

2013 – Research funding in figures

In 2013, the Swiss National Science Foundation (SNSF) granted funding to the total value of CHF 818.8 million, 8.4% more than in 2012 (CHF 755.2 million). This financing was used to support over 3,400 research projects.

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 2013. 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

Content

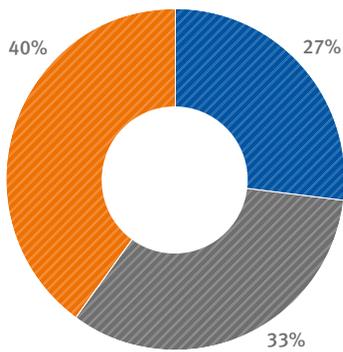
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1. Overview of funding

1.1 Funding by research area

Amounts in CHF million

Distribution of the approved amounts



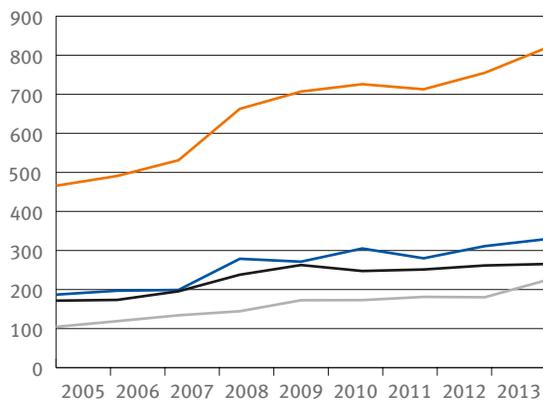
- Humanities and social sciences
- Mathematics, natural and engineering sciences
- Biology and medicine

	Amount	Women Men
Humanities and social sciences	223.8	32% 68%
Mathematics, natural and engineering sciences	265.4	13% 87%
Biology and medicine	329.2	21% 79%
Unapportionable	0.4	
Total	818.8	21% 79%

The allocation to the research areas has changed slightly year-on-year. The share of the humanities and social sciences has risen by three percent.

Approved amounts since 2005

CHF million



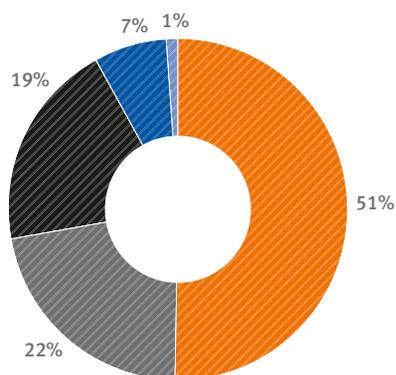
- Total
- Biology and medicine
- Mathematics, natural and engineering sciences
- Humanities and social sciences

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

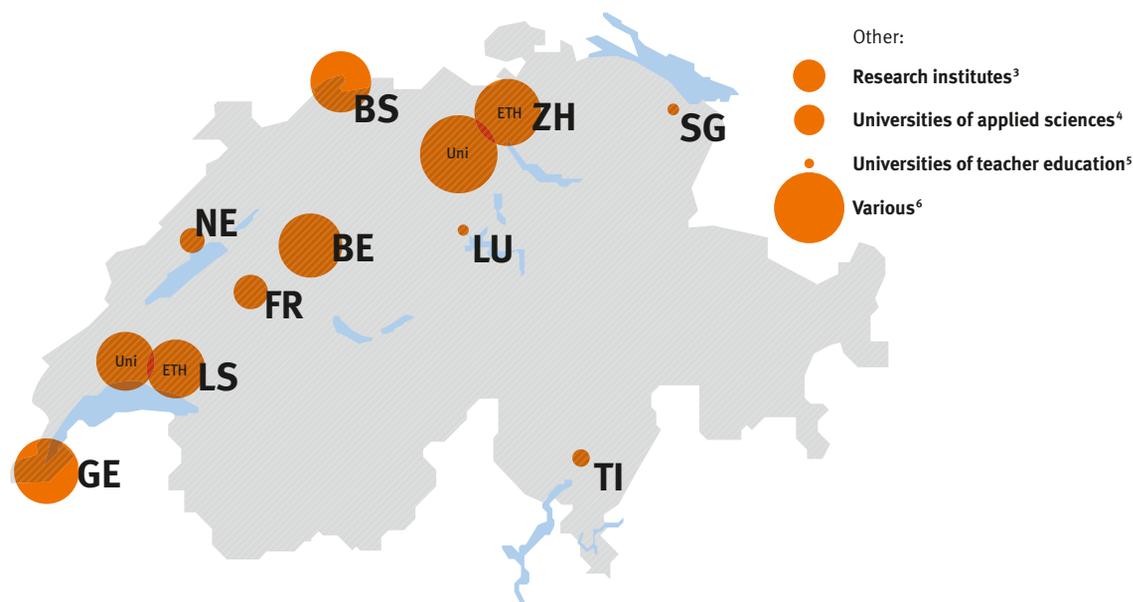
	Number	Amount
Projects	1,217	416.5
Careers	1,280	179.2
Programmes	432	160.4
Infrastructures	96	56.9
Science communication	378	5.8
Total	3,403	818.8

In 2013, the SNSF allocated more than half of its funds to its main funding scheme, project funding. The share of infrastructures has more than doubled year-on-year, from three to seven percent (for details see p. 44).

1.3 Funding by institution and research area

Amounts in CHF million

Distribution of the approved amounts (incl. overhead)¹



Institution	Humanities and social sciences	Mathem., natural and engineering sciences	Biology and medicine	Unassignable	Total in CHF million	Total in %	Overhead ²	Total incl. overhead
Universities	144.5	107.3	244.1		496.0	61%	58.3	554.3
Berne (BE)	25.3	28.9	33.0		87.2	11%	7.7	94.8
Basel (BS)	17.5	14.6	44.4		76.6	9%	8.9	85.4
Fribourg (FR)	7.3	10.0	6.6		23.9	3%	3.2	27.1
Geneva (GE)	25.1	24.4	37.4		86.8	11%	12.1	98.9
Lucerne (LU)	2.4	–	–		2.4	0%	0.4	2.8
Lausanne (LS)	21.4	2.9	47.3		71.6	9%	8.7	80.2
Neuchâtel (NE)	7.1	4.3	1.0		12.4	2%	2.3	14.7
St. Gallen (SG)	2.4	0.0	0.0		2.4	0%	0.8	3.2
Ticino (TI)	3.4	3.1	0.0		6.5	1%	0.5	7.0
Zurich (ZH)	32.6	19.1	74.4		126.1	15%	13.9	139.9
ETH Domain	16.8	123.8	47.6		188.2	23%	21.8	210.0
EPF Lausanne	4.6	47.2	21.8		73.6	9%	7.2	80.9
ETH Zurich	11.6	59.8	21.3		92.7	11%	11.8	104.4
Research institutes ³	0.6	16.8	4.5		21.9	3%	2.8	24.7
Universities of applied sciences⁴	14.5	3.3	1.7		19.4	2%	2.0	21.5
Universities of teacher education⁵	2.0	–	–		2.0	0%	0.2	2.2
Various⁶	46.0	31.0	35.8	0.4	113.2	14%	2.7	115.8
Total	223.8	265.4	329.2	0.4	818.8	100%	85.0	903.8

¹ 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.

² Entitlement to overhead in accordance with overhead regulations

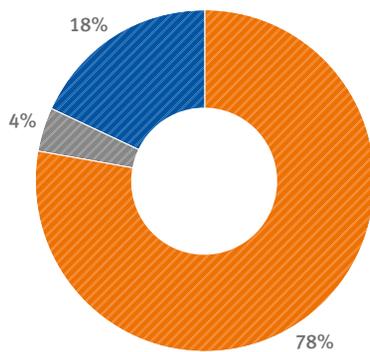
³ Research institutes in the ETH Domain (EMPA, EAWAG, PSI, WSL)

⁴ BFH, FHNW, FHO, HES-SO, HSLU, SUPSI, ZFH, Kalaidos. You will find the breakdown by institution in the web version.

⁵ Without universities of teacher education of FHNW and ZFH

⁶ Research centres, 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



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.

Total amount: CHF 818.8 million

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

1.5 Personnel in research projects

In total, the SNSF supported approximately 8,900 collaborators in 2013: around 5,300 through project funding, 1,000 through career funding and 2,600 through programmes.

	Total	Women Men	
Scientists ¹	36%	44%	56%
Personnel at doctoral level	51%	43%	57%
Technicians, support staff	13%	65%	35%
Total	100%	46%	54%

¹ 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 ¹			Number of applications submitted			Number of applications approved			Approved amount
	Total	Women	Men	Total	Women	Men	Total	Women	Men	
Projects	54%	47%	56%	2,266	488	1,778	1,217	227	990	416.5
Humanities and social sciences	47%	43%	49%	705	214	491	334	92	242	95.0
Mathematics, natural and engineering sciences	63%	56%	64%	786	98	688	492	55	437	139.6
Biology and medicine	53%	46%	54%	669	143	526	352	66	286	166.2
Interdisciplinary research	37%	42%	34%	106	33	73	39	14	25	15.8
Careers²										
Doc.CH	29%	25%	35%	94	60	34	27	15	12	4.6
Doc.Mobility	56%	59%	54%	315	139	176	177	82	95	8.7
Early Postdoc.Mobility	59%	56%	61%	608	242	366	357	135	222	28.9
Advanced Postdoc.Mobility ³	49%	49%	49%	325	149	176	159	73	86	14.2
Marie Heim-Vögtlin grants (MHV)	22%	22%	–	175	175	–	39	39	–	7.8
Ambizione	20%	14%	23%	305	116	189	60	16	44	30.4
SNSF professorships	18%	14%	19%	248	71	177	44	10	34	81.0
Programmes										
Nationale Centres of Competence in Research ⁴	13%	0%	15%	63	8	55	8	0	8	123.0
National Research Programmes ⁵	27%	32%	24%	79	28	51	21	9	12	7.5
International programmes	69%	74%	67%	189	42	147	130	31	99	21.2
Sinergia	47%	53%	46%	99	17	82	47	9	38	56.6
Special programmes biology and medicine ⁶	33%	33%	33%	27	3	24	9	1	8	26.9
Infrastructures	81%	85%	81%	118	20	98	96	17	79	56.9
Science communication	84%	85%	84%	449	144	305	378	122	256	5.8

¹ Ratio of the number of applications approved to the number of applications submitted

² Success rates without follow-up applications

³ Incl. 15 grants from private foundations

⁴ Based on pre-proposals; approved amount for four years

⁵ Based on pre-proposals for NRP 69

⁶ Longitudinal studies

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

	Women	Men
Doc.CH	64%	36%
Doc.Mobility	44%	56%
Early Postdoc.Mobility	40%	60%
Advanced Postdoc.Mobility	46%	54%
Marie Heim-Vögtlin grants (MHV) ¹	100%	
Ambizione	38%	62%
SNSF professorships	29%	71%
Projects	22%	78%

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

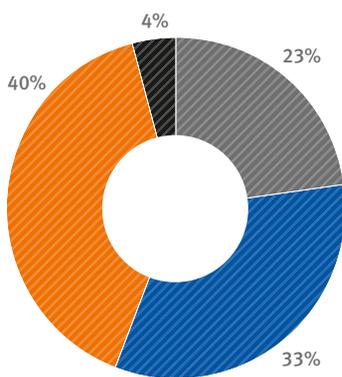
2. Projects

The SNSF supports research projects of high quality across all disciplines. The topics are selected by the researchers. Grants include contributions towards personnel costs, equipment, consumables and travel expenses.

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	95.0
Mathematics, natural and engineering sciences	139.6
Biology and medicine	166.2
Interdisciplinary research	15.8
Total	416.5

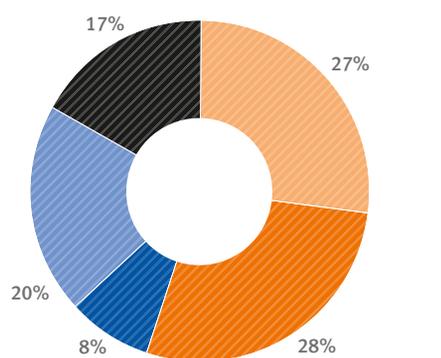
Due to rising demand, the SNSF has made more money available for the humanities and social sciences. Their share has grown by three percent to 23% in the last two years.

2.2 Funding by group of disciplines

Amounts in CHF million

Division I: Humanities and Social Sciences

Distribution of the approved amounts



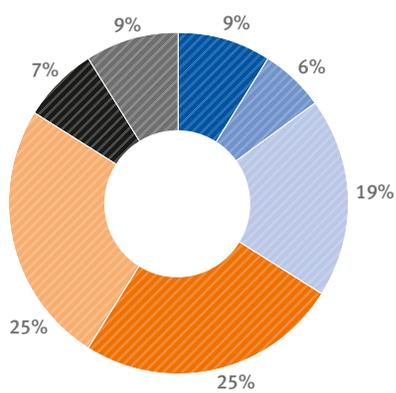
- Philosophy, psychology, educational sciences and religious sciences
- Legal and social sciences, economics
- History
- Archaeology, ethnology, art studies and social urban science
- Linguistics and literature

	Number	Amount
Philosophy, psychology, educational sciences and religious sciences	89	25.4
Legal and social sciences, economics	105	26.4
History	26	7.5
Archaeology, ethnology, art studies and social urban science	64	19.1
Linguistics and literature	50	16.6
Total	334	95.0

Compared to the previous year, the share of grants for history was significantly lower (14% > 8%). In contrast, the share of linguistics and literature was higher (10% > 17%). All in all, the changes can be regarded as normal fluctuations.

Division II: Mathematics, Natural and Engineering Sciences

Distribution of the approved amounts

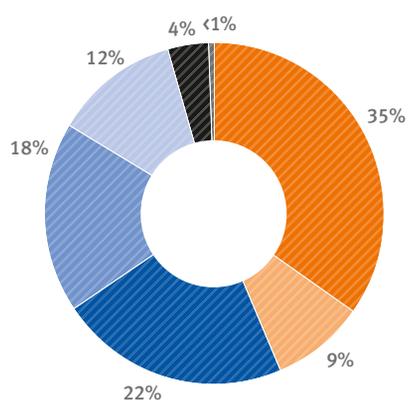


- Mathematics
- Astronomy, astrophysics, space sciences
- Chemistry
- Physics
- Engineering sciences
- Environmental sciences
- Earth sciences

	Number	Amount
Mathematics	42	12.1
Astronomy, astrophysics and space sciences	20	7.8
Chemistry	78	26.4
Physics	96	34.5
Engineering sciences	154	35.3
Environmental sciences	45	10.3
Earth sciences	57	13.1
Total	492	139.6

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	106	57.7
General biology	37	14.9
Basic medical research	77	37.0
Experimental medicine	61	30.0
Clinical medicine	54	20.3
Preventive medicine (epidemiology/early diagnosis/prevention)	16	5.9
Social medicine	1	0.4
Total	352	166.2

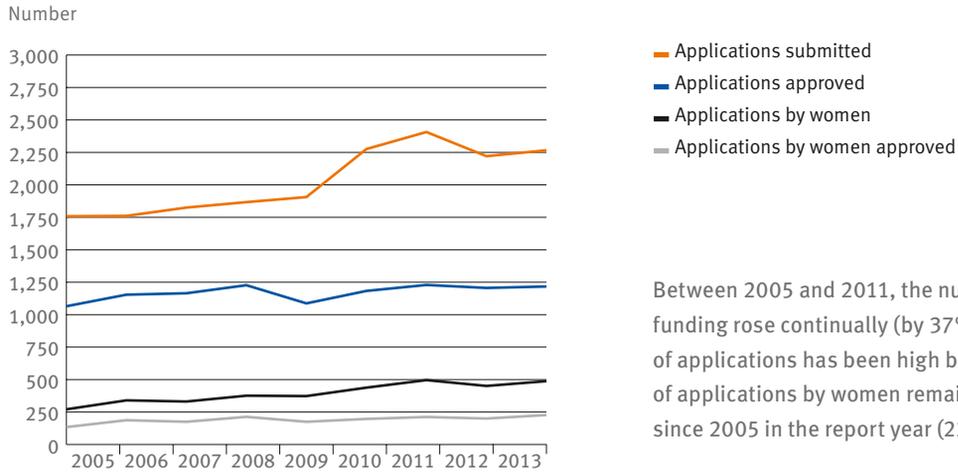
The funds of division III are mainly allocated to basic biological and medical research. Fewer applications are submitted and grants approved in more practice-oriented areas such as clinical medicine or social and preventive medicine.

2.3 Grants, reductions and rejections

Amounts in CHF million

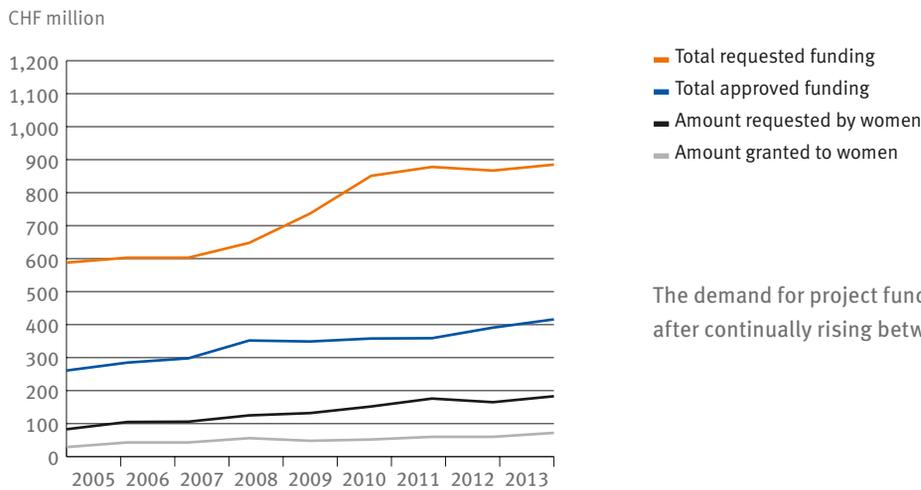
	Number	Amount	Grants Reductions Rejections, withdrawals
Humanities and social sciences			
Applications submitted	705		47% 53%
Requested amount		233.0	41% 6% 53%
Grants	334	95.0	
Reductions in approved applications	(224)	14.2	
Rejections, withdrawals	371	123.8	
Mathematics, natural and engineering sciences			
Applications submitted	786		63% 37%
Requested amount		278.6	50% 18% 32%
Grants	492	139.6	
Reductions in approved applications	(397)	50.8	
Rejections, withdrawals	294	88.2	
Biology and medicine			
Applications submitted	669		53% 47%
Requested amount		325.8	51% 10% 39%
Grants	352	166.2	
Reductions in approved applications	(214)	32.8	
Rejections, withdrawals	317	126.8	
Interdisciplinary research			
Applications submitted	106		37% 63%
Requested amount		47.7	33% 6% 61%
Grants	39	15.8	
Reductions in approved applications	(24)	2.9	
Rejections, withdrawals	67	29.0	
Total			
Applications submitted	2,266		54% 46%
Requested amount		885.0	47% 11% 42%
Grants	1,217	416.5	
Reductions in approved applications	(859)	100.7	
Rejections, withdrawals	1,049	367.8	

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. Although the share of applications by women remains low, it reached its highest mark since 2005 in the report year (22%).

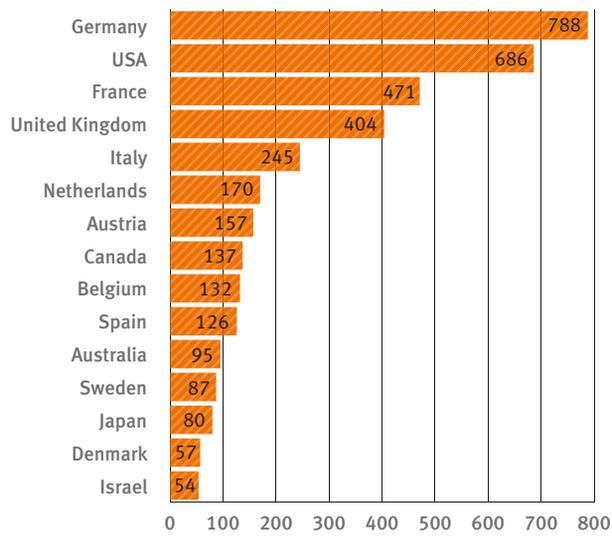
2.5 Requested and approved amounts since 2005



The demand for project funding has stabilised, albeit at a high level, after continually rising between 2005 and 2011.

2.6 International networking

Number of international collaborations



In total, 4,324 instances of international collaboration have taken place in the context of projects supported by the SNSF. The table shows the 15 countries collaborated with most frequently.

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	
Career funding schemes											
Doc.CH	94	60	34	–	–	27	15	12	–	–	4.6
MD-PhD fellowships	7	4	3	–	–	7	4	3	–	–	1.2
Doc.Mobility	315	139	176	13	7	177	82	95	10	5	8.7
Early Postdoc.Mobility	608	242	366	–	–	357	135	222	–	–	28.9
Advanced Postdoc.Mobility	325	149	176	6	26	159	73	86	4	13	14.2
Marie Heim-Vögtlin grants (MHV)	175	175	–	9	–	39	39	–	7	–	7.8
Ambizione	305	116	189	8	9	60	16	44	7	7	30.4
SNSF professorships	248	71	177	14	21	44	10	34	14	20	81.0
Measures for promoting careers											
Graduate courses	4	2	2	–	–	4	2	2	–	–	0.1
Summer courses	186	117	69	–	–	186	117	69	–	–	0.4
International short visits	145	45	100	–	–	130	38	92	–	–	1.0
Research semesters ¹	3	1	2	–	–	3	1	2	–	–	0.3
Mobility grants for doctoral students ²	(33)	(18)	(15)	–	–	(32)	(17)	(15)	–	–	0.4
120% support grants ²	(19)	(10)	(9)	–	–	(13)	(7)	(6)	–	–	0.2
Total	2,415	1,121	1,294	50	63	1,193	532	661	42	45	179.2

¹ Research semesters for departing members of the National Research Council

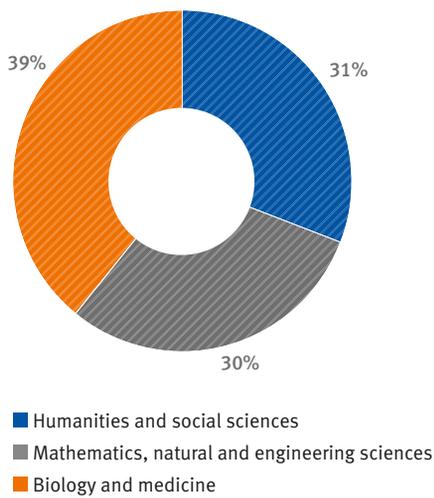
² Mobility grants and “120% support grants” are supplementary grants in projects and are therefore not treated as separate applications. Hence they are not accounted for in the total number of applications, but are considered in the amount.

All in all, the demand for career funding continued to rise strongly in 2013. The mobility fellowships were reorganised and the first Doc.CH grants were awarded (see p. 14/15). Postdoctoral researchers were able to apply for the new “120% support grants” as of summer 2013.

3.2 Funding by research area

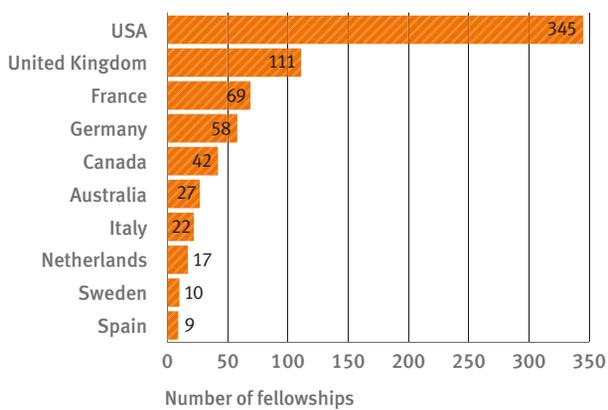
Amounts in CHF million

Distribution of the approved amounts



	Amount
Humanities and social sciences	55.8
Mathematics, natural and engineering sciences	53.7
Biology and medicine	69.7
Total	179.2

3.3 Fellowships by host country



With 727 fellowships for young researchers, the SNSF supported a total of 809 research stays abroad. The graph shows the ten most frequent host countries.

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
National Research Programmes (NRPs)	52	14.6
National Centres of Competence in Research (NCCRs)¹	194	40.2
International programmes	130	21.2
Multilateral collaboration	7	0.5
Swiss South African Joint Research Programme	25	5.5
Swiss Programme for Research on Global Issues for Development (r4d.ch)	17	14.7
SCOPES	81	0.4
Sinergia	47	56.6
Special Programmes University Medicine	9	26.9
Longitudinal studies	9	26.9
Doctoral programmes (ProDoc)²	–	0.8
Total	432	160.4

¹ Sub-projects

² 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 2013 ¹	Overall budget	Overall amount approved up to 2013 ²	Duration
NRP 60 Gender Equality	0.2	8.0	6.9	2010–2013
NRP 61 Sustainable Water Management	0.2	12.0	10.7	2010–2013
NRP 62 Smart Materials	0.1	11.0	9.6	2010–2014
NRP 63 Stem Cells and Regenerative Medicine	3.4	10.0	9.0	2010–2014
NRP 64 Opportunities and Risks of Nanomaterials	1.5	12.0	10.8	2010–2015
NRP 65 New Urban Quality	0.5	5.0	3.9	2010–2013
NRP 66 Resource Wood	0.2	18.0	12.9	2012–2017
NRP 67 End of Life	0.1	15.0	10.5	2012–2018
NRP 68 Sustainable Use of Soil as a Resource	0.2	13.0	8.4	2013–2017
NRP 69 Healthy Nutrition and Sustainable Food Production	7.5	13.0	7.5	2013–2017
NRP 70 Transforming Energy	–	37.0	–	2013–2018
NRP 71 Options for Controlling Final Energy Consumption	–	8.0	–	2013–2018
Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI)	0.6	4.0	0.6	2013–2017
Total	14.4	166.0	91.0	

¹ Excluding grants for formally terminated programmes (CHF 0.1 million)

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

In 2013, the SNSF issued calls for two new NRPs devoted to the topics “Energy Turnaround” and “Managing Energy Consumption” respectively.

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.

Series 2005	SNSF contribution 2013 ¹	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	84.9	2005	University of Geneva
NCCR Democracy: Challenges to Democracy in the 21 st Century	1.3	20.1	43.4	2005	University of Zurich
NCCR Iconic Criticism: Power and Importance of Pictures (Eikones)	1.6	19.9	52.1	2005	University of Basel
NCCR Mediality: Historical Perspectives	1.1	15.9	33.2	2005	University of Zurich
NCCR Trade Regulation: International Trade Regulation – From Fragmentation to Coherence	2.3	26.3	36.3	2005	University of Berne
Total	8.2	110.3	249.9		

Series 2010	SNSF contribution 2013 ¹	SNSF contribution for 4 years	Total budget for 4 years	Start	Home institution
NCCR Chemical Biology: Visualisation and Control of Biological Processes Using Chemistry	3.2	13.5	27.4	2010	University of Geneva ETH Zurich
NCCR Kidney.CH: Kidney Control of Homeostasis	4.5	16.5	27.2	2010	University of Zurich
NCCR LIVES: Overcoming vulnerability: life course perspectives	4.0	14.6	31.9	2011	University of Lausanne University of Geneva
NCCR MUST: Molecular Ultrafast Sciences and Technology	3.9	17.8	39.9	2010	ETH Zurich University of Berne
NCCR QSIT: Quantum Science and Technology	4.5	17.3	55.5	2011	ETH Zurich University of Basel
NCCR Robotics: Intelligent Robots for Improving the Quality of Life	3.5	13.3	29.9	2010	EPF Lausanne
NCCR SYNAPSY: The synaptic bases of mental diseases	4.7	17.5	41.1	2010	EPF Lausanne University of Lausanne University of Geneva
NCCR TransCure: From transport physiology to identification of therapeutic targets	3.7	14.1	28.3	2010	University of Berne
Total	32.0	124.6	281.2		

Series 2014	SNSF contribution for 4 years	Total budget for 4 years	Start	Home institution
NCCR Bio-Inspired Materials	12.0	26.9	2014	University of Fribourg
NCCR Digital Fabrication: Advanced Building Processes in Architecture	13.4	28.8	2014	ETH Zurich
NCCR MARVEL: Computational Materials – Design and Discovery	18.0	31.8	2014	EPF Lausanne
NCCR MoSE: Molecular Systems Engineering	16.9	37.1	2014	University of Basel ETH Zurich
NCCR On the Move: The Migration-Mobility Nexus	17.2	24.9	2014	University of Neuchâtel
NCCR PlanetS: Origin, Evolution, and Characterisation of Planets	17.6	37.9	2014	University of Berne University of Geneva
NCCR RNA & Disease: The Role of RNA Biology in Disease Mechanisms	16.6	38.5	2014	University of Berne ETH Zurich
NCCR SwissMAP: The Mathematics of Physics	11.2	27.5	2014	University of Geneva ETH Zurich
Total	122.9	253.4		
	SNSF contribution 2013	SNSF contribution for 4/12 years	Total budget for 4/12 years	
All NCCRs	40.2	357.8	784.5	

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

The eight new NCCRs will start their research work in the first half of 2014.

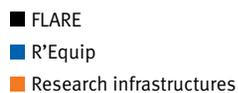
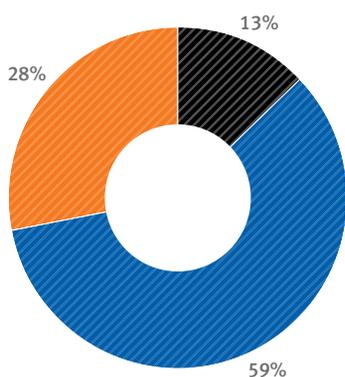
5. Infrastructures

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

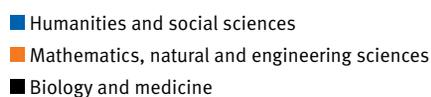
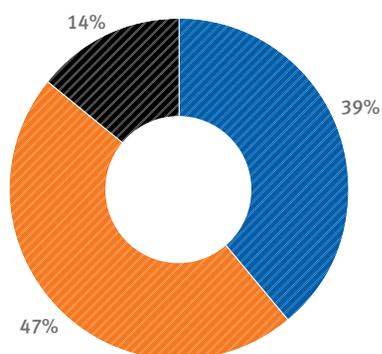


	Number	Amount
FLARE	11	7.3
R'Equip	60	33.4
Research infrastructures	25	16.3
Total	96	56.9

5.2 Funding by research area

Amounts in CHF million

Distribution of the approved amounts



	Amount
Humanities and social sciences	22.4
Mathematics, natural and engineering sciences	26.8
Biology and medicine	7.7
Total	56.9

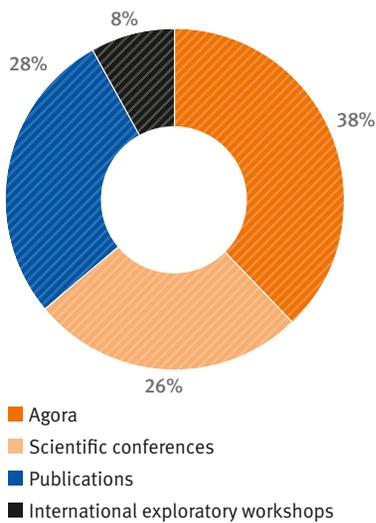
6. Science communication

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

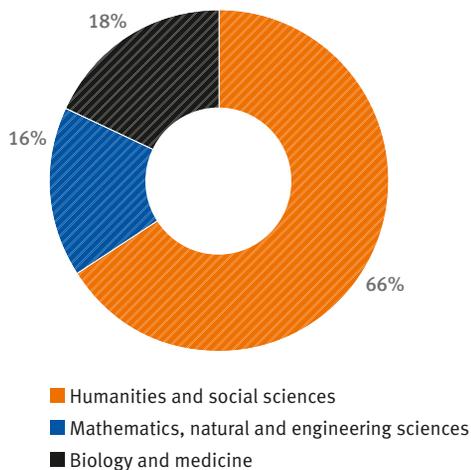


	Number	Amount
Agora	14	2.2
Scientific conferences	194	1.5
Publications	134	1.6
International exploratory workshops	36	0.4
Total	378	5.8

6.2 Funding by research area

Amounts in CHF million

Distribution of the approved amounts



	Amount
Humanities and social sciences	3.8
Mathematics, natural and engineering sciences	0.9
Biology and medicine	1.1
Total	5.8