

Navigating NSF Programs

Esin Gulari

Dean, College of Engineering & Science
Clemson University

Essential Conditions for Submitting a Proposal to NSF

■ Novel idea

- Synthesis of prior knowledge and experience to address new phenomena with potential leading to a technological breakthrough – “left or right turn” from current research
- Interdisciplinary ideas with partners

■ Capable people

- Track record of the PI and partners

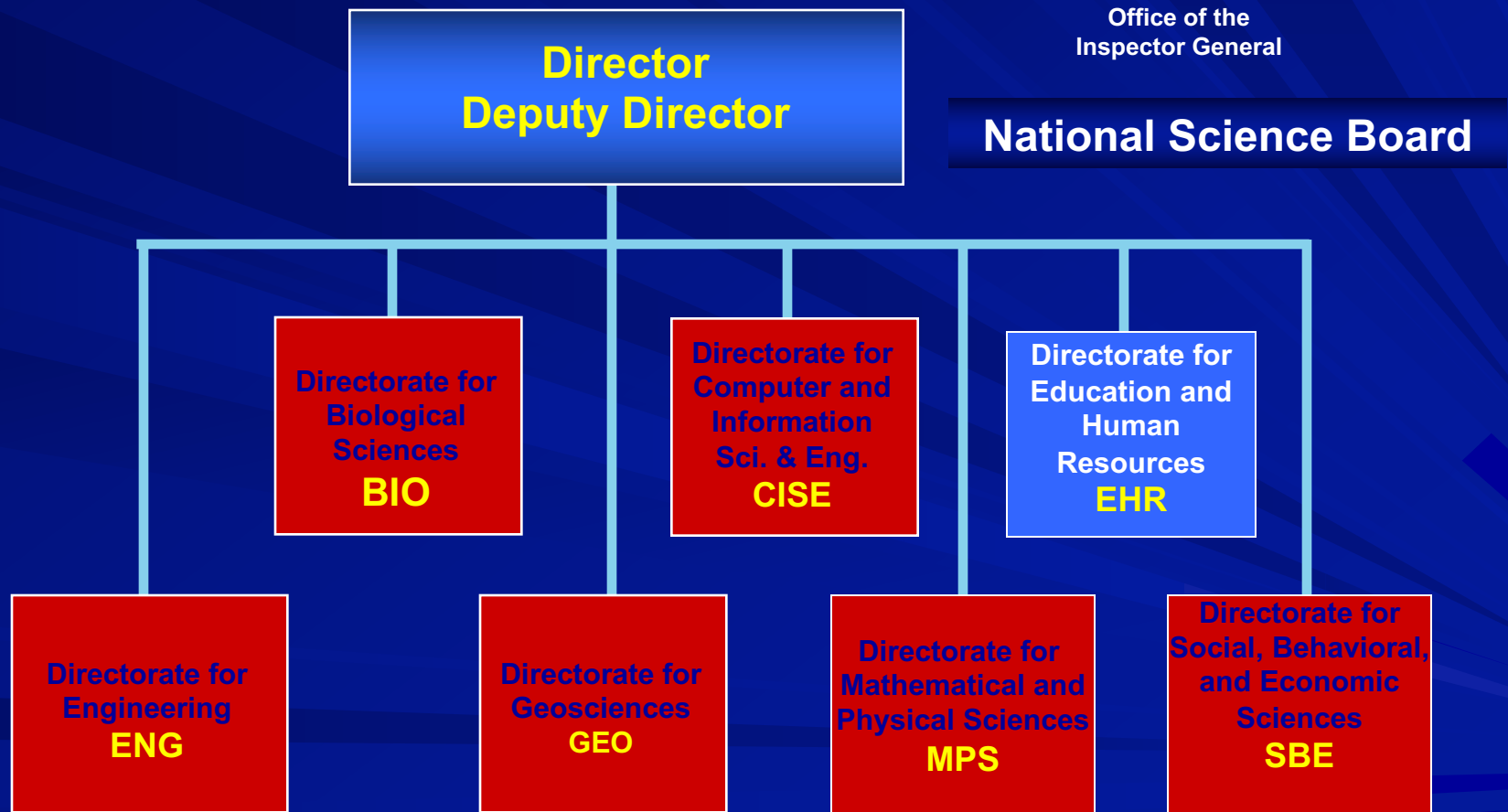
■ State-of-the-art tools

- Instrumentation
- Access to institutional or national facilities

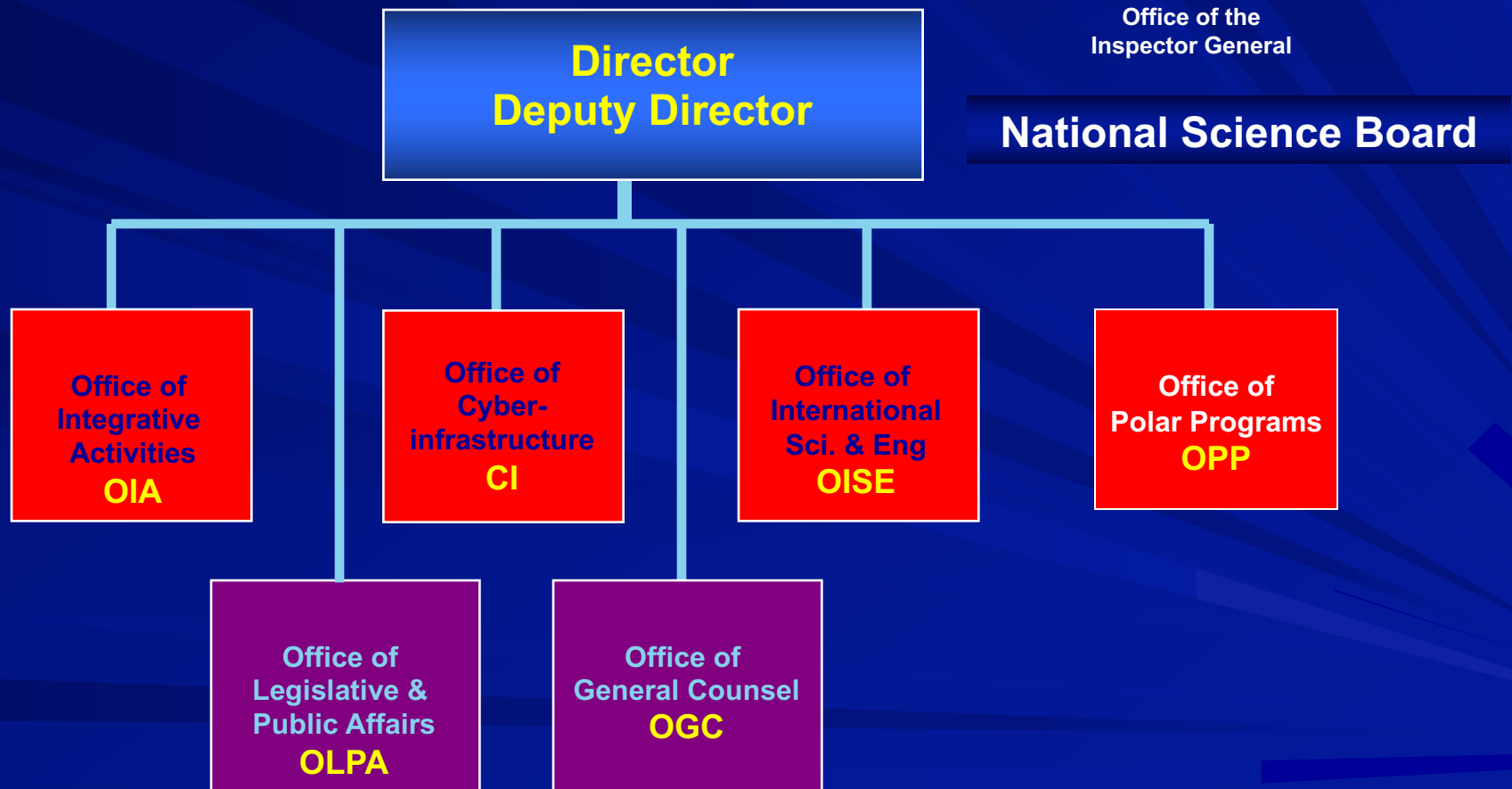
Identification of the funding source

- Federal agencies
 - NSF (fundamental research)
 - NIH (biomedical research)
 - Mission agencies
- Foundations
 - ACS-PRF
 - Dreyfus new faculty
 - Beckman new faculty
- Institutional sources

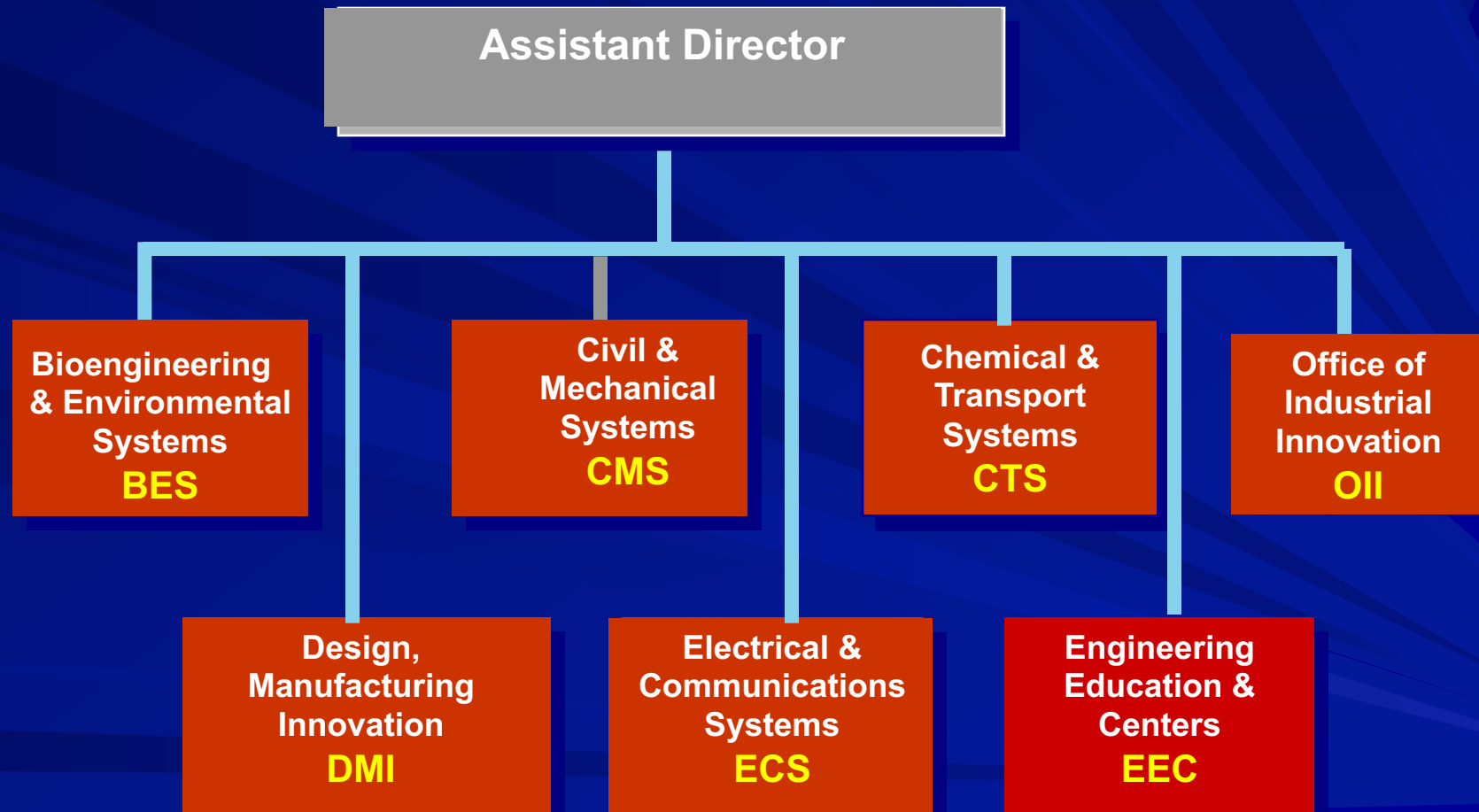
National Science Foundation



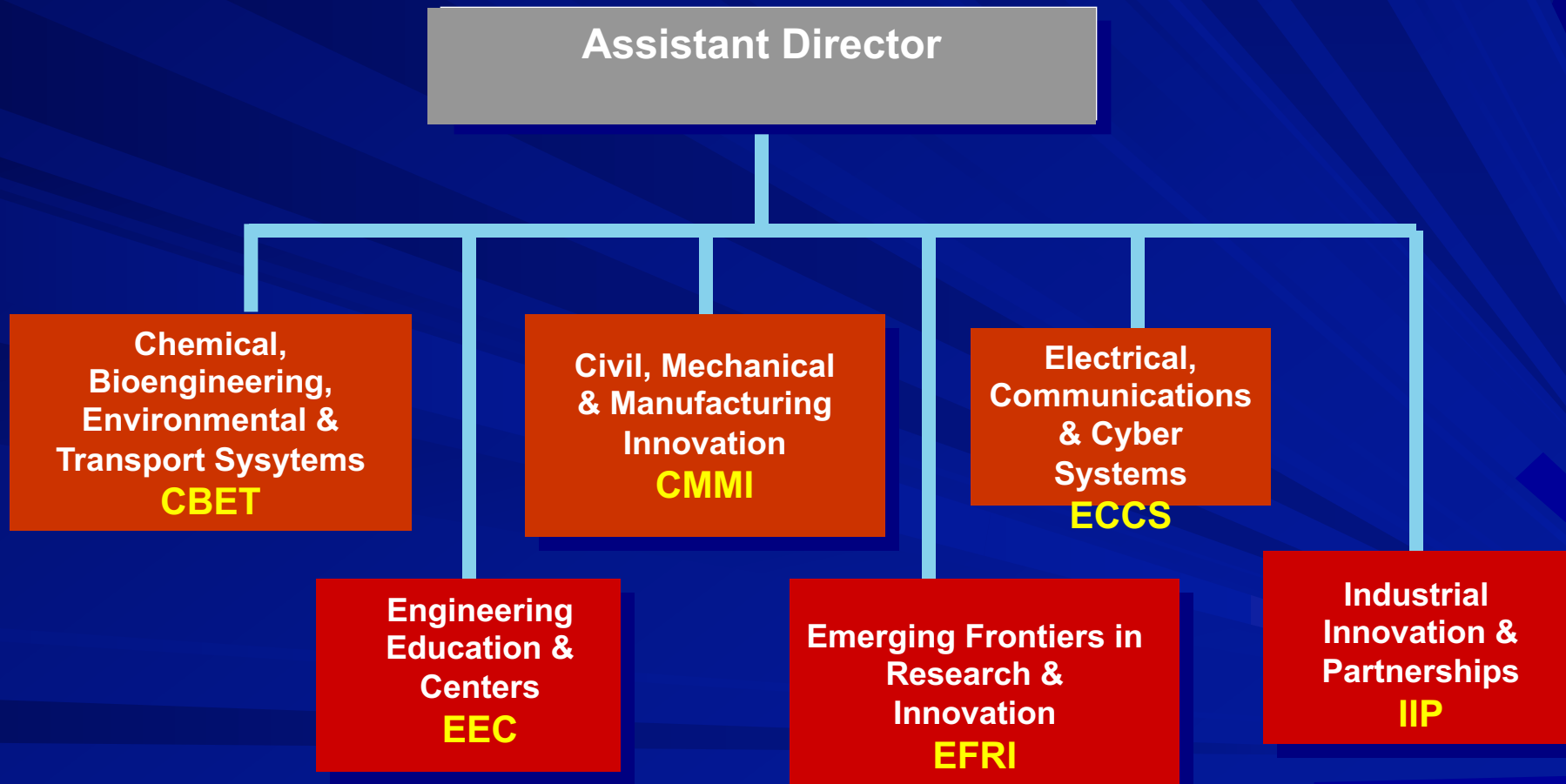
National Science Foundation



Divisions in Engineering Directorate - 2006



Divisions in Engineering Directorate – 2007 (10/1/2006)



NSF Programs

```
graph TD; A[NSF Programs] --> B[Core Programs<br/>(Within a Division)]; A --> C[Priority Areas<br/>(Across Some Directorates)]; A --> D[Crosscutting Programs<br/>(All Directorates Participate)]; A --> E[Initiatives<br/>(Crosscutting and transient)];
```

Core Programs
(Within a Division)

Priority Areas
(Across Some Directorates)

Crosscutting Programs
(All Directorates Participate)

Initiatives
(Crosscutting and transient)

Suggestions

- Identify programs central to your research interests. Try to meet with program directors.
- Most education, training, international and centers programs are coordinated with the disciplinary programs.
- Pay attention to the broader impacts of your proposal.
- Read the NSF budget (pp 79-102 of the 2007 budget for ENG directorate)

Questions to Ask NSF Program Directors

- Does your idea fit the specific program?
- What are the new areas and solicitations?
- What will be the review process (panel, mail or combination)?
- What are the budgets and expected success rates?
- Volunteer to serve as a reviewer.

Be proactive!