



UNESCO-ROSTE Initiative on Scientific Co-operation in South East Europe

Ad Hoc Working Group Meeting on
Exchanges for Young Scientists from South East Europe

**Overview of the Existing Fellowships and Grants
of Interest to Young Researchers from South East Europe**

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General Overview of the Existing Fellowships and Grants of Interest to Young Researchers from South East Europe

- BILATERAL FRAMEWORK -

FRANCE

The *Programme for Integrated Actions (PAI)* was jointly launched by the Ministry of Foreign Affairs and the Ministry of Research to support common European research projects, between a French research team and a foreign team. Proposals are evaluated in response to a call for proposals which varies according the programmes. PAI finances only travel expenses and short term visits for two consecutive years of the project duration.

The joint research projects in progress with countries from South East Europe are: Brancusi (with Romania) and Proteus (with Slovenia).

GERMANY

► DFG international cooperation in PhD training with Central and Eastern Europe

1. International Research Training Groups Programme

This concerns mainly the DFG programme "International Graduiertenkollegs" (International Research Training Groups), which was launched in 1997. It is based on the programme "Graduiertenkollegs", which was introduced by DFG in 1991 in order to provide a model for structured PhD training in Germany.

A Graduiertenkolleg is a *university graduate training programme* established at a centre of scientific excellence for a maximum period of nine years. It is designed for *10-20 PhD students by 8-15 senior scientists* at a single university, or in some cases, a small group of neighbouring universities. It is evaluated every 3 years by a strict peer review process directed by DFG. The students work on their theses within the framework of a *coordinated and often interdisciplinary research programme*; they participate in an accompanying study programme organised by the faculty members and to some extent by the students themselves. Foreign students from any country within or without Europe are

welcome in Graduiertenkollegs and may apply for a fellowship. At the moment, 21% of all PhD students and 43% of the postdocs funded by DFG in Graduiertenkollegs have a nationality other than German; 36% of the foreign students come from Central and Eastern Europe. Students from any country who are interested in doing their PhD (or postdoc) in a Graduiertenkolleg in Germany may apply for a fellowship.

2. "International Graduiertenkollegs" Sub-programme

It aims to encourage *bilateral cooperation in research training* between German universities and graduate programmes abroad. It promotes international research training at centres of excellence at a German university and a university in any other country. The framework of a research programme is jointly established and implemented by researchers in both countries and offers doctoral students in both countries excellent opportunities to develop their talents in the context of a joint doctoral training programme.

The joint research and study programme is expected to reveal both the excellence of the individual research sites as well as the integration of complementary expertise. The programme includes *joint supervision of dissertations* and *approximately a six months mobility period*. One of the major features is the systematic coordination of bilateral research projects, a parallel study and exchange programme, and the added value for international research training.

Funding includes stipends, consumables, travel costs, exchange visits visiting scientists, workshops, coordination costs. The partner is expected to provide own basic funding from national sources, in addition to complementary financing (*matching funds*). Currently DFG funds 26 International Graduiertenkollegs – See Annex 2.

Recently, DGF has noticed a *growing interest of scientists to establish international Graduiertenkollegs with their partner groups especially in Central and Eastern Europe*. In October 2001, a German-Polish and a German-Polish-Czech Graduiertenkolleg were established; in April 2002, the first German-Hungarian Graduiertenkolleg started to work. A considerable number of applications, especially with Poland, but also Hungary, the Czech Republic, Latvia, and Russia, are currently being prepared.

One reason why "International Graduiertenkollegs" are especially attractive with respect to Central and Eastern Europe may lie in that the programme is based on an *equal exchange of expertise and a stable equilibrium between the groups in the two countries*; it counteracts fears of a "brain drain", moving the best qualified young scientists to "the West". Within this programme, the PhD students stay at the university in their home country - except for the mobility period - and finish their degree there. However, exchange and the building of an international scientific network is supported and funded by the programme. Also, German Graduiertenkollegs may easily cooperate with similar structures such as Doctor Schools in Hungary, to form a joint "German-Hungarian Graduiertenkolleg".

As the *scientists in Germany and Central and Eastern Europe become more and more interested in cooperating with each other in PhD training*, DFG tries to intensify its cooperation with partner institutions in these states, with the aim to jointly administrate the programme.

► Humboldt Foundation

1. Research fellowships for scholars of *all nationalities and disciplines*:

Humboldt Research Fellowships for highly qualified scholars not resident in Germany, aged up to 40 and holding a doctorate, enabling them to undertake periods of research in Germany (500 fellowships per annum).

2. Programmes geared to *specific countries*:

2.1. Special programme for the reinstatement of academic research in South East Europe

Thanks to special funds made available by the Federal Foreign Office within the framework of the Stability Pact for Southeastern Europe, the Humboldt Foundation is able to offer increased sponsorship to scholars from former Yugoslavia and the neighbouring countries Albania, Bulgaria and Romania. Apart from additional Humboldt Research Fellowships for young scholars holding doctorates from these countries, academic work carried out there by Humboldtians is promoted through additional funds for material donations. The programme also offers an opportunity for scholars to spend a renewed period of research in Germany together with young academics, analogous to the Fritz Thyssen Special Programme.

2.2. Fritz Thyssen Special Programme

This special programme was established jointly by the Alexander von Humboldt Foundation and the Fritz Thyssen Foundation. It is open primarily to Humboldt Research Fellows in the *humanities and social sciences* from former Yugoslavia and the neighbouring countries Albania, Bulgaria and Romania. Fellows are given an opportunity to spend renewed periods of research in Germany together with young scholars selected by them. This is intended mainly to promote the integration of young academics into the European academic community.

From April 2001, scientific conferences in the region of Southeast Europe may be supported financially in order to enhance the academic and scientific dialog inside Southeastern Europe.

3. Roman Herzog Research Fellowships

The Alexander von Humboldt Foundation (AvH) and the non-profit Hertie Foundation (GHS) in Frankfurt-on-Main enable young highly qualified scholars with outstanding leadership qualities in research and teaching from central and south-east Europe (including the Baltic States) to carry out research projects of their own choice in Germany (age limit: 35 years).

Applications may be submitted for long-term research stays of between **6 and 12 months**; short-term study tours or participation in conferences cannot be founded.

Research fellowships are offered on a regional competitive basis. Scholars from the following states in South East Europe may apply: Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Romania, Slovenia, Yugoslavia

There are no quotas in respect of either country or academic discipline. Applications from the fields of law, economics and social sciences are particularly welcome since fellowships shall contribute to the further development of scientific policy in the home country. 12 research fellowships are available per annum.

Applications for extension of research stays already commenced in Germany cannot be considered.

HUNGARY

The Ministry of Education open **Szent-Györgyi Fellowships Programme** (available from September 2002). The objective of the Fellowship Programme is to enable an increasing number of outstanding Hungarian and foreign researchers living outside Hungary on a permanent basis to contribute to the scientific work carried out in Hungarian institutions of higher education, thus strengthening Hungary in its effort to become a regional centre of excellence in certain scientific fields.

The Fellowship is available to researchers holding an academic degree who live and work outside Hungary on a permanent basis.

In the selection procedure, priority is given to applicants whose field of research is of great importance with regard to scientific and artistic life in Hungary, and who already have experience in conducting joint research with the institution that will host them in the event of a successful application.

The maximum duration of a Fellowship Programme is **12 months**; fellows may, however, re-apply for a new fellowship at the end of their research period. In 2002 a maximum of ten fellowships will be awarded. In the course of the programme, the fellow

status can be suspended on one occasion for a maximum of three months. The suspension does not alter the total duration of the programme.

The existence of internationally acknowledged research results is a primary criterion of the Fellowship.

Among applicants fulfilling this primary criterion, priority is given to those:

- who already have an active and successful research co-operation project with the host institution;
- whose field of research is deemed to be of great value in terms of furthering knowledge and expertise within Hungarian academia;
- whose scientific work is connected to Hungary, or whose research topic is Hungary.

ROMANIA

► New Europe College

The New Europe College (centre of excellence in the humanities and social sciences) in Bucharest includes in its *NEC Fellowships Regional Programme* scholars from South East Europe (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Greece, FYR of Macedonia, Republic of Moldova, Slovenia, Turkey, Serbia and Montenegro).

UNITED KINGDOM

► Royal Society

There are no schemes that are specific to the Balkans and nowhere else, although the Royal Society supports visits to and from the region in a wide variety of ways.

Macedonia is the only region with which the Royal Society has an existing agreement, most others having been subsumed under the European Science Exchange Programme (ESEP.) The agreement was signed with the Macedonian Academy of Sciences and Arts in November 1993 and allows for the funding of **short-term study visits** of between one week and three months.

Bulgaria, Greece, Romania, Slovenia and Turkey are all members of the ESEP. Croatia joined the ESEP in January 2001 and, from last financial year, rather than have a set allocation per country, there is one large sum for the whole of Europe (£779k), with each country competing against the rest.

For all of the Balkans (including Albania, Bosnia, Kosovo, Montenegro and Serbia – for which none of the above applies) a separate “*exagreement*” arrangement exists, whereby the UK host applies to the Society on behalf of an incoming scientist (or applies for an

outgoing visit for him/herself.) These are also short-term study visits. The budget for this financial year is £70k, to be used also for other Central and Eastern European countries.

The Society also runs **two year joint projects** for all countries within the Balkans and – with the exception of Greece and Turkey - has in the past always funded these unilaterally (regardless of whether the Royal Society had a partner organisation in the country concerned.) However, the Bulgarian Academy has recently agreed to consider *cost-sharing*. (Greece and Turkey have been cost-sharing for some time already.) The budget for joint projects in this financial year is £580k. There are two closing dates a year: 1 March and 1 September. (The other schemes described above have no closing date and applications are considered on a rolling basis throughout the year.)

One year fellowships into the UK operate under the Royal Society NATO Postdoctoral Fellowships Programme, for which there are two annual closing dates: 15 April and 1 October. Fellowships are aimed at young scientists. However, only the following Balkan countries may apply: Albania, Bulgaria, Croatia, Macedonia, Romania and Slovenia. All the above offer funding for travel and subsistence and joint projects offer in addition a small amount for consumables.

Some statistics are given in Annex 1.

► **Biotechnology and Biological Sciences Research Council (BBSRC)**

The ***Underwood Fund*** provides travel and living expenses *to senior overseas scientists* to visit the UK to work with current BBSRC grantholders in UK universities and BBSRC sponsored institutes. **Visits** should normally be for a period of **three to twelve months**. Grants are not provided for visits to conferences or to make a tour of UK research establishments.

► **British Council**

British Council ***Partnership Programmes*** have been developed to promote links and contacts between British and other European higher education, research institutions and laboratories. These programmes are designed to facilitate collaboration in areas of mutual interest by the enhancement and transfer of research and teaching expertise, whilst providing opportunities for young researchers.

Financial support is provided to contribute to fares and subsistence **for exploratory and bilateral visits of specialists**, for *approved projects of up to three years duration*.

Proposals are assessed by nationally recognised researchers and by selection committees, on criteria such as, potential for research enhancement by collaboration and the experience and track record of the research groups involved. The key criterion is the excellence of the research proposal.

The programme is open in present for the following countries from South East Europe:

- Croatia: subject area: applied science, social science and management
- Slovenia: subject area: the environment, applied sciences and technology, electronics and computing, textile manufacturing technology, science education, the public understanding of science

► Wellcome Trust

1. Existing Fellowships within the *International Biomedical Programme* :

- *Travelling Research Fellowships*: for young researchers from any country except USA and the UK with proven research record and less than ten years of postdoctoral experience to extend their research training in the UK. Support may be requested for up to two years.
- *International Senior Research Fellowships*: for outstanding postdoctoral scientists to establish their scientific career in South Africa and India. Awards are for a period of five years and will include a personal salary and ancillary support. For researchers from any country.
- *International Senior Research Fellowships (Central and Eastern Europe)*. For outstanding postdoctoral scientists to establish their scientific career in the Czech Republic, Estonia, Hungary and Poland. Awards are for a period of five years and will include a personal salary and ancillary support. For researchers from any country.

2. The Wellcome Trust offers limited opportunities for programme and project grant support under its new *Health Consequences of Population Change Programme* which focuses on the changing health outcomes resulting from demographic, socioeconomic and lifestyle changes taking place in less developed countries.

Applications may be received from any country, except for the North American region where researchers are advised to approach funding agencies in their respective countries; priority will be given to potential applicants from less developed countries who have demonstrated a commitment to addressing problems of health which are of relevance to their own society.

Grants may be for **research projects** (usually **up to three years** in duration) or **programmes (up to five years)**. Applications should include full direct project costs only (e.g. research assistance, consumables and equipment).

- EUROPEAN INSTITUTIONS -

EUROPEAN COMMISSION, DG RESEARCH

The 5th Framework Programme (FP5) sets out the priorities for the European Union's research, technological development and demonstration (RTD) activities for the period 1998-2002.

Out of the overall budget of €14,960 million for the whole of FP5 €858 have been allocated to support for the training and mobility of researchers through mobility grants for individuals and research groups in both industry and academy.

Marie Curie Fellowships provide European placements for pre and post-doctoral researchers, usually up to the age of 35, and for experienced researchers. Fellowships are available in any scientific discipline that contributes to the objectives of the Fifth Framework Programme (FP5). Applicants to this activity are young and experienced researchers and host organisations in academia and industry.

All fellows must be nationals of an EU Member or Associated State (i.e. from South East Europe: Bulgaria, Romania, Slovenia, Turkey), or have resided in the EU for at least five years immediately prior to their selection by the company.

Categories of Marie Curie Fellowships

There are six categories of Marie Curie Fellowship available under the FP5 for Community activities in research, technological development and demonstration (1998 - 2002). Marie Curie Fellowships are divided into *Marie Curie Individual Fellowships* and *Marie Curie Host Fellowships*.

1. Marie Curie *Individual* Fellowships

Applicants make a proposal for an individual fellowship by applying, in conjunction with a host institution, to the Commission. Independent experts, selected by the Commission, will evaluate the proposals and the Commission will then select Marie Curie fellows upon their recommendations.

Fellowship Category	Rationale	Applicant
Marie Curie Individual Fellowships (Category 30)	Fellowships awarded to the best of Europe's young post-doctoral researchers for high level research training in an institution in a country other than their own.	Young post-doctoral level researchers
Marie Curie Return	Fellowships for Marie Curie fellows from a less-favoured region (LFR) of the Community to return	Marie Curie fellows wishing to return to a

Fellowships (Category R)	to any LFR in their home country, upon completion of a two-year individual post-doctoral Marie Curie fellowship.	less-favoured region
Marie Curie Experienced Researchers' Fellowships (Category 40)	Fellowships awarded to experienced researchers for the transfer of knowledge and technology between (i) industry and academia and (ii) towards institutions in less-favoured regions of the Community.	Experienced researchers

Marie Curie *Host* Fellowships

Fellowship category	Rationale	Applicant
Marie Curie Industry Host Fellowship	Fellowships awarded to registered companies active in research for the training of young postgraduate and post-doctoral researchers (particularly those without any previous industrial research experience) in an industrial or commercial environment.	Registered companies or research groups in registered companies
Marie Curie Development Host Fellowships	Fellowships awarded to institutions active in research in less-favoured regions of the Community. Institutions must have a need for a particular research competence which they will develop by hosting post-doctoral level researchers.	Research groups in academia, research centres and industrial or commercial enterprises
Stays at Marie Curie Training Sites	This scheme will support short stays by young researchers pursuing doctoral studies, providing them with the possibility of undertaking part of their doctoral studies in a country other than their own, and allowing them the benefit of working within an internationally recognised group in their specialised area of research.	Research groups in academia, research centres and industrial or commercial enterprises

Programme Offering Marie Curie Fellowships

Applicant hosts are required to choose one programme only for their proposal. As a guideline, applicant hosts should choose a Thematic Programme, if the research area to be proposed fits clearly within one of the specific areas financed by that programme. Applicant hosts whose research area does not fit clearly within one of the specific areas available should apply to the Horizontal Human Potential Programme, which has no pre-established scientific targets.

Programme	Human Potential	Quality of Life	Information society	Competitive Growth	Energy Environment /	Nuclear Energy
Fellowship Type						
Individual	X	X			X	X

Return	X	X			X	X
Experienced Researchers	X	X		X	X	X
Industry Host	X	X	X	X	X	
Development Host	X				X	
Training Site	X	X			X	

Developments in the EU's RTD Framework Programme

6th Framework Programme

Programme 5 has now virtually run its course but its successor FP6 is being developed. In this new programme, the eligibility for the Marie Curie awards will be altered quite dramatically.

For the first time, 3rd country researchers (i.e. those who are not from either the EU Member states or Associated states) will be able to apply for the opportunities and will be able to work in Europe. In addition, MS and AS researchers will be able to work in the 3rd countries (i.e. anywhere in the rest of the world). Associated with this change of scope is a doubling of the budget for these awards and an expansion of the types of opportunity offered.

Overall Structure of Framework Programme VI (FP6):

The 6th Framework Programme is divided into three main sub-programmes:

1. *Integrating and Strengthening the European Research Area (ERA)*, which contains all the subject-oriented research priorities;
2. *Structuring the ERA*, where the non-subject-specific activities such as mobility, infrastructures, innovation and science and society are located; and, finally,
3. *Joint Research Centre Activities*

FP6 - Human Resources and Mobility Programme (1630 million Euro)

The training and mobility component of Framework 6 offers a few significant novelties other than the proposed doubling of the mobility budget and the 'Marie Curie' branding being extended to all the schemes. Most noticeable are the extension of many of the grants associated with Host fellowships to 3 years and the extension of the scheme outside of the borders of the EU and Associated Countries.

1. In terms of ***host-driven actions***, the commission proposes a series of support measures for universities, research centres, businesses including in particular SMEs and networks, for hosting of European and third country researchers, including the training of pre-doctoral researchers. These activities could include the setting up of long-term training networks and encouraging mobility between different sectors. The initial schemes proposed in the Specific Programmes are (with their FP5 name in parentheses):

- *MC Research Training Networks*: Research Training Networks by another name. Partners will be given significant autonomy and flexibility in the detailed operation of the networks, which will have a typical duration of 4 years, with associated fellowships of up to 3 years, including short-term stays.
- *MC Host Fellowships for Early Stage Research Training*: A variation on the MC Training Sites, potentially no longer restricted to PhD students, but which, more significantly, will contain fellowship for up to a maximum duration of 3 years, raising the possibility of funding full PhDs through this scheme.
- *MC Host Fellowships for the Transfer of Knowledge*: A subtle blend of Development and Industry Host fellowships, aimed at furthering the development of research capabilities in the less-favoured regions of the EU and Associated countries as well as assisting those research groups outside the LFRs which are in need developing new areas of competence.
- *MC Conferences and Training Courses* are the successor of the High Level Scientific Conferences activity in the FP5 IHP programme.

2. In the ***individual-driven actions***, the Commission maintains the focus on *post-doctoral researchers*. An interesting development is that European researchers will be eligible for mobility not only to another European country, but also to third countries (e.g., USA, Australia, Brazil, etc.) Similarly, top-class third-country researchers wishing to come to Europe will also be eligible. Such support will provide for a sufficiently long training period and focus on researchers with at least four years of research experience, while also addressing the needs of training in research management. The schemes currently proposed are:

- *MC Intra-European Fellowships*. In the absence of a detailed definition, these are likely to be similar to Category 30 fellowships without the age limit.
- *MC Outgoing International Fellowships*. A new type of fellowship designed to allow researchers from EU and Associated countries to work in third country research centres. In order to avoid a ‘brain drain’ this scheme will require the submission of a coherent individual training programme, involving a first phase abroad, followed by a mandatory second phase in Europe.
- *MC Incoming International Fellowships*, which are designed to attract high-level researchers and promising young researchers from third countries to work and

undertake research training in Europe. In the case of *emerging economies* and *developing countries*, the scheme may include provision to assist fellows to return to their country of origin.

- *Marie Curie Re-integration Grants* will consist of a lump sum, paid as a personal grant to be used within one year. The grant will be allocated to the fellow on the basis of the submission of a defined project, which will be evaluated on its own merits. Where allocated to the holder of a previous MC Grant in FP5, the re-integration would not be restricted to the researcher's country of origin. A similar mechanism (but covering a period of re-integration of up to two years) will apply to European researchers who have carried out research outside Europe for at least 5 years.

The Commission is also keen to continue with the *funding of recognisably excellent European collaborative grants*. It will therefore provide support for the *creation and development of European research teams* which are considered as having the potential to reach a high level of excellence, more particularly for leading edge or interdisciplinary research activities where such support can add value to national measures. It will also continue to *award scientific prizes* for work of excellence carried out by a researcher having received EU financial support for mobility.

Finally, the Commission is also considering, at the behest of the Council, the possibility of a *financial contribution to national or regional programmes in support of researcher mobility open to researchers from other European countries*.

EUROPEAN SCIENCE FOUNDATION (ESF)

The ESF sees its strengths as being flexibility, quality and pan-European outlook. It is also non-governmental and so regards itself as independent of national policy. There are 70 Member Organisations (MOs) of the ESF across 27 European countries (i.e., from SEE: Greece, Cyprus, Slovenia, Bulgaria, Turkey). Application received from Croatia.

The principal function of the ESF is to co-ordinate co-operative research in Europe which it achieves through four activities:

Programmes - bring together groups of key researchers over periods of 3-5 years to address major scientific issues at the European level. Activities that can be undertaken within a Programme include workshops, conferences, schools, short-term fellowships, publications and publicity, databases and management committee meetings.

Networks are discussion and planning groups that have a short life span of up to 3 years. They bring together scientists to explore the potential of developing and carrying out research at a European level. They are not exclusive. Other scientists may be added to the Network during its lifetime. Networks usually have active participants from at least 6 countries, with the average involvement being about 12 countries

Exploratory Workshops are aimed at identifying research projects which would benefit from being carried out on a European level. The aim of each Workshop is to allow 15-20 leading European scientists to discuss the scientific background of, as well as the need for, an initiative in one of a number of specified areas

European Research Conferences are organised jointly with the EU which contributes to the cost through the Training and Mobility of Researchers activities of the **Framework Programme**. These conferences are modelled on the USA Gordon Conferences and consist of a series of *week long discussion meetings* spread over several years. Participation is limited to 80-100 scientists and is by invitation through application.

A limited number of research grants, mainly to support visits directly relevant to the scientific programme or network in question and from one European country to another, are available. Within programmes priority is given to visits involving at least one country contributing to the à la carte budget. A limited number of research fellowships and travel grants are available to support researchers' participation in the ESF's scientific activities. Most are directed to younger researchers.

ESF also promotes three other instruments, the most significant being EUROCORES. This scheme permits collaborative research funding on particular themes: development of medium term science perspectives, research infrastructures (studies and assessments across all carrier of the research spectrum).

ESF has no specific schemes of support directed to SEE. Eligibility to take part in SEE activities is normally, but not exclusively, directed to scientists from countries in which there is an ESF member agency. Participation from scientists from elsewhere may be accepted on a case-by-case basis, for mutual benefit if the activity and the individual. Finally, in its general action to support young researchers, ESF is a partner with and major sponsor of Newt Wave Europe, an open Web-based career development and mentoring service for young researchers.

COOPERATION IN SCIENCE AND TECHNOLOGY (COST)

COST represents an estimated volume of national funding of more than € 1.5 billion per year. An average of € 60 000 per Action is available for co-ordination depending on size and activity of the Action. This expenditure represents on average 0.5% of the overall national funding, which shows that COST gives excellent value for money.

This funding is basically used to cover co-ordination costs such as contributions to *workshops/conferences, travel costs for meetings, contributions to publications and short term scientific missions of researchers to visit other laboratories*.

COST has a geographical scope beyond the EU and most of the Central and Eastern European countries are members. COST also welcomes the participation of interested institutions from non-COST member states without any geographical restriction. The

member countries participate on an "à la carte" principle and activities are launched on a "bottom-up" approach. One of its main features is its built-in flexibility. This concept clearly meets a growing demand and in addition, it complements the Community programmes.

In total, institutions from 43 countries participate in COST under different forms: 33 member states: *Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, Federal Republic of Yugoslavia.*

- INTERNATIONAL INSTITUTIONS -

NATO FELLOWSHIPS

1. Science Fellowships Sub-programme

The objective of this sub-programme is to prepare for the long-term future by *training young researchers*. Science fellowships provide opportunities for scientists of *NATO's Partner countries* (i.e., from South East Europe: Albania, Bulgaria, Croatia, Romania, Slovenia, former Yugoslav Republic of Macedonia) to pursue their research work or continue their training in a NATO country, and *vice-versa*.

The NATO Science Committee entrusts the administration of the Science Fellowships to agencies in the NATO member countries. The NATO Scientific Affairs Division guides the sub-programme to ensure coordinated general policies and administration.

Three types of fellowship are supported, although not all countries offer all types of fellowship:

- **Basic Fellowships**, for those who have a first university degree and wish to further their science or engineering education by following a higher degree course abroad.
- **Advanced Fellowships**, for scientists with a Ph.D. or an equivalent degree and/or sufficient research experience to conduct independent research.
- **Senior Fellowships**, for senior scientists to lecture or pursue research in institutions abroad.

The duration of the fellowships offered varies by type and country. The typical length of basic fellowships is one year, with renewal in certain cases; the duration of advanced fellowships ranges from three to twenty-four months; and senior fellowships, three months.

Each NATO country decides on the types of fellowship and the level of financial support it offers to individual fellows, as well as deciding on which scientific fields and professions it will support. The criteria for selection and the eligibility conditions therefore vary by country, but all applications are judged on scientific merit by independent committees of senior scientists. Science fellows generally choose the subject of research or study.

The amount of a fellowship varies by country and depends upon the length of tenure. Usually NATO Science Fellowships cover travel and living costs.

2. Cooperative Science and Technology Sub-Programme

The objective of this sub-programme is to *initiate research cooperation* and to establish enduring personal links between scientists of the NATO and Partner countries.

Support is available *for Collaborative Linkage Grants* and *Expert Visits*, and to organize Advanced Study Institutes and Advanced Research Workshops. Four scientific areas have been designated, and applications for topics in these areas will be considered for support. The scientific areas are:

- Physical and Engineering Science and Technology (PST)
- Life Science and Technology (LST)
- Environmental and Earth Science and Technology (EST)
- Security-Related Civil Science and Technology (SST)

Each of these areas is guided by an international Advisory Panel of experts in the relevant disciplines. The Advisory Panels meet three times a year to consider applications received in their areas of expertise for the four support mechanisms:

- **Advanced Study Institutes (ASI):** promotes the dissemination of scientific information, to impart experience and to foster professional contacts among scientists. Opportunities are offered to leading scientists (ASI directors) to organize advanced meetings of a tutorial character, typically of a duration of ten working days, involving 12 to 15 lecturers with an audience of 60 to 80 post-doctoral level ASI "students" of whom 40% to 50% are from Partner or Mediterranean Dialogue countries.
- **Advanced Research Workshop (ARW):** contributes to the critical assessment of existing knowledge on new important topics, to identify directions for future research, and to promote close working relations between scientists from different countries and with different professional experience. They are meetings of between 20 and 50 experts lasting from two to five days. Funding is provided to ARW directors to cover organizational expenses, the travel and living expenses of key speakers and to contribute to the travel and living expenses of other participants of whom 40% to 50% are from Partner or Mediterranean Dialogue countries.

- **Collaborative Linkage Grants (CLG):** The aim of a CLG is to facilitate collaboration between research scientists or research teams in order to stimulate scientific research through the pooling of capabilities and resources. CLGs are available for collaboration between researchers in [Partner](#) or Mediterranean Dialogue countries and NATO countries. Funding is available for *reciprocal visits abroad* of up to five members of each research team collaborating on a joint research project. CLGs may be bilateral or multilateral. Awards are for one or two years.
- **Expert Visits (EV):** The objective of Expert Visits is to allow high-level specialists from NATO countries and from Partner or Mediterranean Dialogue countries to benefit from one another's expertise. Grants support the travel and living expenses of experts from NATO countries visiting research laboratories in Partner or Mediterranean Dialogue countries, and *vice versa*, for consultation on current research projects. The duration of visits may range from a few days to a maximum of one month.

Support for the above activities is concentrated in four Scientific Areas, each guided by an Advisory Panel. The Scientific Areas are:

- *Physical and Engineering Science and Technology (PST);*
- *Life Science and Technology (LST);*
- *Environmental and Earth Science and Technology (EST);*
- *Security-Related Civil Science and Technology (SST).*

UNESCO FELLOWSHIP BANK SCHEME

All applications must be channelled through the [National Commission](#) for UNESCO of the candidate's country and without this endorsement no application may be examined. It is very important to note that the UNESCO Secretariat cannot entertain requests from individuals. *A National Commission can propose a maximum 2 candidates/year.* The maximum amount is US \$ 7,000/fellowship.

The fields of study within UNESCO's competence are those relating to Education, Natural Sciences, Social Science and Humanities, Culture, Communication, Information and Informatics.

Owing to the high cost of training, *fellowship possibilities at UNESCO are scarce.* Under-graduate students who wish to pursue studies in their own country cannot be beneficiaries of UNESCO fellowships. Furthermore, applicants must have exceptional merit, and have demonstrated that they possess outstanding potential to contribute to the social, cultural and/or economic development of their country to be considered for a UNESCO fellowship.

So far, requests far outstrip the funds available for fellowship activities. UNESCO is not a funding agency nor is it a research institute. Training is supported by UNESCO, in close co-operation with Member States, through a variety of modalities: consultations, surveys, exhibitions, films, videos, international and regional conferences, research grants, fellowships, study and travel grants, publications, documentation, and equipment.

UNESCO Fellowships Bank Programme

I. Individual Fellowships Scheme

The fellowships offered under this scheme are of *short term duration* (6 months maximum) and are intended for specialized training at the postgraduate level. Priority targets are promising and qualified specialists who seek to undertake advanced research or to upgrade their skills and knowledge of state-of-the-art developments in their field of study or work.

The principles and conditions that govern this scheme are spelt out in a circular letter sent to National Commissions at the beginning of each biennial exercise.

II. The UNESCO Co-Sponsored Fellowships Scheme

Under this scheme, Member States, foundations, institutions and private donors may offer fellowships (contributions-in-kind), or, may finance fellowships (cash contributions) in fields within UNESCO's competence. The Republic of Korea, China, Czech Republic, Poland, Israel, USA, the European Union, INCORVUZ, Netherlands, and Japan are some of the countries/body which have made contributions under this scheme.

Each programme has its own specific character and terms of reference. The details of each offer are spelled out in the letter of announcement sent to the National Commissions of the invited Member States each time a programme has been agreed upon between UNESCO and the donor country/body. The final selection is made by the donor.

III. Other fellowship programmes at UNESCO

The Regular Programme

The fellowships under this programme are awarded with a view to facilitating the implementation of the programmes undertaken by the Organization. These are foreseen in the Approved Programme and Budget for the biennial exercise (the C/5 document) and each scheme is announced separately to Member States by the relevant Programme Sector.

The National Commissions in the various Member States are kept fully informed of these opportunities.

The Participation Programme

The fellowships and study grants under this programme are awarded as a form of assistance, particularly those concerning longer periods of study such as for the annual training at the International Institute for Educational Planning (IIEP), to Member States in carrying out their activities connected with UNESCO's programme.

Extra-budgetary Projects

Fellowships awarded under this programme are those specified and approved under an extra-budgetary project and are included in the 'project document'. Individual fellowships are foreseen for the study of certain special methods and techniques and study grants or tours, consisting of short programmes (generally not exceeding two months) of visits and contacts, are planned for high-level personnel.

Examples of Fellowship Activities in the Field of Natural Sciences:

- **UNESCO Microbial Resources Centres Network (MIRCENs)** Short-term Fellowships in Biotechnology is designed to stimulate and facilitate research and training in microbial biotechnology and related environmental biotechnologies.
- **UNESCO/Biotechnology Action Council (BAC) Professorship Scheme** aims to provide the biotechnological community in the least developed countries with research and training opportunities in biotechnology. Fellowships are not awarded for attending scientific meetings or training courses or to meet the costs of bench fees levied by some host institutes.
- **UNESCO Short-term Fellowships in Biotechnology** offer short-term fellowships in biotechnology, particularly research in plant and aquatic biotechnology and related biotechnologies.
- **UNESCO/ICSU/TWAS Short-term Fellowship Programme in the Basic Sciences** aims at promoting international co-operation in the basic sciences.
- **UNESCO-MCBN Short-term Fellowship Programme in Molecular and Cell Biology** aims at promoting international co-operation and developing regional and national infrastructures in Molecular and Cell biology.
- **MAB (Man and the Biosphere) Young Scientists Research Grant Awards** aims at assisting young scientists to participate in research and development activities, and also involve them in promotional and demonstration activities on appropriate technologies and conservation measures in rural areas.
- **UNESCO Summer School on Solar Electricity for Rural and Isolated Zones** concerns a four week course, held only in French, and organized every year during the month of July. It aims especially at professionals working in areas related to solar energy in rural and isolated zones.

- **The International Oceanographic Commission (IOC)** offers study grants designed to enhance capacity in developing countries for marine sciences, systematic ocean observations, and marine management.
- **UNESCO-sponsored Postgraduate Courses in Hydrology and Water Resources** concern courses that are offered all over the world in the field of hydrology and water resources.
- **UNESCO/Keizo Obuchi Research Fellowship Programme** awards 20 fellowships of US\$7,500 each to young researchers over 2001 and the same amount in 2002 in four fields: the environment, inter-cultural dialogue, information and communication technologies and peaceful conflict resolution. The programme covers a period of three and a half years and involves a total of nearly US\$396,000. Candidates - post-graduate researchers from developing countries – are selected by their country's National Commission for UNESCO.
- **UNESCO/International Programme for the Development of Communication (IPDC)** Fellowships are intended for participants from the developing countries.