Fostering International Collaborations

(Attraction and Retention)
“Global collaboration – among scientists, engineers, educators, industry and governments – can speed the transformation of new knowledge into new products, processes and services, and in their wake produce new jobs, create wealth, and improve the standard of living and quality of life worldwide.”

*NSF Director Arden L. Bement, Jr.*

*August 2005 Materials World Network Symposium, Cancun, Mexico*

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

*NSF Director Arden L. Bement, Jr.*

*May 2006*
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.
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- **True** intellectual collaboration with a foreign partner
- **New** international collaboration, as opposed to well-established ones
- **Benefits** to be realized from foreign collaboration
- **Active** research engagement of U.S. students and junior researchers at the foreign site
Why Collaborate?

- Achieve Significant Outcomes
  - Generate research results that cannot be done alone

- Access
  - Expertise, Facilities, Infrastructure, Data

- Leverage Resources
  - Investments, Personnel, Equipment, Knowledge

- Next Generation of Globally Engaged Scientists/Engineers

- Develop/Expand Networks

- Strategic Positioning
  - Leader vs. Strong Follower
OISE Research Investments

- Co-fund with Research Directorates/Offices
- International Planning Visits and Workshop
  
  Planning visit -> Workshop -> Research Grant

- Partnerships for International Research and Education (PIRE)
  - Institution-focused models
  - Larger award size and duration - $2.5 M over 5 years

- NSF Priority and Cross-Cutting Programs
  - Biocomplexity, Math Sciences, HumaPn and Social Dynamics, Nano, Cyber, Climate Change, Homeland Security, Discovery K-12, IGERT, IPY, REUs, RETs
OISE People Investments

- **International Research Fellowships (IRFP; NSF 06-582)**
  - Recent Ph.D’s, 9-24 months + re-entry

- **Doctoral Dissertation Enhancement Projects (DDEP; NSF 04-036)**

- **Pan-American Advanced Studies Institutes (PASI; NSF 03-506)**
  - Intensive seminars, Ph.D’s/grad students

- **East Asia and Pacific Summer Graduate Student Summer Institute (EAPSI, NSF 06-602)**
  - 8-week research programs, 6 East Asia/Pacific countries

- **International Research Experiences for Students (IRES; NSF 04-036)**

- **International Research and Education: Planning Visits and Workshops (NSF 04-035)**
  - Planning visit – 7-14 days, <$20K
  - Joint Workshops – focused area of research, < 2yrs, <$60K

- **Partnerships for International Research and Education (PIRE; NSF 06-589)**
Program Specifics

EAPSI’s

www.nsf.gov/eapsi

- Internship in a research lab
- Science and science policy
- Society, language and cultural orientation
- ~ 8 week
- Programs in Australia, China, Japan, Korea, New Zealand, and Taiwan

PASI’s

- 10-15 lecturers; 30-50 students
- Physical, mathematical, engineering, biological sciences
- 45+ funded in last 5 years
- Foreign researcher support
New Strategies/Mechanisms??

- Are there international strategies and mechanisms developed by the Alliances?
- Are there unmet needs for incorporating international collaborations in the Alliances?
Thank You!

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