

# How the National Science Foundation (NSF) Supports and Promotes International Collaborations

National and European Funding Opportunities in  
the Social Sciences for Young Researchers  
Florence, January 31, 2018



**Sonia Ortega, Ph.D**  
**Head**  
**Europe-Eurasia Office**  
**National Science Foundation,**  
**USA**



NSF is an independent agency  
established by Congress in 1950



## Two core missions:

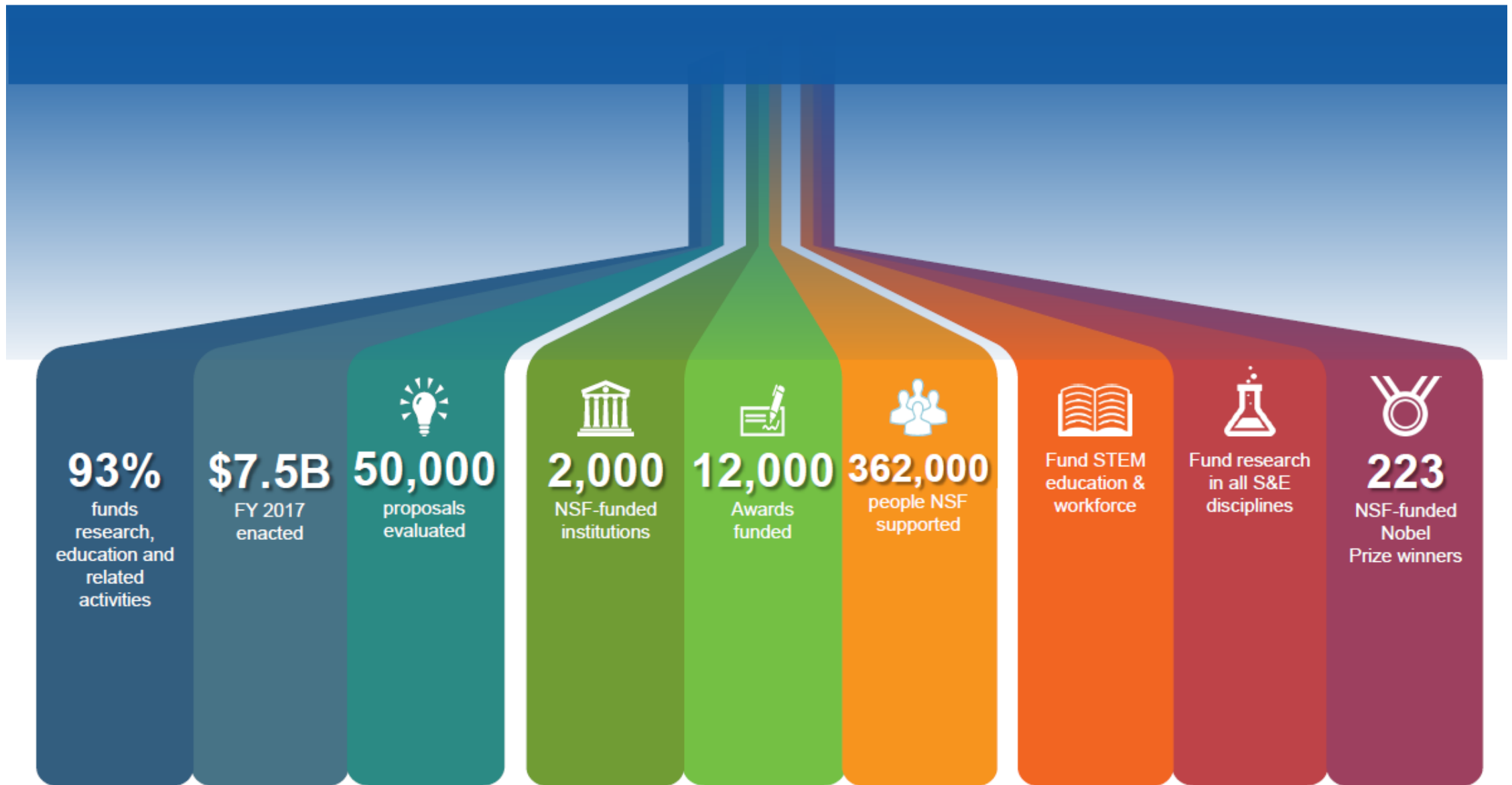
- Supports **basic** science and promotes **discovery**
- Prepares science and engineering **workforce** through providing research and educational experience for U. S. Students

NSF is the only US Federal agency whose mission includes support for all fields of fundamental science and engineering except medical sciences.

“Transforming the World through Science” NSF 17-800

[https://www.nsf.gov/about/congress/reports/Transforming\\_the\\_World.pdf](https://www.nsf.gov/about/congress/reports/Transforming_the_World.pdf)

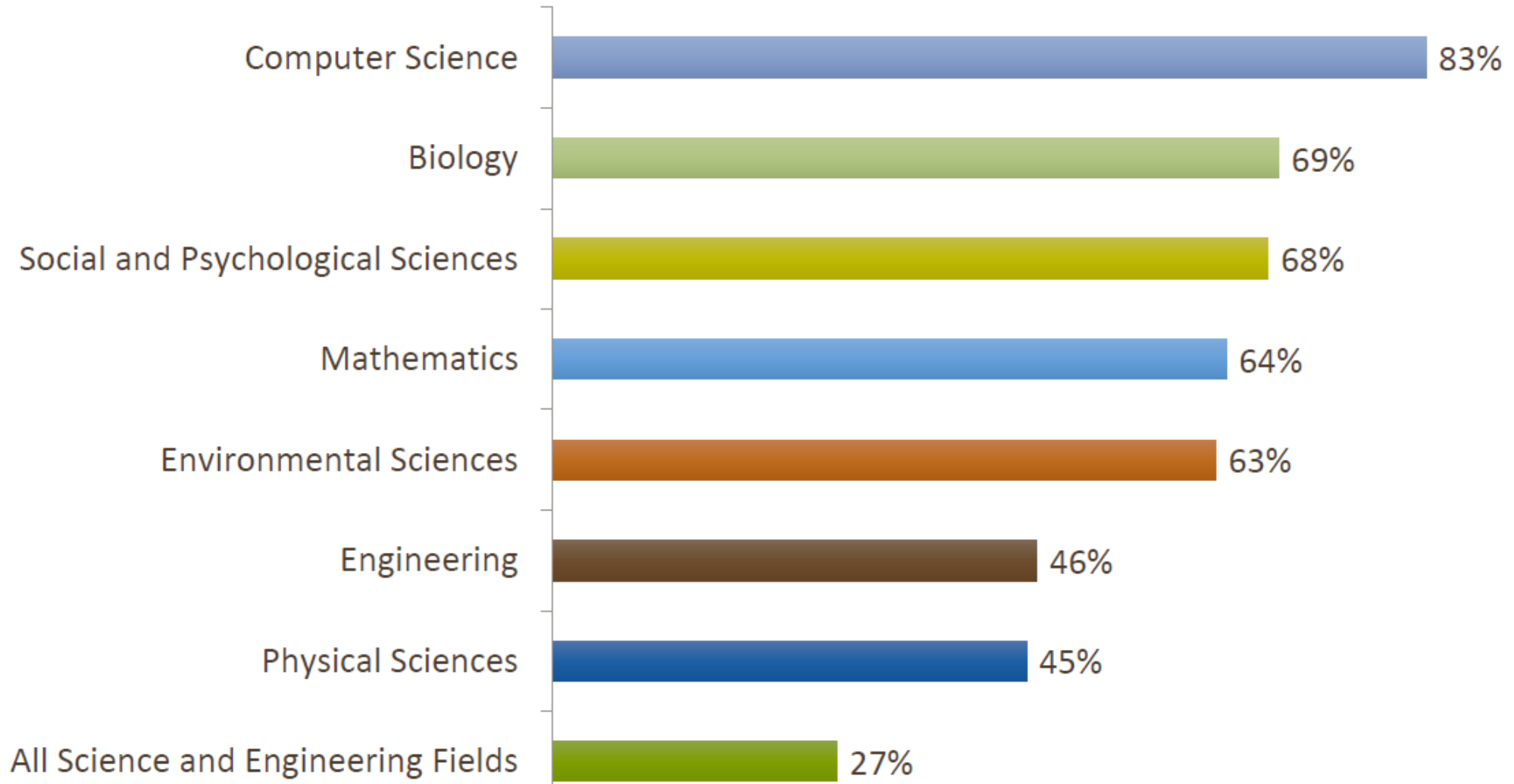
# NSF by the Numbers





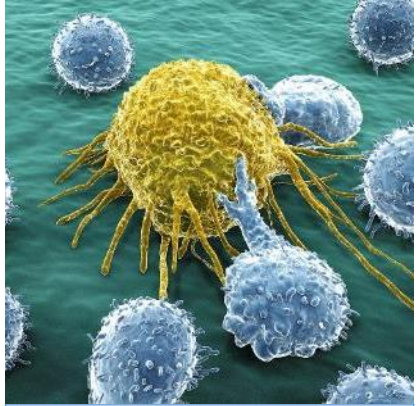
# NSF Support of Academic Basic Research in Selected Fields

(as a percentage of total Federal support)

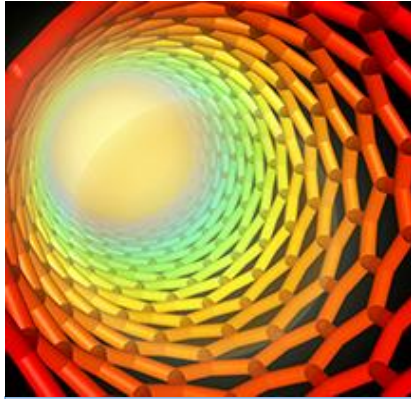


Note: Biology includes Biological Science and Environmental Science. Biology and Psychological Sciences exclude National Institutes of Health funding from the total amount of federal support.  
Source: NSF/National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development

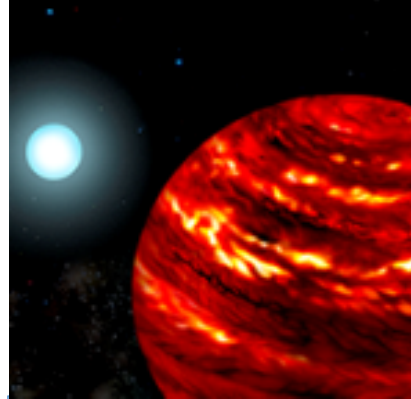
# NSF champions research and education across all fields of science and engineering



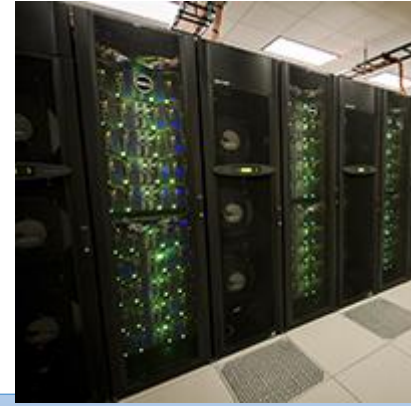
**Biological Sciences**



**Engineering**



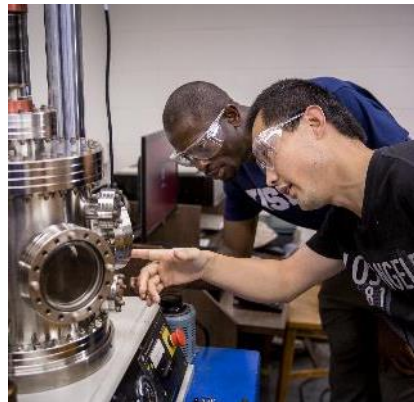
**Mathematical & Physical  
Sciences**



**Computer & Information  
Science & Engineering**



**Geosciences (including  
Polar Programs)**



**Integrative Activities**



**Education &  
Human Resources**



**Social, Behavioral &  
Economic Sciences**



**International Science &  
Engineering**



# Why International Research Collaborations?

Advance the  
**FRONTIERS** of  
Science and  
Engineering

- **ACCESS** expertise, facilities, data and research environments
- **LEVERAGE** limited resources
- **EXCHANGE** insights and techniques
- **ADDRESS** national, transnational and global challenges

Prepare a  
**GLOBALLY-**  
**ENGAGED U.S.**  
**S&E workforce**

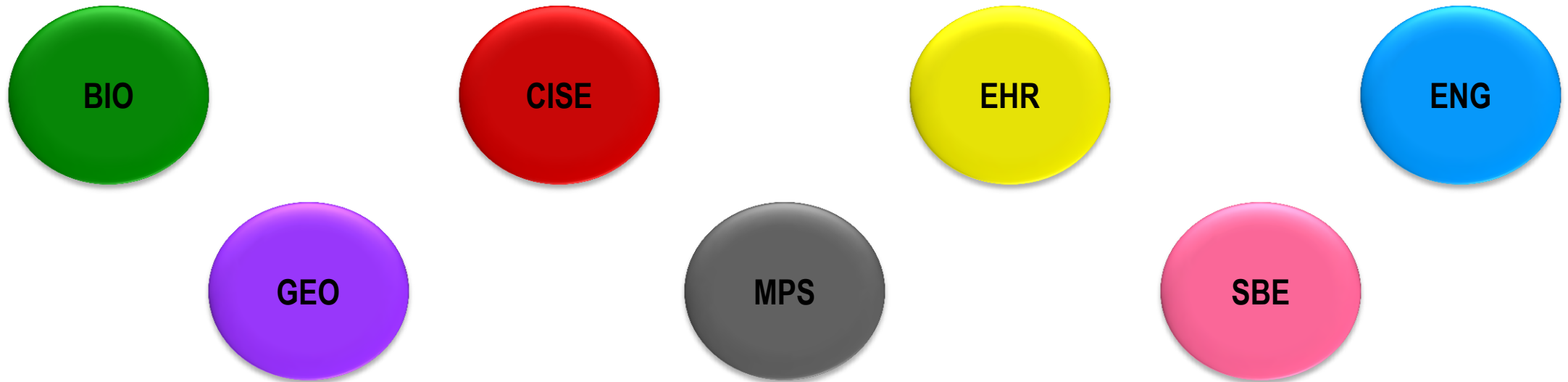
- **NURTURE** capable young researchers with strong networks overseas
- **DEVELOP** a global perspective
- **FACILITATE** mobility and brain circulation

NSF funds the U.S.-side of international collaborations

# NSF Funding for International Activities

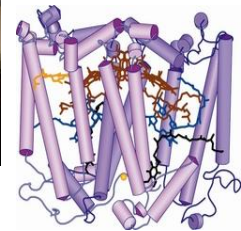
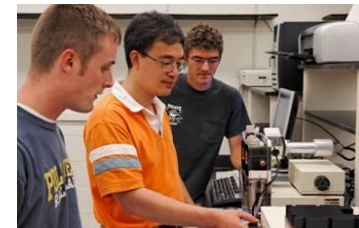
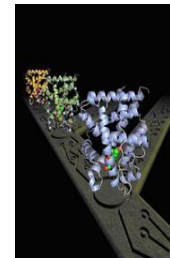
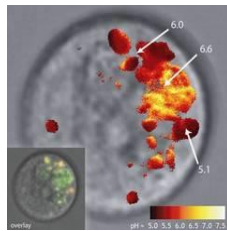
Most international research and education activities are funded by NSF disciplinary programs:

- As part of regular awards
- As supplements to regular awards



# Specific Support for International Engagement

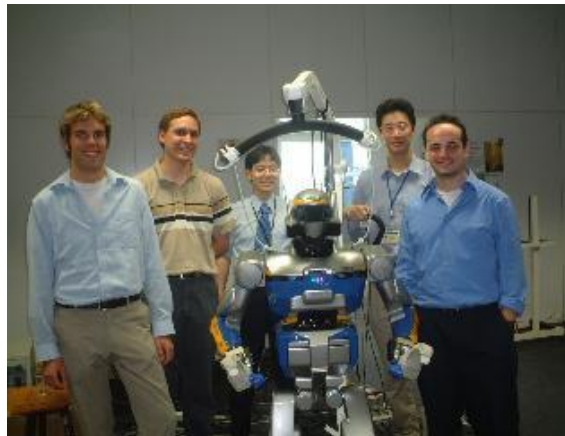
- International Research Experience for Students (IRES) -
- International Research Experience for Undergraduates (REU) –
- Partnerships for International Research and Education (PIRE) –





# International Research Experience for Students – IRES

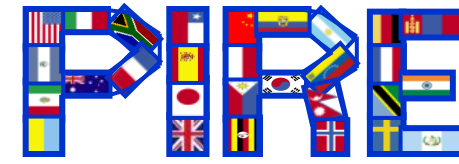
- OISE program to develop a globally engaged S&E workforce:  
Program Page [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=12831](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12831)
- NEW solicitation (18-505) with three tracks:
  - **IRES Sites** – cohorts of students doing research overseas
  - **International Advanced Studies Institutes**
  - **Large-scale graduate student** international research, training and professional development program
- Due dates: January-February 2018



# IRES Awards in Social Sciences

- **U.S.-Netherlands Forensic Research Collaboration in Cultural Heritage Science** Award 1460143; PI: Marc Walton -Northwestern University - \$247,034.00
- **Culture and Heritage in European Societies and Spaces (CHESS)** Award 1261172; PI: Krista Harper - University of Massachusetts Amherst -\$249,861.00
- **Cross-Cutting Interdisciplinary Research and Integration of Ecology and Biocultural Conservation in the World's Southernmost Forests** Award 1658651; PI: Jaime Jimenez - University of North Texas - \$249,963.00
- **Interdisciplinary student research on urban resilience in Latin America**  
Award Number:1658731; PI:Nancy Grimm -Arizona State University: \$249,705.00

# Partnerships for International Research & Education



- OISE-managed flagship research program
- Frontier research that leverages unique, complementary expertise of US & International Partners
- Extensive overseas research opportunities for US students / early career researchers
- 5 year awards; average award \$4M
- ~50 active awards across all NSF disciplines in > 70 countries
- New solicitation expected in 2019
  - Biennial competition



# PIRE Awards that include Social Sciences

- **USA/Europe Partnership for Integrated Research and Education in Wind Energy Intermittency: From Wind Farm Turbulence to Economic Management.** PI: Charles Meneveau, Johns Hopkins U. Award 1243482. Denmark, the Netherlands, Switzerland, Belgium, Spain.
- **Translating cognitive and brain science in the laboratory and field to language learning environments.** PI: Judith Kroll, Penn State U. Award: 1545900. Brazil, Spain, Germany,, China, Mexico, Netherlands, Colombia, UK, Poland
- **Confronting Energy Poverty: Building an interdisciplinary Evidence Base, Network, and Capacity for Transformative Change.** PI: Pamela Jagger, University of North Carolina CH. Award: 1743741. Malawi, Zambia and Zimbabwe.
- **Sustainable Communities & Gold Supply Chains: Integrating Responsible Engineering & Local Knowledge to Design, Implement & Evaluate Sustainable Artisanal Mining in Latin America.** PI; Juan Lucena. Colorado School of Mines. Award: 1743749. Colombia and Peru.



# ERC-NSF: CAREER and Postdoctoral Research Fellowships

- NSF-EC signed an implementing arrangement in July 2012
- ERC researchers host NSF CAREER or Postdoc grantees. ERC identifies researchers wishing to host US researchers
- NSF solicits proposals for the collaborative opportunities
- US researchers work with ERC funded teams and are supported as any other ERC team member
- NSF covers travel costs for 6-12 month visits



# NSF provides funding for International Workshops

- NSF can support workshops that immediately precede or follow a conference when they add an international dimension focused on building new research collaboration (see [NSF Grant Proposal Guide II.D.8 & 9](#)).
- NSF will not support participation of U.S. scientists and engineers in international conferences. NSF rarely supports travel costs of foreign investigators
- Workshop requests can be done through supplements to existing grants

# Additional Opportunities for International Collaboration

- Funding Opportunities through the Office for Naval Research
- Funding Opportunities through Fulbright Program
- PEER (Partnerships for Enhanced Engagement in Research) program if there's involvement with developing countries. Funded by USAID
- Newton's List- CRDFGlobal- A tool for funders and grant seekers interested in collaborative international research ([www.newtonlist.crdfglobal.org](http://www.newtonlist.crdfglobal.org))

# Non-Academic Research Internships for Graduate Students (INTERN)

- INTERN Dear Colleague Letter (DCL):  
<https://www.nsf.gov/pubs/2017/nsf17091/nsf17091.jsp>
- Offered as supplemental funding to any active NSF Research Grant
- International students are eligible
- Supported in FY18 and FY19

In FY 2018, all submissions received on or before **June 1st, 2018** will be reviewed

In FY 2019, all submissions must be received by **June 3rd, 2019**



# INTERN DCL – Highlights

- Internships for NSF funded Graduate Students on research assistantships
- Up to 6 months per internship
- To pursue new activities aimed at acquiring professional experience to prepare them for multiple career pathways after graduation
- Activities supported in: Industry, start-ups/small businesses, government agencies/National labs, policy think-tanks, non-profit organizations
- Not to exceed \$50,000 per student per six month period or 20% of the original award total (whichever is lower)

# Key Value Propositions – Graduate Students

- Communication skills
- Better exposure to real world challenges
- Better understanding of professional work practices and operations
- Exposure to legal, business, financial, human capital issues in the workplace
- Time and project management skills
- A better understanding of career options



# Thank You!



**Contact: [sortega@nsf.gov](mailto:sortega@nsf.gov)**

**Website: [www.nsf.gov](http://www.nsf.gov)**