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**Science Policy News**

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**United Kingdom: The Annual Report for 1987/88 and the Handbook for 1988 of the Medical Research Council**

The function of the Medical Research Council (MRC) is to promote the balanced development of medical and related biological research in the United Kingdom. The MRC employs its own research staff and also provides grants for other institutions and for individuals who are not members of its own staff, thus complementing the research resources of the universities and hospitals. Though not a government department, the MRC receives an annual grant-in-aid from Parliament, and also funds for specific projects from a number of other government sources.

Highlights from the scientific section of the 1987/88 Annual Report point out some of the key areas wherein the Council has been active in encouraging new research developments. A *human genome mapping project is being established*. A Resource Centre will provide a service collecting, collating and mapping information from scientific teams, and will develop computer-based information systems. Biological material collected from individual teams and a physical library of clones will also be provided. This project will enable the U.K. to benefit optimally from the application and exploitation of the results through a better understanding of genetic disease and the introduction of novel diagnostic techniques and therapies.

Three research areas of especially current public concern have received MRC support as well. *AIDS*: Research covers a wide range of studies into the spread of infection, and how, why and what kind of disease develops. The development of vaccines for prevention, and drugs for treatment of AIDS continues. *Meningitis*: There have been a number of disturbing outbreaks of meningitis with tragic consequences. Research will further the development of vaccines and provide greater understanding of the epidemiology of the infection. *Whooping cough*: Proposals for a major trial of the relative efficacy of acellular whooping cough vaccines were approved in principle.

*Grants and training awards*

In addition to maintaining its own research establishments and staff the MRC supports much research carried out in universities and other independent institutions. Various forms of assistance are provided for suitably qualified medical, dental and scientific graduates who wish to prepare themselves for careers in research or to obtain specialised research training.

*Research grants: Special grants to institutions* – Two autonomous institutions, the Strangeways Research Laboratory and the Institute of Cancer Research, receive support from the MRC both for research and for administrative overheads. *Programme grants* are the

principal mechanism for the support of long-term research in university departments or analogous institutions. Such grants are normally made initially for a period of five years and may be considered for renewal. *Special Project grants* arise as a result of specific needs identified by the MRC, normally as a result of an advisory committee recommendation. The *Project grants* are designed primarily to provide support for a single project and are normally awarded for three years.

*Training awards: Travelling fellowships* enable graduates already possessing several years' postgraduate experience to spend up to a year working at a recognized centre overseas. In addition, four French Exchange Fellowships are made available each year in association with the Institut National de la Santé et de la Recherche Médicale (INSERM) and the Centre National de la Recherche Scientifique (CNRS). Each year the MRC is invited to nominate six U.K. candidates for research fellowships provided by the United States Public Health Service, and one candidate for a Lilly International Fellowship. *Training fellowships* enable graduates at any stage of their careers up to lecturer or equivalent level to gain specialised research training in the biomedical field in the U.K. *Research studentships* are awarded to recent graduates of special promise selected to receive full-time research training primarily with a view to their pursuing an academic research career. *Advanced course studentships* are available to graduates wishing to attend approved formal courses in subjects relevant to biomedical science.

*International collaboration*

The MRC is responsible for payment of the U.K. subscription of £2.5 million (in 1987/88) to the European Molecular Biology Laboratory in Heidelberg, Germany, and of £0.5 million to the European Molecular Biology Conference. The MRC is involved in training programmes of the European Science Foundation in the fields of Brain and Behaviour research (£60,000 p.a.) and Toxicology (£12,000 p.a.).

*Account for the year ending 31 March 1988*

*Receipts*: Parliamentary Grant-in-Aid; £139.8 million, other receipts: £10.6 million; total £150.4 million.

*Payments*: Headquarters and central expenses £9.4 million; National Institute for Medical Research £14.7 million; Clinical Research Centre £12.7 million; Research units and external scientific staff £60.7 million; Special grants to institutions £4.1 million; Programme grants £15.6 million; Project grants £21.8 million; Training awards and fellowships £6.6 million.

*Allocation of payments to major subject areas:* Molecular structure, metabolism, cell and tissue, immune system, skin, inheritance: £32.8 million [25%]; Fertility and development: £8.2 million [6%]; Mental health including addiction: £10.4 million [8%]; Nervous system, including pain and anaesthetic agents: £15.5 million [12%]; Cancer: £9.9 million [7%]; Cardiovascular, blood, respiratory, gastrointestinal, kidney, urinary, teeth, muscle, bone, joints, endocrine glands: £18.2 million [13%]; Tropical diseases £7.6 million [6%]; Nutrition: £3.1 million [2%]; Infections: £10.4 million [8%]; Environment and medical care: £9 million [7%]; Services and techniques: £7.6 million [6%].

*Distribution of allocations to forms of support:* MRC Institutes, Units and Staff: 58.7%; Project grants: 14.7%; Long-term grants: 13.7%; Training awards: 4.3%; International: 2.3%; Headquarters, 4.6%; Central expenses: 1.7%.

Further information can be obtained from:  
Medical Research Council Headquarters Office  
20 Park Crescent  
London W1N 4AL (U.K.)

### United Kingdom: The Science and Engineering Research Council: Collaborative Research into New Catalysts and Catalytic Processes

The government of the United Kingdom has announced a new £5 million program, under the LINK initiative, for collaborative research into new catalysts and catalytic processes. Through the LINK initiative government departments and the research councils will support up to one half the costs of collaborative research programs between industry and scientific institutions. Government funding of £2.5 million will be matched by contributions from industry towards individual projects.

The program will focus on seven areas of research:

- C<sub>1</sub> Chemistry Conversions, including conversion of syngas or methane to higher value products.

- Hydrocarbon Processing: Catalytic cracking of fuel oils in the refining process.
- Environmental Control: Improved industrial effluent control and vehicle exhaust systems.
- Electrocatalytic Technology: Fuel cells for 'clean' power generation.
- Photocatalysis: Including improved water purification techniques.
- Polymerization: Novel polymerization catalysis.
- Enabling Technologies for Catalysis: Research into methods of catalyst regeneration.

### Switzerland: The Annual Report for 1988 of the Swiss National Science Foundation

(For a detailed description of the organization of the SNSF and the different types of funding it provides, see the May 1989 issue [Vol. 45, p. 404] of *Experientia*).

In 1988, the Swiss National Science Foundation (SNSF) had at its disposal SFr. 226.5 million. Of this amount, SFr. 218 million were appropriated by the Swiss Confederation, and SFr. 8.5 million came from unused grants, repayments, donations and capital interest. Grants were allocated to the three divisions of the SNSF as follows: Division I (Humanities and Social Sciences): SFr. 41.4 million (18.9%); Division II (Physical and Engineering Sciences): SFr. 91.4 million (41.8%); Division III: (Biology and Medicine) SFr. 86.0 million: (39.3%).

*Research grants.* In 1988, 1067 applications (4.5% more than in 1987) requesting SFr. 271 million (4.8% more than in 1987) were examined. 875 grants (SFr. 170.5 million) were made, of which 192 were for the full amount requested. Reductions, refusals, withdrawals and transfers amounted to SFr. 100.5 million. In Division I, of 303 grant requests made, 215 were approved (SFr. 27.3 million). In Division II, of 340 requests, 311 were approved (SFr. 71.3 million). In Division III, of 424 requests, 347 were approved (SFr. 72.4 million).

*Publication grants.* The SNSF received 54 requests as compared to 81 in 1987 for contribution to the costs of scientific publication. 46 requests (SFr. 1.3 million) were approved. 77.4% (SFr. 0.98 million) financed publications in the humanities and social sciences.

*Personal grants (long-term research grants).* In 1988, 20 personal grants (SFr. 2.9 million) were awarded (1987: 19 grants, SFr. 3.1 million).

*Postgraduate scholarship program:* In 1988, SFr. 18.9 million were allocated to scholarships for applicants under 35 years of age. 311 postgraduate studies (*lower level*) were supported with SFr. 9.6 million. Most of this sum was awarded to scholarship holders of the Research Committees of the SNSF. This amount also includes the exchange scholarships which the SNSF has offered to

British postgraduate fellows in the framework of the exchange program with the Royal Society. For postgraduates at an *advanced level*, 128 fellowships were awarded, among them 22 international postdoctoral exchange scholarships.

For further information contact:

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

### Belgium: The 60th Annual Report of the National Fund for Scientific Research (French-speaking Section: Fonds National de la Recherche Scientifique [FNRS]; Flemish-speaking Section: Nationaal Fonds voor Wetenschappelijk Onderzoek [NFWO])

Grants and awards are made on the basis of the academic year, 1 September to 31 August. They are made separately for the French-speaking Section (FNRS) and the Flemish-speaking Section (NFWO). In this report, grants and awards for the academic year 1987–1988 are listed.

In 1987–88, the NFWO provided salaries for 303 *Research assistants (Aspirants)* and the FNRS for 190. 'Aspirants' are postgraduate or postdoctoral scientists up to 26, or medical doctors up to 29 years of age without previous research experience. The 'Aspirant' may use his or her grant to prepare a doctoral thesis. These grants are limited to two years and may be prolonged once for the same period.

*Senior Research assistants (Chargés de Recherche)* must have a doctoral degree and be not more than 30 years of age (medical doctors: 33) at the beginning of their grant work. These grants are limited to two years and not renewable. For 1987–88 the NFWO awarded 54, and the FNRS 56 such grants.

8 *Special Doctoral grants* of the NFWO and 6 of the FNRS were awarded to graduate students preparing a doctoral thesis.

*Exchange grants with other European scientific support institutions:* As a result of agreements under the European Science Exchange Program, the NFWO-FNRS are in a position to award grants for work in other European countries. These grants are for a maximum of 12

months. Candidates must provide a written invitation from the institution they wish to work in.

For 1987–88, the NFWO awarded 122 and the FNRS 153 *Research grants*. Research grants are awarded for specific research programs, which must be submitted in full detail with the grant request. International communication and exchange is supported by travel grants for attending scientific meetings in Europe or overseas. The NFWO awarded 803 and the FNRS 550 such travel grants.

*Short visits* of up to two months' duration at laboratories in Europe or overseas, intended to enable the learning of new techniques or extended exchange of information, were also granted by the NFWO (295 grants) and the FNRS (113 grants).

Financial statements of the FNRS and NFWO as of 30 September 1987

	FNRS	NFWO
Government support	BF 505	BF 643
Other income	3	13
Total income	508	656
Salaries	287	378
Research grants	75	118
Research assistants	6.5	3.2
International contacts and visits	38	65
Administration and general expenses	64	61

Further information can be obtained from:

N.F.W.O.	F.N.R.S.
Egmontstraat 5	rue d'Egmont 5
B-1050 Brussel	B-1050 Bruxelles

### The European Science Foundation (ESF) Scientific Networks: Submission of New Initiatives

In 1985 the European Science Foundation launched 'Scientific Networks' as a new form of activity promoting international collaboration. The purpose of the Networks is to bring together ideas, resources, training and expertise in areas requiring action on a European level. Networks are set up initially for a two-year period and typically a Network would have a budget of about £ 50,000 (ca DM 150,000, SFr 120,000) for this initial period. The funds can be used for a range of activities to

promote cooperation and communication between workers; such activities may take the form of workshops, training programs, short-term fellowships, information exchange, and the production of books. Self-management by the participants is a key feature of the Networks. There are now 13 Networks and funds are available for the introduction of about four new Networks each year. Following the initial two-year Phase 1 period it is possible for Networks to develop into more major collabora-

tive projects (Phase 2 Networks) if sufficient member organizations are prepared to contribute directly to the funding. In the medical research field, Networks have so far been launched on 'Molecular Neurobiology of Mental Illness' and 'Cristallography of Biological Macromolecules'. There is also a Phase 2 Network on 'Longitudinal Studies of Individual Development'.

The ESF have asked member organizations to promote the Network scheme by ensuring that the scientific community is well informed on the opportunities available. Further information on Networks and how to submit proposals can be obtained from:

European Science Foundation,  
1 quai Lezay Marnesia,  
F-67000 Strasbourg, France

### **The European Brain Research Program 1990 of the European Science Foundation (European Training Program in Brain and Behavior Research ETP)**

This program covers all aspects of the neurosciences, ranging from molecular neurobiology to behavioral sciences. It includes training program activities as well as advanced research, with particular emphasis on interdisciplinary work and on introducing new methods.

#### *Advanced research activities*

**1990 ETP Autumn School.** The Autumn School is a one-week course organized by the ETP. The 1990 School will be devoted to the subject 'Brain Damage and Repair'. The purpose of the School is to give an overview of the issues and models which currently are most actively pursued in this field, with emphasis on research carried out in European laboratories. The School is intended for young scientists under the age of 35 working on a subject closely related to the central topic. The scientific organizers are Professor A. Björklund (Stockholm) and Dr S. B. Dunnett (Cambridge).

The School will be held from the end of September to the beginning of October 1990 (exact dates and location are to be announced). For students living expenses are paid by the ETP, and they will also be awarded travel expenses. Deadline for applications: 1 March 1990.

**Modern methods in neuroanatomy.** This 6-day course, organized by the ETP in collaboration with the Hungarian Academy of Sciences, will be held in Budapest in the first week of July 1990. It will be composed of lectures and practical laboratory work. Topics covered will include immunocytochemistry, quantitative morphology (3-D reconstruction techniques), neuronal tracing methods, and in situ hybridization. The scientific organizer is Professor J. Hamori (Budapest). Students' living expenses will be paid by the ETP, and travel expenses will be awarded. Deadline for applications: 1 March 1990.

**Twinning grants.** Proposals can be submitted by laboratories located in two or more different countries and working in neuroscience and/or behavioral science. Twinning grants are for research projects which one of the groups could not undertake alone. In particular, multidisciplinary collaboration is supported. The grants allocated

do not exceed FF 20,000 (about SFr. 5,000, or DM 6,000, or £ 2,000) per project and are meant to cover the costs for short visits of research workers of the participating institutes. Deadlines for applications: 1 March and 15 September.

**Travel fellowships.** Due to the rapid development of new techniques in neuroscience, it is becoming increasingly difficult for scientists to keep up to date and to make use of the latest techniques. Therefore it has been decided to create a new type of grant for experienced scientists to allow them to visit other laboratories with well-recognized advanced technology in neuroscience. The maximum amount awarded per project is FF 15,000 (about SFr. 4,000, or DM 4,500, or £ 1,600) to cover traveling costs of the participants. Deadlines for applications: 1 March and 15 September.

#### *Training program activities*

**Short-term fellowships.** These are intended for qualified young scientists (preferably under the age of 35) with some research experience who wish to acquire further training and expertise in new methodology. These fellowships are awarded for periods of up to three months in the fields of neuroscience or behavioral science. Recipients of these fellowships are expected to return to their institutes upon terminations of the grant. These visits are restricted to European countries other than the applicants' own, and Israel. Deadlines for applications: 1 March and 15 September.

**Travel grants** will be available to young scientists for participation in the Annual Meeting of the European Neuroscience Association (ENA) and the European Brain and Behavior Society (EBBS) in Stockholm, September 1990. Deadline for applications: 1 March 1990.

For further information:

European Science Foundation  
1 quai Lezay Marnesia  
F-67000 Strasbourg, France