

THE NATIONAL

POLICY AND GLOBAL AFFAIRS

ACADEMIES

**NRC Study on
Research Universities**

Peter Henderson, Study Director

Coalition for Academic Scientific Computing

March 18, 2011

THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

National Academy of Sciences
National Academy of Engineering
Institute of Medicine
National Research Council

Study Origins: 2005

National Academies produces *Gathering Storm* focusing on STEM education, S&E research funding, and innovation policy

National Academies also begins discussions of financial trends in higher education focusing on state appropriations, university endowments, and federal research funding

Request: 2009

In Spring 2009, these conversations converged when Bob Berdahl invited Senator Alexander to address the AAU

In June 2009, a request from Senators Mikulski and Alexander and Reps. Gordon and Hall for a follow-up to *Gathering Storm* focused on the future of US research universities

Charge

“What are the top ten actions that Congress, the federal government, state governments, research universities, and others could take to assure the ability of the American research university to maintain the excellence in research and doctoral education needed to help the United States compete, prosper, and achieve national goals for health, energy, the environment, and security in the global community of the 21st century?”

Parameters

The study committee will, in carrying out its work, focus on:

- Research and doctoral programs carried out by research universities and associated medical centers;
- Basic and applied research in research universities, along with collaborative research programs with other components of the research enterprise (e.g., national and federal laboratories, federally-funded research and development centers, and corporate research laboratories);
- Doctoral education and, to the extent necessary, the pathways to graduate education and research careers; and
- Fields of study and research that are critical to helping the United States compete, prosper, and achieve national goals for health, energy, the environment, and security, with a focus on science, engineering, and medicine.

Tasks

In carrying out this charge, the study committee will, in addition to other tasks it identifies:

- describe and assess the historical development, current status, trends, and societal impact of research universities and the “ecosystem” of this set of institutions in the United States, placing these institutions in the context of the nation's research, innovation, and industrial enterprises and the nation's system of higher education;
- assess the organizational, financial, and intellectual capacity of public and private research universities in the United States, including reference to research universities internationally to the extent possible with existing data; and
- envision the mission and organization of these diverse institutions 10-20 years into the future and the steps needed to get there.

Study Committee

Chad Holliday, *Committee Chair*, Chairman of the Board, Bank of America, and Chairman and CEO, E.I. du Pont de Nemours and Company (DuPont) (retired) [NAE]

Peter Agre, University Professor and Director, Johns Hopkins Malaria Research Institute, Department of Molecular Microbiology and Immunology, Bloomberg School of Public Health, Johns Hopkins University [NAS/IOM]

Enriqueta Bond, President, Burroughs Wellcome Fund (retired) [IOM]

C.W. Paul Chu, T. L. L. Temple Chair of Science and Professor of Physics, University of Houston, and Former President, Hong Kong University of Science and Technology [NAS]

Francisco Cigarroa, Chancellor, The University of Texas System [IOM]

James Duderstadt, President Emeritus and University Professor of Science and Engineering, University of Michigan [NAE]

Ronald Ehrenberg, Irving M. Ives Professor of Industrial and Labor Relations and Economics, and Director, Cornell Higher Education Research Institute, Cornell University

William Frist, Distinguished University Professor, Owen Graduate School of Management, Vanderbilt University, and US Senator (retired)

William Green, Chairman and CEO, Accenture

John Hennessy, President and Bing Presidential Professor, Stanford University [NAS/NAE]

Study Committee

Walter Massey, President Emeritus Morehouse College, and Chairman, Bank of America (retired)

Burton McMurtry, Founding Partner, TVI

Ernest Moniz, Cecil and Ida Green Professor of Physics and Engineering Systems and Director of the MIT Laboratory for Energy and the Environment , Department of Physics, MIT

Heather Monroe-Blum, Principal and Vice-Chancellor, and Professor, Department of Epidemiology, Biostatistics and Occupational Health, McGill University

Cherry Murray, Dean, Harvard School of Engineering and Applied Sciences, John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences, and Professor of Physics, Harvard University [NAS/NAE]

Hunter Rawlings, President Emeritus and Professor of Classical History, Cornell University

John Reed, Chairman, New York Stock Exchange (retired), and Chairman and CEO, Citigroup (retired)

Teresa Sullivan, President, University of Virginia

Sidney Taurel, Chairman and CEO, Eli Lilly & Company (retired)

Laura D'Andrea Tyson, S. K. and Angela Chan Chair in Global Management, Haas School of Business, University of California Berkeley

Padmasree Warrior, Chief Technology Officer, Cisco Systems

Study Committee

- Sectors: Industry, Government, Non-Profits, National Laboratory, Academia
- Research Universities: Public and private; range of sizes; geographically representative
- Geography: US regions, Canada, Europe, and Asia
- Fields: Engineering, Information Technology, Physical Sciences, Life Sciences, Medicine, Finance, Social Sciences, and Humanities.

Study Committee

- 7 corporate or non-profit CEOs
- 8 university or system presidents
- Former Undersecretary of Energy
- Former deputy director of national lab
- 8 Members of the NAS, NAE, and/or IOM
- Nobel Laureate, Recipient of the National Medal of Science, and Recipient of the National Medal of Technology

Work Plan

2010

Summer:	Kick-off; Conference calls
Sept. 21-22:	Meeting, Washington, DC
Fall :	Information Gathering
Nov. 22-23:	Convocation, Washington, DC
Nov. 23-24:	Meeting, Washington, DC
Winter :	Deliberations; Report Outline

2011

February 20:	Meeting, Washington, DC
Spring:	Writing and External Review
Summer:	Report Release and Dissemination

Key Issue Areas

- Mission
- Governance
- Management
- University finance
- Compliance Burden (Regulation and Reporting)

Key Issue Areas

- Research: Agendas, Resources, Organization
- Commercialization and Econ Development
- Doctoral education: Content, Outcomes
- Demographics

Key Issue Areas

- Globalization and International Dimensions
- Transformative Power of Technologies

Contact

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