



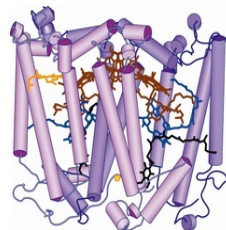
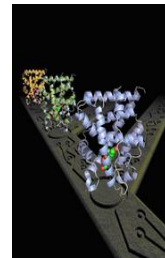
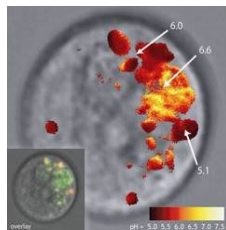
NSF's Mechanisms for Collaboration

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International Science and Engineering (ISE)

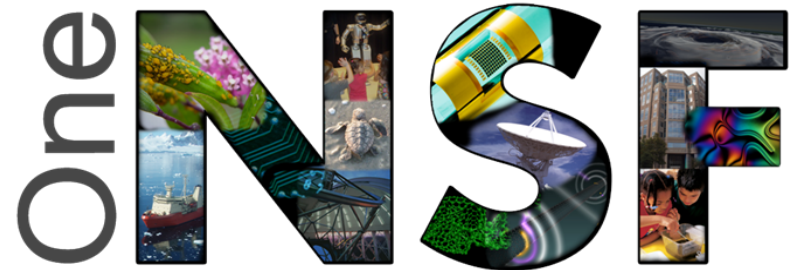
China- US Collaboration meeting
July 28th, 2014
Maryland





Outline

- Importance of International Collaborations
- NSF organization and ISE organization
- Mechanisms for supporting international engagement
- International Programs
 - ISE programs
 - EHR Programs
 - Other Programs





Why International Research Collaborations?

Join Resources

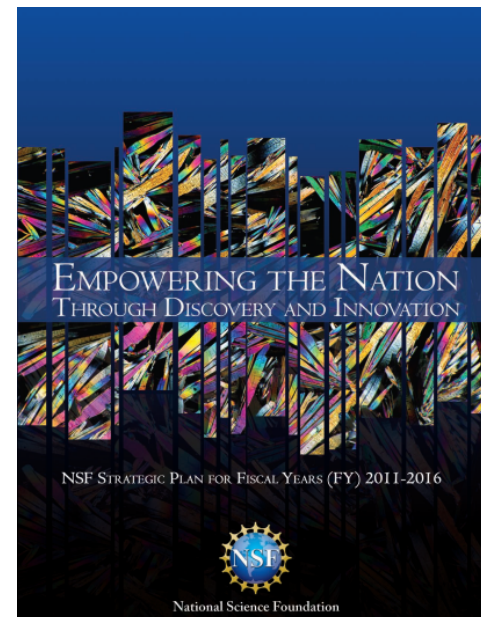
- Access to unique facilities and equipment
- Share costs and risks
- Exchange techniques and insights

Build Capacity

- Strengthen/Expand knowledge base
- Attract talent
- Boost S&T-led economic performance

Achieve Objectives

- Address national and global problems
- Develop synergy among parties
- Enhance research and education
- Advance personal/professional goals



Keep the United States globally competitive at the frontiers of knowledge by increasing international partnerships and collaborations.

NSF Strategic Plan, Performance Goal #3



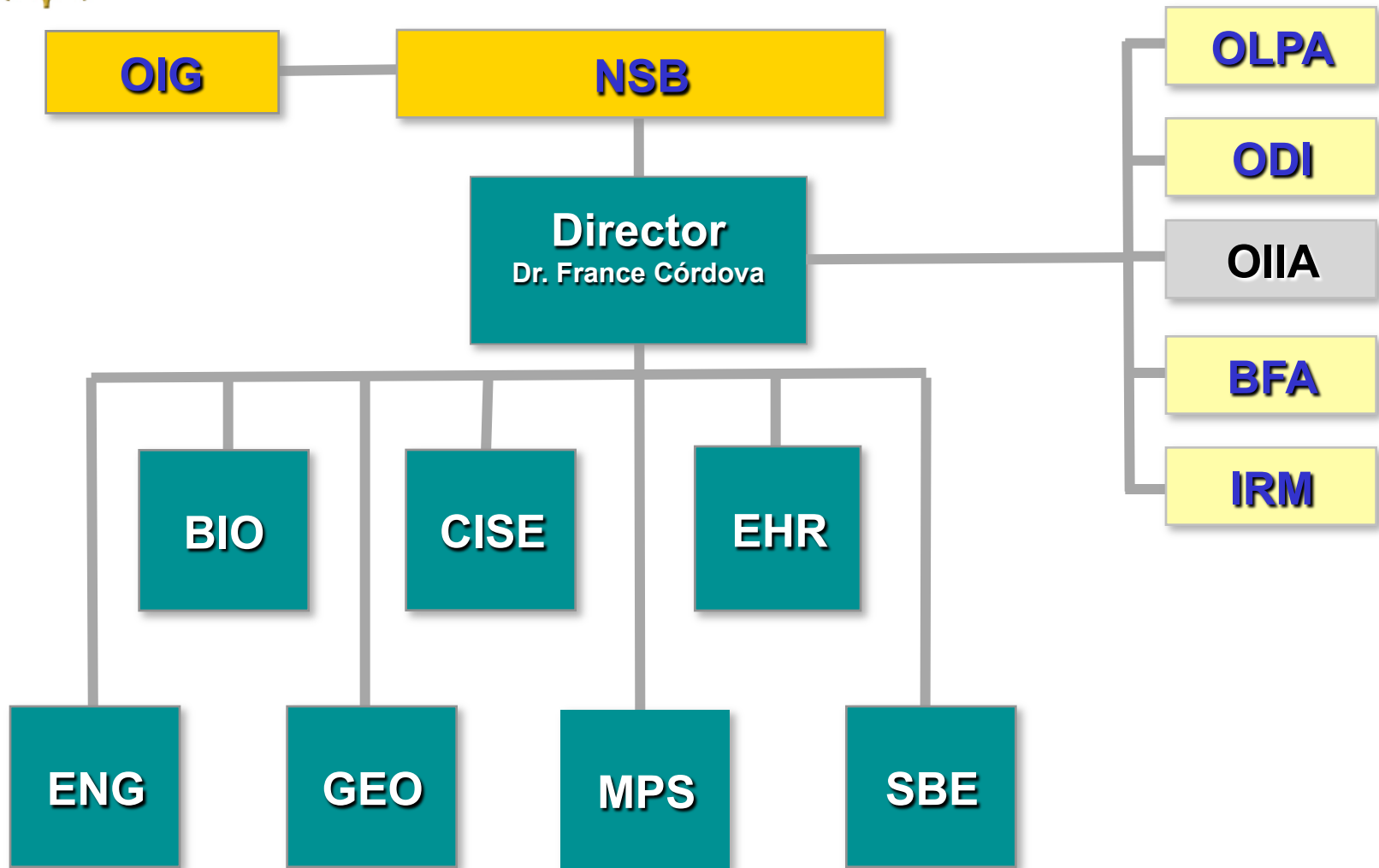
Core Values for International Engagement

- Intellectual Partnerships
- Mutual Benefit from expertise, facilities, or resources
- New international collaborations
- U.S. Students & Researchers gain international experience
- Networking to link expertise and resources



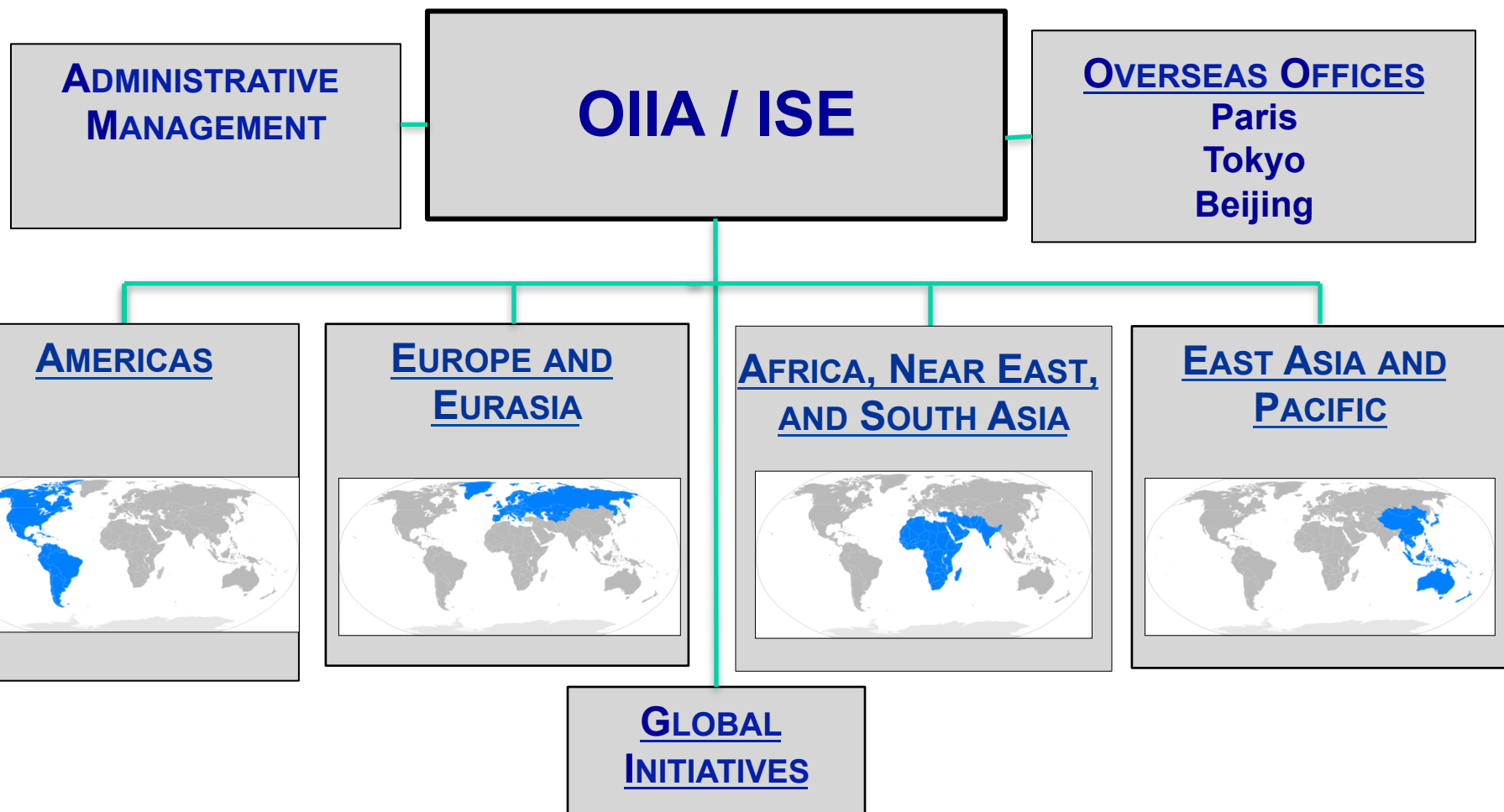


NSF Organizational Structure





International Science and Engineering (ISE) is organized by global regions





Mechanisms for supporting International Engagements

- **Leverage NSF funds with domestic and international partners**
 - Science Across Virtual Institutions (SAVI)
 - Early career scientist engagement (NSF/ERC MOU)
 - Partnerships for Enhanced Engagement in Research (PEER)
- **Leverage NSF funds among NSF directorates**
 - Catalyzing New International Collaborations (CNIC)
 - Global Research Opportunities Worldwide (GROW)
 - Miscellaneous co-funding and supplements
- **ISE-managed programs for international activities**
 - East Asia and Pacific Summer Institutes (EAPSI)
 - International Research Experiences for Students (IRES)
 - Partnerships for International Research and Education (PIRE)



Mechanisms for supporting International Engagements

- **Dear Colleague Letter (DCL)**
- **Grant Solicitation**
- **Fellowships**
- **Supplements to existing grants**
- **RAPIDs**



ISE Programs

- **For students**
 - EAPSI
 - IRES
- **New international collaborations**
 - CNIC
- **International engagement**
 - PEER
 - PIRE



International Opportunities for Students

International Research Experiences for Students (IRES)

- Faculty organize an international research experience for U.S. undergraduate/graduate students
- Scale of Funding: \$50,000 per year for 3 years



East Asia Pacific Summer Institutes (EAPSI)

- Supports Graduate students (Ph.D. or M.S.) to conduct research overseas (8-10 weeks)
- Students can work with hosts in Australia, China, Japan, South Korea, New Zealand, Singapore, or Taiwan
- Scale of Funding: \$5,000 stipend, travel expenses





Catalyzing New International Collaborations (CNIC)

Supports initial phases of NEW international collaboration

- Initial data gathering activities
- Proof-of-concept
- Planning visits
- Research visits
- Scale of funding: \$10k-\$75k

Successful result is follow-up full Directorate proposal

- Must contact cognizant NSF Directorate before CNIC submission
- Ideally identify another program to continue the collaboration





Partnerships for Enhanced Engagement in Research (PEER)

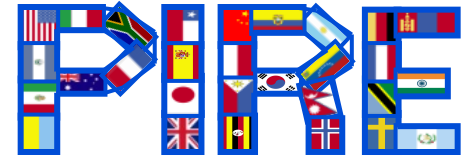
- Support scientists in developing countries who work with NSF-funded scientists
- Build scientific capacity and empower researchers in developing countries to use science and technology to address local and global development challenges
- Link to NSF-funded research
- **USAID PEER-Science:**
 - Train students and faculty
 - Equip laboratories and field stations
 - Fund research
 - Build scientific networks
- Administered by The National Academies



where scientific research meets global development challenges



Partnerships for International Research & Education



Senior researchers (and team)

- Bold, forward-looking research
- Facilitate student participation in international research collaborations
- Strengthen the capacity for mutually beneficial international collaborations
- 50+ PIRE awards have engaged collaborators in more than 70 countries
- Typically, five-year duration and average total budget of ~\$3.0 million
- 1 Award per institution





Programs for students outside ISE

Graduate Research Opportunities Worldwide (GROW) program

- Support for GRFP students to conduct research overseas
- USAID partnership
- In country support by partner agency
- Scale of Funding: \$5,000





Additional programs that supports interdisciplinary research

- CAREER
- EAGER
- RAPID
- INSPIRE
- SAVI
- EFRI
- ERC



Keys to successful funding of international collaborations

- **Scientific Merit -- Good Idea**
- **Address how the collaboration will enhance the research**
 - Value added
 - Mutual benefits
- **Obtain commitment from foreign collaborators**
- **Involve U.S. students, junior researchers**
 - Meaningful attention to diversity
 - Prepare, mentor, and assess
 - Pay them - travel, living costs, stipends
- **Know and observe special rules**
 - Visa regulations
 - Import and export rules
- **Work with others in your institution**
- **Consult NSF staff**
 - Disciplinary Program Officer
 - International Program Officer





Thanks!

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