



***Office of International
Science and Engineering***

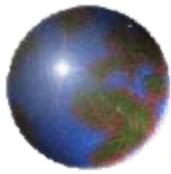


**Supporting International Collaborations
for U.S. Researchers at the
National Science Foundation**



**NSF Regional Grants Conference
October 20-21, 2008**

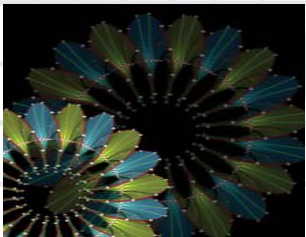
**Anne Emig
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Why International Collaboration?

“International cooperation in science is not a luxury; it is a necessity – and the foundation for the future.”

*Arden L. Bement, Jr.
NSF Director
May 2006*

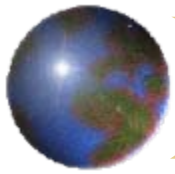


Investing in America's Future

Strategic Plan FY 2006-2011

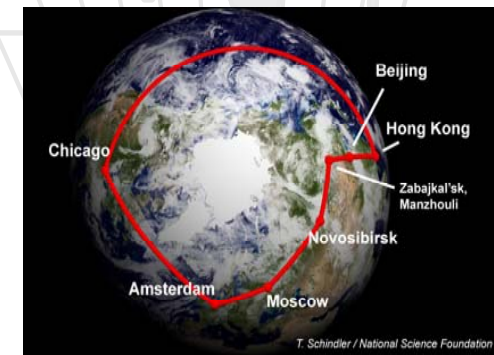
NSF 06-48

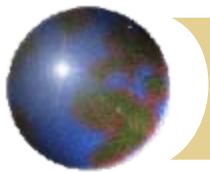
*Strengthen the nation's collaborative advantage by developing unique networks and innovative partnerships...both nationally and **internationally**, to leverage intellectual capabilities.*



International Collaboration at NSF

- Advance the FRONTIERS of Science and Engineering
 - ACCESS to unique expertise, facilities, and phenomena
 - LEVERAGE limited resources
- Prepare a GLOBALLY-ENGAGED U.S. S&E workforce
 - DEVELOP understanding of science abroad
 - NURTURE capable young researchers with strong networks overseas
 - RETAIN young researchers in S&E



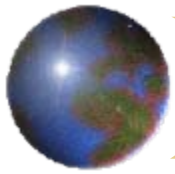


International Collaboration

Integrated throughout NSF

- Integral part of new proposals to NSF research or education programs
- Supplements to active grants
- New proposal to the Office of International Science and Engineering

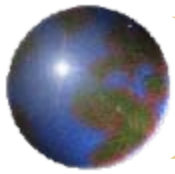




Support for International Activities

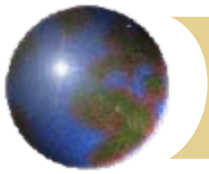
Examples of NSF support for international activities are numerous.

To name just a few...



International Activities at NSF

- Materials World Network
- International Collaborations in Chemistry
- New international component of I/UCRC program
- International Supplements to IGERT, other awards



OISE Overview

Office of International Science & Engineering

- Serve all NSF
- Fund research & education in all areas of NSF-funded S&E
- Regional Organization
 - Program Managers have country portfolios
- 3 NSF Overseas Offices
 - Tokyo, Paris, Beijing
- Relatively small budget
 - OISE programs
 - Cofunding awards in directorates

Office of International Science & Engineering (OISE)



OISE Home

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Office of International Science & Engineering (OISE)

Important Notice

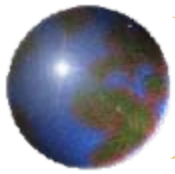
International science and engineering research and education activities are funded by all NSF directorates and offices.

Investigators seeking funding for international collaborative research may include an international component in **new proposals** submitted to their relevant NSF research program, or request [supplemental funding](#) to add international collaboration to projects supported by current NSF grants.

OISE works closely with other NSF directorates and offices to co-fund innovative, catalytic new awards and supplements that promote research excellence through international collaboration and develop the next generation of globally engaged U.S. scientists and engineers. OISE criteria for co-funding include:

- **True intellectual collaboration with a foreign partner** (The foreign partner's 2-page biographical sketch, communication outlining their role in the project, and a letter of endorsement from the foreign institution should be included.)
- **New** international collaborations, as opposed to well-established ones;
- Benefits to be realized from the **expertise and specialized skills, facilities, and/or resources** of the foreign collaborator; and
- Active research engagement of U.S. **students and junior researchers** at the foreign site.

Investigators should consult early in the application process with both the relevant disciplinary program manager and [OISE country program manager](#).

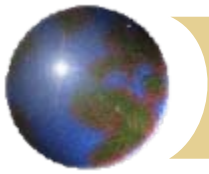


International Activities at NSF

Key elements for OISE funding

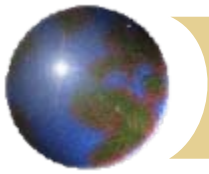
- Collaborative
- Synergistic
- Catalytic
- Engage students, junior researchers in international research





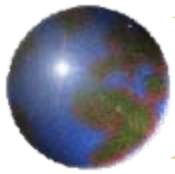
Planning Visits

- NSF 04-035
- Supports short-term travel by small teams of U.S. researchers to plan *new* collaborations
 - Assess expertise, sites, facilities, data, experimental protocols, etc.
 - Plan next steps
- Intended outcome: Proposal to NSF research directorate
 - Directorate input on proposal critical: internal review
- \$20,000 maximum



Workshops

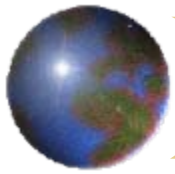
- NSF 04-035
- Small-scale, focused meetings
 - Identify areas of joint research interest
 - Develop new collaborations
- NSF supports U.S. faculty and students
- Intended outcome: proposal to NSF research directorate
- Research directorate input critical
 - Internal Review or combined internal and external review
- \$60,000 max



Pan-American Advanced Studies Institutes

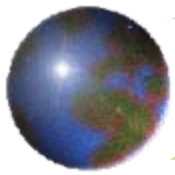
- NSF 03-506
- Modeled on NATO Advanced Studies Institutes
- PASIs aim to disseminate advanced scientific knowledge and stimulate cooperation among researchers of the Americas
- Short (2-4 wks) courses at the advanced graduate and postdoc level
- Supported by NSF/ENG, BIO and MPS, with DOE
- \$100,000 max
- Jan deadline





International Research Fellowships

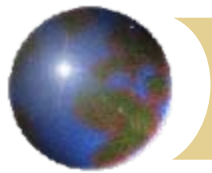
- NSF 06-582
- Introduce young scientists to international research opportunities
- Supports 9-24 mos overseas research
 - Stipend, travel, subsistence, some dependent support
- U.S. citizens & permanent residents
- Applications from women and minorities, and for work in developing countries are especially encouraged.



International Research Experiences for Students (IRES)

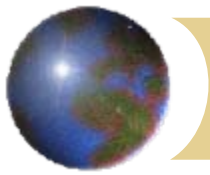
- NSF 04-036
- Graduate and/or undergraduate students
- Supports small groups of students for focused research experiences overseas
- \$150,000 max (\$50,000 per year for up to 3 years)
- Deadlines: 9/15 and 2/15





Doctoral Dissertation Enhancement Program (DDEP)

- NSF 04-036
- Provides travel support for doctoral research overseas
- Must be collaborative, with evidence of intellectual involvement of foreign institution
- U.S. faculty mentor is PI on proposal
- \$15,000 max.
- No deadlines: Proposals welcome year-round



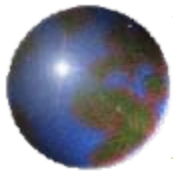
East Asia and Pacific Summer Institutes

- NSF 07-584
- Individually tailored overseas research experience
- ~ 8 weeks
- Australia, China, Japan, Korea, New Zealand, Singapore and Taiwan
- Application deadline: Dec 9, 2008
- U.S. citizens, perm residents
- Travel, subsistence, stipend



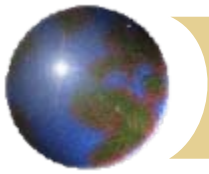
1991 SUMMER INSTITUTE KYOTO STUDY TOUR JUL.12 KIYOMIZU TEMPLE





Partnerships for International Research & Education (PIRE)

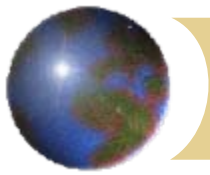
- NSF 06-589
- Objectives
 - Frontier research that leverages unique, complementary expertise of US, inat'l partners
 - Innovative international education opportunities for students, integrated with research
 - Institutional impact
- Next competition: FY2009-FY2010
 - New program announcement to be posted in early fall
 - Some changes, but similar to previous competitions
 - ❖ 5-year awards
 - ❖ Large-scale (~ up to \$2.5M each)
 - ❖ 32 active awards across all NSF disciplines
- Stay tuned



The Bad News...

OISE Does Not Typically Fund

- Travel grants
- Study abroad programs
- Sabbaticals
- Costs of the foreign counterpart
 - In rare cases, exceptions may be possible
 - ❖ Consult OISE program manager before submitting proposal



Keys to success with OISE

- Top-notch science question
 - How will the collaboration improve the research?
 - Who is your collaborator? What does he/she bring to the project?
- Involve U.S. students, junior researchers
 - Prepare, mentor, and assess
 - Pay them: travel, living costs, stipends
- Meaningful attention to diversity
- Include biosketch of key collaborator(s)
- Include letter(s) of support from collaborator(s)
- Know and observe special rules
 - Fly America Act
 - Visa regulations
- Work with others in your institution
- Consult OISE program officer early in process