

- 6) The *Postdoctoral Program* granted 115 scholarships to young scientists totalling DM 10.4 million.
- 7) The *Gottfried Wilhelm Leibniz Program* awards prizes for excellence in science. Twelve researchers and research groups received a total of DM 14.6 million under this program last year.

The promotion of international scientific relations is an important goal of the DFG. DM 47.4 million were spent on international relations, general promotion of scientific research, and library operations. The DFG represents

German science in all major international science organizations and maintains bilateral agreements with an increasing number of countries.

Further information can be obtained from:

Deutsche Forschungsgemeinschaft
Kennedyallee 40
Postfach 20 50 04
D-5300 Bonn 2
Federal Republic of Germany

Switzerland

The Annual Report for 1987 of the Swiss National Science Foundation

The Swiss National Science Foundation (SNSF), founded in 1952, is entrusted by the Swiss Confederation with the promotion and funding of scientific and technological research of the highest quality. The Confederation provides the funds. The SNSF is governed by the *Council of the Foundation*, consisting of representatives from the Confederation, the Cantons, the universities, and various scientific and cultural bodies and institutions. The *Research Council*, composed of representatives of the main scientific disciplines, assesses the applications on scientific criteria and allocates research and publication grants as well as fellowships for advanced researchers. It also prepares cost estimates, the distribution plan, the annual budget and the annual report for the Council of the Foundation. The *Research Commissions* of each university award fellowships to post-graduates, provide information on the laboratory facilities which would be available to grant recipients, and foster the flow of information among universities, scientific organizations and the SNSF.

In 1987, the SNSF had at its disposal SFr. 240.6 million, of which SFr. 205.5 million were provided by the Swiss Confederation, and SFr. 35.1 million came from unused grants, repayments, donations, a legacy, and capital interests. Grants are allocated in 3 divisions:

Division I, Humanities and Social Sciences;
Division II, Physical Sciences and Engineering; and
Division III, Biology and Medicine (Sect. IIIA, Biology and Experimental Medicine; Section IIIB, Clinical Social and Preventive Medicine).

Division I received SFr. 41.8 million (19.9%), Division II SFr. 87.7 million (41.7%), and Division III SFr. 80.7 million (38.4%).

Grants

Research grants: These are grants to well-qualified researchers or research groups, enabling on exactly defined

project to be carried out within a definite time limit (1–3 years). These grants are used by the applicant to pay his scientific and technical co-workers and to buy specially needed research equipment. Fully 75% of the available SNSF funds is allocated in the form of such grants. Because a large number of young scientists are integrated into these projects, these grants also serve for training purposes.

In 1987, 1021 applications requesting SFr. 258.5 million were examined. 820 grants were awarded, of which 205 were awarded for the full amount requested. From these grants, 2600 co-workers, of whom 75% were under 35, were paid. Of the total SFr. 159.6 million allocated for research grants, SFr. 26 million went to Division I (182 approved grants), SFr. 66.9 million to Division II (272 approved grants), and SFr. 66.7 million to Division III (366 approved grants).

Publication grants: The SNSF received 81 requests for contributions to the cost of scientific publication. 71 requests were granted (SFr. 2.1 million, of which 90% went to supporting books or articles in the humanities and social sciences).

Personal grants (Research Fellowships): These grants were created to help discourage the emigration of experienced scientists from, or to encourage their return to, Switzerland. These long-term grants are given on condition that the recipients devote themselves first and foremost to research. In 1987, 19 personal grants (SFr. 311 million) were awarded. A personal grant is given for a maximum of 6 years.

Fellowship programs: The SNSF allocated SFr. 16.6 million in 1987 for fellowships. This money is usually used to pay for further education abroad in some particular field of research. The applicants must not be older than 35 at the beginning of the fellowship. 295 postgraduate studies (SFr. 9.7 million) and 82 advanced fellowships (SFr. 6.9 million) were granted.

Fellowships for *prospective researchers* (postgraduates) are for applicants who have completed their studies at the degree, masters or doctorate levels and have been active in research for a least one year. The local Research Commissions are responsible for the allocation of these grants. Fellowships for *advanced researchers* are for applicants who have carried out at least two years of independent research and can produce evidence of successfully completed work. These fellowships are allocated by the Research Council.

Other fellowships: As the two categories described above do not always cover satisfactorily all cases where further support seems desirable, the SNSF has created special funds for specific scientific disciplines (e.g. the social sciences, social and preventive medicine) and for particularly well-qualified biologists and medical scientists eligible for the START (Swiss Talents for Academic Research and Teaching) grants. Furthermore, there are research fellowships created in collaboration with industry and an exchange system which gives young scientists the opportunity to acquire research experience in other countries.

International collaboration: The SNSF encourages collaborative efforts with scientists in other countries. International agreements have been entered into with funding agencies in Great Britain, the USA, Japan, Italy, and others. The SNSF belongs to the Stockholm-based International Foundation for Science which supports postgraduate education of young Third World scientists in their own countries. The SNSF is also one of the founding members of the European Science Foundation (ESF), established in Strasbourg, France, in 1974. The ESF, as a private umbrella organization with 49 member organizations from 18 West European countries, has become an important forum for the discussion, planning and coordination of many areas of research.

The National Research Programs (NRP): Since their introduction in 1975 the NRP have played an important role in the activities of the SNSF. They are specifically designed to encourage research (both within and outside the universities) which contributes towards the solution of important current problems of national interest. The Federal Council (Swiss Government) selects the topics,

while the management of the projects is entrusted to the SNSF, which may use up to 12 % of its federal funds for this purpose. Most of the programs are interdisciplinary. In 1987 110 applications from 17 projects were submitted, and SFr. 28.1 million were allocated. Current NRP are:

		Closing date	Credit limit
NRP 18	Biomedical Engineering	(1991)	12 million
NRP 19	New Materials for Swiss Industry	(1990)	12 million
NRP 20	Deep Geological Structure of Switzerland	(1991)	10 million
NRP 21	Cultural Variety and National Identity	(1990)	12 million
NRP 22	Utilization of Soil in Switzerland	(1991)	10 million
NRP 23	Applications of Artificial Intelligence	(1995)	12 million
NRP 24	Chemical and Physical Aspects of Surfaces	(1995)	12 million
NRP 25	Future of Urban Districts and Public Transport	(1995)	12 million
NRP 26	Health of Man in Present-day Environment, incl. the Problem of AIDS	(1994)	14 million
NRP 27	Efficiency of Political Measures	(1995)	5 million
NRP 28	Switzerland in a World of Change – A Challenge in Foreign Trade and Development Policy	(1995)	5 million
NRP 29	Change of Life Pattern and Social Security	(1995)	5 million

Further information can be obtained from the secretariat:

Swiss National Science Foundation
Wildhainweg 20
P.O. Box 8232
CH-3001 Bern, Switzerland