

American grant funding in environmental science

Delia Gallinaro*

Director, Office of Research and Special Programs, Sam Houston State University, P.O. Box 2448, Huntsville, Texas 77341-2448, U.S.A.
Tel: (936) 294-3760, Fax : (936) 294-3622, E-mail: RGS_DXG@SHSU.EDU

INTRODUCTION

The workshop focused on American grant funding for foreign researchers in environmental science. It was divided into three sections: funding sources, agencies and programs and proposal development information. The National Science Foundation (NSF) will not allow a foreign institution to lead a project but does allow for extensive research partnerships. Some agencies however do allow foreign applicants to take the lead in a grant application. Both the Environmental Protection Agency (EPA) and the National Institute of Health (NIH) have awarded grants directly to international institutions. Most programs will state in the grant guidelines whether foreign applications will be accepted. For foreign scientists, American grant collaboration can include being a co-Principal Investigator, Consultant, or Grant Participant.

TYPES OF AMERICAN GRANTS

1. Scientific research and/or project grants to support investigations aimed at discovery of facts, revision of accepted theories, or application of new or revised theories.

2. Demonstration grants to establish the feasibility of a particular theory or approach.

3. Research and Development grants are awarded to investigate feasibility of an idea or technology directly tied to a problem.

Example: EPA's Office of Research and Development: 66.511 STAR Program supports research and engineering to: (1) determine the environmental effects of air quality, drinking water, water quality, hazardous waste, toxic substances and pesticides, (2) identify, develop, and demonstrate effective pollution control techniques, and (3)

perform risk assessments to characterize the potential adverse health effects of human exposures to environmental hazards. Investigator initiated grants may be funded in broad areas such as environmental chemistry and physics, environmental engineering, and health and ecological effects of pollution.

4. Training grants are funds given to institutions to promote workforce development in a specific area.

5. Planning/Workshop/Travel grants are awarded specifically to bring collaborators together to discuss a project.

6. Grants for education are awarded for curriculum development, e-learning development, promoting special groups (e.g. women in science). Most agencies promote incorporating educational activities in research grants.

Example: NSF's International Collaboration for Higher Education and Social Change; this is a collaboration with the European Science Foundation (<http://www.nsf.gov/pubs/2008/nsf08050/nsf08050.jsp>).

If a foreign institution participates in an American grant, they are required to follow the same ethical, compliance and administrative protocols as the American counterparts. Furthermore, they should expect that the lead institution will want to establish financial policies that will be used to provide compensation to the foreign researchers. Some issues that will need to be negotiated between institutions are: type of contract (fee for service, cooperative agreement or other), monetary conversion rate policy, administrative cost rate and program deliverables (including reports). NIH's National Institute of Allergy and Infectious Diseases provides training for foreign researchers at <http://www.niaid.nih.gov/ncn/grants/int/grantspolicy/default.html>. This training contains material that is applicable to most American grant programs.

* Delia Gallinaro, MPA, has moderated the American Grant Funding in Environmental Science Educational Workshop (AGFES), which constituted a part of The Second International Environmental Best Practices Conference, 14-18 September 2009, Krakow, Poland

SECTION I. FUNDING SOURCES

For foreign scientists, the most important aspect of finding American research funding is **identifying American researchers or institutions that have scientific experience and skills in the same field of your research and developing a professional relationship that can lead to collaborative opportunities**. In addition to attending professional conferences or joining associations, you can access online scientific databases that will provide you with peer-reviewed professional articles. Some examples of these databases are:

- **NIH's PUBMED** (www.ncbi.nlm.nih.gov/pubmed/) for Environmental Health research,
- **NSF** has an award database that you can search two ways:
 - by text, name or institution (<http://www.nsf.gov/awardsearch/>), each of the awards also has the project summary,
 - or on the home page (www.nsf.gov); click FUNDING on second option on blue line directly below National Science Foundation; click on A-Z INDEX under second search option titled "Other Ways to Find Funding"; this is a comprehensive list of ALL programs, the page will display all awarded proposals; click on any option (award number, title, NSF organization, program, Start Date, Principal Investigator, State, organization, Award Amount to Date) and it will bring you to a summary page that includes PROGRAM ABSTRACT,
- **EPA** has an award database that may assist you to identify U.S. based scientists in a particular field of research http://yosemite.epa.gov/oarm/igms_egf.nsf/HomePage?ReadForm.

There are also private subscription services aimed to facilitate funding information and collaboration among scientists worldwide. The most widely used resources are:

- **Community of Science (COS)** (www.cos.com/); institutions must pay a fee to subscribe to this service. The COS network includes: (1) finding funding opportunities from 25,000 records, (2) identifying experts and collaborators from 1,600 institutions world wide with as many as 400,000 expert profiles, and (3) promote research through a Scholar Universe database. Representative for Poland is Krzysztof Murawski, Area Sales Manager; Tel: +48 2 2781 483, Mobile: +48 600 457 222, Fax: +44 1223 215514, E-mail: Krzysztof.murawski@emea.proquest.com,
- **InfoEd International** (www.infoed.org); this database also requires a subscription fee. It contains 14,000 funding opportunities. Contact for international inquiries are handled from their New York office - Tim Degregory; E-mail: t.degregory@infoed.org,
- **American Association for the Advancement of Science (AAAS)** (www.aaas.org/programs/); AAAS has 100 affiliated societies and 150 foreign corresponding members through its Consortium of Affiliates for International Programs (CAIP). CAIP members,

including those from Poland, meet twice annually to discuss international activities and to exchange information on the status of international science. CAIP Representatives for POLAND:

- **Institute of Geography and Spatial Organization of the Polish Academy of Sciences**, Krakowskie Przedmiescie 30, Warsaw, Poland; Tel: (48) (22) 26193, representative and staff liaison: Prof. Dr. Marcin Rosciszewski;
- **Phoniatric Section of the Polish ENT Society**, 60355 Poznan, Przybyszewskiego 49, Poland; Tel: (48) (61) 673215, representative: Prof. Andrzej Obrebowski, M.D., Department of Phoniatrics and Audiology; University School of Medical Sciences in Poznan, 61-867 Poznan, Garbary 12/4, Poland; Tel: (48) (61) 525307, E-mail: aobrebowski@am.poznan.pl, staff liaison: Dr. Bozena Woznica, MD, Chair and Department of Phoniatrics and Audiology, University of Medical Sciences in Poznan, 60-348 Poznan, Lubeckiego 27A, Poland; Tel: (48) (61) 8672562, E-mail: bozena.woznica@wp.pl,
- **Polish Sociological Association**, Nowy Swiat 72, Warszawa, Poland; Tel: (48) (22) 267737, representative: Prof. Edmund Wnuk-Lipinski, Institute of Political Sciences, Polish Academy of Science, 00-625 Warszawa, Polna 18/20, Poland; Tel: (48 22) 25522, Fax: (4822) 252146, staff liaison: Maria Ewa Haberka ,
- **Society for the Advancement of Sciences and Arts**, Prof. Michal Nawrocki, Institute of Experimental Physics, University of Warsaw, Hoza 69, 00-681 Warsaw, Poland; E-mail: michaln@fuw.edu.pl.

SECTION II. PROGRAMS

1. U.S. State Department: <http://www.state.gov/>

The agency promotes mutual understanding between the U.S. and people around the world. The Office of Academic Exchange program awards 7,000 grants to scholars and students through the Fulbright Scholars Program (<http://fulbright.state.gov/>).

2. The U.S. Department of Energy: <http://www.energy.gov/>

The agency is responsible for promoting America's energy security through scientific and technological innovation. There are many multilateral agreements with other countries and the Fossil Fuel Program offers some detailed information regarding these (<http://fossil.energy.gov/international/index.html>).

3. The Environmental Protection Agency (EPA): <http://www.epa.gov/>

The agency is responsible for the following sectors and research grants are available in each of these areas:

Air: Acid Rain, Climate Change, Vehicle Emissions	http://www.epa.gov/air/grants_funding.html
Clean up: Brownfields, Superfund	http://www.epa.gov/swerosps/bf/pilot.html
Ecosystems: Wetlands, Watersheds, Endangered Species	http://www.epa.gov/ebtpages/econgrantsprogramgrants.html
Environmental Education	http://www.epa.gov/enviroed/grants.html
Environmental Justice	http://www.epa.gov/compliance/environmentaljustice/grants/index.html
Environmental Technology	http://www.epa.gov/etv/grantsandfunding.html
Human Health: Children's Health, Aging Initiative, School Environments	http://www.epa.gov/ordntrnt/ORD/npd/hhrp/index.html
Industry: Small Businesses, Permits, Reporting	http://www.epa.gov/partners/
International Cooperation	http://www.epa.gov/ebtpages/internationalcooperation.html
Pesticides: Labeling, Registration, Food Safety	http://www.epa.gov/pesticides/grants/index.html
Pollutants & Toxics: Lead, Dioxins, Asbestos, Mercury	http://www.epa.gov/opptintr/pubs/grants.html
Pollution Prevention: Recycling, Conservation, Fuel Economy	http://www.epa.gov/oppt/p2home/pubs/grants/index.html
Radiation and Radioactivity: Exposure, Emergency Response, Radioactive Waste	http://www.epa.gov/rpdweb00/
Research: Publications, Labs, Models, Test Methods	http://www.epa.gov/ord/
Treatment & Control: Treatment Technologies, Pollution control	http://www.epa.gov/ebtpages/treattreatmenttechnologies.html
Wastes: Hazardous Wastes, Landfills, Household Waste	http://www.epa.gov/osw/
Water: Wastewater, Drinking Water, Ground Water	http://www.epa.gov/water/funding.html

Useful EPA databases: <http://www.epa.gov/nheerl/publications/databases.html>
http://www.epa.gov/ogd/competition/open_awards.html

3.1. Office of International Programs:

<http://www.epa.gov/oia/>

Through its international air and climate programs, EPA works with other countries.

Example: Methane to Market grant program in which a project from Poland was awarded funding. The project description and contact information can be found at

<http://www.methanetomarkets.org/partners/country/poland.html>,
http://www.methanetomarkets.org/projects/project_detail.aspx?id=348.

Contacts for Poland within this Program are:

Steering Committee – Zbigniew Kamiński, Deputy Director, Ministry of Economy, Energy Department, Plac Trzech Krzyży 3/5, 00-507 Warsaw, Poland,

Agriculture Subcommittee – Grazyna Kowalik, Chief Specialist, Ministry of Agriculture and Rural Development, Wspólna 30, 00-930 Warsaw, Poland; E-mail: Grazyna.Kowalik@minrol.gov.pl, Kamila Kreis-Tomczak, Institute for Construction, Mechanization and Electrification of Agriculture, Rakowiecka 32, 02-532 Warsaw, Poland; Tel: 48 61 820 33 31, E-mail: kakreis@man.poznan.pl,

Coal Mines Subcommittee – Marek Szarafiński, Head of Team, Kompania Wegłowa, Powstancow 30, 40-039 Katowice, Poland; Tel: 48 32 757 20 00, E-mail: mszarafinski@kwsa.pl,

Landfill subcommittee – Joanna Darska, Senior Specialist, Ministry of the Environment, Wawelska 52/54, 00-922 Warsaw, Poland; Tel: 48-22-57-92-817, E-mail: joanna.darska@mos.gov.pl, Agnieszka Tarach, Senior Specialist, GIOS, Wawelska 52/54,

00-922 Warsaw, Poland; Tel: 48 22 57 92 384, E-mail: a.tarach@gios.gov.pl,

Administrative Liaisons – Andrzej Gdula, Economic Counselor, Embassy of the Republic of Poland, 2460 16th St. NW, Washington D.C. 20009, U.S.A.; Tel: 202 467 6690 x241, E-mail: a.qdula@polemb.us,

Lukasz Jaworski, Ministry of Economy, Plac Trzech Krzyży 3/5, 00-507 Warsaw, Poland; Tel: 48 22 6935534.

3.2. STAR Grants Program: <http://www.epa.gov/ncer/>

The EPA's National Center for Environmental Research's Science to Achieve Results (STAR) program funds research grants in numerous environmental science and engineering disciplines through a competitive solicitation process and independent peer review. The program engages the nation's best scientists and engineers in targeted research that complements EPA's laboratory research and research conducted by partners in other federal agencies. The web site allows you to listen to a podcast from various universities.

3.3. Environmental Technologies Verification (ETV Program): <http://www.epa.gov/etv/>

There are currently 4 pilot projects with Europe:

- **AIRTV** (air): <http://www.airtv.eu/>, contact – Ignacio Calleja; Tel: +34 945 29 81 44, x110,

- **EURODEMO** (soil and groundwater remediation): <http://www.eurodemo.info/>, contact – Dr. Yvonne Spira; Tel: +431-31304/5932,
- **PROMOTE** (soil-groundwater protection and rehabilitation): <http://www.promote-etv.org/>, contact – Thomas Track; E-mail: track@dechema.de,
- **TESTNET** (water, clean production and monitoring): <http://www.est-testnet.net/servlet/KBaseShow?m=3&cid=16042&catid=16043>, contact – Berrie Van Kampen; E-mail: berrie.vankampen@tno.nl.

4. The National Science Foundation: <http://www.nsf.gov/>

NSF supports fundamental research and education across all fields of science and engineering. In 2009 its budget is \$9.5Billion, which includes \$3Billion in stimulus funding by the US government. NSF funds go to all 50 states through grants to 1,900 institutions. Each year the agency receives

44,400 requests for funding and makes 11,500 new funding awards. The agency has opened offices in Europe and Asia in an effort to promote international research collaborations.

4.1. NSF Contacts for International Programs

- Dr. David Stonner, Head, European Office, National Science Foundation, 14 Bd. Haussmann, 75009 Paris, France; Tel: +33 (0)1 43 12 70 08, E-mail: dstonner@nsf.gov. Dr. Stonner can make presentations to groups in Europe upon request.
- OISE Europe and Eurasian Representative is Dr. Cassandra Dudka; E-mail: dudka@nsf.gov, Tel: (703) 292-7250.
- International Collaboration in Chemistry (ICC), Dr. Zeev Rosenzweig; E-mail: zrosenzw@nsf.gov, Tel: (703) 292-7719.

4.2. Outline of NSF programs

Program Name	NSF office/website	Deadlines	Purpose
International Research and Education: Planning Visits and Workshops	Office of International Science & Engineering (OISE) http://www.nsf.gov/pubs/2004/nsf04035/nsf04035.html	September 20, 2009, February 20, 2010 and May 20, 2010	Building research collaborations
Developing Global Scientists and Engineers (International Research Experiences for Students (IRES) and Doctoral Dissertation Enhancement	OISE http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12831	September 15, 2009 and February 15, 2010	Provide international research experience for U.S. students
Partnerships for International Research and Education	OISE http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12819		Innovative research and education
International Collaboration in Chemistry between U.S. Investigators and their Counterparts Abroad	ICC http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13627	November 01-30, 2009 and July 01-August 02, 2010	3 year collaborations with one of 4 centers in Europe
Environmental Chemical Sciences NEW PROGRAM	IES Division of Chemistry http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503416	November 01-30, 2009 and July 01-August 02, 2010	Basic research promoting understanding of natural and anthropogenic chemical processes in the environment
Global Learning and Observations to Benefit the Environment	GLOBE Program http://www.globe.gov/	Each participating country allocates funding for projects	Government to government agreements to promote environmental education and develop working structure between scientists, teachers and students
Ecosystem Science	Division of Environmental Biology http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12822	January 09 and July 09, annually	Research on ecosystems and human-dominated environments
Environmental Engineering	Division of Earth Sciences http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13684	December 05 and June 01, annually	Research on physical, chemical and biological processes within water bodies
Hydrologic Sciences	Division of Earth Sciences http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13684	December 05 and June 01, annually	Research on physical, chemical and biological processes within water bodies

4.3. EU Partnering Agencies with NSF

1. (FWF), Dr. Bettina M. Loescher, Scientific Administrator for Chemistry and Nano-Sciences, Fonds zur Forderung der wissenschaftlichen Forschung (FWF, Austrian Science Fund), Sensengasse 1, A-1090 Wien, Austria; Tel: +43 1 505 67 39 84 05, Email: loescher@fwf.ac.at.
2. France (ANR), Prof. Marie-Louise Saboungi, Department of Chemistry and Processes for Sustainable Development, Agence Nationale de la Recherche (ANR), 212 rue de Bercy, F-75012, Paris, France; Tel: +33 1 78 09 80 58, E-mail: Marie-Louise.Saboungi@agencerecherche.fr.
3. Germany (DFG), Dr. Ing. Georg Bechtold, Deutsche Forschungsgemeinschaft (DFG), Chemie und Verfahrenstechnik-Polymerwissenschaft, D-53170 Bonn, Germany; Tel: +49 (228) 885-2818, E-mail: georg.bechtold@dfg.de.
4. UK (EPSRC), Katie Daniel, Senior Physical Sciences Manager, EPSRC, Polaris House, North Star Avenue, Swindon SN2 1ET, UK; Tel: 01793 442895, E-mail: Katie.daniel@epsrc.ac.uk.

SECTION III. WRITING A SUCCESSFUL PROPOSAL

In writing a winning grant for an American or a European Union funding agency it is important to emphasize the: SCIENCE, IMPACT, MANAGEMENT of the grant.

In the U.S. every grant is funded for the purpose of impacting **public policy**. You will need to explain the: (1) social or scientific problem that you are addressing, (2) the existing solutions to the problem or what the research/literature indicates to be possible solutions, and (3) your own projected solution to the problem that is different from all other approaches. A grant may be judged more favorably by reviewers if it is interdisciplinary and involves an educational component. Each Federal agency will have their own proposal procedures but if you follow the NSF model you will be prepared to write any grant. Grant writing tips for the EPA can be found at <http://www.epa.gov/ogd/recipient/tips.html> and NSF has a guide for proposal writing at <http://www.nsf.gov/pubs/2004/nsf04016/start.html>.

NSF represents the top scientific agency in the U.S. and all NSF grants must include in the project abstract (summary) two criteria: **the intellectual merit** of the project (SCIENCE) and **the broader impact** (IMPACT) of the project:

- (a) Example: <http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0929491>,
- (b) Example: <http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0853106>,
- (c) Example: <http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0931504>.

All NSF grants must have an American university lead the project so foreign partners must demonstrate

complimentary backgrounds, experiences and expertise from the American counterparts. In this way, the entire team demonstrates **capacity** to proceed with the proposed research project. The Budget, Timeline and Institutional Commitment and Organization are important in a grant application because they imply ability to MANAGE the grant. This point is very important with American funding agencies because if a grant is financially mismanaged the entire agency is at risk of losing program appropriation from the U.S. Congress. Below is a sample grant format using NSF template. The term "PI" is used for Principal Investigator.

SECTIONS OF A NSF PROPOSAL

a. Cover Sheet

Applicants are required to select the appropriate program announcement, solicitation or program description. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. The title of the project must be brief, scientifically or technically valid, intelligible to a scientifically or technically literate reader, and suitable for use in the public press. NSF may edit the title of a project prior to making an award.

b. Project Summary

The proposal must contain a summary of the proposed activity suitable for publication, not more than one page in length. It should not be an abstract of the proposal, but rather a self-contained description of the activity that would result if the proposal were funded. The summary should be written in the third person and include a statement of objectives and methods to be employed. It must clearly address in separate statements (within the one-page summary): (1) the intellectual merit of the proposed activity, and (2) the broader impacts resulting from the proposed activity.

c. Table of Contents

A Table of Contents is automatically generated for the proposal by the FastLane system. The proposer cannot edit this form. FastLane is the electronic grant application submission system used by NSF.

d. Project Description

All proposals to NSF will be reviewed utilizing the two merit review criteria. Project Description should provide a clear statement of the work to be undertaken and must include: objectives for the period of the proposed work and expected significance; relation to longer-term goals of the PI's project; and relation to the present state of knowledge in the field, work in progress by the PI under

other support and work in progress elsewhere. The Project Description should outline the general plan of work, including the broad design of activities to be undertaken, and, where appropriate, provide a clear description of experimental methods and procedures and plans for preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products. It must describe as an integral part of the narrative, the broader impacts resulting from the proposed activities, addressing one or more of the following as appropriate for the project:

- how the project will integrate research and education by advancing discovery and understanding while at the same time promoting teaching, training, and learning,
- ways in which the proposed activity will broaden the participation of underrepresented groups (e.g. gender, ethnicity, disability, geographic, etc.),
- how the project will enhance the infrastructure for research and/or education, such as facilities, instrumentation, networks, and partnerships,
- how the results of the project will be disseminated broadly to enhance scientific and technological understanding,
- potential benefits of the proposed activity to society at large.

The Project Description **may not exceed 15 pages**. Visual materials, including charts, graphs, maps, photographs and other pictorial presentations are included in the 15-page limitation.

Unfunded Collaborations. Any substantial collaboration with individuals not included in the budget should be described and documented with a letter from each collaborator, which should be provided in the supplementary documentation section of the FastLane Proposal Preparation Module. Collaborative activities that are identified in the budget should follow instructions.

Group Proposals. NSF encourages submission of proposals by groups of investigators; often these are submitted to carry out interdisciplinary projects. Unless stipulated in a specific program solicitation, however, such proposals will be subject to the 15 page limitation.

e. References Cited

Reference information is required. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the Website address also should be identified. Applicants must be especially careful to follow accepted scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. While there is no established page limitation for the references, this section must include bibliographic citations only.

f. Biographical Sketch(es)

Senior Personnel

A biographical sketch (limited to two pages) is required for each individual identified as senior project personnel. This includes:

- Professional Preparation (educational degrees, year, major, institution),
- Appointments (beginning with most current),
- Publications (up to 5 of the most closely related to the proposed project).

Other Personnel

For the personnel categories listed below, the proposal also may include information on exceptional qualifications that merit consideration in the evaluation of the proposal:

- postdoctoral associates,
- other professionals,
- students (research assistants).

g. Budget

Each proposal must contain a budget for each year of support requested, unless a particular program solicitation stipulates otherwise. Completion of the budget does not eliminate the need to document and justify the amounts requested in each category. A budget justification of up to three pages is authorized to provide the necessary justification and documentation specified below.

h. Current and Pending Support

This section of the proposal calls for required information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing grants.

i. Facilities, Equipment and Other Resources

This section of the proposal is used to assess the adequacy of the organizational resources available to perform the effort proposed. Proponents must describe only those resources that are directly applicable.

j. Special Information and Supplementary Documentation

Except as specified below, special information and supplementary documentation must be included as part of the project description (or part of the budget justification), if it is relevant to determining the quality of the proposed work. Information submitted in the following areas is not considered part of the 15-page project description limitation. This Special Information and Supplementary Documentation section also is not considered an appendix. Specific guidance on the need for additional documentation may be obtained from the organization's sponsored projects office or in the references cited below:

- rationale for performance of all or part of the project off-campus or away from organizational headquarters,
 - documentation of collaborative arrangements of significance to the proposal through letters of commitment,
 - environmental impact statement for activities that have an actual or potential impact on the environment,
 - work in foreign countries; some governments require nonresidents to obtain official approval to carry out investigations within their borders and coastal waters under their jurisdiction. PIs are responsible for obtaining the required authorizations and for advising NSF that they have been obtained or requested. Advance coordination should minimize disruption of the research,
 - research in a location designated or eligible to be designated, a registered historic place,
 - research involving field experiments with genetically engineered organisms,
 - documentation regarding research involving the use of human subjects, hazardous materials, vertebrate animals, or endangered species,
 - projects that involve technology utilization/transfer activities that require a management plan or that involve special reports or final products,
 - Facilitation Awards for Scientists and Engineers with Disabilities (FASSED),
 - Research in Undergraduate Institutions,
 - Research Experiences for Undergraduates.
- In addition, the supplementary documentation section should alert NSF officials to unusual circumstances that require special handling, including, for example, proprietary or other privileged information in the proposal, matters affecting individual privacy, or possible national security implications.

(U.S.) NSF

(EU) CORDIS

Cover page

Cover page

Project summary

List of participants

Table of contents

Table of contents

Project description

Objectives and expected significance of the project

Relation to longer term goals

Relation to the present state of knowledge in the field

Work in progress by the PI under other support

General plan of work with broad design of activities, description of experimental methods, plans for preserving, documenting, sharing data

Scientific and/or technical quality, relevant to the area addressed by the call

Concept and objectives

Contribution to the co-ordination of high quality research

Quality and effectiveness of the co-ordination mechanisms
Work plan with deliverables, milestones, work package descriptions and summary of staff effort (can use grant templates)

15 pages

20 pages

References

Management structure and procedures (5 pages)

Biographical Information

Individual participants (one page per participant)

Budget

Consortium

Current and pending support

Committed resources

Facilities, equipment and other resources

Supplementary information

Expected impact of the work

Dissemination of project results

Ethical issues (grant template)
