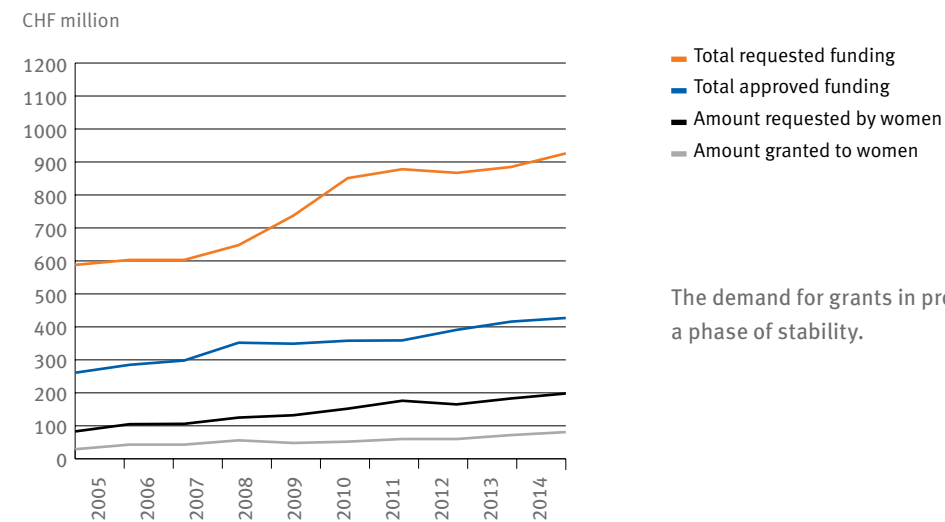
	Number	Amount	Grants	Reductions	Rejections	
<b>Humanities and social sciences</b>						
Applications submitted	706		45%	55%		Number
Requested amount		241.8	40%	6%	54%	Amount
Grants	320	96.6				
Reductions in approved applications	(214)	14.2				
Rejections, withdrawals	386	131.0				
<b>Mathematics, natural and engineering sciences</b>						
Applications submitted	784		60%	40%		Number
Requested amount		306.5	48%	19%	33%	Amount
Grants	470	147.0				
Reductions in approved applications	(363)	58.8				
Rejections, withdrawals	314	100.7				
<b>Biology and medicine</b>						
Applications submitted	652		50%	50%		Number
Requested amount		324.6	50%	9%	41%	Amount
Grants	329	162.3				
Reductions in approved applications	(188)	29.3				
Rejections, withdrawals	323	133.0				
<b>Interdisciplinary research</b>						
Applications submitted	107		43%	57%		Number
Requested amount		53.1	40%	7%	53%	Amount
Grants	46	20.9				
Reductions in approved applications	(25)	3.8				
Rejections, withdrawals	61	28.4				
<b>Total</b>						
Applications submitted	2249		52%	48%		Number
Requested amount		926.0	46%	12%	42%	Amount
Grants	1165	426.8				
Reductions in approved applications	(790)	106.2				
Rejections, withdrawals	1084	393.0				

### 2.4 Number of applications and grants since 2005



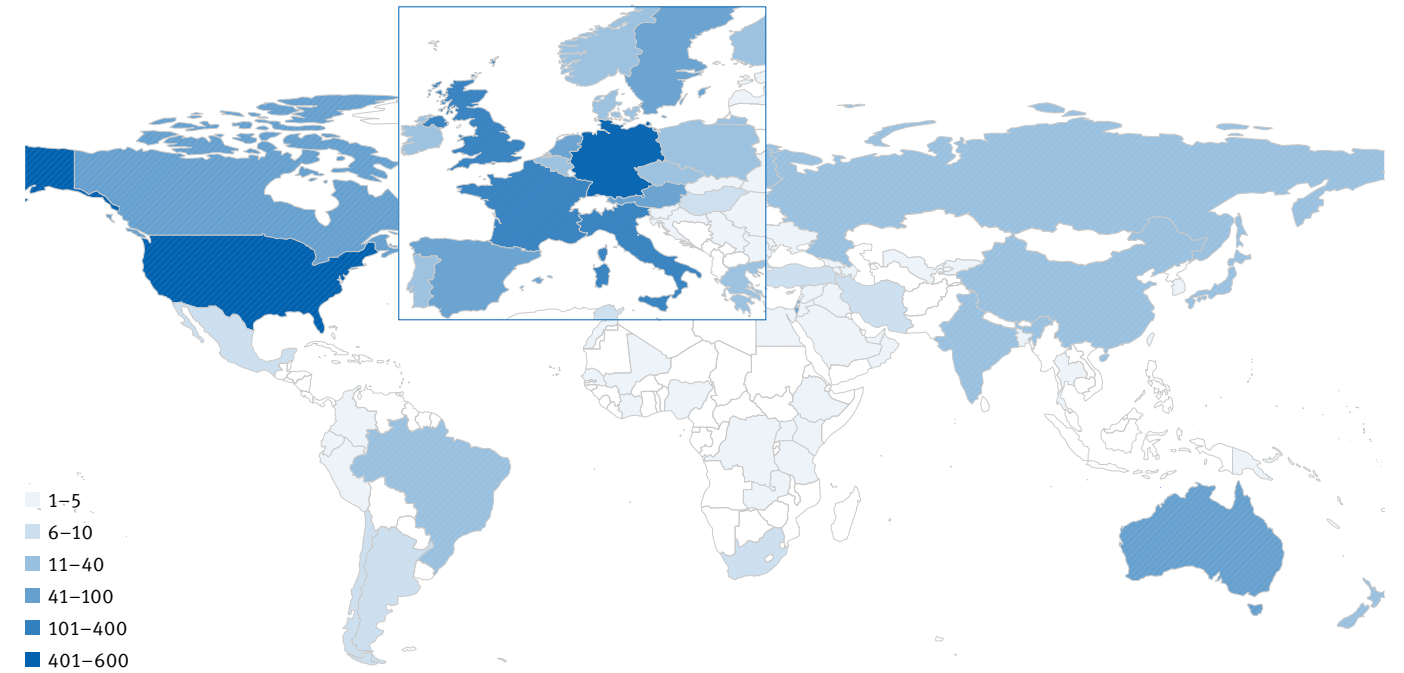
Between 2005 and 2011, the number of applications in project funding rose continually (by 37% in total). Since then, the number of applications has been high but stable. While the share of applications by women remains low, at 22% it equals the previous year's figure, the highest since 2005.

### 2.5 Requested and approved amounts since 2005



The demand for grants in project funding rose again after going through a phase of stability.

### 2.6 Number of international collaborations



The projects approved by the SNSF in 2014 involved a total of 2,574 collaborations. On average, this corresponds to 2.2 international collaborations per project.

Most of the collaborations included European partners (67%), followed by North America (22%), Asian (7%) and Oceanian partners (2%).

### 3. Careers

The SNSF has a wide range of funding options in place to promote the careers of young researchers.

#### 3.1 Funding by scheme

Amounts in CHF million

	Number of applications submitted					Number of applications approved					Approved amount
	Total	New applications		Follow-up applications		Total	New applications		Follow-up applications		
		Women	Men	Women	Men		Women	Men	Women	Men	
<b>Career funding schemes</b>											
Doc.CH	121	68	53	—	—	41	23	18	—	—	7.4
MD-PhD fellowships	7	5	2	—	—	7	5	2	—	—	1.2
Doc.Mobility	338	166	172	7	17	202	99	103	2	7	9.9
Early Postdoc.Mobility	643	242	401	—	—	353	134	219	—	—	28.1
Advanced Postdoc.Mobility <sup>1</sup>	301	108	193	19	15	146	51	95	7	11	16.5
Marie Heim-Vögtlin grants (MHV)	152	152	—	6	—	36	36	—	4	—	7.8
Ambizione	294	90	204	4	1	60	19	41	4	1	32.1
Ambizione Energy <sup>2</sup>	29	6	23	—	—	4	2	2	—	—	2.7
SNSF professorships	259	89	170	8	28	40	18	22	8	24	77.5
Assistant Professor (AP) Energy grants <sup>2</sup>	15	3	12	—	—	5	1	4	—	—	4.9
<b>Measures for promoting careers</b>											
Graduate courses	3	—	3	—	—	3	—	3	—	—	0.1
International short visits	168	59	109	—	—	144	52	92	—	—	1.1
Research semesters <sup>3</sup>	2	1	1	—	—	2	1	1	—	—	0.2
Mobility grants for doctoral students <sup>4</sup>	(44)	(21)	(23)	—	—	(44)	(21)	(23)	—	—	(0.5)
120% support grants <sup>4</sup>	(16)	(10)	(6)	—	—	(12)	(7)	(5)	—	—	(0.3)
<b>Total</b>	<b>2,332</b>	<b>989</b>	<b>1,343</b>	<b>44</b>	<b>61</b>	<b>1,043</b>	<b>441</b>	<b>602</b>	<b>25</b>	<b>43</b>	<b>189.4</b>

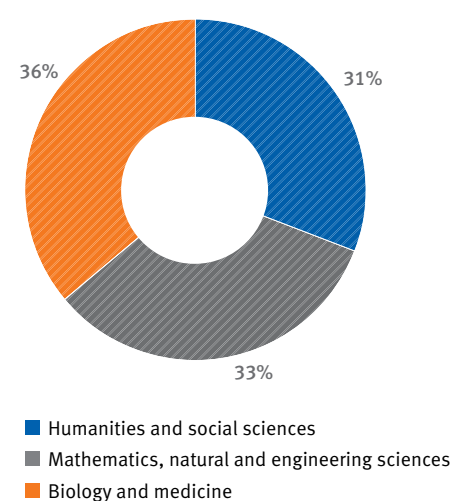
<sup>1</sup> Incl. 96 applications for return grants (44 women; 52 men) and 44 approved return grants (21 women; 23 men). Amount approved CHF 3.9 million  
<sup>2</sup> Special schemes in connection with the Federal Council's Dispatch on the "Coordinated Swiss Energy Research" Action Plan – Measures for the Years 2013–2016  
<sup>3</sup> Research semesters for departing members of the National Research Council  
<sup>4</sup> Mobility grants and "120% support grants" are supplementary grants in projects and are therefore not treated as separate applications. Hence they are not accounted for in the total number of applications

In 2014, the demand for career funding remained high but stable. The number of applications dropped from 2,528 to 2,437 as a result of the discontinuation of summer schools (2013: 186 applications). If we ignore this effect, the total number of applications is slightly higher than in the previous year. Ambizione Energy and Assistant Professor Energy grants as well as the return grants were newly added to the portfolio.

#### 3.2 Funding by research area

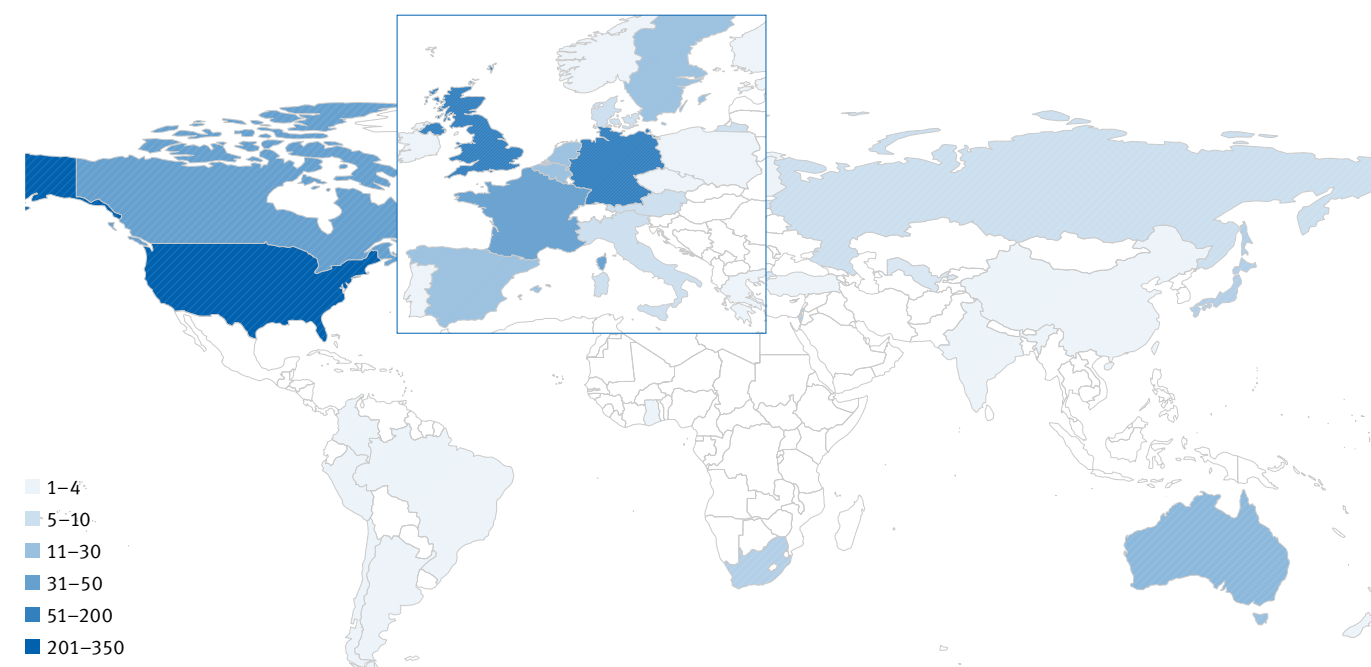
Amounts in CHF million

Distribution of the approved amounts



	Amount
Humanities and social sciences	58.5
Mathematics, natural and engineering sciences	62.4
Biology and medicine	68.6
<b>Total</b>	<b>189.4</b>

#### 3.3 Fellowships by host country



With 701 fellowships for young researchers, the SNSF supported a total of 773 research stays abroad. About half of the stays took place in a European country (47%), with the USA taking second place with 46%.

## 4. Programmes

Programmes are funding schemes with pre-defined thematic, conceptual and organisational parameters. They are either suggested by researchers or their home institutions, or established by political actors.

### 4.1 Funding by scheme

Amounts in CHF million

	Number	Amount
<b>National Research Programmes (NRPs)</b>	<b>144</b>	<b>45.2</b>
<b>National Centres of Competence in Research (NCCRs)<sup>1</sup></b>	<b>358</b>	<b>64.2</b>
<b>Sinergia</b>	<b>35</b>	<b>54.5</b>
<b>International programmes</b>	<b>142</b>	<b>30.0</b>
Swiss Programme for Research on Global Issues for Development (r4d programme)	17	13.5
SCOPEs	103	11.7
Multilateral collaboration	3	0.3
Indo-Swiss Joint Research Programme	11	2.7
ERA-NET	8	1.8
<b>precoR</b>	<b>6</b>	<b>2.1</b>
<b>Doctoral programmes (ProDoc)<sup>2</sup></b>	<b>–</b>	<b>1.5</b>
<b>Total</b>	<b>685</b>	<b>197.5</b>

<sup>1</sup> Sub-projects

<sup>2</sup> Additional personnel costs and supplementary grants

### 4.2 National Research Programmes

Amounts in CHF million

The National Research Programmes (NRPs) study problems of societal, political and economic importance for Switzerland. The topics are prescribed by the Federal Council.

Current NRPs	Approved amount 2014 <sup>1</sup>	Overall budget	Overall amount approved up to 2014 <sup>2</sup>	Duration
NRP 60 Gender Equality	0.4	8.0	7.4	2010–2013
NRP 61 Sustainable Water Management	0.3	12.0	11.0	2010–2013
NRP 62 Smart Materials	0.4	11.0	10.0	2010–2014
NRP 63 Stem Cells and Regenerative Medicine	–	10.0	9.0	2010–2014
NRP 64 Opportunities and Risks of Nanomaterials	0.0	12.0	10.8	2010–2015
NRP 65 New Urban Quality	0.1	5.0	4.0	2010–2013
NRP 66 Resource Wood	3.3	18.0	16.3	2012–2017
NRP 67 End of Life	1.5	15.0	12.0	2012–2018
NRP 68 Sustainable Use of Soil as a Resource	0.9	13.0	9.3	2013–2017
NRP 69 Healthy Nutrition and Sustainable Food Production	0.0	13.0	7.5	2013–2017
NRP 70 Energy Turnaround	30.1	37.0	30.1	2013–2018
NRP 71 Managing Energy Consumption	5.9	8.0	5.9	2013–2018
Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI)	2.4	4.0	3.0	2013–2017
<b>Total</b>	<b>45.2</b>	<b>166.0</b>	<b>136.2</b>	

<sup>1</sup> Excluding grants for formally terminated programmes

<sup>2</sup> These amounts do not take account of repayments, third-party funds, etc.

With a total budget of CHF 37 million, the National Research Programme “Energy Turnaround” is the largest NRP ever launched. In 2014, the SNSF awarded grants worth CHF 30.1 million from this budget. NRP 70 generates knowledge aimed at supporting the federal government and Swiss businesses in implementing “Energy Strategy 2050”. In addition, CHF 5.9 million was allocated to the NRP “Managing Energy Consumption”.



### 4.3 National Centres of Competence in Research

Amounts in CHF million

With the National Centres of Competence in Research the SNSF promotes long-term research networks in areas of strategic significance for the future of Swiss science, economy and society.

2005 series	SNSF contribution 2014 <sup>1</sup>	SNSF contribution for 12 years	Total budget for 12 years	Start	Home institution
NCCR Affective Sciences: Emotions in Individual Behaviour and Social Processes	1.9	28.1	89.9	2005	University of Geneva
NCCR Democracy: Challenges to Democracy in the 21 <sup>st</sup> Century	1.3	20.1	44.5	2005	University of Zurich
NCCR Iconic Criticism: Power and Importance of Pictures (Eikones)	1.3	19.9	51.2	2005	University of Basel
NCCR Mediality: Historical Perspectives	1.2	15.9	33.2	2005	University of Zurich
NCCR Trade Regulation: International Trade Regulation – From Fragmentation to Coherence	2.1	26.4	37.1	2005	University of Berne
<b>Total</b>	<b>7.8</b>	<b>110.4</b>	<b>255.9</b>		

2010 series	SNSF contribution 2014 <sup>1</sup>	SNSF contribution for 8 years	Total budget for 8 years	Start	Home institution
NCCR Chemical Biology: Visualisation and Control of Biological Processes Using Chemistry	2.6	28.1	61.8	2010	University of Geneva ETH Zurich
NCCR Kidney.CH: Kidney Control of Homeostasis	3.4	33.1	50.2	2010	University of Zurich
NCCR LIVES: Overcoming vulnerability: life course perspectives	3.5	29.1	80.3	2011	University of Lausanne University of Geneva
NCCR MUST: Molecular Ultrafast Sciences and Technology	3.5	35.1	92.1	2010	ETH Zurich University of Berne
NCCR QSIT: Quantum Science and Technology	4.5	37.8	112.6	2011	ETH Zurich University of Basel
NCCR Robotics: Intelligent Robots for Improving the Quality of Life	2.6	28.6	64.0	2010	EPF Lausanne
NCCR SYNAPSY: The synaptic bases of mental diseases	3.5	34.9	93.9	2010	EPF Lausanne University of Lausanne University of Geneva
NCCR TransCure: From transport physiology to identification of therapeutic targets	2.8	25.9	60.7	2010	University of Berne
<b>Total</b>	<b>26.4</b>	<b>252.6</b>	<b>615.6</b>		

2014 series	SNSF contribution 2014 <sup>1</sup>	SNSF contribution for 4 years	Total budget for 4 years	Start	Home institution
NCCR Bio-Inspired Materials	3.0	12.0	26.6	2014	University of Fribourg
NCCR Digital Fabrication: Advanced Building Processes in Architecture	2.8	13.4	28.8	2014	ETH Zurich
NCCR MARVEL: Computational Materials – Design and Discovery	5.3	18.0	34.4	2014	EPF Lausanne
NCCR MSE: Molecular Systems Engineering	4.2	16.9	37.1	2014	University of Basel ETH Zurich
NCCR On the Move: The Migration-Mobility Nexus	4.3	17.2	27.4	2014	University of Neuchâtel
NCCR PlanetS: Origin, Evolution, and Characterisation of Planets	4.4	17.6	34.4	2014	University of Berne University of Geneva
NCCR RNA & Disease: The Role of RNA Biology in Disease Mechanisms	3.7	16.6	39.1	2014	University of Berne ETH Zurich
NCCR SwissMAP: The Mathematics of Physics	2.3	11.2	28.0	2014	University of Geneva ETH Zurich
<b>Total</b>	<b>30.0</b>	<b>122.9</b>	<b>255.8</b>		

	SNSF contribution 2014 <sup>1</sup>	SNSF contribution for 4/8/12 years	Total budget for 4/8/12 years		
<b>All NCCRs</b>	<b>64.2</b>	<b>485.9</b>	<b>1,127.3</b>		

<sup>1</sup> Also contains contributions for management, knowledge and technology transfer, promotion of young scientists, etc.

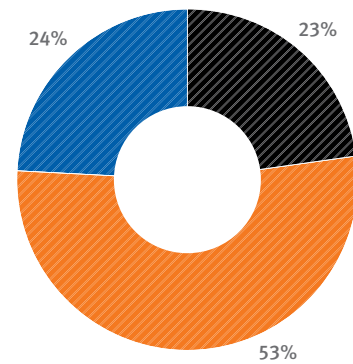
## 5. Infrastructures

In individual cases, the SNSF provides direct funding for research infrastructures that are indispensable for research projects. This is complemented by specific funding programmes.

### 5.1 Funding by scheme

Amounts in CHF million

Distribution of the approved amounts



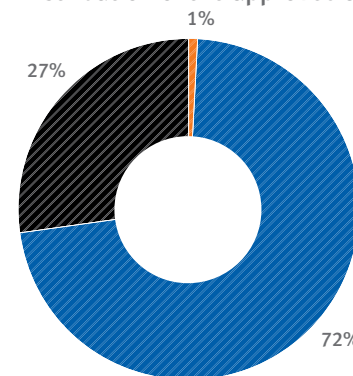
- Research infrastructures
- R'Equip
- FLARE

	Number	Amount
Research infrastructures	8	6.2
R'Equip	56	14.7
FLARE	8	6.5
<b>Total</b>	<b>72</b>	<b>27.4</b>

### 5.2 Funding by research area

Amounts in CHF million

Distribution of the approved amounts



- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine

	Amount
Humanities and social sciences	0.2
Mathematics, natural and engineering sciences	19.9
Biology and medicine	7.3
<b>Total</b>	<b>27.4</b>

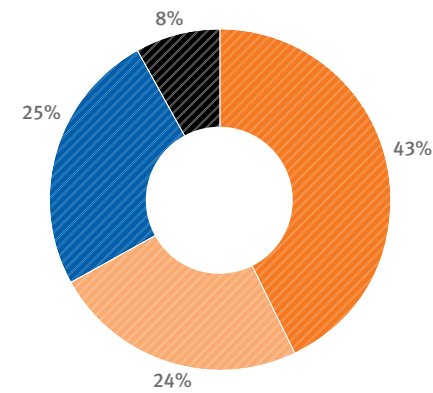
## 6. Science communication

The SNSF promotes communication between researchers as well as between science and society.

### 6.1 Funding by scheme

Amounts in CHF million

Distribution of the approved amounts



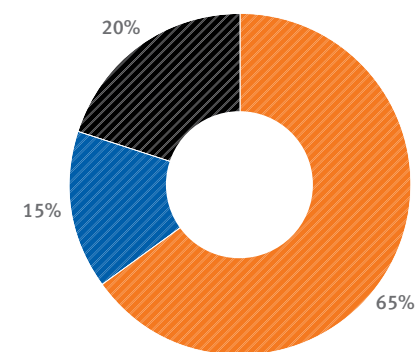
- Agora
- Scientific conferences
- Publications
- International exploratory workshops

	Number	Amount
Agora	19	3.2
Scientific conferences	205	1.7
Publications	167	1.9
International exploratory workshops	45	0.6
<b>Total</b>	<b>436</b>	<b>7.4</b>

### 6.2 Funding by research area

Amounts in CHF million

Distribution of the approved amounts



- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine

	Amount
Humanities and social sciences	4.8
Mathematics, natural and engineering sciences	1.1
Biology and medicine	1.5
<b>Total</b>	<b>7.4</b>

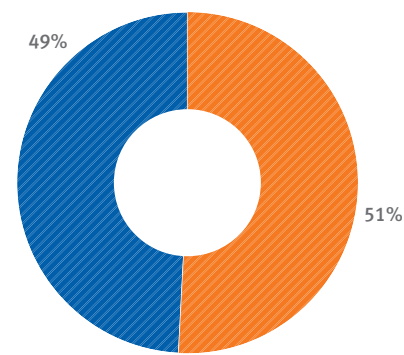
## 7. Temporary Backup Schemes

The Temporary Backup Schemes (TBS) comprise SNSF Starting Grants and SNSF Consolidators Grants. With these backup measures, the SNSF provided researchers in Switzerland with a substitute for the grants of the European Research Council following the acceptance of the popular initiative “Stop mass immigration” in February 2014. The federal government made additional funds available to finance TBS (see pages 6–9).

### 7.1 Funding by scheme

Amounts in CHF million

Distribution of the approved amounts



- Starting Grants
- Consolidator Grants

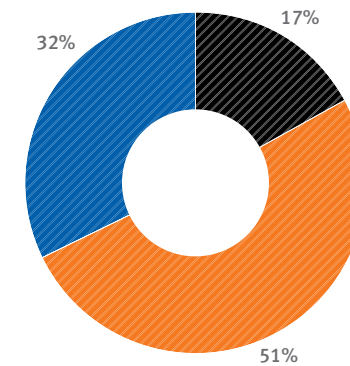
	Number	Amount	Amount incl. overhead
Starting Grants	27	40.6	46.7
Consolidator Grants	21	39.6	45.5
<b>Total</b>	<b>48</b>	<b>80.2</b>	<b>92.2</b>

The distribution of funds across the Starting and Consolidator Grants was based on demand.

### 7.3 Consolidator Grants: funding by research area

Amounts in CHF million

Distribution of the approved amounts



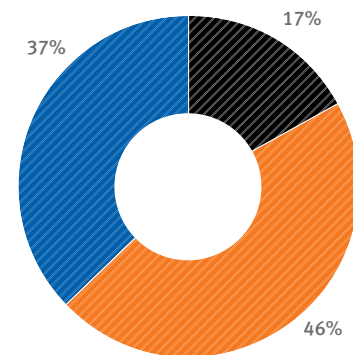
- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine

	Amount
Humanities and social sciences	6.6
Mathematics, natural and engineering sciences	20.4
Biology and medicine	12.6
<b>Total</b>	<b>39.6</b>

### 7.2 Starting Grants: funding by research area

Amounts in CHF million

Distribution of the approved amounts

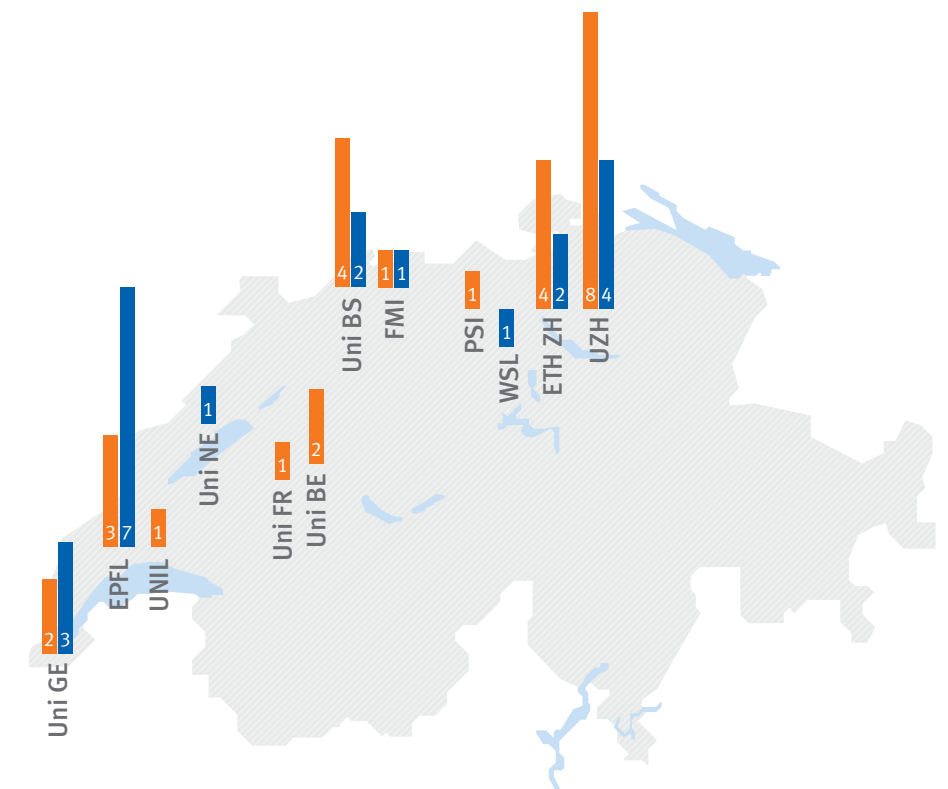


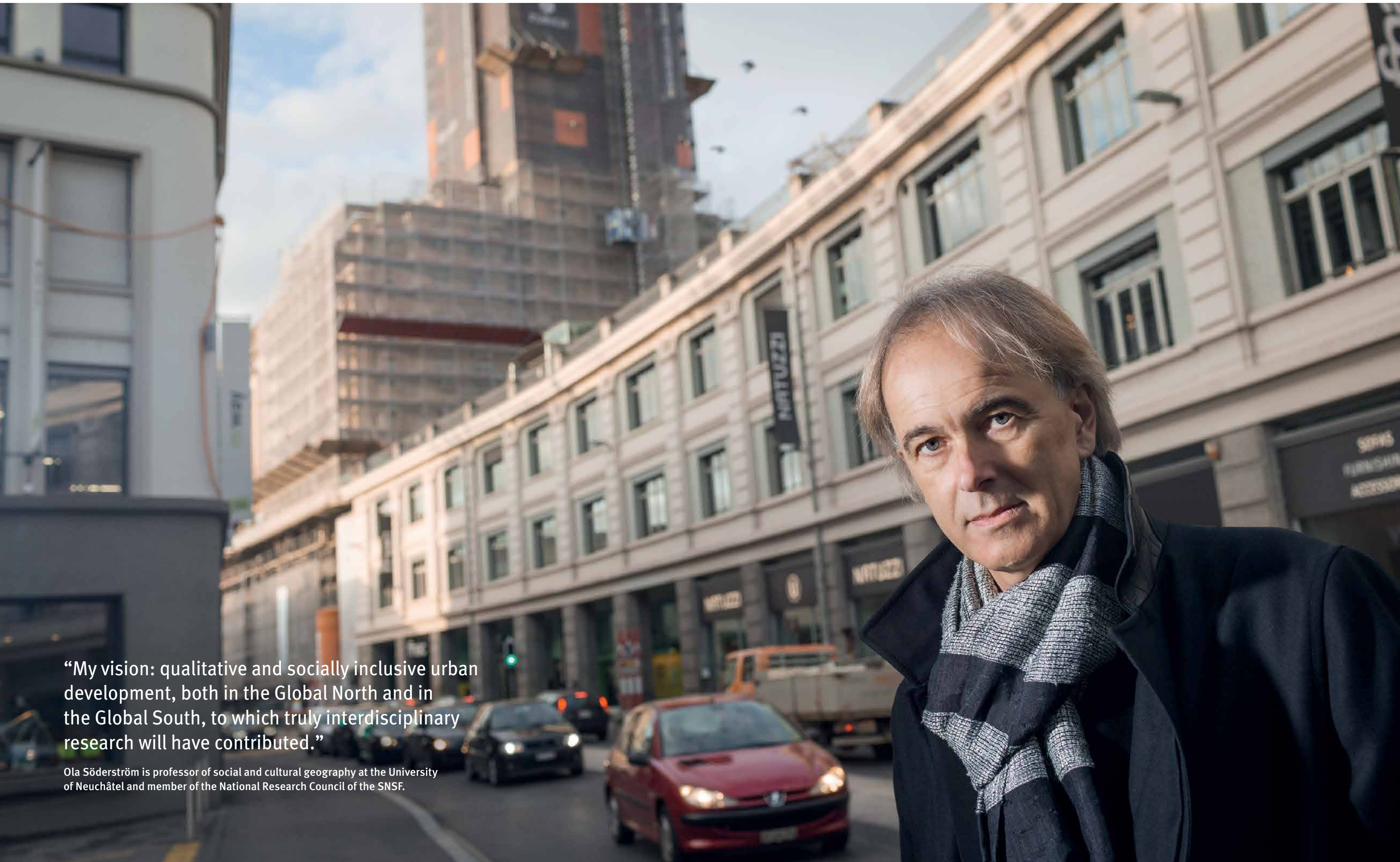
- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine

	Amount
Humanities and social sciences	6.8
Mathematics, natural and engineering sciences	18.9
Biology and medicine	15.0
<b>Total</b>	<b>40.6</b>

### 7.4 Funding by institution

- Starting Grants (Total 27)
- Consolidator Grants (Total 21)





“My vision: qualitative and socially inclusive urban development, both in the Global North and in the Global South, to which truly interdisciplinary research will have contributed.”

Ola Söderström is professor of social and cultural geography at the University of Neuchâtel and member of the National Research Council of the SNSF.

# Bodies of the Swiss National Science Foundation

The bodies of the SNSF work at different levels towards a common goal: scientific evaluation and financing of researchers and the projects submitted by them.



## Foundation Council and Executive Committee

Foundation Council | Executive Committee

37 | 15  
Members

22% | 13%  
Proportion of women

1-2 | 4  
Meetings per annum

As the highest body of the SNSF, the Foundation Council (FC) is responsible for making decisions on a strategic level. It ensures that the Foundation stays on mission and defines the position of the SNSF on research policy issues.

The responsibilities of the Executive Committee of the FC include the election of members of the Research Council as well as the adoption of the financial budget, the key regulations and the service level agreement with the federal government.

### Representatives of scientific organisations

#### Cantonal Universities

- Basel Prof. Edwin Ch. Constable, Deputy Prof. Erich Nigg
- Berne Prof. Christian Leumann, Deputy Prof. Walter Perrig
- Fribourg Prof. Fritz Müller, Deputy Prof. Jean-Pierre Montani
- Geneva Prof. Howard Riezman, Deputy Prof. Ueli Schibler
- Lausanne Prof. Jacques Besson, Deputy Prof. Alexandrine Schniewind
- Lucerne Prof. Martin Baumann, Deputy Prof. Martina Merz (until 30.6.2014), Deputy Prof. Bernhard Rütsche (from 1.7.2014)
- Neuchâtel Prof. Kilian Stoffel, Deputy Prof. Alain Valette
- St. Gallen Prof. Torsten Tomczak, Deputy Prof. Bernhard Ehrenzeller
- Ticino Prof. Bertil Cottier, Deputy Prof. Massimo Filippini
- Zurich Prof. Thomas Hengartner, Deputy Prof. Roger M. Nitsch

#### Swiss Federal Institutes of Technology

- Lausanne Prof. Andreas Mortensen (until 31.8.2014), Prof. Stephan Morgenthaler (from 1.9.2014, Deputy until 31.8.2014), Deputy vacant
- Zurich Prof. Lucas Bretschger, Deputy Prof. Nicholas Spencer

#### Rectors' Conference of the Swiss Universities (CRUS)

Prof. Martine Rahier, Deputy Dr. Raymond Werlen

#### Rectors' Conference of the Swiss Universities of Applied Sciences (KFH)

Dr. Jakob Limacher, Deputy Prof. Luca Crivelli | Prof. Markus Hodel, Deputy Prof. Lukas Rohr | Prof. Thomas D. Meier, Deputy Prof. Michel Fontaine | Prof. Monika Wohler (until 31.8.2014), Prof. Luciana Vaccaro (from 1.9.2014), Deputy Prof. Ursula Blosser

#### Swiss Conference of Rectors of Universities of Teacher Education (COHEP)

Prof. Pascale Marro (until 30.9.2014), Prof. Erwin Beck (from 26.11.2014), Deputy Prof. Luca Botturi

#### ETH Board

Dr. Fritz Schiesser, Deputy Privatdozent Dr. Kurt Baltensperger

#### Swiss Lawyers Association

Prof. Regula Kägi-Diener, Deputy Prof. Christian Schwarzenegger

#### Swiss Society of Economics and Statistics (SSES)

Prof. Klaus Neusser, Deputy Prof. Volker Grossmann

#### Actionuni

Dr. Odilo W. Huber (deceased 29.1.2014), Georg Winterberger (from 3.2.2014), Deputy Dr. Matthias Hirt (until 31.3.2014), Deputy vacant

### Swiss Academies of Arts and Sciences

SAHS: Prof. Anne-Claude Berthoud (until 30.6.2014), Prof. Simona Pekarek Doehler (from 1.7.2014), Deputy Dr. Markus Zürcher  
 SAMS: Prof. Peter Meier-Abt, Deputy Prof. Prof. Verena Briner  
 SCNAT: Prof. Thierry Courvoisier (until 28.2.2014, Deputy from 1.3.2014), Prof. Felicitas Pauss (from 1.3.2014), Deputy Prof. Nouria Hernandez (until 28.2.2014)  
 SATW: Prof. Ulrich W. Suter, Deputy Dr. Monica Duca Widmer

### Government appointed members

Judith Bucher (VPOD), Deputy Véronique Polito (SGB) | Isabelle Chassot (Director of the Federal Office of Culture), no deputy | Gabriele Gendotti (former member of cantonal government [Ticino]), no deputy | Dr. Barbara Haering (former National Councillor), deputy vacant | Dr. René Imhof (F. Hoffmann-La Roche Ltd.), no deputy | Dr. Wolfgang A. Renner (Synthema Ltd.), no deputy | Prof. Luzius Mader (FOJ), Deputy Dr. Werner Bussmann (FOJ) | Dr. Andreas Langenbacher (Pro Helvetia) (until 30.11.2014), vacant; Deputy Marianne Burki (Pro Helvetia) | Jürg Burri (SERI) (until 31.3.2014), Dr. Gregor Haefliger (SERI) (from 3.4.2014, Deputy until 2.4.2014), deputy vacant | Dipl.-phys. Ulrich Jakob Looser (economiesuisse), Deputy Dr. Rudolf Minsch (economiesuisse) | Dipl.-Ing. Walter Steinlin (CTI), Deputy Dr. Klara Sekanina (CTI)

### Executive Committee

Gabriele Gendotti (former member of cantonal government, President), Prof. Anne-Claude Berthoud (Vice President until 30.6.2014), Prof. Felicitas Pauss (Vice President from 1.7.2014), Prof. Jacques Besson, Prof. Lucas Bretschger, Jürg Burri (until 31.3.2014), Prof. Bertil Cottier, Dr. Gregor Haefliger (from 3.4.2014), Prof. Thomas Hengartner, Prof. Christian Leumann, Dr. Jakob Limacher (from 28.3.2014), Dipl.-phys. Ulrich Jakob Looser, Prof. Fritz Müller, Prof. Martine Rahier, Dr. Wolfgang A. Renner, Prof. Howard Riezman, Dipl.-Ing. Walter Steinlin

**Internal Audit:** ERM Solutions Ltd., Wil/St. Gallen

**Compliance Committee:** Walter Steinlin (President), Prof. Klaus Müller, Prof. Howard Riezman, Prof. Monika Roth, Dr. Dorothea Sturn

Status as at 31.12.2014

## National Research Council

The National Research Council (NRC) is composed of eminent researchers. It reviews thousands of applications submitted to the SNSF each year and decides whether and to what extent they merit funding.

The National Research Council consists of four divisions: Humanities and Social Sciences; Mathematics, Natural and Engineering Sciences; Biology and Medicine as well as Programmes. There are also three specialised committees: “International Cooperation”, “Careers” and “Interdisciplinary Research”.

# 98

Members

# 23%

Proportion of women

# 10–12

Meetings per annum

### Presiding Board

President NRC	Prof. Martin Vetterli
President Div. I	Prof. Paul Schubert
President Div. II	Prof. Jürg Osterwalder (until 30.9.2014) Prof. Harald Brune (from 1.10.2014)
President Div. III	Prof. Denis Duboule (until 31.3.2014) Prof. Urs Frey (from 1.4.2014)
President Div. IV	Prof. Peter Chen
President Specialised Committee Careers	Prof. Katia Saporiti (Deputy to the President of the NRC)
President Specialised Committee International Cooperation	Prof. Urs Baltensperger
President Specialised Committee Interdisciplinary Research	Prof. Laurent Tissot

### Division I: Humanities and Social Sciences

Prof. Paul Schubert (President), Prof. Friedrich Wilkening (Vice President), Prof. Claudio Bolzman, Prof. Monica Budowski, Prof. Corina Caduff, Prof. Franz Caspar, Prof. Rita Franceschini, Prof. Andreas Furrer, Prof. Dario Gamboni, Prof. Annelies Häcki Buhofer, Prof. Alessandro Lomi, Prof. Katharina Maag Merki, Prof. Jon Mathieu, Prof. Ioannis Papadopoulos, Prof. Katia Saporiti, Prof. Sabine Schneider, Prof. Silvia Schroer, Prof. Peter Schulz, Prof. Paul Söderlind, Prof. Ola Söderström, Prof. Laurent Tissot, Prof. Georg von Krogh, Prof. Eric Widmer

### Division II: Mathematics, Natural and Engineering Sciences

Prof. Jürg Osterwalder (President until 30.9.2014), Prof. Harald Brune (Vice President until 30.9.2014, President from 1.10.2014), Prof. Samuel Leutwyler (Vice President from 1.10.2014), Prof. Urs Baltensperger, Prof. David Andrew Barry, Prof. Lukas Baumgartner, Prof. Eva Bayer-Flückiger, Prof. Christian Bernhard, Prof. Michal Borkovec, Dr. Urs Dürig, Prof. Jean-Pierre Eckmann (until 30.9.2014), Prof. Antonio Ereditato, Prof. Thomas Gehrmann (from 1.10.2014), Prof. Juliane Hollender (from 1.10.2014), Prof. Kai Johnsson, Prof. Ursula Keller (from 1.10.2014), Prof. Arjen K. Lenstra, Prof. Simon Lilly, Prof. Marcel Mayor, Prof. Bradley Nelson, Prof. Oscar Nierstrasz, Prof. Fritz Schlunegger, Prof. Michael W.I. Schmidt (until 30.9.2014), Prof. Lothar Thiele, Prof. Antonio Togni, Prof. Sara van de Geer, Dr. Marco Wieland

### Division III: Biology and Medicine

Prof. Denis Duboule (President until 31.3.2014), Prof. Urs Frey (Vice President until 31.3.2014, President from 1.4.2014), Prof. Dominique Soldati-Favre (Vice President from 1.4.2014), Prof. Hugues Abriel, Prof. Markus Affolter, Prof. Beatrice Beck Schimmer, Prof. Chris Boesch, Prof. Sebastian Bonhoeffer, Prof. Thierry Calandra, Prof. Michael Detmar, Prof. Marc Yves Donath, Prof. Matthias Egger, Prof. Markus Fischer, Prof. Stephan Grzesiek, Prof. Huldrych Fritz Günthard, Prof. Michael N. Hall, Prof. Markus Hermann Heim, Prof. Christoph Hock, Prof. Petra Hüppi, Prof. Beat Keller (from 1.10.2014), Prof. Laurent Keller, Prof. Christian Lüscher, Prof. Andreas Lüthi, Prof. Jean-Pierre Métraux (until 30.9.2014), Prof. Anita Rauch, Prof. Walter Reith, Prof. Markus Stoffel, Prof. George Thalmann, Prof. Bernard Thorens, Prof. Didier Trono, Prof. Hanns Ulrich Zeilhofer, Prof. Rolf Zeller (from 1.4.2014)

### Division IV: Programmes

Prof. Peter Chen (President), Prof. Frédéric Varone (Vice President), Prof. Regina Elisabeth Aebi-Müller, Prof. Kay W. Axhausen, Prof. Nina Buchmann, Prof. Susanna Burghartz, Prof. Fabrizio Butera, Prof. Christoph Dehio, Prof. Friedrich Eisenbrand, Prof. Dominique Foray, Prof. Katharina M. Fromm, Prof. Alexander Grob, Prof. Stefanie Hellweg, Prof. Michael O. Hottiger, Prof. Isabelle Mansuy, Prof. Katharina Michaelowa, Prof. Philipp Rudolf von Rohr, Prof. Frank Scheffold, Prof. Jürg Ulrich Steiger, Prof. Dirk van der Marel

### Specialised Committee Careers

Prof. Katia Saporiti (President), Prof. Michal Borkovec (Vice President), Prof. Lukas Baumgartner, Prof. Eva Bayer-Flückiger, Prof. Beatrice Beck Schimmer, Prof. Nina Buchmann, Prof. Susanna Burghartz, Prof. Markus Fischer, Prof. Petra Hüppi, Prof. Peter J. Schulz

### Specialised Committee International Cooperation

Prof. Urs Baltensperger (President), Dr. Marco Wieland (Vice President), Prof. Kay W. Axhausen, Prof. Monica Budowski, Prof. Denis Duboule (until 31.3.2014), Prof. Markus Heim (from 1.5.2014), Prof. Jon Mathieu, Prof. Katharina Michaelowa (from 1.5.2014), Prof. Dominique Soldati-Favre, Prof. Jürg Ulrich Steiger

### Specialised Committee Interdisciplinary Research

Prof. Laurent Tissot (President), Prof. Alessandro Lomi (Vice President), Prof. David Andrew Barry, Prof. Antonio Ereditato, Prof. Andreas Lüthi, Prof. Walter Reith, Prof. Philipp Rudolf von Rohr, Prof. George Thalmann, Prof. Dirk van der Marel

### Commission on Gender Equality in Research Funding

Prof. Susan M. Gasser (President), Prof. Thomas Hinz, Prof. Nicky Le Feuvre, Gary Loke, Dr. Patricia Schulz, Prof. Anna Wahl, Maya Widmer

### Commission on Research Integrity

Prof. Dr. iur. Dr. h.c. Kurt Seelmann (President), Prof. Andreas Furrer (Vice President), Prof. Beatrice Beck Schimmer, Dr. Christian Brunner, Prof. Katharina M. Fromm, Marie Guyaz del Aguila, Prof. Michael Hall, Dr. Marjory Hunt, Prof. Arjen K. Lenstra, Dr. Noélie Maillard Schaffter, Dr. Juliette Pont, Prof. Ian Sanders, Elisabeth Schenker, Prof. Dominique Soldati-Favre, Beatrice Tobler-Miescher, Dr. Marc Zbinden

Status as at 31.12.2014

Further information > [www.snsf.ch/nrc](http://www.snsf.ch/nrc)

## Research Commissions

The university-based Research Commissions of the SNSF act as a link between the university and the SNSF. In their function as an SNSF body, they are primarily responsible for awarding mobility fellowships to doctoral students (Doc.Mobility) and postdocs starting their careers (Early Postdoc.Mobility) as well as for selecting (in the first phase) candidates for Doc.CH grants in the humanities and social sciences. On behalf of the university, they also compile institutional statements on research projects submitted to the SNSF.

**12**  
Research Commissions

**182**  
Members

**25%**  
Proportion of women

**42**  
Meetings per annum

### Presidents of the Research Commissions at Swiss institutions of higher education

Basel	Prof. Primo Schär
Berne	Prof. René Bloch
Fribourg	Prof. Martin Wallmeier
Geneva	Prof. Rita Trigo Trindade
Lausanne	Prof. Othmar Müntener
Lucerne	Prof. Martin Baumann
Neuchâtel	Prof. Pascal Felber
St. Gallen	Prof. Oliver Gassmann (until 31.1.2014) Prof. Michael Lechner (from 1.2.2014)
Ticino	Prof. Rico Maggi
Zurich	Prof. Daniel Wyler
EPF Lausanne	Prof. Benoît Deveaud-Plédran
ETH Zurich	Prof. Nicholas Spencer

Status as at 31.12.2014

## Administrative Offices

The Administrative Offices of the SNSF support and co-ordinate the activities of the Foundation Council, National Research Council and Research Commissions. They make decisions, pass resolutions and monitor the financial aspects of research activity.

Among the key tasks performed each year are the commissioning and evaluation of several thousand expert opinions from national and international experts concerning research proposals. Furthermore the Administrative Offices maintain contacts with bodies responsible for research policy in Switzerland and abroad, represent the SNSF on relevant committees and ensure that the concerns of the Foundation are effectively communicated to the general public.

### Executive Management

Director	Dr. Daniel Höchli
Deputy Director	Dr. Angelika Kalt
Vice Director	Rosemarie Pécaut

### Staff Services

Executive Staff/Legal Department	Inge Blatter
Communication	Jürg Dinner
Gender Equality in Research Funding	Maya Widmer

### Research Funding divisions

Division I, Humanities and Social Sciences	Dr. Ingrid Kissling-Näf
Division II, Mathematics, Natural and Engineering Sciences	Dr. Paul Burkhard (until 30.9.2014) Dr. Tristan Maillard (from 1.10.2014)
Division III, Biology and Medicine	Dr. Aysim Yilmaz
Division IV, Programmes	Dr. Dimitri Sudan
Division Careers	Dr. Marcel Kullin
Division Interdivisional Coordination and Cooperative Research (CoRe)	Dr. Angelika Kalt
Division International Cooperation/SwissCore	Dr. Jean-Luc Barras

### Central Services and Support

Director	Rosemarie Pécaut
Human Resources	Andreas Michel, Rolf Zürcher
Strategic Planning and Controlling	Dr. Katrin Milzow
Finance	Markus König
IT Infrastructure Services	René Liechti
IT Business Services	Mario Andenmatten

Status as at 31.12.2014

**250**  
Employees

**203**  
Full-time equivalents

**66%**  
Proportion of women

**341,640**  
Working hours 2014

**Financial figures in brief**

# Annual statement 2014

Full version: [www.snsf.ch/annualstatements](http://www.snsf.ch/annualstatements)

All amounts are stated in millions of Swiss francs.

**Income statement****Income**

	2014	2013
Federal contributions (ordinary and other)	954.1	842.6
Federal contributions for overhead	91.0	85.0
Returns	27.3	22.8
Accrued income	13.3	9.0
Miscellaneous	0.6	1.0
<b>Total</b>	<b>1086.3</b>	<b>960.4</b>

**Expenditure**

	2014	2013
Research funding	847.9	770.6
Projects	409.3	385.5
Careers	172.6	165.8
Programmes	181.6	135.2
Infrastructures	35.9	36.3
Science communication	6.8	5.4
Third-party programmes	41.7	42.4
Overhead payments to research institutions	91.0	85.0
Accrued expenses	107.2	70.1
Scientific evaluation and governance	9.5	9.3
Foundation Council	0.1	0.1
National Research Council	8.1	7.2
Miscellaneous	1.3	2.0
Public relations work	1.8	1.7
Administrative expenses	31.4	29.1
Personnel expenses	25.9	23.9
Information technology expenses	2.0	1.9
Miscellaneous	3.5	3.3
Other expenses	0.2	0.2
Surplus	-2.7	-5.6
<b>Total</b>	<b>1086.3</b>	<b>960.4</b>

**Balance sheet****Assets**

	2014	2013
Cash and cash equivalents	678.2	553.8
Other current assets	0.4	0.1
Fixed assets	8.3	8.6
Financial assets	92.2	70.0
<b>Total</b>	<b>779.1</b>	<b>632.5</b>

**Liabilities**

	2014	2013
Loan capital	618.7	491.5
Miscellaneous short-term liabilities	545.9	409.1
Miscellaneous provisions	72.8	82.4
Earmarked donations and bequests	90.5	68.4
Equity capital	69.9	72.6
Non-earmarked donations and bequests	0.4	0.4
Foundation capital	1.3	1.3
Reserves	70.9	76.5
Unappropriated surplus	-2.7	-5.6
<b>Total</b>	<b>779.1</b>	<b>632.5</b>

**Additional information on the annual statement****Grants approved but not entered for the years 2015 to 2017**

As at 31 December 2014 the following liabilities existed which were not listed in the balance sheet: CHF 829.2 million.

**Remuneration of the Foundation Council**

In 2014 the members of the Foundation Council received fixed remunerations and daily allowances totalling CHF 93,500 (2013: CHF 73,000).

**Transactions with related parties**

In 2014 the members of the National Research Council and the members of the expert commissions used by them were awarded funding grants totalling CHF 25.1 million, representing 4.0% of the grants approved (2013: CHF 26.6 million or 4.3%). The ceiling set of 5% by the Executive Committee of the Foundation Council was not exceeded.

**Approval of the annual statement**

Following the recommendation of the Swiss Federal Audit Office, which audited the annual statement in its role as external auditor, the Foundation Council approved the annual statement at its meeting on 27 March 2015.



## Abbreviations and glossary

Actionuni	Organisation representing young researchers as well as non-professorial teaching staff associations of the universities and the ETHs nationally and internationally	SAHS	Swiss Academy of Humanities and Social Sciences
Advanced Postdoc.Mobility	Career funding scheme that enables postdocs to enhance their scientific profile at a research institution abroad. Includes the option of a return grant	SAMS	Swiss Academy of Medical Sciences
Agora	SNSF funding scheme for the promotion of public science communication	SATW	Swiss Academy of Engineering Sciences
Ambizione	Career funding scheme for qualified young researchers who aim to conduct a project of their own	Science Europe	Umbrella organisation of national research organisations in European countries
BFH	Bern University of Applied Sciences	SCNAT	Swiss Academy of Sciences
COHEP	Swiss Conference of Rectors of Universities of Teacher Education	SCOPEs	Scientific Cooperation between Eastern Europe and Switzerland (SNSF and SDC programme)
CRUS	Rectors' Conference of the Swiss Universities	SCORE	Swiss Clinicians Opting for Research
CTI	Commission for Technology and Innovation of the federal government of Switzerland	SERI	State Secretariat for Education, Research and Innovation
CTU	Clinical Trial Units: centres of competence for patient-oriented clinical research	SGB	Swiss Federation of Trade Unions
Division I of the SNSF	Humanities and Social Sciences division	Sinergia	SNSF programme for facilitating larger-scale collaborative projects that are initiated bottom-up
Division II of the SNSF	Mathematics, Natural and Engineering Sciences division	SNSF	Swiss National Science Foundation
Division III of the SNSF	Biology and Medicine division	Success rate	Percentage of approved applications among the submitted applications
Division IV of the SNSF	Programmes division (NRPs and NCCRs)	120% support grant	SNSF measure to support postdocs and their families
Doc.CH	Career funding scheme used to support dissertations in the humanities and social sciences	SUPSI	University of Applied Sciences and Arts of Southern Switzerland
Doc.Mobility	Career funding scheme that enables doctoral students to enhance their scientific profile at a research institution abroad	SwissCore	Contact Office for European Research, Innovation and Education: SNSF office in Brussels, co-financed by SERI
Early Postdoc.Mobility	Career funding schemes that enables postdocs starting their careers to enhance their scientific profile at a research institution abroad	TBS	Temporary Backup Schemes: The funding schemes SNSF Starting Grants and SNSF Consolidator Grants, designed to tide researchers over Switzerland's temporary exclusion from European Research Council grants in 2014
EAER	Federal Department of Economic Affairs, Education and Research	Tenure track assistant professorship	Type of assistant professorship that may be converted into a permanent professorship if the holder's performance is considered outstanding during a pre-defined period
EAWAG	Swiss Federal Institute of Aquatic Science and Technology	VPOD	Association of Swiss Civil Servants
economiesuisse	Association of Swiss companies: largest umbrella organisation representing Swiss businesses	W.I.R.E.	Interdisciplinary think tank that studies developments in the economy, the life sciences and society at large
EMPA	Swiss Federal Laboratories for Materials Science and Technology (ETH Domain)	WSL	Swiss Federal Institute for Forest, Snow and Landscape Research (ETH Domain)
ERA	European Research Area	ZFH	Zürcher Fachhochschule
ERA-NET	Scheme introduced by the 6 <sup>th</sup> European Framework Programme for coordinating research activities		
ERC	European Research Council		
ESTROM	Environmental Science and Technology in Romania		
ETHZ / EPFL	Swiss Federal Institutes of Technology (Zurich and Lausanne)		
FHNW	University of Applied Sciences and Arts Northwestern Switzerland		
FHO	University of Applied Sciences Eastern Switzerland		
FINES	Fund for the development of instruments for the European Southern Observatory (ESO)		
FLARE	Funding LArge international REsearch projects: grants for large international projects in the fields of particle physics, astroparticle physics and astrophysics		
FMI	Friedrich Miescher Institute for Biomedical Research		
FOJ	Federal Office of Justice, Switzerland		
FORCE	Fund for research at CERN (infrastructure)		
Funding rate	Percentage share of the total approved amount in the overall amount requested by researchers		
HES-SO	University of Applied Sciences Western Switzerland		
HSLU	Lucerne University of Applied Sciences and Arts		
Idiap	Research institute specialising in perceptive artificial intelligence, Martigny, Switzerland		
Indio-Swiss Joint Research Programme	Research cooperation between the SNSF and India		
Kalaidos	Kalaidos University of Applied Sciences		
KFH	Rectors' Conference of the Swiss Universities of Applied Sciences		
MD-PhD	Doctorate in medicine and natural sciences		
MHV	Marie Heim-Vögtlin grants (SNSF funding for women)		
nano-tera.ch	Swiss initiative to engineer complex systems for health, security and the environment		
NCCR	National Centre of Competence in Research, Switzerland		
NRP	National Research Programme, Switzerland		
Overhead	Contribution to indirect costs of SNSF-funded projects		
p <sup>3</sup>	Research database of the SNSF		
precoR	Initiative of the Mathematics, Natural and Engineering Sciences division of the SNSF to fund precompetitive research		
ProDoc	Post-graduate research programme of the SNSF		
PROSPER	Funding scheme for social medicine and preventive and epidemiological research		
PSI	Paul Scherrer Institute, Switzerland		
r4d programme	Swiss Programme for Research on Global Issues for Development		
R'Equip	SNSF funding scheme for research equipment		

## Further information

General information

> [www.snsf.ch](http://www.snsf.ch)



Research magazine Horizons

> [www.snsf.ch/horizons](http://www.snsf.ch/horizons)

Research database P<sup>3</sup> (approved grants since 1975)

> [www.snsf.ch/p3](http://www.snsf.ch/p3)

### Images

#### Daniel Rihs, photographer

A seasoned professional photographer, Daniel Rihs likes nothing better than to portray people and their stories through the lens of his camera. He is a contributor to various magazines, newspapers and private companies, and many of his personal projects have been on show at exhibitions. [www.danielrihs.ch](http://www.danielrihs.ch)

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## Some goals for 2015



### Informing researchers in detail

In 2015, the SNSF intends to inform researchers comprehensively about the optimisation measures in project funding (see p. 16/17). This will allow them to prepare for the planned changes, which will take effect in the first half of 2016 at the earliest. The Administrative Offices will flesh out the details and amend the guidelines and regulations for project funding.



### Call for investigator-initiated clinical trials

In 2015, the SNSF plans to launch a first call for investigator-initiated clinical trials (IICTs). IICTs address burning clinical and public health relevant research questions in the public interest, and are not sponsored by the pharmaceutical industry.



### A close look at new NRPs

On behalf of the Federal Council, the SNSF is evaluating the feasibility of six new National Research Programmes (NRPs) and preparing the necessary call documents. The Federal Council will make a decision in mid-2015 on launching two to four new NRPs with a total budget of approximately CHF 80 million.

