Profile

Facts and Figures

FNSNF
Swiss National Science Foundation

Our ambition

We invest in researchers and their ideas. We promote and disseminate research, creating knowledge that is valuable to society, the economy and politics.

From left to right:
Daniel Höchli, Director of the Administrative Offices
Gabriele Gendotti, President of the Foundation Council
Martin Vetterli, President of the National Research Council

“In order to forge ahead and maintain its innovative strength, a country needs to invest in education and research.”

Gabriele Gendotti – President of the Foundation Council

The Swiss National Science Foundation

As Switzerland’s foremost research funding organisation, the Swiss National Science Foundation (SNSF) finances over 3,400 projects involving 14,000 researchers each year.

One of its core tasks is the evaluation of research proposals. In 2014, it allocated CHF 849 million to the best applications. By distributing public research money based on a competitive system, the SNSF contributes to the high quality of Swiss research.

Research creates knowledge: new drugs, materials and technologies as well as insights into social questions are the result of basic research. By supporting it, the SNSF creates an environment of innovation, quality of life and social development. In terms of knowledge and technology transfer, the SNSF works closely with the market-oriented national Commission for Technology and Innovation (CTI).

To ensure its independence in research, the SNSF was established as a private foundation in 1952. Mandated by the federal authorities, the SNSF supports basic science in all academic disciplines, from history to medicine and the engineering sciences.

In close collaboration with higher education institutions and other partners, the SNSF works towards creating the best possible conditions for the development and international integration of Swiss research. The SNSF is paying particular attention to the support of young scientists.

Portfolio

The SNSF offers a wide range of funding schemes. For funding purposes it distinguishes between:

_ Projects
_ Careers
_ Programmes
_ Infrastructures
_ Science communication

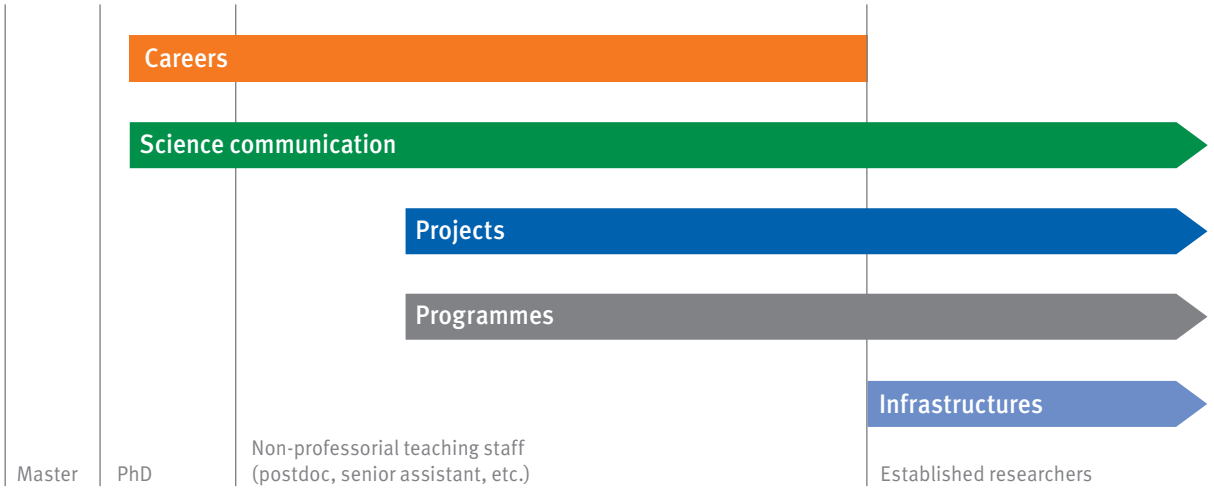
In project funding, researchers determine the topic and the nature of their research endeavour independently. This approach creates an environment where innovative ideas can be pursued.

The various career funding schemes lend support to young talents from the doctoral to the professorial level. They include fellowships for research stays abroad and specific measures supporting women in research.

In programme funding, some basic parameters are pre-defined. The most important programmes are National Research Programmes (NRPs) and National Centres of Competence in Research (NCCRs). NCCRs strengthen the competitiveness of Swiss research in strategically important spheres (robotics, molecular basis of diseases, etc.). Topics for NRPs are chosen by the Federal Council and concern problems of national importance such as the use of wood, soil and energy.

Other programmes focus on joint projects, clinical research and international collaborations.

The SNSF also funds research infrastructures as well as communication between researchers and between science and society.



The funding schemes of the SNSF cover the various phases of an academic career.

Organisational chart

Foundation Council and Executive Committee

Highest body of the SNSF, takes strategic decisions

Compliance Committee
Internal Audit

National Research Council

Evaluates several thousands of applications each year

Divisions	
I	Humanities and Social Sciences
II	Mathematics, Natural and Engineering Sciences
III	Biology and Medicine
IV	Programmes
Specialised Committees	Interdisciplinary Research
	Careers
	International Cooperation
Commissions	Gender Equality in Research Funding
	Research Integrity

Research Commissions at Swiss institutions of higher education

Locally based commissions acting as a link to the SNSF

Administrative Offices

Support the Foundation Council, the Research Council and the Research Commissions

Executive Management
Staff Services
Research Funding divisions
Central Services

"We need to win over young talents for research and create the right conditions for them."

Martin Vetterli – President of the National Research Council

Funding activities of the SNSF in 2014

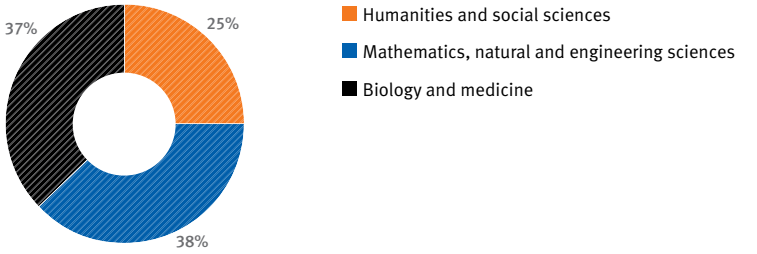
In 2014, the SNSF approved 3469 applications from researchers, granting them funding worth CHF 849 million in total. This corresponds to 3.7 percent more than in the previous year (CHF 819 million). As a “one-off” commitment, the SNSF was also able to allocate CHF 92 million to the Temporary Backup Schemes thanks to additional funds from the federal government.

Full version of the statistics: www.snsf.ch/statistics

Funding by research area

Amounts in CHF million

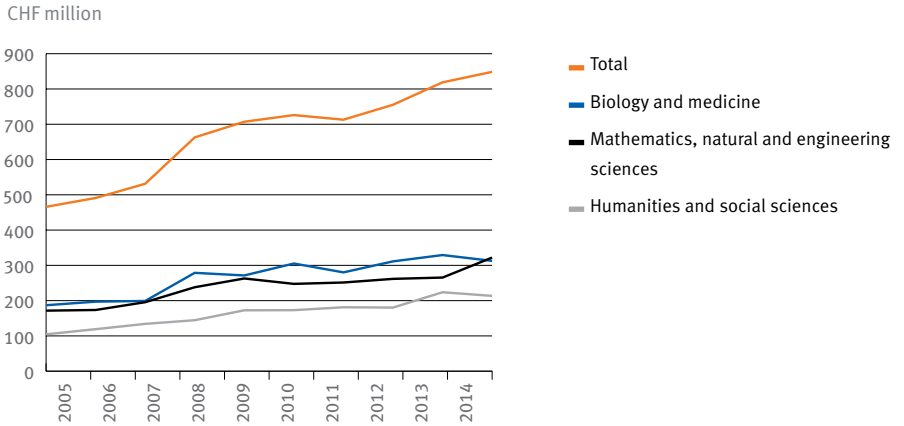
Distribution of the approved amounts



	Amount	
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	
Total	**848.5**	22% 78%

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

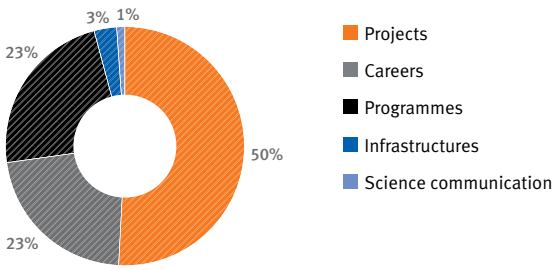


The distribution of funds across the three research areas is based largely on demand.

Funding by scheme

Amounts in CHF million

Distribution of the approved amounts



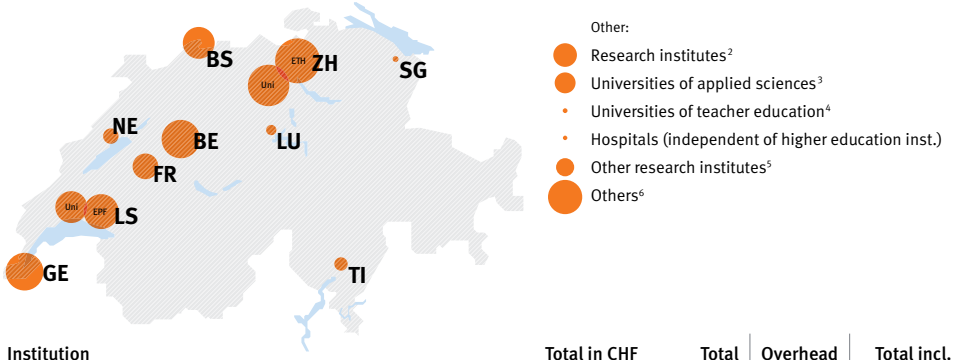
	Number	Amount
Projects	1,165	426.8
Careers	1,111	189.4
Programmes	685	197.5
Infrastructures	72	27.4
Science communication	436	7.4
Total	**3,469**	**848.5**

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”.

Funding by institution

Amounts in CHF million

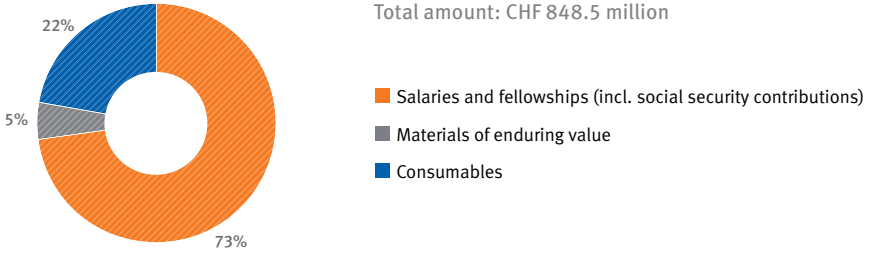
Distribution of the approved amounts (incl. overhead)[1]



Institution	Total in CHF million	Total in %	Overhead	Total incl. overhead
Universities	**480.8**	**57%**	**61.2**	**542.0**
Berne (BE)	91.8	11%	10.4	102.1
Basel (BS)	60.7	7%	8.7	69.4
Fribourg (FR)	41.5	5%	3.2	44.6
Geneva (GE)	88.2	10%	10.5	98.6
Lucerne (LU)	7.0	1%	0.2	7.2
Lausanne (Uni LS)	62.3	7%	8.3	70.5
Neuchâtel (NE)	15.1	2%	1.8	16.9
St. Gallen (SG)	2.0	0%	0.3	2.3
Ticino (TI)	10.6	1%	1.5	12.1
Zurich (Uni ZH)	101.8	12%	16.4	118.1
ETH Domain	**237.0**	**28%**	**23.8**	**260.8**
EPF Lausanne (EPF LS)	75.0	9%	9.7	84.7
ETH Zurich (ETH ZH)	126.8	15%	11.2	138.0
Research institutes[2]	35.2	4%	2.9	38.1
Universities of applied sciences[3]	**27.3**	**3%**	**2.6**	**29.9**
Universities of teacher education[4]	**1.3**	**0%**	**0.3**	**1.6**
Hospitals (independent of higher education institutes)	**1.0**	**0%**	**0.3**	**1.3**
Other research institutes[5]	**20.6**	**2%**	**2.3**	**22.8**
Others[6]	**80.6**	**9%**	**0.5**	**81.1**
Total	**848.5**	**100%**	**91.0**	**939.5**

[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] Research institutes in the ETH Domain (EMPA, EAWAG, PSI, WSL)
[3] BFH, FHNW, FHO, HES-SO, HSLU, SUPSI, ZFH, Kalaidos. Breakdown by institution: www.snsf.ch/statistics
[4] Without universities of teacher education of FHNW and ZFH
[5] SIAF, AORI, BITG, EHB, Agroscope, FiBL, IRO, FMI, IDIAP, IHEID, IST, IUKB, PMOD, FORS, SPF, SIK-ISEA, CSEM, SIB and other research institutes
[6] Museums, libraries, individuals, companies, non-profit organisations and not assignable to an institution (e.g. Doc.Mobility, Early/Advanced Postdoc.Mobility)

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.

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	
Scientists[1]	34%	42% 58%
Personnel at doctoral level	51%	44% 56%
Technicians, support staff	15%	64% 36%
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.

Success rates

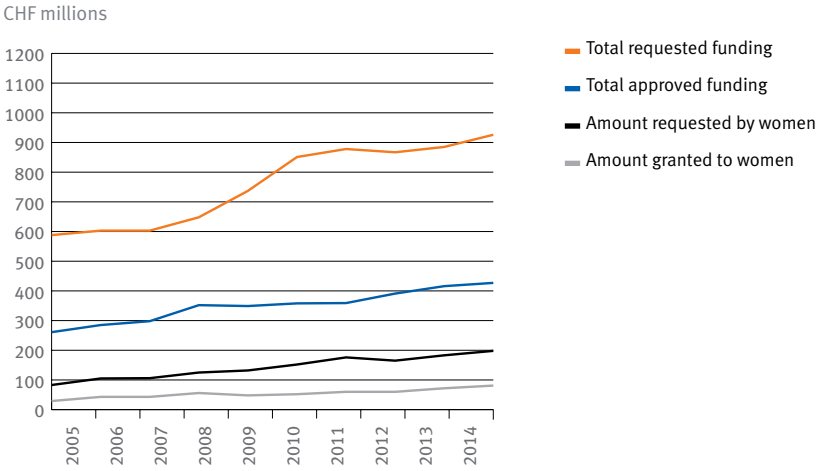
Amounts in CHF million

	Success rate[1]			Number of applications submitted	Number of applications approved	Approved amount
	Total	Women	Men	Total	Total	Total
Projects	**52%**	**46%**	**53%**	**2,249**	**1,165**	**426.8**
Humanities and social sciences	45%	43%	46%	706	320	96.6
Mathematics, natural and engineering sciences	60%	55%	61%	784	470	147.0
Biology and medicine	50%	43%	52%	652	329	162.3
Interdisciplinary research	43%	54%	40%	107	46	20.9
Careers[2]						
Doc.CH	34%	34%	34%	121	41	7.4
Doc.Mobility	60%	60%	60%	338	202	9.9
Early Postdoc.Mobility	55%	55%	55%	643	353	28.1
Advanced Postdoc.Mobility	49%	47%	49%	301	146	16.5
Marie Heim-Vögtlin grants (MHV)	24%	24%	—	152	36	7.8
Ambizione	20%	21%	20%	294	60	32.1
SNSF professorships	15%	20%	13%	259	40	77.5
Programmes						
National Research Programmes[3]	29%	28%	29%	361	103	36.0
Sinergia	39%	27%	41%	89	35	54.5
SCOPES	26%	25%	26%	394	103	11.7
r4d programme[4]	13%	14%	13%	62	8	13,5
Infrastructures	**62%**	**30%**	**65%**	**116**	**72**	**27.4**
Science communication	**85%**	**88%**	**83%**	**515**	**436**	**7.4**

[1] Ratio of the number of applications approved to the number of applications submitted
[2] Success rates without follow-up applications
[3] Based on pre-proposals for NRP 70 and 71
[4] 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.

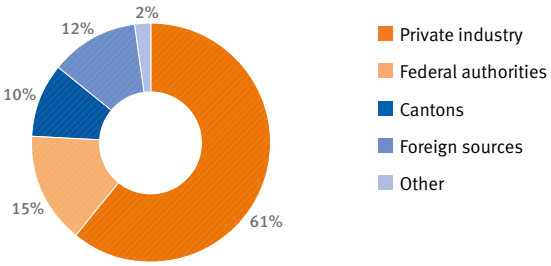
Project funding: requested and approved amounts since 2005



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

Research landscape in Switzerland

Research and development: sources of financial support in Switzerland



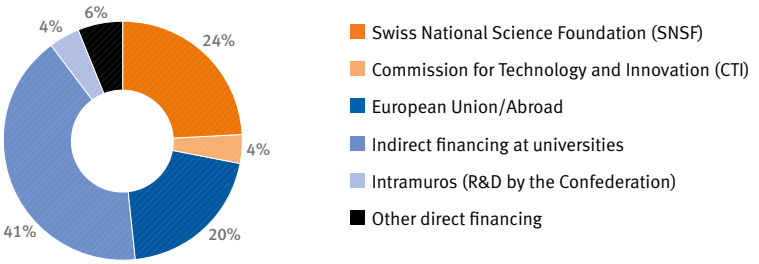
Total CHF 18.5 billion

Sources of finance for R&D in Switzerland, excluding flows of funds abroad

Source: Swiss Federal Statistical Office, data: 2012

The largest proportion of research and development (R&D) in Switzerland is funded privately. At 25 percent, public R&D funding (federal and cantonal) lies nearly 10 percent below the European average.

Research and development: federal funding



Total CHF 3.6 billion

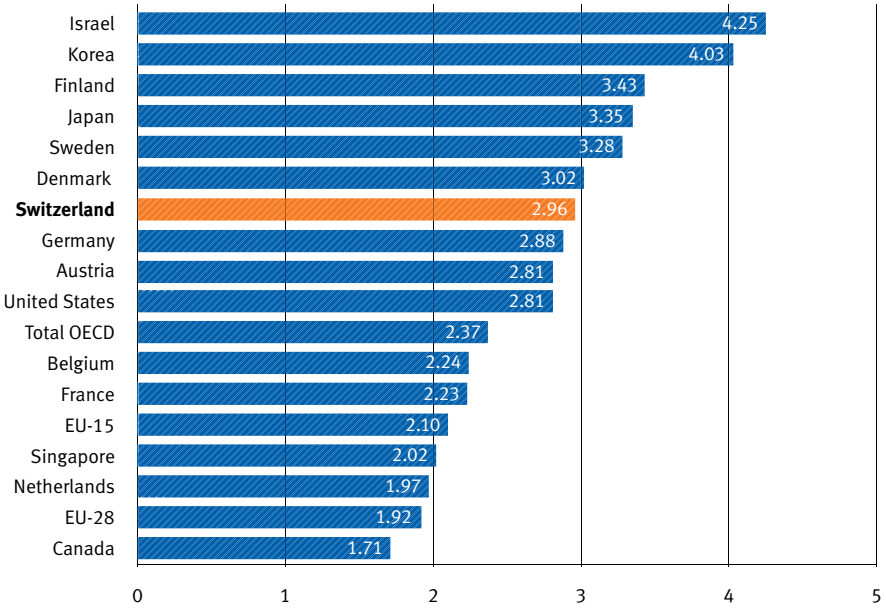
Funding, including money going abroad

Source: Swiss Federal Statistical Office, data: 2012

Approximately a quarter of federal funding for R&D is distributed by the SNSF. The SNSF supports research at higher education institutes and research institutions based on a competitive evaluation procedure.

Research and development: international comparison

Gross domestic expenditure on R&D as a percentage of the GDP



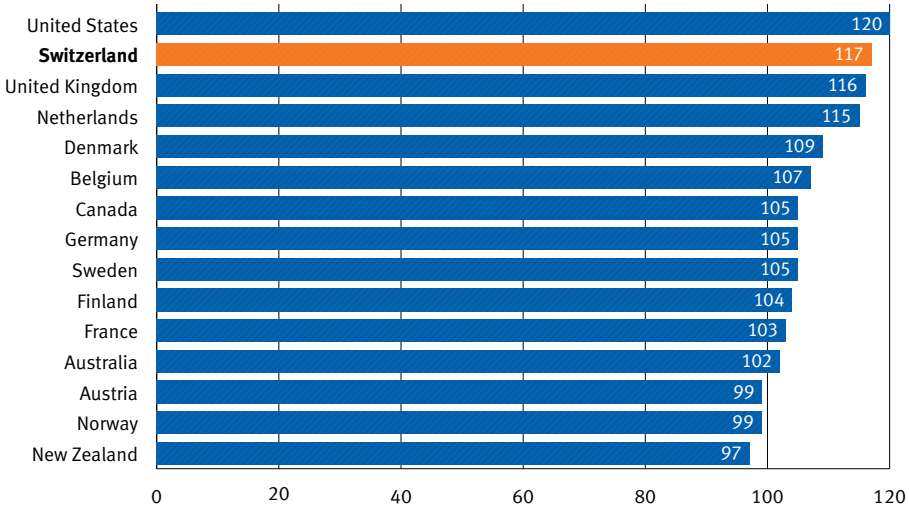
In 2012, Switzerland invested approximately 3 percent of the gross domestic product (GDP) in R&D, thereby ranking seventh.

15 countries with the highest values as well as EU-15, EU-28 and OECD. Listed are countries whose results and/or scientific and technological standards are comparable with those of Switzerland.

Source: OECD, MSTI database. Data: 2012, last updated in February 2015

Impact of scientific publications

Relative citation index



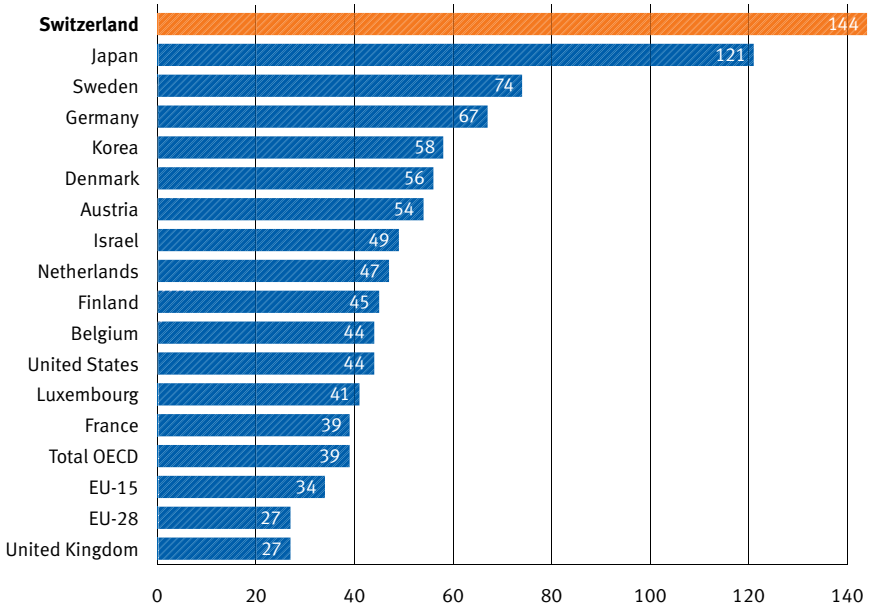
The relative citation index provides a measure for the impact of publications. Switzerland lies 17 percentage points above the global average and holds second place.

15 countries with the best percentage.

Source: Thomson Reuters (SCI/SSCI/A&HCI), adaptation SERI, 2013
Calculations are based on publications from the years 2007–2011

Patents*

Number per million inhabitants



In relation to its inhabitants, Switzerland has an above-average number of registered patents. With regard to the number of triadic patent families*, Switzerland currently tops the OECD ranking.

15 countries with the highest values as well as EU-15, EU-28 and OECD.

Source: Swiss Federal Statistical Office, OECD, MSTI database.
Data: 2012, last updated in February 2015

* Patents that have been registered simultaneously with European and Japanese patent offices as well as granted by the US Patent & Trademark Office.

Further information

General information
› www.snsf.ch

Research magazine Horizons
› www.snsf.ch/horizons

Research database P³ (approved grants since 1975)
› www.snf.ch/p3

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Knowledge is the key to the future.
Research creates knowledge.

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