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

- National Science Board (NSB)
  - Director
  - Deputy Director

- Office of the Inspector General (OIG)
- Office of Cyberinfrastructure
- Office of Equal Employment Opportunity Programs
- Office of the General Counsel
- Office of Integrative Activities
- Office of International Science & Engineering
- Office of Legislative & Public Affairs
- Office of Polar Programs

- Biological Sciences (BIO)
- Computer & Information Science & Engineering (CISE)
- Engineering (ENG)
- Geosciences (GEO)
- Mathematical & Physical Sciences (MPS)

- Social, Behavioral & Economic Sciences (SBE)
- Education & Human Resources (EHR)
- Budget, Finance & Award Management (BFA)
- Information & Resource Management (IRM)
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
Feel free to contact me with any questions!

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