OSTP and U.S. Federal Science and Technology Policy

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What is science and technology policy?

Policy for science vs. Science for policy

(also technology for policy vs. policy for technology)

OSTP does it all!
Office of Science and Technology Policy (OSTP)

- OSTP provides S&T advice to the president and other White House offices, leads federal S&T policymaking, coordinates interagency S&T efforts and R&D spending, and consults with non-federal stakeholders on S&T matters.
- Director John Holdren is also President Obama’s science advisor.
- OSTP manages National Science and Technology Council (NSTC) interagency groups.
- OSTP supports the President’s Council of Advisors on Science and Technology (PCAST).
The place of science in the White House...

...is centered in the Office of Science and Technology Policy (OSTP)

EOP also includes Offices of: Vice President, Chief of Staff, Cabinet Affairs, Communications, Intergovernmental Relations, Public Engagement, Social Secretary, US Trade Representative, White House Counsel, and more.
OSTP: two major responsibilities

1. Policy for science and technology

Analysis, recommendations, and coordination with OMB and other White House offices on R&D budgets & related policies, S&T education & workforce issues, inter-agency S&T initiatives, broadband, open government, scientific integrity. Oversight of NSF and NASA.

2. Science and technology for policy

Independent advice for the President about S&T germane to all policy issues with which he is concerned
“Twenty-first century businesses will rely on American science and technology, research and development.”

- President Barack Obama

January 20, 2015
Total R&D by Agency: 2016 Budget
Budget Authority in billions of dollars

- DOD, $72.1
- HHS (NIH), $31.0
- NASA, $12.2
- DOE, $12.6
- NSF, $6.3
- USDA, $2.9
- DOC (NIST & NOAA), $2.1
- All Other, $6.4

Total R&D = $146 billion
The 2016 Budget:

• Continues our commitment to world-class science and research
• Invests in innovation
• Improves Americans’ health
• Makes America a magnet for jobs
• Invests in homegrown clean energy
• Takes action on climate change
• Prepares students with STEM skills
Continuing our commitment to world-class science and research

- $68.8 billion for non-defense R&D.
- $76.9 billion for defense R&D.
- $66.9 billion for (basic and applied) research.
- $7.7 billion for the National Science Foundation (NSF).
- $5.3 billion for the Department of Energy (DOE) Office of Science.
- $755 million for the National Institute of Standards and Technology (NIST) laboratories.
- $18.5 billion for NASA.
- $550 million for U.S. Department of Agriculture competitive grants, including $450 million for competitively-awarded extramural research grants.

in billions of constant FY 2015 dollars

FY 2009 figures include Recovery Act appropriations.
Research includes basic research and applied research.
February 2015 OSTP
“I want the country that eliminated polio and mapped the human genome to lead a new era of medicine -- one that delivers the right treatment at the right time. In some patients with cystic fibrosis, this approach has reversed a disease once thought unstoppable. So tonight, I’m launching a new Precision Medicine Initiative to bring us closer to curing diseases like cancer and diabetes, and to give all of us access to the personalized information we need to keep ourselves and our families healthier. We can do this.”

- President Barack Obama
   January 20, 2015
Improving Americans’ health through innovation in life sciences, biology, and neuroscience

- The 2016 Budget provides $215 million to launch a Precision Medicine Initiative with funding from HHS agencies.
- The BRAIN Initiative will continue with a Federal commitment of over $300 million from NIH, DARPA, and NSF.
- The 2016 Budget provides over $1.2 billion for a government-wide effort to combat antibiotic-resistant bacteria.
- $31.3 billion for the National Institutes of Health (NIH) to support high-quality, innovative biomedical research.
- The Budget provides $82 million at USGS, EPA, and USDA to address pollinator health, including colony collapse disorder.
THANK YOU

www.whitehouse.gov/ostp
@whitehouseostp
Invest in the Building Blocks of American Innovation

- Educate Americans with 21st century skills and create a world-class workforce
- Strengthen and broaden American leadership in fundamental research
- Build a leading physical infrastructure
- Develop an advanced information technology ecosystem

Catalyze Breakthroughs for National Priorities

- Unleash a clean energy revolution
- Accelerate biotechnology, nanotechnology, and advanced manufacturing
- Develop breakthroughs in space applications
- Drive breakthroughs in health care technology
- Create a quantum leap in educational technologies

Promote Market-Based Innovation

- Accelerate business innovation with the R&E tax credit
- Promote investments in ingenuity through effective intellectual property policy
- Encourage high-growth and innovation-based entrepreneurship
- Promote innovative, open, and competitive markets

Source: http://www.whitehouse.gov/innovation/
THE NATIONAL NANOTECHNOLOGY INITIATIVE

Research and Development Leading to a Revolution in Technology and Industry

NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT

Supplement to the President’s Budget

February 2011
Scientific Collections:
Mission-Critical Infrastructure for Federal Science Agencies

A Report of the
Interagency Working Group on Scientific Collections
(IWGSC)

SCIENCE OF SCIENCE POLICY:
FEDERAL RESEARCH ROADMAP

A Report on the Science of Science Policy to the
Committee on Social, Behavioral and Economic Sciences
Committee on Science
National Science and Technology Council
Office of Science and Technology Policy

November 2008
A STRATEGY FOR AMERICAN INNOVATION
Securing Our Economic Growth and Prosperity

February 2011

NATIONAL SPACE POLICY
of the
UNITED STATES of AMERICA

Blueprint for a Secure Energy Future
March 30, 2011
America COMPETES Reauthorization Act of 2010

Reauthorizes NSF, DOE Science, NIST, DOE ARPA-E 2011-2013
Enacted January 2011; also provides guidance to OSTP’s activities
THANK YOU

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