



# **NSF International Activities Overview**

**David Stonner**  
**NSF Europe**

# National Science Foundation

- ❄ Supports math, science, and engineering education and training at all levels
- ❄ Promotes public understanding of science, engineering and math
- ❄ Seeks to ensure a world-class science, engineering and technology workforce for the U.S.

# NSF Considers Proposals for Research Support in any Field of Science

*Including but not limited to:*

- ❄ Atmospheric Sciences
- ❄ Biological Sciences
- ❄ Behavioral Sciences
- ❄ Chemistry
- ❄ Computer Science
- ❄ Earth Sciences
- ❄ Astronomy
- ❄ Engineering
- ❄ Information Science
- ❄ Materials Research
- ❄ Mathematical Sciences
- ❄ Oceanography
- ❄ Physics
- ❄ Social Sciences

# NSF: Special Responsibilities

## ❄️ *Polar Programs*

- ❄️ U.S. Antarctic Program

- ❄️ Interagency Arctic Research Policy Committee

## ❄️ *Science Resources Studies*

- ❄️ Data collection and analysis

- ❄️ Science and Engineering Indicators

## ❄️ *International Programs*

# NSF Organization

- Seven Directorates (ENG, BIO, GEO, MPS, SBE, CISE, EHR), 40 Divisions, ~ 250 programs
- 1,300 Employees

~ 400 Ph.D. Scientists and Engineers who are Federal Employees;

Plus 170 non-Federal Employee Rotating Scientists and Engineers

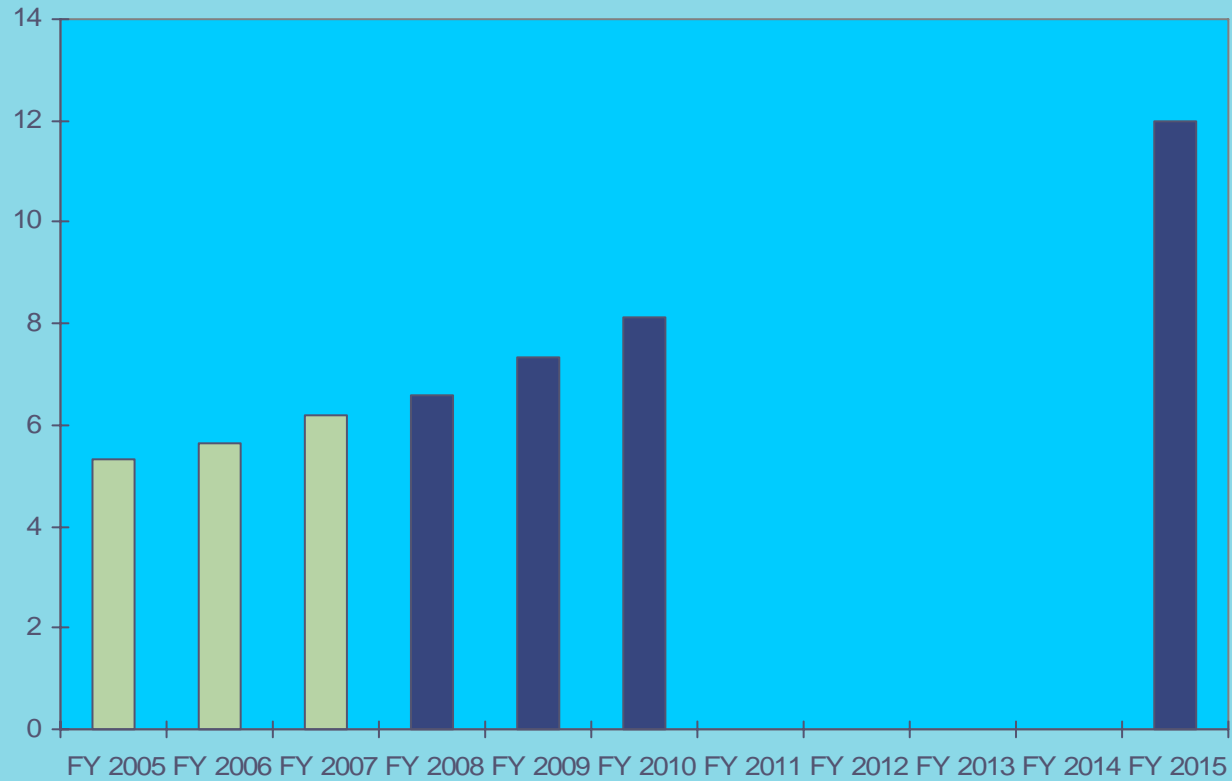
# NSF by the Numbers

- 44,000 Proposals Processed Annually
- 10,300 New Awards
- Median Award is \$110,000/year for 3 years
- Funding rate 25%

# Review Process

- ❄ Pool of 300,000 Reviewers
- ❄ 58,000 reviewers annually (13,000 new reviewers)
- ❄ 10 percent from outside of U.S.
- ❄ Approximately 6 months from proposal deadline to making award.

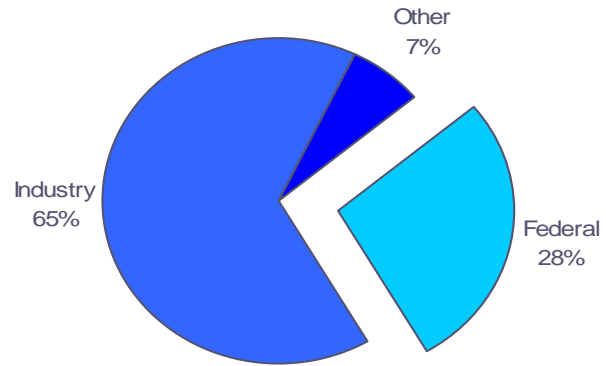
# NSF Funding



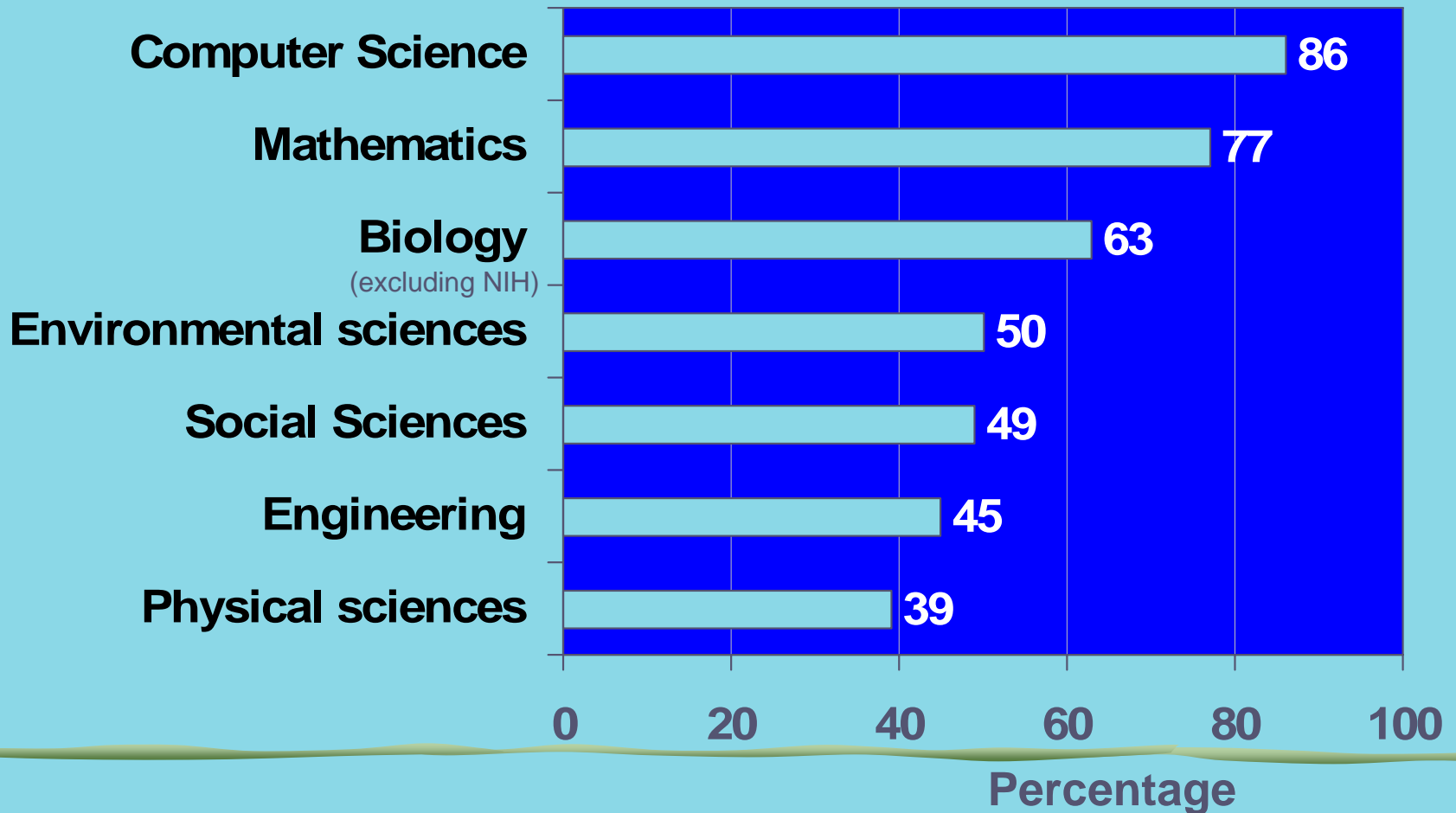


# NSF Role in Research and Development

Total U.S. National R&D - \$340B



# NSF Academic Basic Research Obligations



# NSF Approach to International

- Intellectual cooperation
- Catalytic, new international collaboration
- Synergy from combined skills, expertise, facilities of counterparts
- Involvement of students and junior researchers



# International Offices

Tokyo – Japan and SE Asia

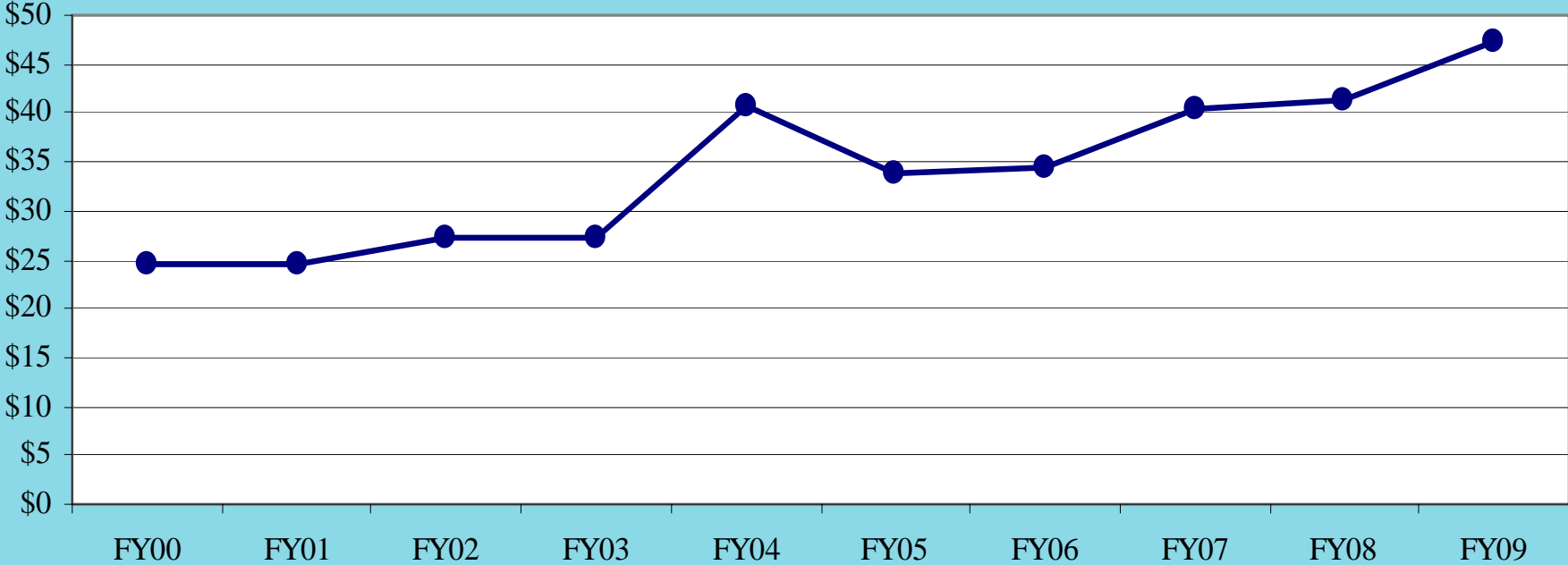
Beijing – China

Paris – Europe and Eurasia

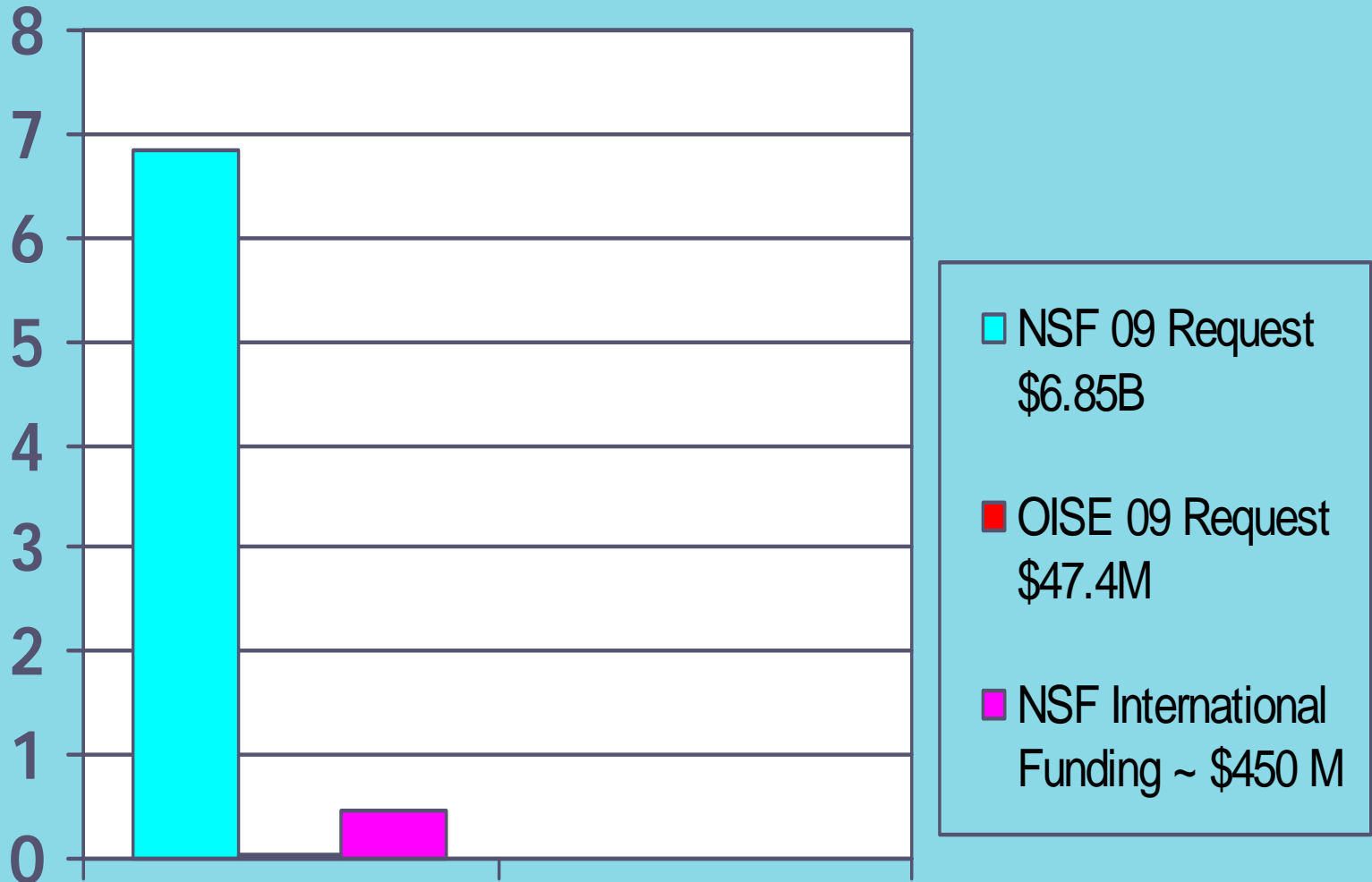
- ❄ Facilitate Collaboration
- ❄ Represent NSF
- ❄ Report on Science

# OISE Subactivity Funding

(Dollars in Millions)



# International Funding at NSF



# Major International Activities

- ❄ Gemini Telescopes (~\$184 M)
- ❄ Atacama Large Millimeter Array (~\$500M)
- ❄ Ice Cube Neutrino Detector (~\$242 M)
- ❄ Large Hadron Collider (CERN) (~\$81 M)
- ❄ Integrated Ocean Drilling Program
  - ❄ SODV (~\$115 M)
- ❄ International Polar Year (~\$135 M)

# Accountability Challenges for International Science at NSF

- ❄ Challenges from the political arena
  - ❄ Mostly positive, but with reservations.
- ❄ Challenges with calibration
  - ❄ What is the appropriate level of analysis?
- ❄ Challenges to the bureaucracy
  - ❄ More effectively managing more complex arrangements.

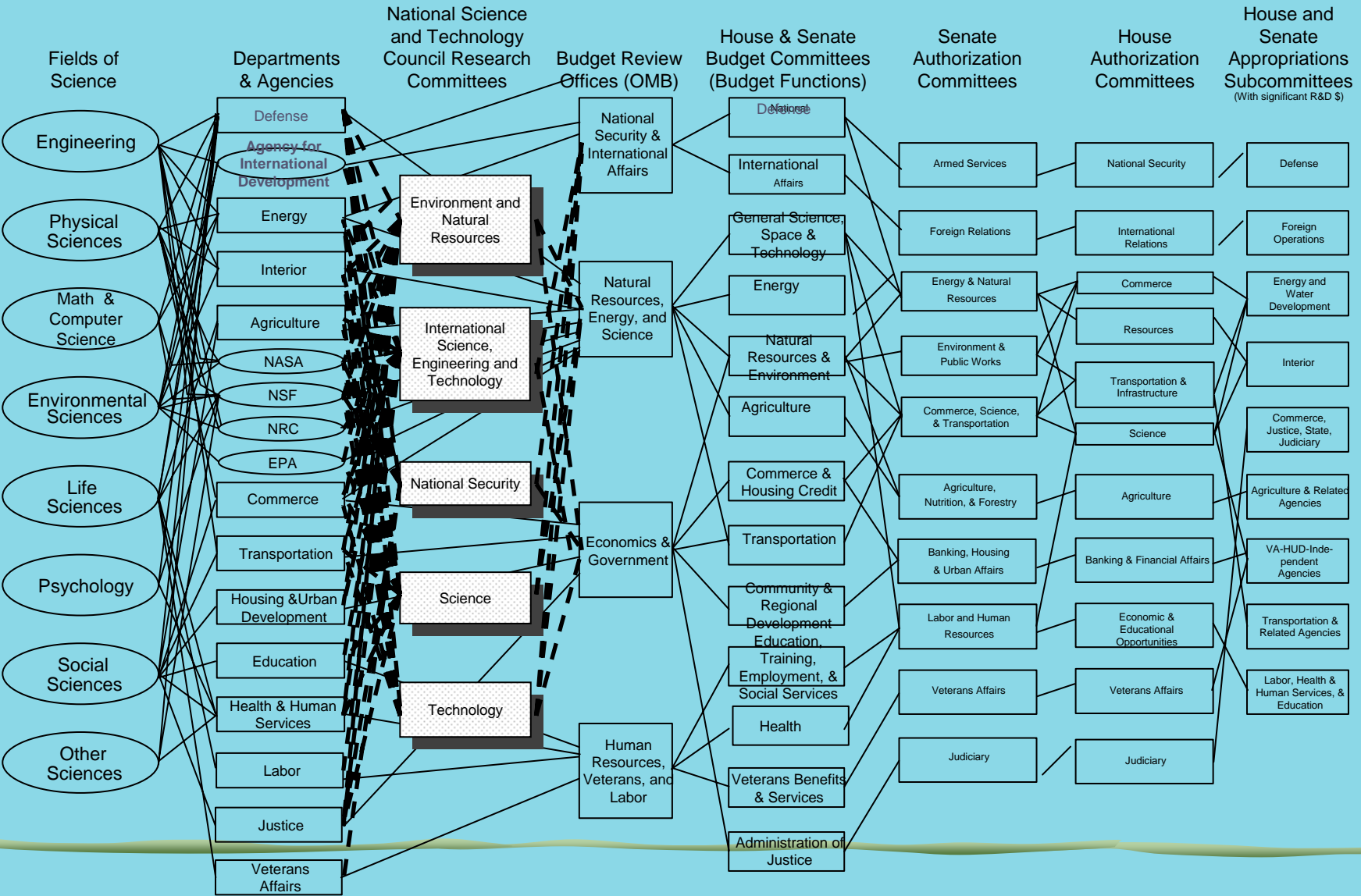


# Who is NSF accountable to?

- ❄ Executive Branch
  - ❄ Office of Management and Budget
  - ❄ Inspector General
  - ❄ Office of Science and Technology Policy
- ❄ Congress
  - ❄ Authorizing/Appropriating/Oversight
  - ❄ Government Accountability Office
- ❄ Research Community
  - ❄ National Science Board
  - ❄ Professional Societies
  - ❄ Evaluation and Oversight through COV and AC
- ❄ General Public
  - ❄ News Media

# Development of the Federal R&D Budget

Showing Fields of Science and Executive and Legislative Decision Units  
 Connecting lines indicate location of agency budget decisions, but not decision sequences.



National Science Foundation

Where  
**Discoveries**  
Begin



NSF-41