



THE SAN DIEGO SUPERCOMPUTER CENTER (SDSC), U.C. SAN DIEGO,  
AND THE CALIFORNIA INSTITUTE FOR FEDERAL POLICY RESEARCH  
invite you to attend a

***LUNCHEON BRIEFING:***  
***Building a National Data Cyberinfrastructure***

**Wednesday, May 17, 2006**  
**12:00 noon – 1:30 p.m.**  
**Room 1310, Longworth House Office Building**

The 20th century brought about an “information revolution” that forever altered the way we work, communicate, and live. In the 21st century, it is hard to imagine working without an increasingly broad array of enabling technologies and the data they provide. These data will form the foundation for new discovery, advances, and policy over the next 100 years and beyond. The care, management and analysis of today’s tidal wave of data has become an increasingly important focus for technology development.

Cyberinfrastructure and its critical components -- including data management and stewardship, high-performance computing, and networking, -- are essential to the economies and competitiveness of both California and the nation. On May 17, 2006, you are invited to hear about these topics at a lunch briefing featuring Dr. Fran Berman, Director of the San Diego Supercomputer Center (SDSC), and recognized by *BusinessWeek* as one of the nation’s top women in technology.

Through NSF’s investments to date in California cyberinfrastructure, the state’s experts are uniquely positioned to help ensure continued U.S. leadership in science, engineering, and technology, and they stand ready to make major contributions. California’s researchers, educators, and leaders are both drivers and users of cyberinfrastructure which provides critical infrastructure for the next generation of advances, discoveries, and practice..

Science and engineering data may come from many sources including sensors, experiments, simulations, etc., and one recent SDSC simulation produced over 45 terabytes (45 trillion bytes) of data -- that’s more than 4 times the printed materials of the Library of Congress. Collecting, providing, and preserving data responsibly presents both opportunities and challenges. Whereas books can be accessed and preserved for years and even centuries, the access, stewardship, and preservation of digital data collections depends on infrastructure and the technologies on which they are stored. In the next 100 years, storage technologies will advance dozens of generations, and today’s digital collections will need to transition through each new generation, and many times over.

Without a planned and long-term approach for digital data cyberinfrastructure, valuable data may be unavailable, damaged, or lost, and the leadership and competitiveness of U.S. researchers, educators, and practitioners may be compromised. This talk will focus on developing and deploying cyberinfrastructure for data management and preservation, challenges for today and for the future.

To attend this lunch briefing, please reply (acceptances only, thank you) to 202-546-3700, or send email to [randsell@calinst.org](mailto:randsell@calinst.org). We look forward to seeing you on May 17.