

# President's Information Technology Advisory Committee

November 12, 2003

# History

- Interagency coordination and an advisory committee were directed by Congress in 1991
- NCO/HPCC established by the Administration in 1992
- PITAC established in 1997
  - *Interim Report to the President*, 1998
    - <http://www.hpcc.gov/pitac/interim/>
  - *Information Technology Research: Investing in Our Future*, 1999
    - <http://www.hpcc.gov/pitac/report/>
  - Short reports on specific topics, 1999-2001
    - Digital libraries, health care, education, open source software for high-end computing, access to government
    - Program reviews
    - <http://www.hpcc.gov/pubs/pitac/>

# Areas of responsibility

- Governed by the *HPC Act of 1991*, Executive Orders 13035 (2/17/97) and 13092 (7/24/98), and the *Next Generation Internet Research Act of 1998*
  - Offer advice concerning the multi-agency NITRD Program
    - Whether R&D investments are appropriate to maintain America's leadership in information technologies and their application
    - Progress made in implementing the Program
    - Balance among Program components
    - Need to revise the Program
  - Guided by Dr. Marburger's *FY 2005 Interagency Research and Development Priorities* memorandum of 6/5/03

# “Leadership Through Innovation”

- Guiding principles
  - For more than 200 years, America has been the land of innovation. America’s world leadership derives in large measure from this spirit of innovation.
  - Today, the field of information technology lies at the heart of America’s innovation – transforming our lives, and driving our economy.
- Vision
  - Broad recognition of these principles – of the value of an explicit “Innovation Agenda”
  - Today’s federal policies and investments in information technology research and development will sustain America’s leadership in this critical field – and thus in other fields.

# This PITAC's approach

- Focused “briefs” rather than comprehensive studies
- Policy recommendations that are
  - Implementable
  - Budget-neutral
  - Will yield demonstrable results
- Generate excitement
  - Tangible demonstrations of what innovation is accomplishing, as a catalyst for further action
  - “Innovation agenda”

# Selection criteria for topic areas

- Widely recognized as being of critical national importance
- Require a high level of IT innovation
- Have been the subject of recent authoritative studies
- Show potential for both short-term and long-term payoff
- Have available funding that could be re-prioritized
- Benefit from interest and expertise among PITAC members

# Examples of topic areas satisfying these criteria

- Homeland security
- The American health care system and medical science
- The American education system
- The efficient operation of government
- Advancing the sciences
- The global environment
- The compassion organizations

# Approach within each topic area

- Identify PITAC topic area leader(s)
- Identify additional PITAC topic area participants
- Quickly get the lay of the land
  - Identify broad issue areas, authoritative individuals, and foundational work
- Move forward progressively, in manageable pieces
  - Tackle worthwhile subtopics, rather than taking an extended period to produce something comprehensive

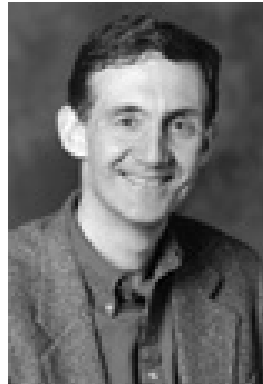


- Bring forward both short-term and long-term recommendations
  - Our fundamental task is to provide advice about the Federal NITRD Program
  - We must also illuminate some short-term actions
- Highlight existing entrepreneurial efforts, in order to excite people and illustrate what's possible
  - These efforts could be in companies, in universities, or in government labs or agencies
  - Goal is to show what's happening today as a result of recent innovation, and thus to foreshadow what could be accomplished by
    - Driving further adoption of these innovations
    - Stimulating further innovation

- Topic area leader(s) set the agenda, working closely with PITAC co-chairs



Marc R. Benioff  
Chairman and CEO  
Salesforce.com



Edward D. Lazowska, Ph.D.  
Bill & Melinda Gates Chair in Computer Science  
University of Washington

- Focus primarily on one topic area at each public meeting

# Topic areas initiated thus far

- Homeland security
  - Topic area leader:

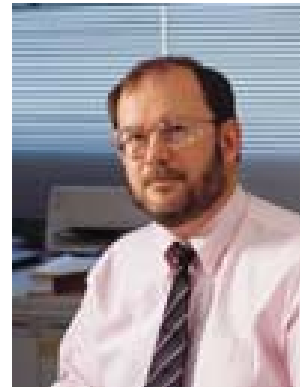


F. Thompson Leighton  
Chief Scientist, Akamai Technologies  
Professor of Applied Mathematics, Massachusetts Institute of Technology

- Advancing the sciences
  - Topic area leaders:



Harold Mortazavian, Ph.D.  
President and CEO  
Advanced Scientific Research, Inc.

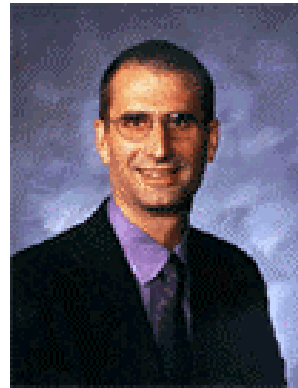


Daniel A. Reed, Ph.D.  
Director and Gutgsell Professor  
National Computational Science Alliance  
University of Illinois

- The American health care system and medical science
  - Topic area leaders:



Jonathan C. Javitt, M.D.  
Vice Chairman  
Health Directions LLC



Peter M. Neupert  
Chairman  
drugstore.com



David H. Staelin, Ph.D.  
Professor of EE  
MIT

# Indicators of success

- Increased appreciation of the value of innovation (especially innovation in information technology) – it becomes a larger component of the national debate
- Diverse federal agencies make appropriate investments in IT R&D
- These agencies also make increasing use of the results of IT innovations
- Federal policies are increasingly oriented towards advancing innovation and entrepreneurship

# Today's technical agenda

- *The New Health Care: How Information Technology Is Transforming America's Health Care System*, led by Dr. Javitt
- *The National Information Technology Research and Development (NITRD) Program*, led by Dr. Nelson