

**National Science Foundation  
Office of International Science and Engineering  
(OISE)  
Overview of Programs**

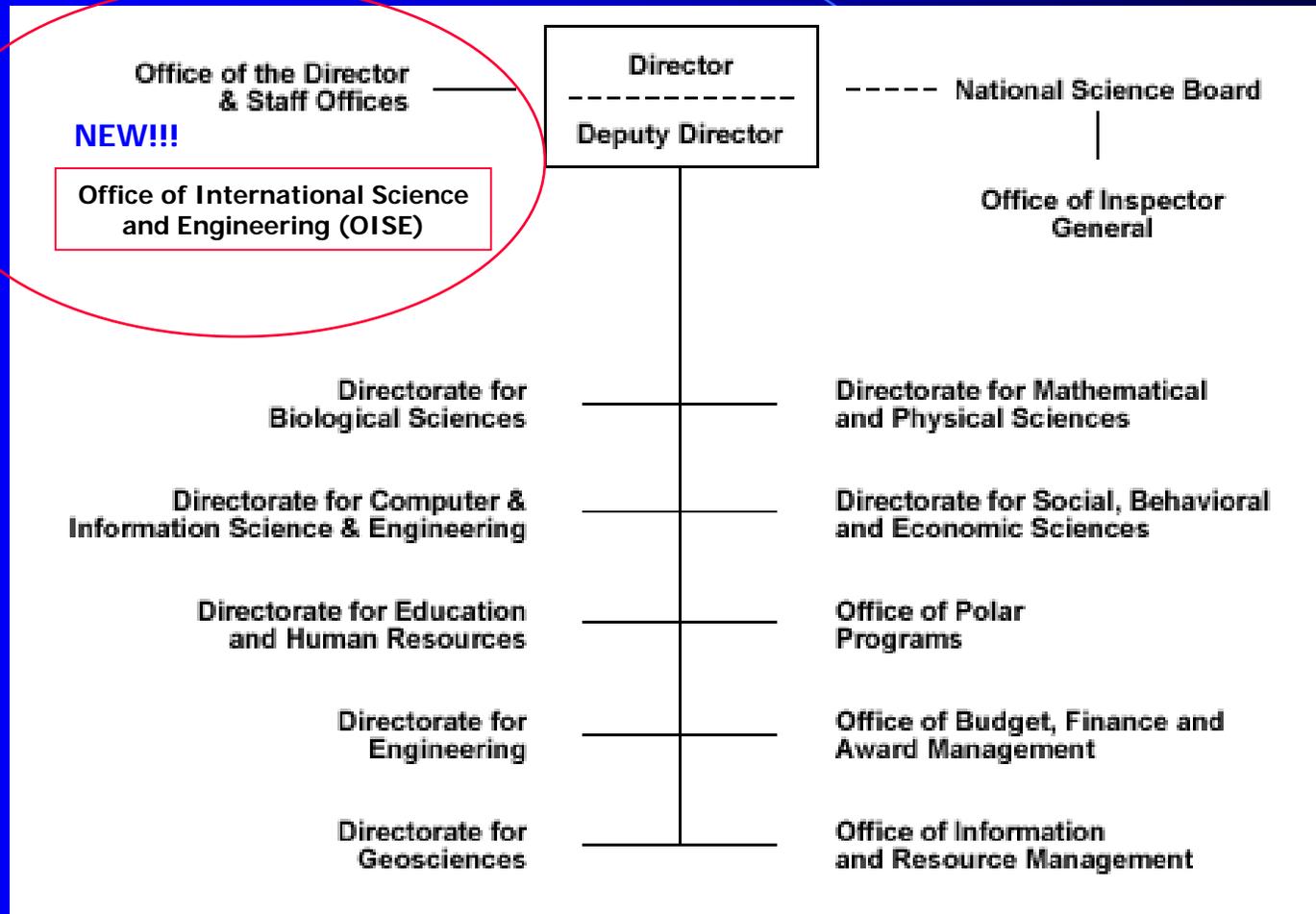
**Regional Grants Conference  
Tampa, Florida  
October 10-11, 2005**

**Harold Stolberg  
Office of International Science and Engineering  
[hstolber@nsf.gov](mailto:hstolber@nsf.gov)**

# NSF's Mission

- **Enabling the Nation's future through discovery, learning, and innovation**
  - **The NSF Strategic Goals relate to:**
    - **People**—Diverse, intellectually competitive and globally engaged
    - **Ideas**—Discovery across frontiers, connected to learning, innovation and service to society
    - **Tools**—Broadly accessible, state-of-the-art and shared research and education tools

# NSF Organizational Chart



# NSF's International Activities

**International activities are a key part of NSF's mission.**

**“Discovery is a global enterprise. For the U.S. to remain in the forefront of world science and technology, it needs scientists and engineers from all disciplines who can operate and lead international teams and track international discoveries in some of the most challenging research areas.”**

- **NSF Director Arden Bement**

# OISE Regional Clusters

- Africa, Near East, and South Asia
- The Americas (including Canada )
- East Asia and Pacific
- Europe and Eurasia
- Global Initiatives

**But more and more proposals are  
global in scope!**

# Types of OISE Funding

- 
- **Planning Visits and Workshops**
  - **Partnerships for International Research and Education**
  - **Developing Global Scientists and Engineers**
  - **Co-funding and Supplements**

**MAJOR CHANGE:** International collaborative research proposals go directly to appropriate NSF Research Directorate

# Planning Visits

- **Support travel of U.S. investigator to plan collaboration**
- **Short duration; usually one or two weeks**
- **Travel to field sites is allowable**
- **Need CV and letter from counterpart scientist indicating interest in collaboration**

[www.nsf.gov/pubs/2004/nsf04035/nsf04035.htm](http://www.nsf.gov/pubs/2004/nsf04035/nsf04035.htm)

# Workshops

- **Co-organized by U.S. & foreign investigator**
- **Grants support U.S. participants**
- **Identify areas of joint research**
- **Stimulate future collaborative proposals**
- **Include junior researchers: graduate students, postdoctoral researchers**
- **May be held in United States or foreign country**
- **<http://www.nsf.gov/pubs/2004/nsf04035/nsf04035.htm>**

# Examples of Recent Workshops

- **Geographic Information Systems and Urbanization on Six Arid Africa Cities, Dakar, Senegal**
- **Exploring Collaborations in Science and Mathematics, Japan-U.S.**
- **Ecology of infectious diseases – Russia**
- **Nanotechnology: Tools and Instruments for Research and Manufacturing, Grenoble, France. 4<sup>th</sup> Joint NSF-European Community**
- **New Trends in Cooperative Game Theory-Mexico**

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# Partnerships for International Research and Education

- **Pilot OISE program, 12 awards starting Fall 05**
- **Larger awards, up to \$500K/year for 5 years**
- **Research focus with essential international partner**
- **Integrate institutional resources (e.g., cultural and language training, IT)**
- **Involve junior researchers and scientists in international collaboration**
- **Another potential round of proposals in FY07**

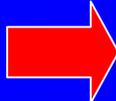
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# Developing Global Scientists and Engineers

**OISE supports many programs to internationalize the next generation of scientists and engineers**

-  **Postdoctoral Researchers**
- Graduate Students**
- Undergraduate Students**

# Support for Postdoctoral Researchers

- 
- **Pan-American Advanced Studies Institutes**
  - **International Research Fellowship Program**
  - **Disciplinary Postdoctoral Fellowships (e.g., BIO, Physics)**
  - **Participation in planning visits and workshops**

# Pan-American Advanced Studies Institutes (PASI) Objectives

- Offer advanced training in topics of current research activity
- Proposed and organized by US PIs in collaboration with scientists from other countries
- Acquaint promising US young investigators with peers in the Hemisphere
- Promote cooperation among senior and junior scientists from the Americas
- Partnership with DOE, MPS, ENG, and BIO

[www.nsf.gov/pubs/2003/nsf03506/nsf03506.htm](http://www.nsf.gov/pubs/2003/nsf03506/nsf03506.htm)

# Support for Postdoctoral Researchers

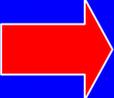
- **Pan-American Advanced Studies Institutes**
- **International Research Fellowship Program (IRFP)**
- **Disciplinary Postdoctoral Fellowships (e.g., BIO, Physics)**
- **Participation in planning visits and workshops**

# Overview of the IRFP Program

- OISE program designed to introduce young scientists to international research
- Science and engineering establishments in foreign countries
- Tenures of 9 to 24 months
- Next deadline: October 11, 2005; second Tuesday in September for next year
- Applications from women and minorities and for work in developing countries are especially encouraged.

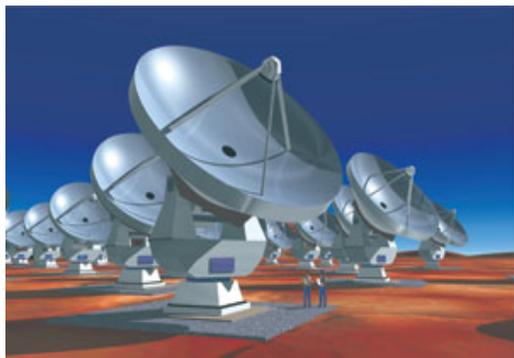
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-  ■ **Graduate Students**
- **Undergraduate Students**

# Support for Graduate Students

- **Pan-American Advanced Studies Institutes**
- **East Asia and Pacific Summer Institutes**
- **Dissertation Enhancement Awards**
- **Integrative Graduate Education and Research Traineeship (IGERT)**
- **Graduate Research Fellowships**
- **Participation in planning visits, workshops, and center-to-center linkages**



# 2006 June-August Graduate Research Summer Institutes



Become an internationally experienced researcher. Spend eight weeks conducting research and experiencing life in:

**Australia, China, Japan, Korea or Taiwan**

For U.S. Graduate Students in:

- Biological Sciences
- Computer and Information Science and Engineering
- Education and Human Resources
- Engineering
- Geosciences
- Mathematical and Physical Sciences
- Polar Research
- Social, Behavioral, and Economic Sciences

Application deadline: December 13, 2005

[www.nsf.gov/eapsi](http://www.nsf.gov/eapsi)



email: [eapinfo@nsf.gov](mailto:eapinfo@nsf.gov)



Sponsored by the U.S. National Science Foundation

# Dissertation Enhancement Research

- **OISE support for doctoral student research in a foreign country**
- **Must be collaborative, with evidence of intellectual involvement of foreign institution**
- **Faculty mentor is PI on proposal**
- **Support is typically for one year or less**
- **If NSF disciplinary program supports dissertation enhancement, proposals should be submitted there**

[www.nsf.gov/pubs/2004/nsf04036/nsf04036.htm](http://www.nsf.gov/pubs/2004/nsf04036/nsf04036.htm)

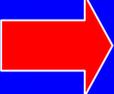
# Integrative Graduate Education and Research Traineeship (IGERT)

- **Foundation-wide program of institutional awards to support graduate research fellowships**
- **Multidisciplinary, problem-oriented focus**
- **Strong encouragement and OISE support for international collaborations, including sending US students abroad**

**[www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=12759&org=DGE&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12759&org=DGE&from=home)**

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# Support for Undergraduate Students

- **International Research Experiences for Students**
- **Research Experiences for Undergraduates (REU) - sites and supplements**

**OISE resource of value to any project taking undergraduates abroad:**

**“Looking Beyond the Borders: A Project Director’s Handbook of Best Practices for International Research Experience for Undergraduates”**

**[www.nsftokyo.org/REU/index.html](http://www.nsftokyo.org/REU/index.html)**

# International Research Experiences for Students

- **OISE program to support international research experiences for small groups of undergraduates and/or graduate students**
- **Students have mentored research experience, with intellectual collaboration with foreign scientists and/or students**

[www.nsf.gov/pubs/2004/nsf04036/nsf04036.htm](http://www.nsf.gov/pubs/2004/nsf04036/nsf04036.htm)

# International REU Activities

- **REU is an NSF-wide program**
- **There are many international REU sites that provide extended international research experiences for undergraduate students**
- **REU supplements can add undergraduates to a research project with an international dimension**

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# OISE and Research Directorates



**Work closely together closely to**

- **Identify international research & education priorities**
- **Identify new international co-funding opportunities**
- **Provide each other reviewers**
- **Co-fund strong international collaborations**

# Research Directorate Support for International Activities

- **The majority of funding for international activities comes from awards made by the research directorates**
- **NSF supports expenses of US scientists and students (limited support possible for foreign counterparts in developing countries)**
- **OISE can co-fund these projects if there is intellectual collaboration on a new project that involves junior US researchers or scientists**
- **Contact programs and OISE about submitting proposals**

# OISE Supplements to NSF Awards

- **OISE can co-fund a request for supplemental funding that adds or strengthens the international dimensions of a project**
- **Research-related activity (e.g., research awards, workshops, REU's, centers, planning visits)**
- **Intellectual collaboration and mutual benefit required**
- **Support for junior faculty & students a priority**
- **PI should consult NSF disciplinary program director or OISE program manager with regional expertise**



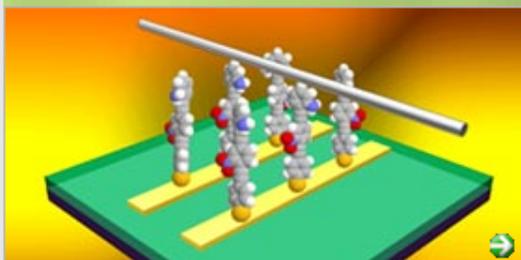
# National Science Foundation

WHERE DISCOVERIES BEGIN

## SEARCH

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[About OISE](#)

[Funding Opportunities](#)

[Awards](#)

[News](#)

[Events](#)

[Discoveries](#)

[Publications](#)

[Advisory Committee](#)

[Career Opportunities](#)

[Staff by Country](#)

[Regional Resources](#)

[Info for Travelers](#)

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NSF International Resources

## About the Office of International Science & Engineering (OISE)

The Office of International Science and Engineering (OISE) serves as a focal point for international science and engineering activities both inside and outside NSF.

OISE promotes the development of an integrated, Foundation-wide international strategy, and manages international programs that are innovative, catalytic, and responsive to a broad range of NSF interests.

Specifically, OISE supports programs to expand and enhance leading-edge international research and education opportunities for U.S. scientists and engineers, especially at the early career stage. It works to build and strengthen effective institutional partnerships throughout the global science and engineering research and education community, and it supports international collaborations in NSF's priority research areas.

The Office carries out its functions through close partnership with the NSF Directorates and through its own program activities. OISE is housed within the Office of the NSF Director since its role is Foundation-wide.

OISE encourages funding applicants to include an international component in proposals submitted to the appropriate research directorate. See the [Dear Colleague Letter on OISE Support for International Activities](#) for a description of recent changes in OISE activities.

To identify OISE staff assignments for specific countries, see [Staff by Country page](#).

General questions about OISE may be directed to [OISEwebmaster@nsf.gov](mailto:OISEwebmaster@nsf.gov).



SEARCH

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- [OISE Home](#)
- [About OISE](#)
- [Funding Opportunities](#)
- [Awards](#)
- [News](#)
- [Events](#)
- [Discoveries](#)
- [Publications](#)
- [Advisory Committee](#)
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## Office of International Science & Engineering (OISE) Active Funding Opportunities

Key: C Crosscutting | N NSF-wide

Status: Active

Sorted by Title. Click column headings to sort.

Title	Program Guidelines	Due Dates
<a href="#">ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers</a> <span style="background-color: #FFD700; border: 1px solid black; padding: 0 2px;">C</span> <span style="background-color: #008000; color: white; border: 1px solid black; padding: 0 2px;">N</span>	<a href="#">05-584</a>	Full Proposal: January 27, 2006
<a href="#">Cooperative Activities in Chemistry Between U.S. and German Investigators (NSF-DFG)</a>	<a href="#">05-604</a>	Full Proposal: January 13, 2006
<a href="#">Cyberinfrastructure TEAM (CI-TEAM): Demonstration Projects</a> <span style="background-color: #FFD700; border: 1px solid black; padding: 0 2px;">C</span> <span style="background-color: #008000; color: white; border: 1px solid black; padding: 0 2px;">N</span>	<a href="#">05-560</a>	
<a href="#">DDDAS: Dynamic Data Driven Applications Systems</a> <span style="background-color: #FFD700; border: 1px solid black; padding: 0 2px;">C</span>	<a href="#">05-570</a>	
<a href="#">Developing Global Scientists and Engineers</a> <span style="background-color: #008000; color: white; border: 1px solid black; padding: 0 2px;">N</span>	<a href="#">04-036</a>	Full Proposal: September 15, 2005
		Full Proposal: February 15, 2006
<a href="#">East Asia and Pacific Summer Institutes for U.S. Graduate Students (EAPSI)</a> <span style="background-color: #008000; color: white; border: 1px solid black; padding: 0 2px;">N</span>	<a href="#">03-608</a>	Full Proposal: December 10, 2005