Federal Networking and Information Technology R&D Program

Big Data Senior Steering Group

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Member Agencies

- **DOC**
  - NIST
  - NOAA

- **DoD**
  - DARPA
  - NSA
  - OSD
  - Service Research Orgs

- **DOE**
  - NNSA
  - SC

- **DHHS**
  - AHRQ
  - NIH
  - ONC

- **Independent Agencies**
  - DHS
  - EPA
  - NASA
  - NARA
  - NSF
“We don’t have a data problem... we have an analysis problem...”

Or

“We have a filtering problem...”

Or

“We have an opportunity...”
**Big Data** is a term applied to data sets whose size or complexity is beyond the ability of commonly used software tools to capture, manage, and process the data within a tolerable elapsed time.
Big Data Senior Steering Group’s (BDSSG) Purpose

◆ Describe what a Big Data National Initiative would look like, its vision, goal, scope.

◆ Develop four main areas:
  - Core Technologies
  - Domain Research Projects
  - Challenges/Competitions
  - Workforce Development
Vision

A future in which the ability to analyze and extract information from large, diverse, and disparate data sets accelerates the process of scientific discovery and innovation; promotes new economic growth; and leads to new fields of research and new areas of inquiry that would otherwise be impossible.
Goals

◆ Promote New Science...by harnessing big data.

◆ Exploit big data to address national needs and agency missions.

◆ Support stewardship of federal data.

◆ Develop the necessary workforce and infrastructure to advance data science.
Core Technologies

◆ Solicitation: Core Technologies and Technologies for Advancing Big Data Science & Engineering (BIGDATA) NSF 12-499


◆ 9 NSF Directorates and 7 NIH Institutes
Challenges/Competitions

- Series of Challenges: Ideation -> New Tool
- Workshops to decide the parameters
- NASA Center of Excellence for Collaborative Innovation - > Plan (April 12)
- BD SSG Approval and Funding
Domain Research Projects

- Identify current projects that could benefit from cross-agency collaboration.

- Propose new cross-agency projects.

- Examples: Earth Cube, XCEDE, NIH Electronic health record Collaboratory
Workforce Development

- 20 projects across 7 agencies that may be suitable for adapting to Big Data, (Grants, Fellowships, Summer Internships, Scholarships, etc.)

- Undergraduate, Doc, Post-Doc, Mid-Career

- Building a Data Science Community: Meetings at annual conferences, professional associations etc.
Contacts

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  ➢ Suzanne Iacono, NSF