

European Commission

Today's Europe is fast becoming a truly knowledge-based society, and so one of Europe's prime assets is the quality of its researchers, scientists, engineers, technicians and other science professionals.

Improving Human Potential

The Improving Human Research Potential and the Socio-Economic Base programme, which is part of the Commission's Fifth Framework programme, covers a range of measures aimed specifically at developing the science-base:

- by training and mobility of researchers
- by innovation in education and training
- by making Europe attractive location for researchers and research investment
- by promoting European research
- by enhancing the socio-economic knowledge base
- by understanding better key aspects of developments in European society
- by supporting the development of science and technology policy, other Union policies

The IHP programme includes a wide range of different activities. For the wider public and today's graduates, of principal interests are two major activities: Raising Public Awareness of Science and Technology and Marie Curie Fellowships.

Raising Public Awareness of Science

Raising public awareness programme is based on the rationale that science and society must develop hand in hand. Activities funded under this project are designed to help European citizens to understand better both the beneficial impact of science and technology on their day-to-day lives, as well as limitations and possible implications of research and technological developments. There are also activities aimed at increasing scientists' awareness of issues and subjects that are of concern to the public.

For 2001, three priority areas have been chosen:

- Dialogue with the public: to explore mechanisms for involving the public in science policy related debates and identifies ways in which experience could be shared and generalised across Europe;
- The role of the Media and Science Communicators: to explore the mechanisms and channels through which the general public, and the young in particular, is exposed to science related information, and to identify best practice and develop and demonstrates new approaches for improving the communication of science related information;
- European Science and Technology Week November 2002, to demonstrate and explain the impact of science, its use, and its applications on the daily lives of European citizens in a manner accessible to them.

Marie Curie Fellowships

Marie Curie Fellowships support the training and mobility of researchers throughout Europe. This scheme is particularly focused on the provision of post-doctoral level research training. However, there are also opportunities for pre-doctoral level training, as well as for the transfer of expertise via senior researchers. Fellowships can be located in academic and industrial settings in EU Member and Associated States. To participate researchers are required to go to another country to carry out their training. The scheme particularly encourages participation of female researchers.

There are two types of applicants for a Marie Curie Fellowships: individual fellowships, where individual researchers apply to the Commission for a fellowship; and host fellowship, where the institution applies to the Commission to host a number of researchers.

The Individual Fellowships include:

- Marie Curie Individual Fellowships, awarded to the best of Europe's young experienced researchers, aimed at fellows who already held a Ph.D. or who had 4 years postgraduate research experiences;
- Marie Curie Return Fellowships, awarded to Marie Curie Fellows who, originated from a less-favored region, return to their home countries after their initial two-year post-doctoral fellowship;
- Marie Curie European Researcher Scheme for researchers with, typically, more than 10 years of research experience.

The Host Fellowships include:

- Marie Curie Industry Host Fellowships, awarded to industrial or commercial enterprises for the training of young researchers in an industrial or commercial environment. This type of fellowships particularly aims at providing research training opportunities for young researchers without any previous industrial experience.
- Marie Curie Development Host Fellowships, which allows institutions active in research in less-favored regions of the community with a need to develop new areas of competence to host experienced young researchers.
- Stays at Marie Curie Training Sites, which supports short stays by young researchers pursuing doctoral studies at Marie Curie training sites, providing them with the possibility of undertaking part of their doctoral studies in a foreign country.

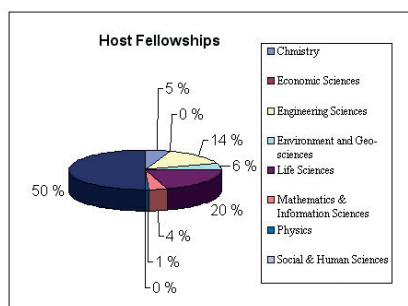
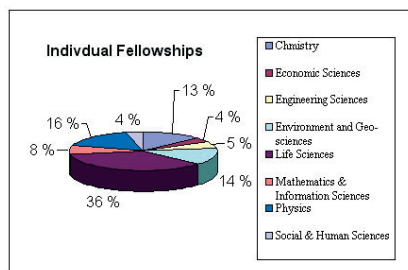
As of last year, for individual fellowships, the highest number of proposals were selected in the field of Life Sciences and this accounted for 35.2% of all



selected proposals. The lowest number of proposals were selected in the field of Social and Human Sciences, and Economics which accounted for 3.9% of the total. For the host fellowships the most selected proposals were in the area of Life Sciences (40.8%), but there were no proposals selected in the fields of Economic Sciences and Social & Human Sciences. The charts summarise the funded proposals by discipline area.

Further information on the System of Marie Curie Fellowships and application forms may be obtained from its website: www.cordis.lu/improving/home.html.

In sum, one could broadly summarise the Human Potential programme by saying it provides the first possibility for the emerging generation of some of Europe's brightest and best scientists to display their



research accomplishments at an early age on the international stage. Then, once first degrees have been completed, Human Potential is there to provide top achievers with the chance to pursue postgraduate and postdoctoral level research in another European country. While, afterwards with Human Potential support there is the potential to conduct top level research at the cutting edge of science in collaboration with Europe's other leading scientists and engineers. Research that might equally lead to breaching the frontiers of science through to perhaps seeing a new revolutionary design enter the European market place. Research that for the very best could now result in the award of the 'Descartes Prize' - the ultimate in European scientific recognition.

For further information on Human Potential, consult our Web site www.cordis.lu/tmr/home.html.

EUROPEAN YOUTH PROGRAMMES

In 2000 the European Union launched the second phase of Socrates, Leonardo da Vinci and Youth programmes, covering education, professional training and youth actions respectively. Each programme runs from 2000 to 2006 and extends to 31 European countries (the 15 EU Member States, the 13 candidate countries for EU membership, Norway, Iceland and Liechtenstein).

Education

About 750,000 University students have spent an Erasmus period abroad and more than 1,800 Universities (or other Higher Education institutions) from right across Europe are presently participating in the programme which began in 1987. The EU budget of Socrates/Erasmus for 2000-2006 amounts to around • 950 million of which approximately • 750 million is for student grants. Additional funds



are provided in each Country by public authorities, by the universities themselves and by other organizations.

Adopted on 24 January 2000 and spanning the period until the end of 2006, Socrates and its Erasmus action are now open to the participation of over 30 countries: the 15 Member States of the European Union; the three EEA countries (Iceland, Liechtenstein and Norway) and twelve associated countries: Hungary, Romania, the Czech Republic, the Slovak Republic, Poland, Bulgaria, Estonia, Latvia, Lithuania, Slovenia, Malta and Cyprus.

Socrates, which began in 1995, was the first European initiative to deal with education at all ages, as part of a broader commitment to the idea of lifelong learning. The programme seeks mainly to promote the European dimension and to improve the quality of education through partnership across national boundaries. It is designed to derive maximum benefit from the diversity of education systems in the participating countries, with a focus on identifying innovative solutions appropriate to particular circumstances.

Mobility and exchange schemes are an important feature of Socrates. Joint curriculum development and school projects, mobility for students, teachers and university staff, the use of electronic distance learning methods and European networking between



educational administrators are all part of the overall approach.

The programme aims to promote European cooperation in six areas: school education (*Comenius*); higher education (*Erasmus*); adult education and other educational pathways (*Grundtvig*), language teaching and learning (*Lingua*); multimedia and education technologies (*Minerva*) and exchanges of information and experience on education systems and policy (*Eurydice, Arion, Naric*).

The higher education section of Socrates II, **Erasmus** continues and extends the European Community Action Scheme for the Mobility of University Students (the "Erasmus programme"), established in 1987. It is named after the philosopher, theologian and humanist Erasmus of Rotterdam (1465-1536).

Erasmus contains a wide range of measures designed to support the European activities of higher education institutions and to promote the mobility and exchange of their teaching staff and students.

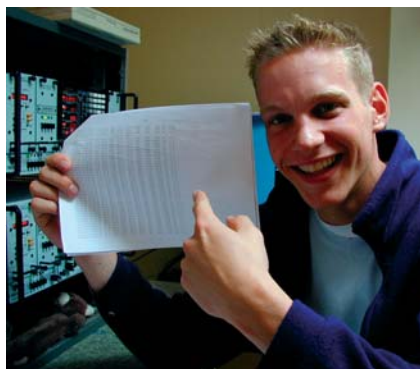
Students in Higher Education may spend a study period, from 3 to 12 months, in another participating country in the framework of agreed arrangements between universities. They generally receive a grant to help offset the “mobility costs” of studying in another country, such as travel, language preparation and differences in the cost of living. Their award depends on several elements which vary from Country to Country.

Full academic recognition for the study period carried out abroad must be ensured before departure, generally by the means of an ECTS Learning Agreement, now used by more than 1000 institutions across Europe.

The programme is open to all higher education students up to and including doctorate level, from a participating country, except for students enrolled in their first year of Higher Education. The grants (“Erasmus action 2”) are administered through a network of National Agencies. The European Commission also supports Intensive Language Preparation Courses (ILPCs) to enable Erasmus students to function socially and academically in a host country whose language is not widely spoken or taught abroad. They were started as a pilot project in 1996 and are now offered on a regularly basis. Special provisions are available for students with disabilities.

Vocational training

The **Leonardo da Vinci** programme aims to boost the competencies of people involved in initial vocational training, and to improve the quality of and access to ongoing vocational training and the lifelong acquisition of skills. There is a particular focus on strengthening the contribution of vocational training to the process of innovation in business.



open to the participation of the states of EFTA/EEA (Iceland, Liechtenstein, Norway), of Cyprus, of Malta and Turkey and the associated countries of Central and Eastern Europe (CECs - Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Czech Republic, Romania, Slovakia, Slovenia). For Turkey, the year 2000 was devoted to the implementation of preparatory measures for its participation in the programme.

The **Leonardo da Vinci** budget for 2000-2007 has been increased to €1.15 billion €620 million for 1995-1999.

Youth

Building on the experience of both the Youth for Europe and the European voluntary service programmes, the **Youth** programme is the first to integrate all the on-going co-operation activities in this field at Community level with a current budget of •520m. Under the exchange and mobility schemes, some 2 million young people will get the chance to study, train or gain work experience abroad over the next seven years.

Six types of transnational measure are envisaged in the programme - physical mobility, use of information and communication technologies, trans-European networks, language skills, pilot projects and improvement of Community reference material.

The provisions relating to youth exchanges enable groups of young people, in the 15-25 age range, to have contacts with and learn about other cultures. Youth workers can also take part in the programme through activities such as study visits and training projects. The European Voluntary Service scheme gives young people (aged 18-25) the opportunity to work in another European country, taking part in projects that benefit the host community. Support

is also given to young people to carry out a project at local level that allow them to get in touch with common questions and problems relating to topical youth issues in Europe through the Youth Initiative Scheme.

The new Youth programme aims to give young people a greater sense of solidarity, to get them actively involved in the European ideal, to encourage youth initiatives and to boost co-operation at the European level.

The Youth programme also cooperates with Socrates and Leonardo da Vinci through Joint Actions to support organisations in the fields of education, training and youth, and facilitate moving from formal to informal education.

For more information, contact eac-info@cec.eu.int, or consult the DG Education and Culture home page at europa.eu.int/comm/education/index_en.html.

FINALLY AN OPPORTUNITY TO FIND OUT ABOUT US...

Both the European Commission and the European Parliament have a range of programmes that are designed to assist young people in gaining a broader understanding of their activities at first hand. Each year recently qualified university graduates are given the opportunity to come “behind the scenes” and discover as part of an “in-service” training period what we are about...

The European Commission through its long established ‘Stagiaire’ scheme provides scientists as well as graduates from other disciplines with the chance to spend 5 months in its operational directorates. While the European Parliament has its own ‘Ramon y Cajal’ scientific scholarships for graduate scientists and engineers. And even provides those who have not even completed their school studies with an insight into its workings through its EUROSCOLA programme.

The Stagiaire Scheme of the European Commission

The Commission organises twice a year in-service training periods lasting between 3 and 5 months for university graduates and for public service employees. The training periods start on 1 March and 1 October each year.

It is difficult to give an exact description of the type of work given to trainees (*stagiaires*) but it would normally be equivalent to that given to a junior executive-grade official. As such trainees can be called upon to do everything from, for instance, writing up minutes of meetings, conducting research on a particular topics, assessing economic, financial and technical co-operation projects or programmes and examining state aid and infringement cases etc.

The purpose of in-service training with the European Commission is to:

- Give trainees a general idea of the objectives and problems of European integration;
- Provide them with practical knowledge of the working of Commission departments;
- Enable them to acquire personal experience by means of the contacts made in the course of their everyday work;
- Enable them to put into practice the knowledge they have acquired during their studies or professional careers.

The training period begins with a general introduction to Community matters, which lasts a week.

Following this, trainees are attached to Commission directorates. In post, they are guided by their programme advisers who supervise their training and advise them on their work. They attend meetings on subjects of interest to them, unless these meetings are confidential, receive documentation and participate in the work of the department to which they are attached at a level corresponding to their educational and working background.

Trainees are selected from among nationals of the 15 Member States of the European Union. However, a limited number of nationals of non-member countries may be accepted. The age limit for trainees is thirty, although exceptions may be made by the Head of the Traineeships Office.

It is required that applicants have a thorough knowledge of one language of the European Union and a satisfactory knowledge of one other, while applicants from non-member countries need have a good knowledge of only one Community language.

What DG-Research *Stagiaires* Had to Say of their March – July 2001 Stage

“This stage has been very enriching as it made me aware of EU policies and gave me some ideas for my future career (scientific or something else)... I arrived here just before the evaluations of the research proposals received in March 2001. I helped the people of my unit during the evaluations, as it is a quite busy period for the scientific officers of the DG-RTD (I have not seen any non-busy period so far).

I had the chance to attend panel discussions on various proposals, and to read some of them. This is very instructive especially if you want to carry on in research, as you learn a little bit [of] what to do and what to avoid when writing proposals... Besides science, I have heard of and read a lot about the EU policies of different DGs (Environment and Health and Consumers’ Protection especially) and how they are implemented.

I have also been to meetings and conferences that were not directly linked to what I am doing. There are always things to do and [things to] see here that are related to the EU, and *stagiaires* usually have access to them. I enjoyed this break from my PhD, but I look forward to going back to the laboratory and to be with my boyfriend again...”

- Laure Fraysse from France

“So far everything for me has been quite interesting

even though I don’t have a scientists/technical background. I would like to encourage people to apply for a stage even to DGs which aren’t related to their [field of] study/career, because it can always be a good experience to have a look into another field, and find out that there’s always a [distinct] approach to each kind of working field... I’m glad [that] my advisor and people from my unit have always been very nice to me and treated me with respect, which I think is of so much importance.”

- Sabine Schmidt from Germany

“I arrived late for the stage due to a lot of reasons, and now I’d tell everybody when asked what I think of the stage that: ‘Well, it is too short!’ In such a short span of time, I have met a lot of nice people within or outside the Commission. I have been to the *stagiaire* trip which has proved to be one of the best in my life so far.

I have been to roundtable discussions and conferences that talk about various intriguing issues such as an inclusive Europe, and enlargement. I have been to national parties that, I believe, showcase a very important aspect of European culture in that life here is to be enjoyed to full at the moment. And, of course, I have been working on the EU Contest for Young Scientists and got some sense of what the EU exists for and how it works. So all in all, if only I could stay longer!”

- Xiaodong Tang from the People’s Republic of China

“[I] have a degree in genetics and experience in a cancer research... As a *stagiaire*, I assist one of the personnel of the Commission who is responsible for making sure I have work and advising me generally. I’ve written speeches, organised evaluations, met officials and occasionally done photocopying, all of which might not sound that exciting but I’ve found the topics really interesting and have met people from all over the world. Almost everything involves computers and vast amounts of emailing, and the working languages are mostly English, often French and occasionally German.

As well as the work you do personally, you also get a lot of opportunities to learn more about the Euro-



pean Institutions generally. There are trips organised by the traineeships office to the European Parliament in Strasbourg and to NATO, and the stagiaires organise their own lectures and language classes, all of which are fun to do. The social life is also huge and can take over your time completely if you wish, with events arranged every evening, stage parties every week and trips around Europe most weekends. The downside is the lack of money but then for only 5 months it's possible to manage, and the experience has definitely been worth it!"

- Rebecca Downing from the United Kingdom

The European Parliament Programmes

Just like the European Commission, the European Parliament also has its own range of programmes that are designed to assist young people in gaining a broader understanding of its activities at first hand.

Ramón y Cajal Scientific Scholarships

These are offered to university science and engineering graduates to enable them to familiarise themselves with the activities of the European Union and, in particular, the European Parliament.

The scholarships are granted to persons who have completed their basic university studies in science and technology related subjects. The scholarships are awarded for a four-month period. The traineeship may, in certain cases, be extended for a maximum

period of two months.

Those interested in applying for a Ramón y Cajal scientific scholarship at the European Parliament should contact the:

Traineeships Office
European Parliament
KAD2 A007
LU-2929 Luxembourg
Luxembourg
Fax: +352 43 00-248 82
mhody@europarl.eu.int

Euroscola

The aim of the programme is to bring together schoolchildren from 15 Member States of the European Union in Strasbourg. Firstly, in order to give them an insight into the workings of the European Parliament and, secondly, to give them a taste of Europe in a day of meetings and discussions on topical European subjects.

Young people confronting the problems of embarking on a career or considering the direction they intend to follow need information on the changes that a Europe without borders will entail. It is to reach these young people that the European Parliament launched **Euroscola**. Each programme is adjusted according to the age of the participants.

A group of about 500 secondary-school pupils, usually from the same age group, is invited to spend a day thinking together about the effects that European integration will have on their future.

They are also called upon to make full use of their knowledge of languages in order to communicate with their opposite numbers from the other European countries, since interpretation is unfortunately very limited. In this way, foreign languages come to be seen not as a barrier, but rather as a way of understanding the problems, opinions and expectations of young people of their own age from different European countries.

For the day to be success, it is important for the young people to be prepared for the meeting, so that they are able to take part in public discussions, some of them in a foreign language, on the subjects they have prepared.

The underlying principle is that young people form a variety of different classes and countries and speaking a variety of languages should come together for a day. They divide into multilingual working parties, each of which chooses a spokesman to present the conclusions of its discussions to the participants assembled in "plenary sitting" in the Chamber of the European Parliament at the end of the afternoon.

In this way, young people will pool their ideas on a range of European subjects that have been chosen in advance, and the most useful contribution will be passed on to the relevant parliamentary bodies.

So young people will be making a real contribution to European integration.

At the end of the day, each participant receives a certificate signed by the President of the European Parliament.

Applications to take part in a forthcoming **Euroscola** day should be sent to:

Jean-Jacques FRITZ
Antenne du Parlement européen
B.P. 1024F
FR-67070 Strasbourg Cedex
Tel: +33 388 17 5284/4499
Fax: +33 388 17 5184



Another Opportunity for Schools: 2001-2002 European Young Consumer Competition

A new edition of the European Young Consumer Competition, organized by the European Commission, is due to be launched at the start of the 2001-2002 school year.

Participants will be asked to design and organise activities to convey information on practical aspects of the switch to the euro to various target groups (e.g. other schoolchildren, families, friends, neighbourhood residents, pensioners of retirement homes, etc.).

In countries which do not belong to the euro-zone, participants will be asked to produce a magazine, video, CD-ROM or Internet site, dealing with at least three consumer issues to be chosen at will.

Each country is free to lay down formal presentation rules to be observed by applicants. The best team selected from each country will then compete at the European level. The EU adult and young juries will award prizes to the four teams which most deserve public recognition. This will be for their awareness of the issues, as well as for their talent as educators and the attractiveness of their presentations.

For information on how to participate, please contact the European Commission, Directorate General "Health and Consumer Protection".

E-mail: sanco-helpline@cec.eu.int

An Opportunity for University Undergraduates too: The Archimedes Prize

The Archimedes Prize is the European Commission's top prize for undergraduate students. Each year several scientific themes or challenges are set for the prize. For 2002 there are six specific themes:

- Structure and function in macromolecules
- Water resources modelling and management
- Societal and economic implications of demographic change in the EU
- Energy devices
- Acquaculture
- Implications of tourism on natural and human ecosystems

The deadline for the submission of proposals is 15th March 2002.



As well as an honorary distinction, the Commission is able to award up to three monetary prizes (3 first prizes of €60,000, 3 second prizes of €50,000 and 3 third prizes of €40,000). These awards aim to give young researchers a kick-start to their scientific career. The award will not only brighten any C.V., but should also be used to support scientific careers, e.g. this monies could be put towards post-graduate/doctoral courses.

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<http://www.cordis.lu/improving/awards/archimedes.htm>

FURTHER INFORMATION:

**The Traineeships Office – B100 01/7
European Commission
Rue de la Loi, 200
BE-1049 Brussels
Belgium**

**Or the Traineeships Office Web-site at:
<http://europa.eu.int/comm/stages/>**

WHAT ELSE CAN THE EUROPEAN COMMISSION DO FOR YOU?

An Important Opportunity for All: European Year of Languages 2001

Language skills are naturally vital if we are to understand each other, appreciate and safeguard Europe's linguistic and cultural diversity, and work in an increasingly international context.

The EU promotes language teaching and learning in many ways, not only through the education, training and youth programmes but also through:

- Media programme support for film distribution, dubbing and subtitling
- Ariane programme, promoting translation, books and reading;

and *special actions* such as:

- The European Label for innovative language learning initiatives.
- The **European Year of Languages 2001**, in partnership with the Council of Europe.

The European Commission is to support 142 more projects under the European Year of Languages 2001. The funding announced today totals nearly •4.2 million and is additional to the •1.75 million already allocated to 43 projects in January (see IP/01/5). Over 1300 applications were received in all.

To find out more about the Program, please visit the Website:

<http://www.eurolang2001.org/eyl/indexFull.htm>

Find out more via the World Wide Web on the Commission's prize-winning Europa web site. Take a look for yourself on:

<http://europa.eu.int/>

A website offering information on the European Union's goals and policies, Europa is a common endeavour of the EU's institutions, run by the European Commission. One of the items not to miss is Euro myths, a useful reference to the myriad and perhaps surprising world of Euro horror stories that crop up so frequently in the press. You can find it at:

<http://europa.eu.int/en/comm/dg10/em/euromyth.html>

Last year's 12th European Union Contest for Young Scientists in Amsterdam was covered as well and both press releases were on the web the day after their release.

Directorate-General Research, the part of the Commission that handles Science, Research and Development and manages amongst its activities the EU Contest, has its own pages on the Europa website at the following address:

<http://europa.eu.int/comm/research/>

For specific information on the Directorate C: Science and Society, please visit:

<http://www.cordis.lu/rtd2002/science-society/home.htm>

