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Introduction

In an increasingly globalized world, health issues such as HIV/AIDS, malaria, tuberculosis and emerging pandemics need to be addressed through international science, technology and education partnerships. The high cost associated with health research infrastructures and the need to rely on large cohorts of patients is driving the development of multinational partnerships.

The cooperation between the European Community and the United States is significant when it comes to transatlantic health research. The continually rising proportion of research publications with authors from several countries demonstrates the reality of increasing international cooperation between health scientists from all over the world.

Global health research puts emphasis on translational research (i.e. the translation of basic discoveries in clinical applications), the development and validation of new therapies, methods for health promotion and prevention including the promotion of healthy aging, diagnostic tools and medical technologies, and sustainable and efficient health care systems.

On the U.S side, an important role in biomedical and behavioural research is played by the National Institutes of Health (NIH), which is the primary Federal agency for conducting and supporting medical research. Leading the way toward important biomedical and behavioural research discoveries in order to improve the health of people everywhere, NIH funds and trains scientists to investigate and translate basic medical research for the prevention, treatment, and prediction of common and rare diseases.

On the European side, the Seventh Framework Program (2007-2013) is even more open to international cooperation than the preceding framework programs. This will generate increased opportunities for transatlantic cooperation.

This publication describes some of the funding opportunities for transatlantic health research and highlights examples of transatlantic research projects. The emphasis is on NIH funding opportunities for non-U.S. scientists and European Commission ones for U.S. citizens. Reference is also given to some bilateral programmes supported by EU Member States.
Chapter 1: National Institutes of Health (NIH): Funding Opportunities for Non-U.S. Scientists

1.1. NIH Funding

1.1.1 Objectives
"NIH funds grants, cooperative agreements, and contracts that support the advancement of fundamental knowledge about the nature and behavior of living systems to meet the NIH mission of extending healthy life and reducing the burdens of illness and disability."

NIH encourages projects of high scientific caliber that is relevant to public health needs and is within NIH Institute and Center (IC) priorities. NIH also strongly encourages investigator-initiated research across the spectrum of their mission. The research projects funded by NIH are required to be of a unique character. By law, NIH cannot support a project already funded or pay for research that has already been done.

The large majority of grants are R01 Grants to a single project and a single principle scientist. Some grants are so-called program project grants to conduct multidisciplinary projects carried out by several investigators such as the Multiple Investigators Grant.

NIH seeks opinions and advice from many sources such as the extramural scientific community including individual researchers and professional societies, patient organizations and voluntary health associations. Extramural grants account for approximately 84 percent of NIH's $29 billion budget. These are awarded to investigators throughout the U.S. and abroad1. More information about NIH: www.nih.gov

1.1.2 Funding instruments
NIH uses three major funding instruments to support extramural research:

- **Grant**: Investigator decides the research to be designed or developed and the approach. Grants are solicited through Program Announcements (PA) and Request for Applications (RFA). Grants stand for over 80% of the research awards.

- **Contract**: Government decides the research to fill their perceived need and establishes detailed requirements. Contracts are solicited through Requests for Proposals (RFP).

- **Cooperative Agreement**: Similar to grants, but awarding Institute/Center (IC) and recipient have substantial involvement in carrying out the project's activities. Cooperative agreements are solicited through Request for Applications (RFA).

NIH provides both solicited and unsolicited funding mechanisms:

- **Funding Opportunity Announcement (FOA)**

  Funding Opportunity Announcements is a publicly available document by which a Federal agency makes known its intentions to award optional grants or cooperative agreements, usually as a result of competition for funds. FOAs may be known as program announcements, requests for applications, notices of funding availability, solicitations, or other names depending on the agency and type of program. FOAs can be found at Grants.gov: [http://www.grants.gov/applicants/find_grant_opportunities.jsp](http://www.grants.gov/applicants/find_grant_opportunities.jsp) or at the following website: [http://grants.nih.gov/grants/guide/index.html](http://grants.nih.gov/grants/guide/index.html)

1 Information retrieved from Office of Extramural Research (OER): [http://grants.nih.gov/grants/oer.htm](http://grants.nih.gov/grants/oer.htm)
Unsolicited (Investigator initiated) research is the cornerstone of NIH Research Portfolio. NIH offers four different funding opportunities to support extramural research:

- **Investigator-Initiated Research - Unsolicited**: The investigator initiates the research and submits a grant application within an area that is relevant to the NIH. Most applications for NIH support are unsolicited. Examples of unsolicited research R01, R03 and R21.

- **Program Announcement (PA) - Solicited**: NIH solicits grant applications or cooperative agreements in a given research area representing a new, ongoing or expanded interest and/or high-priority program; Generally, no set-aside of funds, and applications submitted in response are often considered investigator-initiated in that the applicant has responsibility for the planning, direction, and execution of the proposed project. The research activity is specified in the PA and is generally active for three years.

- **Request for Applications (RFA) - Solicited**: NIH solicits research grant applications for a one-time competition on a specific topic, Describes an IC initiative in a well-defined scientific area to stimulate research in a priority area; Set-aside of funds for a certain number of awards. The applications are generally reviewed within the issuing IC.

- **Request for Proposals (RFP) - Solicited**: NIH solicits offerors to submit research proposals for a one-time competition on a specific IC topic; Set-aside of funds for a certain number of awards. Applications are generally reviewed within the IC that issued the RFP.

### 1.2 Application Procedure

The application process for grants takes about one year so the Applicant should therefore start early to collect preliminary data and establish internal deadlines for an application. In general there are 3 constant cut-off dates per year (Feb 1st, June 1st and Oct 1st) for research proposals.


- **Receipt and Referral (months 1-3)** - Application arrives at CSR and CSR assigns application to an NIH Institute/Center (IC) and a Scientific Review Group (SRG). Scientific Review Officer (SRO) assigns applications to reviewers and readers.

- **Peer Review (months 4-8)** – During the Initial Level of Review the SRG members review and evaluate applications for scientific merit. The Priority Scores and Summary Statement available to PD/PIs are posted on eRA Commons ([http://era.nih.gov/](http://era.nih.gov/)). In Second Level of Review the Advisory council/board reviews applications. Advisory Councils/Boards are composed of scientists from the extramural research community and public representatives. Members are chosen by the respective IC and are approved by the Department of Health and Human Services.

- **Award (months 9-10)** The IC grants management staff conducts final administrative review and negotiates award. IC issues and sends Notice of Award (NoA) to applicant institution/organization. Finally the Project period officially begins.
1.3 Funding Opportunities for non-U.S. scientists

1.3.1 Collaborative Research
A majority of the grants awarded by NIH are to a single investigator or individual laboratories for a very specific and narrow purpose. However NIH has grants that are more analogous to the collaborative/consortium model.

- **Research Project Grant Program (R01).** To support a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing the investigator's specific interest and competencies based on the mission of the NIH. R01s are most often investigator initiated in response to either the R01 Parent Announcement or a Program Announcement highlighting particular scientific areas. The R01 requires that all applications, including investigator-initiated, be submitted in response to a specific Funding Opportunity Announcement (FOA). NIH still welcomes unsolicited, investigator-initiated applications. More than one Project Director/Principal Investigator (PD/PI), or multiple PDs/PIs, may be designated on the application for projects that require a “team science” approach that clearly does not fit the single-PD/PI model.

- **NIH Small Grant Program (R03)** To support small research projects that can be carried out in a short period of time with limited resources. Examples of the types of projects that NIH Institutes and Centers support with the R03 include the following: Pilot or feasibility studies * Secondary analysis of existing data * Small, self-contained research projects * Development of research methodology * Development of new research technology.

- **NIH Exploratory/Developmental Research Grant Award (R21)** The R21 mechanism is intended to encourage new, exploratory and developmental research projects by providing support for the early stages of their development. For example, such projects could assess the feasibility of a novel area of investigation or a new experimental system that has the potential to enhance health-related research. These studies may involve considerable risk but may lead to a breakthrough in a particular area, or to the development of novel techniques, agents, methodologies, models or applications that could have major impact on a field of biomedical, behavioral, or clinical research.

**Specific Grants**

- **The Fogarty International Center (FIC)**
The Fogarty International Center is the international component of the NIH. FIC addresses global health challenges through innovative and collaborative research and training programs and supports and advances the NIH mission through international partnerships. FIC deals with international affairs exclusively.

Opportunities for non-U.S. institutions to apply for cooperative funding in different research areas: AIDS International Training and Research Program (D43); Framework Programs for Global Health (R25); Global Research Training in Population Health.
Opportunities for developing or low-middle income countries to apply for cooperative funding in different research areas: Global Infectious Disease Research Training Program Award; Informatics Training for Global Health (ITGH); International Clinical, Operational and Health Services Research Training Award (D43); International Collaborative Genetics Research Training Program; International Collaborative Genetics Research Training Program.

- **Multiple Principal Investigators**
  The Multiple Principal Investigator Grant allows collaboration and funding to be distributed amongst several research teams at multiple locations working together toward one research goal. The Multiple Principal Investigators model is intended to supplement, and not replace, the traditional single-Principal Investigator model. The implementation strategy for Multiple Principal Investigator Grants started in February 2007 and is therefore a fairly new initiative. As part of the implementation plan, a Request for Information (RFI) was issued by the NIH to solicit input on policies and issues of special interest to the health-related research community. Each of the listed PIs will be designated by the grantee institution and will be expected to share responsibility for directing the project or activity supported by the grant. There are two possible strategies for managing funds in multiple-PI awards: one single, shared budget or Individual working budgets for each Principal Investigator. More information about the Multiple Principal Investigators:

### 1.3.2 Research Training and Research Career Development

- **Pathway to Independence Award.** The purpose with the Pathway to Independence Award is to facilitate receiving an R01 award earlier in an investigator’s research career. The primary, long-term goal of the PI Award Program is to increase and maintain a strong cohort of new and talented, NIH-supported independent investigators. The NIH Pathway to Independence Award will provide up to five years of support consisting of two phases. The initial phase will provide 1-2 years of mentored support for highly promising, postdoctoral research scientists. This phase will be followed by up to 3 years of independent support contingent on securing an independent research position.

- **NIH Director's Pioneer Award Program.** The NIH Director's Pioneer Award Program is a High-Risk Research initiative of Research Teams of the Future. Pioneer Awards are designed to support individual scientists of exceptional creativity who propose pioneering – and possibly transforming approaches - to major challenges in biomedical and behavioral research. The term “pioneering” is used to describe highly innovative approaches that have the potential to produce an unusually high impact in a broad area of biomedical and behavioral research, and the term “award” is used to mean a grant for conducting research, rather than a reward for past achievements.

### Specific Grants

**F05 International Neuroscience Fellowship** is open for non-immigrant foreign scientists who are currently residing outside the U.S. The goal for the International Neuroscience Fellowship Program is to provide a unique opportunity to qualified foreign neuroscientists, at junior or mid-career level, to receive one to two years of research training in the United States. More information: [http://grants.nih.gov/grants/guide/pa-files/PAR-06-227.html](http://grants.nih.gov/grants/guide/pa-files/PAR-06-227.html)

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2 Eligible developing foreign countries include those that have a Gross National Income per capita (GNI per capita) below $9,000, according to the World Bank classification system: [http://www.worldbank.org/data/databytopic/GNIPC.pdf](http://www.worldbank.org/data/databytopic/GNIPC.pdf).
**Shared Neurobiology of Fragile X Syndrome and Autism (R01)** is open for Non-domestic (non-U.S.) entities. This FOA is aimed at characterizing, understanding and treating etiological and pathophysiological mechanisms common to both Fragile X syndrome (FXS) and autism (including autism spectrum disorders such as Rett syndrome). Research projects supported under this FOA that include human subjects should include children affected with both FXS and autism and animal studies may include several models systems, e.g., mouse, fly and zebrafish. Basic neuroscience research in model systems should focus on both FXS and autism. More information: [http://grants.nih.gov/grants/guide/pa-files/PA-07-284.html](http://grants.nih.gov/grants/guide/pa-files/PA-07-284.html)

**Identifying Autism Susceptibility Genes** is open for Foreign Institutions. This FOA aims to solicit applications to identify specific genes and gene variants in localized chromosomal regions that confer susceptibility to autism. Fine mapping of disease loci, or quantitative trait loci (QTLs), is expected to occur in very large datasets of pre-existing samples that have high statistical power for fine mapping autism susceptibility loci. More information: [http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-05-007.html](http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-05-007.html)

### 1.4 Examples of projects funded by the National Institutes of Health

#### 1.4.1 European Research Teams funded by NIH

The National Institutes of Health provide both domestic and foreign awards. In the FY 2006 NIH funded 251 foreign awards to 17 Member States of the European Union. This makes out about 30% of the total sum of funded foreign countries. The total sum of awards given to all foreign countries in 2006 was about $306 million, the Member states of the European Union received about $133 million. In the FY 2005 NIH funded 312 foreign awards to 17 Member States of the European Union. This makes out about 36% of the total sum of funded foreign countries. The total sum of awards given to all foreign countries in 2005 was about $284 million; the Member States of the European Union received about $123 million. More information: [http://report.nih.gov/award/state/state.cfm](http://report.nih.gov/award/state/state.cfm)

Examples:

- Aarhus University Hospital (Denmark), *Pathophysiological Interpretations of Dynamic PET/CT of Molecular Liver Biology*, award: $167,378
- Akubio LTD (United Kingdom), *Acoustic detection of viruses bacteria and toxins*, award: $761,804
- Intercell AG (Austria), *A single-dose prophylactic Japanese Encephalitis vaccine*, award $1,486,847

#### 1.4.2 U.S. Principal Investigator cooperating with European Research Teams

- **New York Medical College and Hospital La Paz-Autonomous University of Madrid (Spain), Emma Children's Hospital-Academic Medical Center (The Netherlands)**

The project consists of a pilot study to set the stage for a study of thyroid supplementation in infants born prior to 28 weeks of gestation to assess whether such treatment improves long-term outcomes, specifically IQ and risk of disabling cerebral palsy. The purpose of the pilot study is to establish the dosing schedules needed to achieve the optimum plasma hormone targets in the neonatal period, without increasing measures of neonatal morbidity, mortality or physiological dysfunction. The project aims to demonstrate cooperation among an international consortium of five participating institutions before initiating a trial to involve about 20 study sites. Enrolment will take place in three
sites: Westchester Medical Center-New York Medical College, Valhalla, NY; Emma Children's Hospital-Academic Medical Center, Amsterdam, the Netherlands; and Hospital La Paz-Autonomous University of Madrid, Spain.

- **Massachusetts General Hospital and Istituto Superiore di Sanita (Italy)**

  This research project aims to develop a Master's Degree program for policy makers, scientists and clinicians caring for and clinically treating the health and mental health sequelae of traumatized populations in diverse geographical and global environments affected by man-made conflict and/or natural disasters (e.g. Tsunami disaster of December 2004). The Harvard Program in Refugee Trauma (HPRT) at Massachusetts General Hospital (MGH), estimates that approximately one billion persons worldwide have had their lives disrupted by violence and disaster. Empirical studies reveal a considerable mental health and health related impact on these populations. Scientific investigations now reveal that the disability effects of violence can be identified and successfully treated by evidence-based interventions.

  The Master's Degree will be in line with the goals of the current grant request by facilitating multi-disciplinary collaboration within and across institutions to seek the amelioration of a major global mental health issue, and offer a pathway for career development, especially in the developing world. This Master's Degree will be the first one in global mental health and violence. The major rationale for this Master's Degree project arose out of 25 years of clinical care, training and research with survivors of mass violence and natural disasters by HPRT in countries affected by mass violence. The advanced scientific training of participants from post-conflict and disaster-affected countries will have an enormous impact on the identification and treatment of mental health problems in the world's poorest countries.

- **Cornell University and Karolinska Institute (Sweden)**

  The goal of this project is to discover principles underlying the coordination of limbs and opposing muscles during walking by combining biological experiments with new dynamical models of the spinal neural networks that generate hindlimb movements in the mouse. New genetic techniques for specifically labeling or ablating specific classes of spinal neurons are likely to produce novel information about the physiology and anatomy of these networks.

  This project establishes a new collaboration to develop realistic models that build upon the partner's long experience and expertise with this system. Experiments will be conducted both at Cornell University and at the Karolinska Institute, Sweden to measure the physiological properties of neurons and their synapses. In addition, connectivity of the network will be studied in the laboratory.
1.5 NIH Grants

1.5.1 NIH Research Project Grant Program (R01)

1. PURPOSE
To support a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing the investigator's specific interest and competencies based on the mission of the NIH. R01s are most often investigator initiated in response to either the R01 Parent Announcement or a Program Announcement highlighting particular scientific areas. The R01 requires that all applications, including investigator-initiated, be submitted in response to a specific Funding Opportunity Announcement (FOA). NIH still welcomes unsolicited, investigator-initiated applications. More than one Project Director/Principal Investigator (PD/PI), or multiple PDs/PIs, may be designated on the application for projects that require a “team science” approach that clearly does not fit the single-PD/PI model.

2. TOPICS COVERED
The R01 mechanism allows an investigator to define the scientific focus or objective of the research based on a particular area of interest and competence.

3. WHO IS ELIGIBLE?
The NIH awards R01 grants to organizations of all types (universities, colleges, small businesses, for-profit, foreign and domestic, faith-based, etc.) including non-U.S. entities. Although the Principal Investigator writes the grant application and is responsible for conducting the research, the applicant is the research organization.

4. SIZE
Average size $250,000-$300,000 (Foreign applicants do not follow the modular applications of $25,000). Full details: http://grants.nih.gov/grants/funding/r01.htm

5. WHAT DOES THE FUNDING COVER?
Salary and fringe benefits for Principal Investigator, key personnel, and other essential personnel * Equipment and supplies * Consultant costs * Alterations and Renovations * Publications and miscellaneous costs * Contract services * Consortium costs * Facilities and Administrative costs (indirect costs) * Travel expenses.

6. DURATION
Applications are generally awarded for 1 – 5 budget periods, each normally 12 months in duration.

7. DEADLINES
Annually on February 5, June 5 and October 5

8. FULL DETAILS
http://grants.nih.gov/grants/funding/r01.htm

9. WHO CAN I CONTACT?
All Institutes and most Centers at NIH support the R01 grant mechanism. For specific information about the mission of each Institute and Center, this link http://www.nih.gov/icd/ provides access to individual home pages.
1.5.2 NIH Small Grant Program (R03)

1. PURPOSE
To support small research projects that can be carried out in a short period of time with limited resources. Examples of the types of projects that NIH Institutes and Centers support with the R03 include the following:
- Pilot or feasibility studies
- Secondary analysis of existing data
- Small, self-contained research projects
- Development of research methodology
- Development of new research technology.

2. TOPICS COVERED
Not all NIH Institutes/Centers accept R03 applications, however the institutes that do accept applications represent the following research areas: Genetic and Genomic research, Aging, Alcohol Abuse and Alcoholism, Allergy and Infectious Diseases, Biomedical Imaging and Bioengineering, Child Health and Human Development, Drug Abuse, Dental and Craniofacial Research, Environmental Health Sciences, Mental Health, Neurological Disorders and Stroke, Nursing Research and Biomedical informatics and Bioinformatics. The application is sent directly to one of NIH Institutes and Centers.

3. WHO IS ELIGIBLE?
For-profit organizations, non-profit organizations, public or private institutions, such as universities, colleges, hospitals, and laboratories, units of State government, units of local government, eligible agencies of the Federal government, domestic institutions, foreign institutions; faith-based or community-based organizations, units of State Tribal government, and units of Local Tribal government.

4. SIZE
Up to $50,000 per year

5. DURATION
Up to 2 years

6. DEADLINES
Annually on February 16, June 16 and October 16

7. FULL DETAILS
http://grants.nih.gov/grants/funding/r03.htm

8. WHO CAN I CONTACT?
- NIH Institutes and Centers that do Accept Investigator-Initiated R03 Applications: NHGRI, NIA, NIAAA, NIAID, NIBIB, NICHD, NIDA, NIDCR, NIEHS, NIMH, NINDS, NINR, and NLM
- NIH Institutes and Centers that do not accept R03 applications in response to the Parent R03 Announcement but only accept R03 applications in response to their specific funding opportunity announcements: FIC, NCCAM, NCI, NCRR, NHLBI, NIAMS, NIDCD, NIDDK, and NIGMS
- NIH Institutes and Centers that do not use the R03 mechanism: NCMHD, NEI
1.5.3 NIH Exploratory/Developmental Research Grant Award (R21)

1. PURPOSE
The R21 mechanism is intended to encourage new, exploratory and developmental research projects by providing support for the early stages of their development. For example, such projects could assess the feasibility of a novel area of investigation or a new experimental system that has the potential to enhance health-related research. These studies may involve considerable risk but may lead to a breakthrough in a particular area, or to the development of novel techniques, agents, methodologies, models or applications that could have major impact on a field of biomedical, behavioral, or clinical research.

2. TOPICS COVERED
Applications submitted under this mechanism should be exploratory and novel. These studies should break new ground or extend previous discoveries toward new directions or applications.

3. WHO IS ELIGIBLE?
For profit organizations; Non-profit organizations; Public or private institutions, such as universities, colleges, hospitals and laboratories; Units of State government; Units of local government; Eligible institutions of the Federal government; Domestic institutions; Foreign institutions; Faith-based or community-based organizations; Units of State Tribal government; and Units of Local Tribal government.

4. SIZE
Up to $275,000

5. DURATION
2 years

6. DEADLINES
Annually on February 16, June 16 and October 16

7. FULL DETAILS

8. WHO CAN I CONTACT?
Participating Institutes and Centers and their contacts are listed at:
1.5.4 NIH Pathway to Independence (PI) Award (K99/R00)

1. PURPOSE
To facilitate receiving an R01 award earlier in an investigator’s research career. The primary, long-term goal of the PI Award Program is to increase and maintain a strong cohort of new and talented, NIH-supported independent investigators. The NIH Pathway to Independence Award will provide up to five years of support consisting of two phases. The initial phase will provide 1-2 years of mentored support for highly promising, postdoctoral research scientists. This phase will be followed by up to 3 years of independent support contingent on securing an independent research position.

2. TOPICS COVERED
The PI Award is limited to postdoctoral trainees who propose research relevant to the mission of one or more of the participating NIH Institutes and Centers: http://www.nih.gov/

3. WHO IS ELIGIBLE?
U.S. citizens and non-U.S. citizens with the skills, knowledge, and resources necessary to carry out the proposed research are invited to develop an application for support. However, investigators at non-domestic (non-U.S.) entities (foreign organizations) are not eligible to apply. Outstanding postdoctoral candidates who have terminal clinical or research doctorates (including Ph.D., M.D., D.O., N.D., D.D.S., D.V.M., Sc.D., D.N.S. or equivalent doctoral degrees) who have no more than 5 years of postdoctoral research training at the time of initial application or resubmission(s).

4. SIZE
Mentored Phase of the Pathway to Independence Award Program provides up to $90,000. Independent Investigator Phase of the Pathway to Independence Award Program provides up to $249,000 per year.

5. WHAT DOES THE FUNDING COVER?
Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. The total amount awarded and the number of awards will depend upon the number, quality, duration, and costs of the applications received.

6. DURATION
5 years (2 phases)

7. DEADLINES
Annually on January 25, May 25 and September 25

8. FULL DETAILS

9. WHO CAN I CONTACT?
1.5.5 NIH Director's Pioneer Award Program (DP1)

1. PURPOSE

The NIH Director's Pioneer Award Program, is a High-Risk Research initiative of Research Teams of the Future. Pioneer Awards are designed to support individual scientists of exceptional creativity who propose pioneering – and possibly transforming approaches - to major challenges in biomedical and behavioral research. The term “pioneering” is used to describe highly innovative approaches that have the potential to produce an unusually high impact in a broad area of biomedical and behavioral research, and the term “award” is used to mean a grant for conducting research, rather than a reward for past achievements.

2. TOPICS COVERED

Behavioral and Social Sciences - Chemical Biology - Clinical and Translational Research - Epidemiology - Immunology - Instrumentation and Engineering - Molecular and Cellular Biology - Neuroscience - Physiology and Integrative Systems - Quantitative and Computational Biology.

3. WHO IS ELIGIBLE?

Investigators at all career levels who are currently engaged in research are eligible to apply. There are no citizenship or residency requirements. However, investigators at non-domestic (non-U.S.) entities (foreign organizations) are not eligible to apply.

4. SIZE

$5 million

5. DURATION

Five-year period

6. DEADLINES

January 16, 2008

7. FULL DETAILS


8. WHO CAN I CONTACT?

Scientific Contact/ Peer Review Contact: Ravi Basavappa, Ph.D., National Institute of General Medical Sciences, National Institutes of Health, Email: pioneer@nih.gov

Financial/Grants Management Contact: Marcia F. Cohn, Grants Management Officer National Institute of General Medical Sciences, National Institutes of Health, Phone: 301-594-3918, Email: cohnm@mail.nih.gov
Chapter 2: European Commission - Health Research: Funding Opportunities for U.S. citizens

2.1 European Commission Funding

2.1.1 Objectives

The objective of health research under FP7 is to improve the health of European citizens and boost the competitiveness of health-related industries and businesses, as well as address global health issues. The Health theme is a major theme of the Cooperation program and the EU has earmarked a total of €6.1 billion for funding this theme over the duration of FP7.

European-funded health research will focus on three pillars:

- **Biotechnology, generic tools and medical technologies for human health** - producing knowledge that will be applied in the area of health and medicine
- **Translating research for human health** - making sure that basic discoveries have practical benefits and improve the quality of life
- **Optimizing the delivery of healthcare to European citizens** - ensuring that the results of biomedical research will ultimately reach the citizens

Health research can also be funded under other themes of the cooperation program (e.g. ICT for health, nanomedicine, diet and health) and under the other FP7 programs (people, ideas, capacities).

2.1.2 Funding instruments

- **Collaborative projects**
  Support for research projects carried out by consortia with participants from different countries, aiming at developing new knowledge, new technology, products, demonstration activities or common resources for research.

- **Coordination and support actions**
  Support for activities aimed at coordinating or supporting research activities and policies (networking, exchanges, trans-national access to research infrastructures, studies, conferences, etc.).

- **Networks of Excellence**
  Support for a Joint Program of Activities implemented by a number of research organizations integrating their activities in a given field, carried out by research teams in the framework of longer term cooperation.

- **Individual projects: Support for “frontier” research**
  Support for projects carried out by individual national or transnational research teams. This scheme will be used to support investigator-driven "frontier" research projects funded in the framework of the European Research Council.

- **Support for training and career development of researchers**
  Support for training and career development of researchers, mainly to be used for the implementation of Marie Curie actions.

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3 The complete name of FP7 is 7th Framework Programme for Research and Technological Development. It will last for seven years from 2007 until 2013. FP7 is a key tool to respond to Europe's needs in terms of jobs and competitiveness, and to maintain leadership in the global knowledge economy.
2.2 Application Procedure
As a general principle, FP7 is open to participation from any country in the world. The procedures for participation and funding possibilities vary for different groups of countries.

- **Work Programmes and Calls for Proposals**
The concrete plans for implementing the Specific Programmes are announced by the European Commission in annual ‘Work Programmes’. These work programmes include the schedule of ‘Calls for Proposals’, commonly known just as ‘Calls’, to be published during the year. Each Call usually covers specific research areas, and you may have to wait until the publication of a Call which covers your exact area of interest.

- **How will I know when a Call for Proposals is issued?**
All Calls are announced in the EU’s Official Journal (which is the official source of EU documents). The annual work programmes and the full texts of the Calls are published on the FP7 section of CORDIS, the web site dedicated to EU-supported research: [http://cordis.europa.eu/fp7/dc/index.cfm](http://cordis.europa.eu/fp7/dc/index.cfm)

- **Submit your proposal**

- **What happens after I submit a proposal?**
After the deadline for the Call, all the proposals submitted are evaluated by a *panel of independent evaluators*, who are recognised specialists in the relevant fields. The panel will check the proposals against a published set of criteria to see if the quality of research proposed is worthy of funding.

- **And if my proposal is accepted?**
For successful proposals, the European Commission enters into financial and scientific/technical negotiations with your consortium on the details of the project. Finally, a grant agreement between each participant and the Commission is drawn up. This sets out the rights and obligations of the beneficiaries and the European Community, including the EU’s financial contribution to your research costs. For additional information: [www.cordis.europa.eu/fp7/](http://www.cordis.europa.eu/fp7/)
2.3 Funding Opportunities for U.S. citizens

2.3.1 Collaborative Research

- **Cooperation program**
  The specific program on 'Cooperation' supports all types of research activities carried out by different research bodies in trans-national cooperation and aims to gain or consolidate leadership in key scientific and technology areas.

FP7 allocates EUR 32 413 million to the Cooperation program. The budget will be devoted to supporting cooperation between universities, industry, research centers and public authorities throughout the EU and beyond.

The Cooperation program is sub-divided into ten distinct themes. Each theme is operationally autonomous but aims to maintain coherence within the Cooperation Program and allowing for joint activities cutting across different themes, through, for example, joint calls.

The ten identified themes reflect the most important fields of knowledge and technology where research excellence is particularly important to improve Europe’s ability to address its social, economic, public health, environmental and industrial challenges of the future.

Across all these themes, support to trans-national cooperation will be implemented through.

- Collaborative research
- Coordination of national research programs
- Joint Technology Initiatives
- Technology Platforms

2.3.2 Capacities - Access to Research Infrastructures

The Commission’s proposals for the FP7 Capacities program aim to enhance research and innovation capacities throughout Europe and ensure their optimal use. The Capacities program is provided with a budget of EUR 4 097 million. The program aims to support the coherent development of policies and complement the Cooperation program. It also aims to contribute to EU policies and initiatives to improve the coherence and impact of Member States policies.

2.3.3 People - Marie Curie Actions

The 'Marie Curie Actions' have long been one of the most popular and appreciated features of the Community Framework Programs for Research and Technological Development. They have developed significantly in orientation over time, from a pure mobility fellowships program to a program dedicated to stimulating researchers' career development. The 'Marie Curie Actions' have been particularly successful in responding to the needs of Europe's scientific community in terms of training, mobility and career development. This has been demonstrated by a demand in terms of highly ranked applications that in most actions extensively surpassed the available financial support.

In the Seventh Framework Program, the 'Marie Curie Actions' have been regrouped and reinforced in the 'People' Specific Program. Entirely dedicated to human resources in research, this Specific Program has a significant overall budget of more than € 4, 7 billion over a seven year period until 2013, which represents a 50% average annual increase over FP6.
2.3.4 Ideas – European Research Council (ERC)

The objective of the specific program ‘Ideas’ is to reinforce excellence, dynamism and creativity in European research and improve the attractiveness of Europe for the best researchers from both European and third countries. It also contributes to stimulate industrial research investment, by providing a Europe-wide competitive funding structure, in addition to and not replacing national funding, for ‘frontier research’ executed by individual teams. Communication and dissemination of research results is an important aspect of this program.

2.4 Examples of projects funded by the European Commission

- Genetic Factor for Osteoporosis (GEFOS)

The FP 7 project GEFOS aims at understanding the genetic influences on osteoporosis. The project builds on previous EC funded projects and from other large osteoporosis patient cohorts for which variable amounts of clinical, environmental, lifestyle and nutritional data are also available. This consortium consists of seven universities, one medical center and one biopharmaceutical company. California Pacific Medical Center Research Institute participates in the consortium providing an international cooperation between clinicians and geneticists. The other partners are Erasmus Medical Centre (NL), University of Ioannina (EL), The University of Edinburgh (UK), Islensk erfadagreining ehf (decode genetics ehf) (IS), King's College London (UK), University of Cambridge (UK), Goteborgs Universitet (SE), University of Sheffield (UK), University of Queensland (AU).

- Meta Cancer

The FP7 project METAcancer aims at characterizing the metabolism of malignant breast tumours in order to identify new biomarkers and targets for therapeutic interventions. The changes will be further evaluated by mining of already available databases including expression data at the transcriptional level as well as by additional targeted investigations on protein and mRNA markers relevant for metabolic alterations. This consortium consists of three universities, one research center and molecular biologists. University of California, Davis participates in the consortium which represents an excellent example of an international coordination among clinicians, biochemists, bioinformaticians consists of universities, research centers. The other partners are the Charite Universitatsmedizin Berlin (DE), the University of Cambridge (UK), the Valtion teknillinen tutkimuskeskus (Technical Research Center Finland) (FI), the Lower Silesian Oncology Center (PL) as well as three companies GBG Forschungs GmbH (DE), tp21 GmbH (DE) and HighChem Ltd. (SK).
2.5 European Commission Funding

2.5.1 Research and Development co-operation programme

1. PURPOSE
The CO-OPERATION programme of the seventh Framework Programme provides financial support to researchers in Europe to work together on international collaborative research projects to advance knowledge, to propose solutions to some of the major issues facing us today, and to develop new technologies for the future. It will promote co-operation between universities, industry and research centres across the European Union as well as with the rest of the world.

2. TOPICS COVERED

- Health
- Food, Agriculture and Biotechnology
- Information and Communication Technologies
- Nanosciences, Nanotechnologies, Materials and new Production Technologies
- Energy
- Environment (including Climate Change)
- Transport (including Aeronautics)
- Socio-economic Sciences and Humanities
- Space
- Security

3. WHO IS ELIGIBLE?
Proposals must include institutions in a minimum of 3 different EU Member State or Associated countries. Beyond this minimum, institutions in all other countries can also participate. Industrialised countries (such as the U.S.) are generally expected to bring their own funding to the project. In exceptional cases however, e.g. where it is essential for the project, they may be funded.

4. WHAT KIND OF PROJECTS CAN BE FUNDED?
Support is provided to trans-national research activities: collaborative projects, networks of excellence, support actions and the coordination of national research programmes.

5. DEADLINES
Targeted calls for proposals published regularly. First calls published December 2006

6. FULL DETAILS
http://ec.europa.eu/research/fp7/home_en.html
2.5.2 Capacities program – Research Infrastructures

1. PURPOSE
The CAPACITIES programme aims at the enhancement of research and innovation capacity in Europe. This includes support to existing and new facilities of pan-European/international relevance. Funding is allocated to selected European infrastructures to provide access to their facilities to researchers.

2. TOPICS COVERED
A list of Infrastructures with funding to provide access to researchers can be found at:
http://cordis.europa.eu/fp7/infrastructures/

3. WHO IS ELIGIBLE?
This action is open to participation of international researchers. Access may be made available to external users, either in person ("hands-on") or through the provision of remote scientific services, such as the provision of reference materials or samples or the performance of sample analysis. The research infrastructures themselves manage these access activities, therefore research teams wishing to have access to an infrastructure supported under FP7 should address themselves directly to the infrastructure. The selection of research teams is carried out through an independent peer-review evaluation of their research projects. The majority of researchers in the research team must come from EU countries or associated states other than where the operator of the infrastructure is established. Only research teams that are entitled to disseminate the knowledge they have generated under the project are eligible to benefit from research services to the infrastructure under the contract.

4. WHAT DOES THE FUNDING COVER?
The EC financial support (to the facility owner) serves to provide access “free of charge” to external users, including all the infrastructural, logistical, technological and scientific support; this also covers training courses, travel and subsistence for users. Researchers from USA can be supported if part of a selected research team.

5. DURATION
The duration of stay at a research infrastructure shall normally be limited to three months.

6. DEADLINES
The deadlines are published by the host infrastructures.

7. FULL DETAILS
The list of EC supported infrastructures with their web sites can be found at:
http://cordis.europa.eu/fp7/infrastructures/

8. WHO CAN I CONTACT?
http://ec.europa.eu/research/enquiries
2.5.3 The Ideas programme

1. PURPOSE
The IDEAS programme will be implemented through the EUROPEAN RESEARCH COUNCIL (ERC).

The ERC’s mandate is to encourage the highest quality research in Europe through competitive funding and to support investigator-initiated frontier research across all fields of research, on the basis of scientific excellence.

ERC grants will provide on average €1 billion per year for investigator-driven "frontier research", in other words the pursuit of questions at or beyond the frontiers of knowledge, without regard for established disciplinary boundaries or national borders.

2. TOPICS COVERED
Applications may be made in any field of research - including the social sciences and humanities - with particular emphasis on the social sciences and humanities - with particular emphasis on the frontier of science and scholarship.4

In particular, proposals of an interdisciplinary nature which cross the boundaries between different fields of research; proposals in new and emerging fields; and "high-risk, high-gain" proposals are encouraged. ERC-supported research should aim to broaden scientific and technological knowledge. Projects should not be linked to short-term commercial objectives.

3. WHO IS ELIGIBLE?
ERC Grants support projects which are carried out by individual teams, headed by a single "Principal Investigator" of any nationality.5

Two types of grants will be available:

- The ERC Starting Independent Researcher Grants (ERC Starting Grants). The objective is to provide adequate support to the independent careers of excellent researchers, whatever their nationality, located in or moving to the EU and associated countries, who are at the stage of establishing and leading their first research team or programme.

- The ERC Advanced Investigator Grants (ERC Advanced Grants). The objective is to encourage and support excellent, innovative investigator-initiated research projects by leading advanced investigators (of any nationality) across the EU Member States and countries associated to the framework programme. This funding stream will complement the Starting Grant scheme by targeting the population of researchers who have already established themselves as being independent research leaders in their own right.

To apply for an ERC grant, the Principal Investigator presents a frontier research project and an individual research team, which will work under his/her responsibility.

Grant applications should be submitted by a single “Principal Investigator” in conjunction with and on behalf of her/his “hosting organization,” which must be located in an EU Member State or a country associated with the Framework Programme6. The grant will be awarded to the host organization with the commitment that this institution will grant the Principal Investigator the independence to manage the research funding for the duration of the project.

4. FUNDING
ERC Starting Grants last up to five years and provide €100,000 to €400,000 of funding per year, amounting to a total of €0.5 to 2.0 million per grant.

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4 Nuclear energy research on fission and fusion should be submitted to calls under the EURATOM Research Programme. Funding of human embryonic stem cell research will be possible within the ethical framework defined in the EC 7th Framework Programme.

5 In certain fields (e.g. in the humanities and mathematics), research is often performed individually, aside from guiding research students. The term “team” is therefore used in the broadest sense. It includes cases where an individual works independently.

6 See Chapter 4.5 for list of Member States and Associated Countries
ERC Advanced Grants last up to five years and provide €100,000 to €500,000 of funding per year, amounting to a total of €0.5 to 2.5 million per grant. The level of grant will be affected by the nature of the project and team and whether it is intended to set up a new team or add support to an established or recently-established team.

5. DURATION
ERC grants can cover up to 5 years.

6. DEADLINES
The IDEAS programme will cover the period 2007-2013 and there will be annual calls for proposals. From 2008 onwards there will be annual calls for both ERC Starting and Advanced Grant proposals.

7. FULL DETAILS
http://erc.europa.eu/

8. WHO CAN I CONTACT?
rtd-erc-info@ec.europa.eu

ERC National Contact Points (ERC NCPs) have been set up across Europe to provide information and personalised support to applicants in their native language. Contact details are provided on the ERC website.
2.5.4 People Program

Incoming International Fellowships

1. PURPOSE
To enable top-class researchers from outside Europe to work on research projects in Europe, with the view to developing mutually-beneficial international research.

2. TOPICS COVERED
MARIE CURIE ACTIONS are open to all domains of research.

3. WHO IS ELIGIBLE?
The action is open to researchers from any country except EU Member States and Countries associated with the Framework Programme. Applicants may not have spent more than 3 years during the previous 4 years in the territory of a Member State or Associated country.

On the date of the relevant deadline for submission of proposals, applicants must be in possession of a doctoral degree, or have at least four years of full-time equivalent research experience. It is however expected that the researchers will typically have a more senior profile in terms of experience.

If a researcher originates from one of certain "International Cooperation Partner Countries" (including Developing Countries and countries in Eastern Europe and Central Asia) the scheme may include provision to assist him/her to return to their country of origin, thus helping to establish sustainable co-operation between these countries and European research organisations.

4. WHAT DOES THE FUNDING COVER?
Monthly living allowance; mobility allowance for expenses linked to relocation; travel allowance; contribution to the cost of attending conferences, training etc. as well as a contribution to research costs and overheads.

5. DURATION
12 to 24 months. Possible return phase of 12 months to country of origin for eligible candidates.

6. DEADLINES
Annual calls with a single deadline per year.

7. FULL DETAILS

8. WHO CAN I CONTACT?
National contact points can be found at: http://cordis.europa.eu/fp7/ncp_en.html

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7 Nuclear energy research on fission and fusion should be submitted to calls under the EURATOM Research Programme. Funding of human embryonic stem cell research will be possible within the ethical framework defined in the EC 7th Framework Programme.

8 The monthly living allowance is according to a fixed rate depending on the host country and the type of contract. Full details are available in annex 3 of the ‘People’ Work Programme: http://ec.europa.eu/research/fp7/home_en.html
Outgoing International Fellowships

1. PURPOSE
This action aims to reinforce the international dimension of the career of European researchers by giving them the opportunity to be trained and acquire new knowledge in a high-level research organization in a third country (including the U.S.). Subsequently, these researchers will return with the acquired knowledge and experience to an organization in a Member State or Associated country.

2. TOPICS COVERED
MARIE CURIE ACTIONS are open to all domains of research.

3. WHO IS ELIGIBLE?
Researchers must be nationals of a Member State or Associated country.

The researchers shall be selected on the basis of a proposal submitted in liaison with a return host organization in a Member State or an Associated country. The researchers will be in a situation of secondment during the initial phase of training in the partner organization in the third country.

The contracts will be concluded with the return host organizations of the Member States or the Associated countries for a total duration of up to 3 years.

On the date of the relevant deadline for submission of proposals, researchers addressed under this action must be in possession of a doctoral degree, or have at least four years of full-time equivalent research experience. As the action is directed at life-long training and career development, it is however expected that the researchers will typically have a more senior profile in terms of experience.

4. WHAT DOES THE FUNDING COVER?
Monthly living allowance; mobility allowance for expenses linked to relocation; travel allowance; contribution to the cost of attending conferences, training etc. as well as a contribution to research costs and overheads.

5. DURATION
The project must include a coherent research program for an initial outgoing phase, of between 1 and 2 years, to be spent in a distinct legal entity in a third country (“partner organization”) and a mandatory re/integration phase of 1 year within the contracting organization (“return host organization”) in a Member State or Associated country. The reintegration phase will normally commence directly after the outgoing phase.

6. DEADLINES
Annual calls with a single deadline per year.

7. FULL DETAILS

8. WHO CAN I CONTACT?
National contact points can be found at: http://cordis.europa.eu/fp7/ncp_en.html

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9 Nuclear energy research on fission and fusion should be submitted to calls under the EURATOM Research Programme. Funding of human embryonic stem cell research will be possible within the ethical framework defined in the EC 7th Framework Programme

10 The monthly living allowance is according to a fixed rate depending on the host country and the type of contract. Full details are available in annex 3 of the 'People' Work Programme: http://ec.europa.eu/research/fp7/home_en.html
2.5.5 EU-U.S. Education Agreement: Schuman-Fulbright

1. PURPOSE
The Schuman-Fulbright programme provides support to a small number of professionals (including professionals in training) to undertake studies or training in areas of specific relevance to the EU-U.S. relationship at institutions in the U.S. or EU.

2. TOPICS COVERED
Selected EU and U.S. grantees will conduct study, research, lecturing on the other side of the Atlantic on topics related to the EU integration process and policies and to EU/U.S. relations. Priority fields of study may be decided on an annual basis. Projects involving internships in companies and organisations may also be considered.

3. WHO IS ELIGIBLE?
Professionals, academics and policy makers from any of the EU Member States and from the U.S. are eligible. EU applicants are expected to have prior experience in at least two EU countries. U.S. applicants are expected to carry out their projects in at least two EU Member States. Both EU and U.S. applicants should have clear plans to make use, upon their return to country, of their Schuman-Fulbright project activity in a way that increases knowledge/awareness of EU affairs and/or brings added value to EU-U.S. relations.

4. WHAT DOES THE FUNDING COVER?
A monthly stipend covering part of subsistence costs and a fixed amount for the travel costs.

5. DURATION
3 to 12 months of study, research or lecturing on the other side of the Atlantic

6. DEADLINES
The Schuman-Fulbright programme will cover the period 2007-2013 and there will be annual call for proposals.

7. FULL DETAILS
Fulbright Commission for Belgium and Luxembourg http://www.fulbright.be/
Council for International Exchange of Scholars: www.cies.org/us_scholars
Institute of International Education: www.iie.org

8. WHO CAN I CONTACT?
Council for International Exchange of Scholars
3007 Tilden St. NW – Suite 5M
Washington, DC 20009-3008

Photo by: National Institutes of Health
Chapter 3: Scientific Cooperation between EU member states and the United States: Examples of transatlantic collaborations in the Health sector

Whereas EC funding programs bring a pan-European dimension to transatlantic S&T cooperation, many bilateral arrangements between individual Member States and the U.S. Government or between individual institutions on both sides of the Atlantic provide significant incentives to transatlantic research cooperation. Scientific partnerships can appear in different forms such as cooperation between institutions, mobility of staff and the establishment joint research laboratories. A few examples are described below:

A. Cooperation between institutions

Cooperation between institutions in the EU Member States and institutions in the U.S. is particularly important for promoting "brain circulation" where scientists and engineers leave their home countries to build bridges with foreign professionals leading innovative studies abroad.

In Germany, the Deutsche Forschungsgemeinschaft (DFG) is the central, self-governing research funding organisation that promotes research at universities and other publicly financed research institutions. The DFG provides several research programs such as The Mercator Programme which enables Germany's research universities to invite highly qualified scientists and academics working abroad to complete a DFG funded stay at their institutes in joint cooperative projects. The Max Planck Society provides several examples of successful scientific cooperation between German institutions and institutions in the United States. One example is the research project: Characterization of zebra fish mutants defective in sensory hair cell function, which involves a cooperation agreement between MPI for Medical Research in Heidelberg, Germany and Vollum Institute in Portland, USA.

For more on DFG: http://www.dfg.de/en/research_funding/scientific_contacts/mercator/
Additional examples of cooperation can be found at: http://www.mpg.de/english/institutesProjectsFacilities/instituteChoice/medizinische_forschung/instProfil/instKooperationen/index.html

In Ireland, the Health Research Board (HRB) is the lead agency supporting and funding health research and is involved in a number of international research programs involving U.S. health institutions. Among others, The All Ireland National Cancer Institute Cancer Consortium has made significant developments to date in the areas of prevention, clinical trials, cancer registries, training and education and telesynergy (http://www.allirelandnci.org). Additional information about Health Research Board: www.HRB.ie

In Finland, Tekes (Finish Funding Agency for Technology and Innovation) has a running program called FinnWell aimed at promoting health and wellbeing through technology applications and service innovations (www.tekes.fi/finnwell). Besides providing funding for Finnish counterparts in joint projects the programs offer a forum for the exchange of information and networking (www.tekes.fi/eng/programmes). Additional information about Tekes: www.tekes.fi

B. Mobility of Staff

Mobility of staff supports career development of experiences for researchers at different stages of their careers, and enhances diversification of skills at interdisciplinary levels. It also supports researchers in attaining and/or strengthening a leading independent position, e.g. principal investigator, professor or other senior position in education or enterprise.
In France, Inserm provides an example of scientific agreement between Inserm and NIH regarding mobility of staff. The agreement is a plan of action for post-doctoral training entitled “European Research Career Transition and Faculty Development Awards”. The program extends over 6 to 8 years where the first 3 years is a post-doctorate in one of the institutes of intramural research at NIH which is followed by an Inserm Junior Contract or an Avenir program which allows young talented scientists to start their own research team. Additional information “European Research Career Transition and Faculty Development Awards”: http://www.inserm.fr/en/actualites/appeloffre/att00003903/2007_callforcandidates_NIH_fin.pdf

In Germany, The Max Planck Society provides two examples of promotion of junior scientists and scientific mobility: Promoting doctoral candidates at the International Max Planck Research Schools and International exchange of scientists. The Research Schools are centers of scientific excellence in selected innovative and interdisciplinary areas of research. Each Max Planck Institute has funds at its disposal for international scientist exchange and is alone responsible for selecting and inviting foreign guest scientists. In addition, the NIH-DFG Research Career Transition Awards Program aims to enable young scientists to pursue research over a period of five to six years, beginning at an NIH institute in the USA and continuing at a German research institution. The German Academic Exchange Service (DAAD) offers a wide array of programs supporting the mobility of undergraduate and graduate students, postdoctoral researchers and faculty members from and to Germany. For additional information see: http://www.mpg.de/english/aboutTheSociety/scientificCooperation/cooperationAbroad/internationalProfile/index.html For DFG: http://www.dfg.de/en/research_funding/index.html For DAAD: www.daad.de or www.daad.org

In Ireland, The Health Research Board/National Cancer Institute Health Economics Fellowships program aims to encourage successful applicants to pursue careers in health economics on the island of Ireland. The duration of the fellowship will be four years leading to a PhD degree in health economics. The Fellowship includes ten months of coursework in health economics, cancer prevention and health policy, based mainly in Ireland, followed by two years of mentored research at the National Cancer Institute (NCI) in Washington DC and a final year of mentored research at an affiliated host institution in Ireland. Additional information about the Health Economics Fellowships program: http://www.hrb.ie/display_content.php?page_id=248

In Finland, Tekes and Academy of Finland have a joint program FiDiPro, Finland Distinguished Professor Programme which enables distinguished researchers, both foreign and expatriates to work and team up with the 'best of the best' in Finnish academic research, creating long-term synergy in science and technology. Additional information: www.fidipro.fi/eng/
C. Joint Research Laboratories

Joint Research Laboratories are important because they can provide access to necessary equipment, human capital and research data that may not be available in other countries. International Research partnerships are important because it address global challenges (e.g. climate change, energy security and infectious diseases).

The Max Planck Society in Germany has received an offer to establish its first foreign institute in the United States, Florida’s Palm Beach County. This would facilitate the creation of a Max Planck Institute in the life sciences on the Jupiter Campus of Florida Atlantic University (FAU). The institute would eventually have three departments staffed by around 135 researchers from all over the world. At the same time, the Max Planck Society wants to offer a visiting scientist program and provide lab space for internationally renowned researchers to carry out their work.

Additional information about Max Planck institute in the United States:

Inserm in France has established innovative facilities in the form of international associate laboratories, Inserm units abroad and facilities of partner institutions in France. These new forms of partnership allow the Institute to develop new research programs based on team complementarity and interdisciplinarity, to share access to technological facilities, to set up common clinical trials and to make joint applications for financial support from national and international funding bodies. Two Inserm units have been created in 2008 in the USA: one in the Baylor Institute for Immunology Research in Dallas, Texas and one in the University of California in Irvine. The Inserm associated laboratory in the United States is situated in Pittsburgh, PA and two other associated laboratories are planned to be set up in California. Additional information about international associate laboratories and units abroad:
http://www.inserm.fr/en/inserm/programmes/internationaux/laboratoires_associes/