National Science Foundation: Funding opportunities in healthcare

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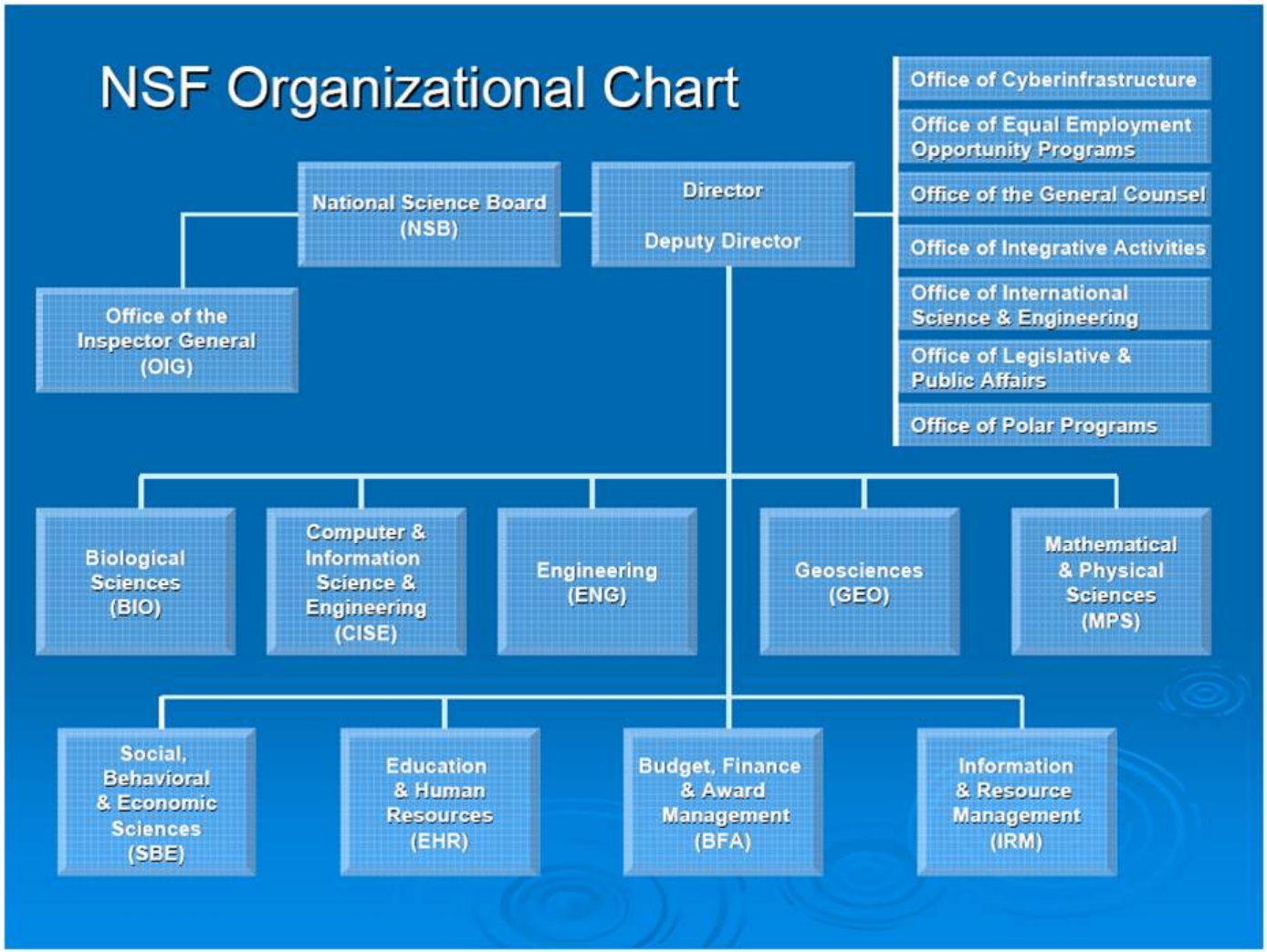
Outline

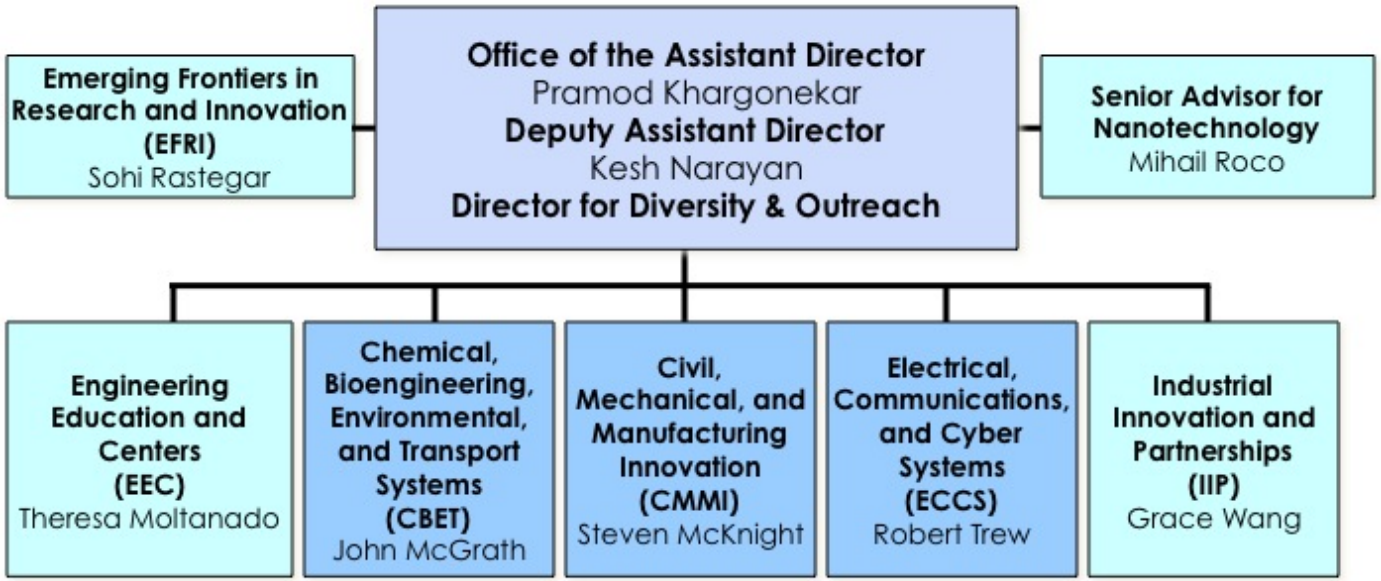
1. General overview
   - NSF structure
   - Funding mechanisms
2. Relevant programs

NSF organizational chart

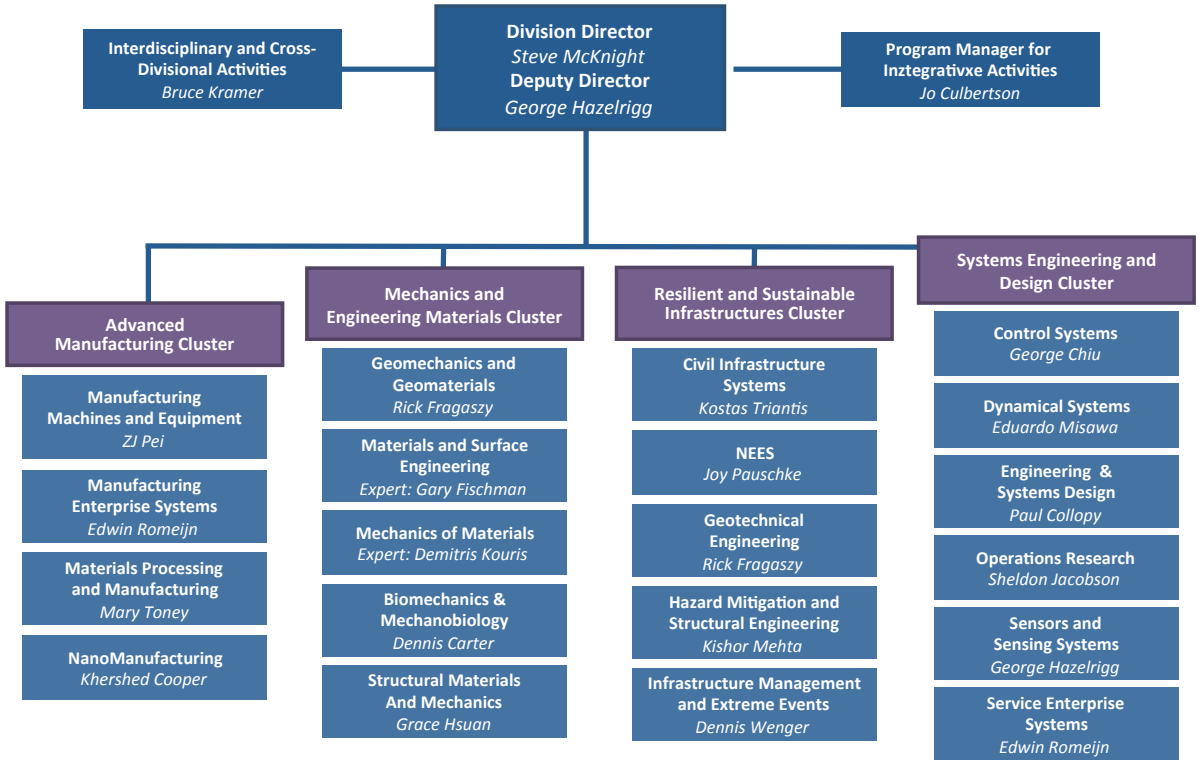


Directorate for Engineering

Directorate of Engineering



Division of CMMI



Main funding mechanisms

- *Unsolicited*
  - Submission windows September 1 – October 1 and January 15 – February 15 (in CMMI)
- *GOALI* (Grant Opportunities for Academic Liaison with Industry)
  - Submitted as and reviewed with unsolicited proposals
- *Workshops* and *Conferences*
- Special initiatives
  - Often cross-disciplinary

Relevant programs

Directorate of Engineering

- Service Enterprise Systems
  - operations
    - patient scheduling
    - workflow
  - decision making/treatment
    - treatment modality choice
    - treatment plan optimization
  - policies and incentives
    - reimbursements

Relevant programs

Directorate of Engineering

- Manufacturing Enterprise Systems
  - Quality control and engineering
  - Reliability
  - Maintenance
- Decision, Risk, and Management Science
  - Decision making; models that explicitly incorporate human behavior
- Biomedical Engineering and Engineering Healthcare

Relevant programs

Directorate of Computer and Information Science and Engineering

- Imaging, image reconstruction
- BigData

Directorate of Biological Sciences

- Biological and Computing Shared Principles (jointly with CISE)
- Molecular and Cellular Biosciences

Smart and Connected Health (SCH)

- Goal:
  - Innovative approaches that support the transformation of healthcare from
    - *reactive* and *hospital-centered* to
    - *preventive*, *proactive*, *evidence-based*, *person-centered*, and *focused on well-being rather than disease*
- NSF/NIH Interagency cooperation
  - First round of submissions now being reviewed by NSF
- Next deadlines:
  - Exploratory proposals:
    October 10, 2013 + annually thereafter
  - Integrative proposals:
    December 10, 2013 + annually thereafter

Conclusion

- Feel free to contact me with any questions!

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