



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

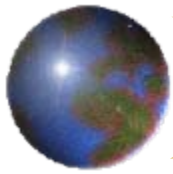


**Supporting International Collaborations  
for U.S. Researchers at the  
National Science Foundation**



**NSF Regional Grants Conference  
March 30-31, 2009**

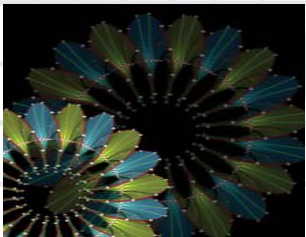
**Elizabeth Lyons  
[elyons@nsf.gov](mailto:elyons@nsf.gov)**



# *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*

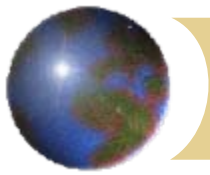


## **Investing in America's Future**

Strategic Plan FY 2006-2011

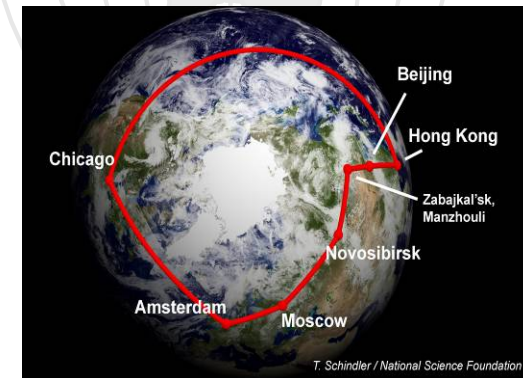
NSF 06-48

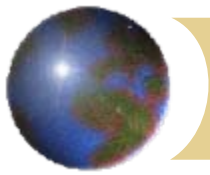
*Strengthen the nation's collaborative advantage by developing unique networks and innovative partnerships...both nationally and **internationally**, to leverage intellectual capabilities.*



# *Through international collaboration*

- Advance the FRONTIERS of Science & Engineering
  - ACCESS unique expertise, facilities, & 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



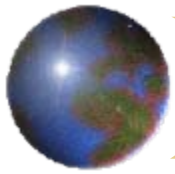


# *International Collaboration*

## *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

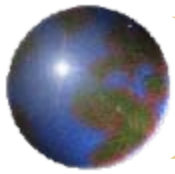




# *Support for International Activities*

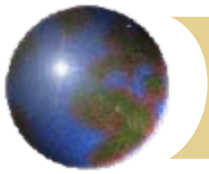
Examples of NSF support for international activities are numerous.

To name just a few...



# *International Activities at NSF*

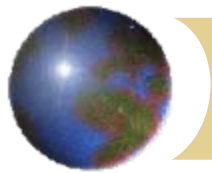
- Materials World Network
- International Collaborations in Chemistry
- BREAD
- International Supplements to IGERT, other awards



# OISE Overview

## Office of International Science & Engineering

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



# Finding the OISE Homepage

Visit our  
Homepage!

**National Science Foundation**  
WHERE DISCOVERIES BEGIN

SEARCH  
NSF Web Site

HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane

**Rap Music and Forest Ecology** →

FEATURES 1 2 3 4 II

**Funding Opportunities**

- Find Funding Opportunities
- Upcoming Due Dates
- How to Prepare Your Proposal
- Funding Trends

Program Areas

- Select One
- Select One
- .....
- Biology
- Computer, Info. Sci., Eng.
- Crosscutting, NSF-wide
- Cyberinfrastructure
- Education
- Engineering
- Environmental Research
- Geosciences
- Integrative Activities
- International**
- Math, Physical Sciences
- Polar Research
- Social, Behavioral, Econ.

Career Opportunities  
Contracting Opportunities

**Special Notices**

[National Science Board STEM Education Recommendations for the Obama Administration](#)

New [Proposal and Award Policies and Procedures Guide](#) Available, Effective April 6, 2009.

**Latest News** [See All](#)

- [Evidence of Earliest Known Domestic Horses Found in Kazakhstan](#)  
Released March 5, 2009  
Press Release
- [Geologic Findings Undermine Theories of Permian Mass Extinction Timing](#)  
Released March 2, 2009  
Press Release
- [Understanding How Earth's Biological Systems Respond to and Influence Its Physical and Chemical Conditions](#)  
Released February 26, 2009  
Press Release

Now Showing: Film, TV, Museums and More [See All](#)

**Get NSF Updates by Email**

**Site Features**

- [NSF at a Glance](#)
- News
- For the News Media
- Special Reports
- Discoveries from NSF Research
- Research Overviews
- Speeches & Lectures
- Multimedia Gallery
- NSF & Congress
- Classroom Resources
- NSF-Wide Investments
- Science and Engineering Statistics
- Search NSF Awards

International  
Office  
Homepage



## Office of International Science & Engineering (OISE)



### [OISE Home](#)

### [About OISE](#)

### [Funding Opportunities](#)

### [Awards](#)

### [News](#)

### [Events](#)

### [Discoveries](#)

### [Publications](#)

### [Advisory Committee](#)

### [Career Opportunities](#)

### [Staff by Country](#)

### [Regional Opportunities](#)

### [Info for Travelers](#)

### See [Additional OISE Resources](#)

### [View OISE Staff](#)

### Search OISE Staff

## Office of International Science & Engineering (OISE)

### Important Notice

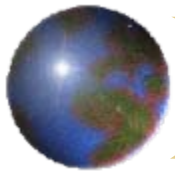
International science and engineering research and education activities are funded by all NSF directorates and offices.

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](#).

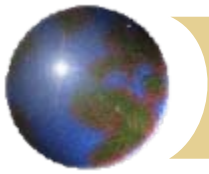


# *International Activities at NSF*

## Key elements for OISE funding

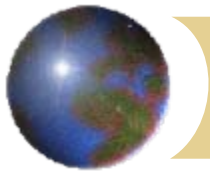
- Collaborative
- Synergistic
- Catalytic
- Engage students, junior researchers in international research





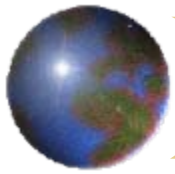
# Planning Visits

- 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

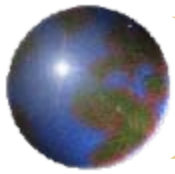
- NSF 04-035
- Small-scale, focused meetings
  - Identify areas of joint research interest
  - Develop new collaborations
- NSF supports U.S. faculty and students
- Intended outcome: proposal to NSF research directorate
- Research directorate input critical
  - Internal Review or combined internal and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



# *Pan-American Advanced Studies Institutes*

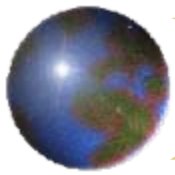
- *NSF 03-506*
- Modeled on NATO Advanced Studies Institutes
- PASIs aim to disseminate advanced scientific knowledge and stimulate cooperation among researchers of the Americas
- Short (2-4 wks) courses at the advanced graduate and postdoc level
- Supported by NSF/ENG, BIO and MPS, with DOE
- \$100,000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





# *International Research Fellowship Program*

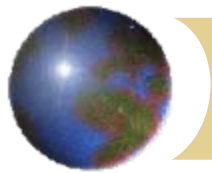
- *NSF 06-582*
- Introduce young scientists to international research opportunities
- Supports 9-24 mos overseas research
  - Stipend, travel, subsistence, some dependent support
- U.S. citizens & permanent residents
- Applications from women and minorities, and for work in developing countries are especially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

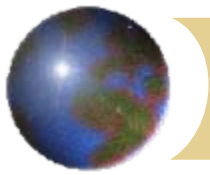




## *Doctoral Dissertation Enhancement Program (DDEP)*

- *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





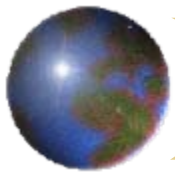
# East Asia and Pacific Summer Institutes

- *NSF 08-603*
- 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

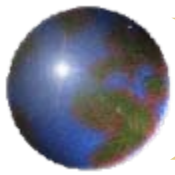




# Partnerships for International Research & Education (PIRE)

- Program solicitation: *NSF 09-505*
- Objectives
  - Research excellence via international partnership – international is essential and drives the research!
  - Development of a diverse, globally engaged U.S. S&E workforce
  - Strengthened international engagement by U.S. institutions
- Five year awards, No budget ceiling
  - Request the amount needed to achieve project goals
  - OISE's PIRE budget for FY10-14 is \$40,000,000 in total
- Two-stage process
  - Preliminary proposals due Feb 26, 2009
  - Invited full proposals (50-70) due Aug 4, 2009





# Partnerships for International Research & Education (PIRE)

## ➤ Who May Apply?

- U.S. academic institutions that granted at least one Ph.D. in a science or engineering field since 2006
  - ❖ 3 preliminary proposals per institution
- Researcher may be PI, co-PI or senior personnel on no more than 1 preproposal



## ➤ Other Relevant Information

- 32 active PIRE awards (see PIRE webpage for details)
- Lead institutions strongly encouraged to partner with two- and four-year colleges, industry, museums, others



## ➤ PIRE webpage:

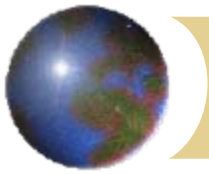
[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_](http://www.nsf.gov/funding/pgm_summ.jsp?pims_)

NSF PIRE



Patagonia

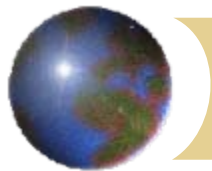
19



*Caution!*

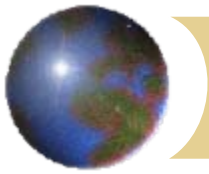
## *OISE Does Not Typically Fund*

- 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



**OISE**



**Thank You!**



<http://www.nsf.gov/oise>