

HEP and DOE:

Focus and Context

Steven E. Koonin
Under Secretary for Science
US Department of Energy
June 2010

Outline

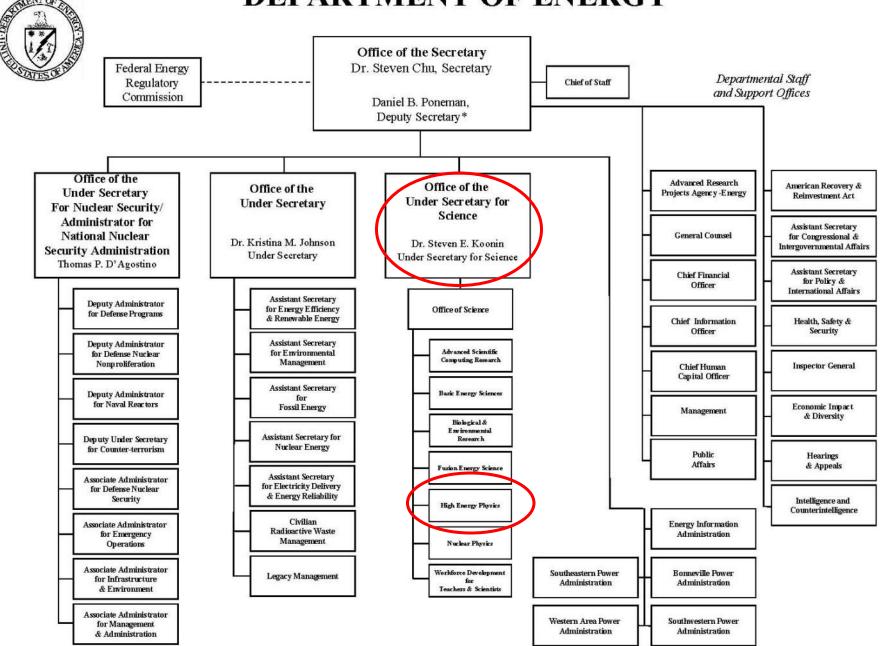
A bit about me and my role

HEP now

The future (broader picture)



DEPARTMENT OF ENERGY



HIGH ENERGY PHYSICS





Energy R&D Organizations

Secretary Steven Chu

Deputy Secretary
Daniel B. Poneman

Under Secretary for Energy

Kristina Johnson

Energy Efficiency & Renewable Energy Cathy Zoi

Fossil Energy James Markowski

Nuclear Energy Pete Miller

Electricity Delivery and Energy Reliability Pat Hoffman (A) Under Secretary for Science

Steven E. Koonin

Office of Science

William Brinkman Patricia Dehmer

Basic Energy Sciences Harriet Kung

Advanced Scientific Computing Research Michael Strayer

> Biological & Environmental Research Anna Palmisano

High Energy Physics

Dennis Kovar

Nuclear Physics

Tim Hallman

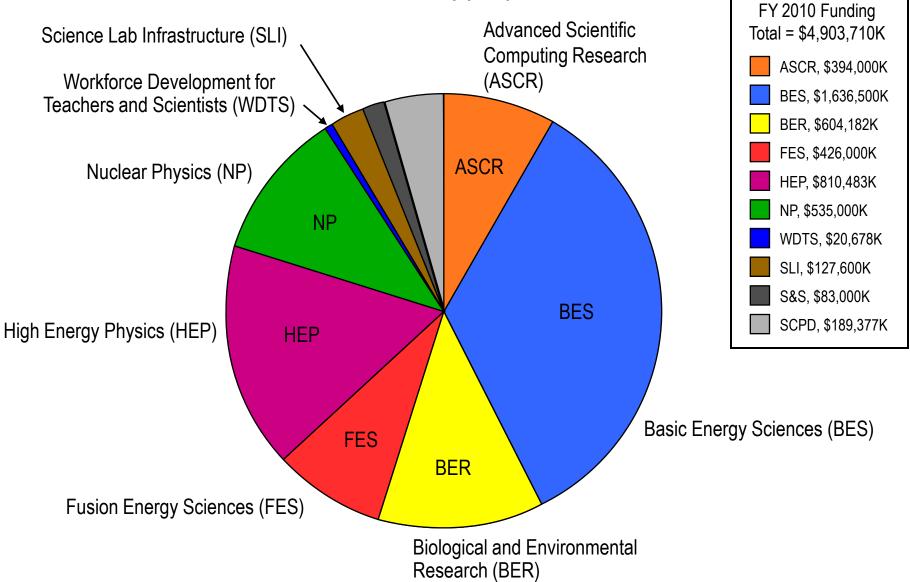
Fusion Energy Sciences Ed Synakowski

Workforce
Development for
Teachers & Scientists
Bill Valdez

Advanced Research Projects Agency – Energy

Arun Majumdar

Office of Science Programs FY 2010 Appropriation



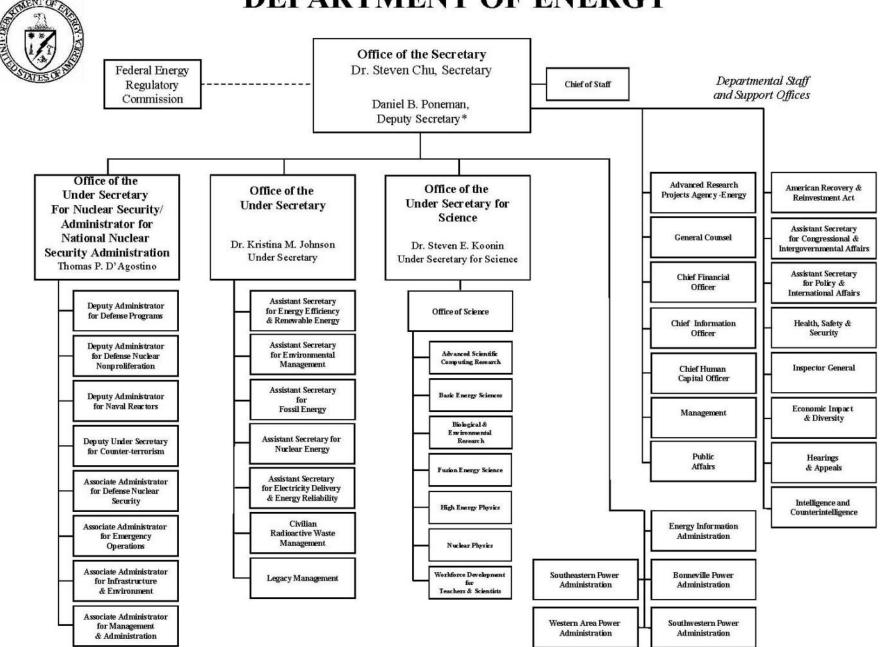


DOE missions

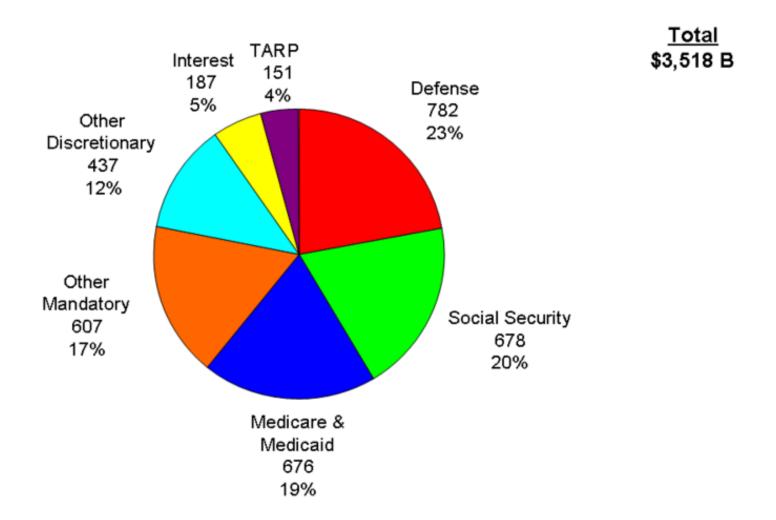
- Sustain basic research
 - Discovery and Mission Driven
- Catalyze a transformation of the national/global energy system
 - Energy security: 3.5 M bbl/day reduction in crude use
 - □ Greenhouse gas emissions: ~17% reduction by 2020, 83% by 2050
- Enhance nuclear security
 - Steward an aging/diminishing stockpile without nuclear testing
 - Deter/detect proliferation
 - Secure nuclear materials
- Contribute to US competitiveness and jobs



DEPARTMENT OF ENERGY



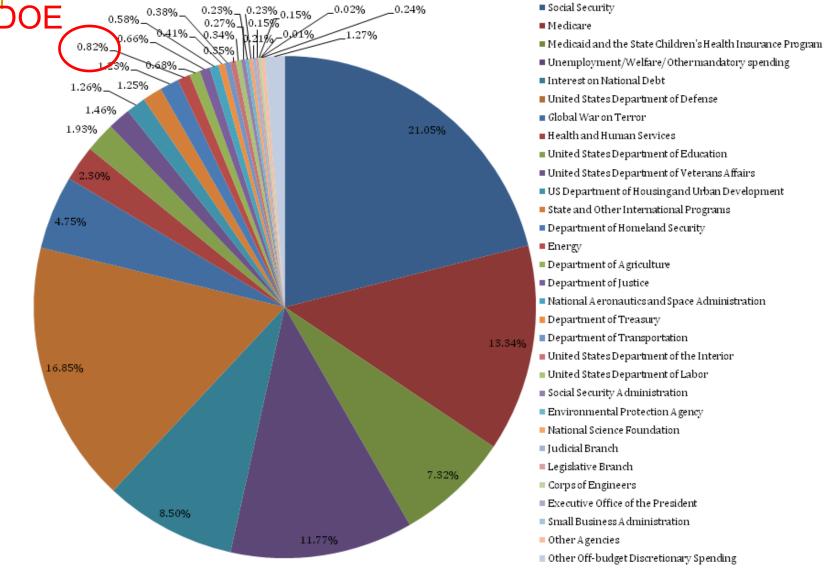
U.S. Federal Spending - Fiscal Year 2009 (\$ Billion)



Source: OMB - 2011 Budget - Summary Table S-3

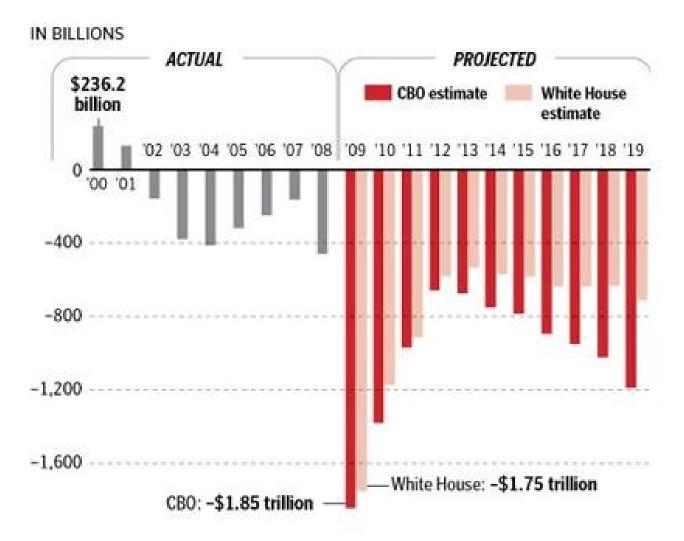


FY09 Federal Spending



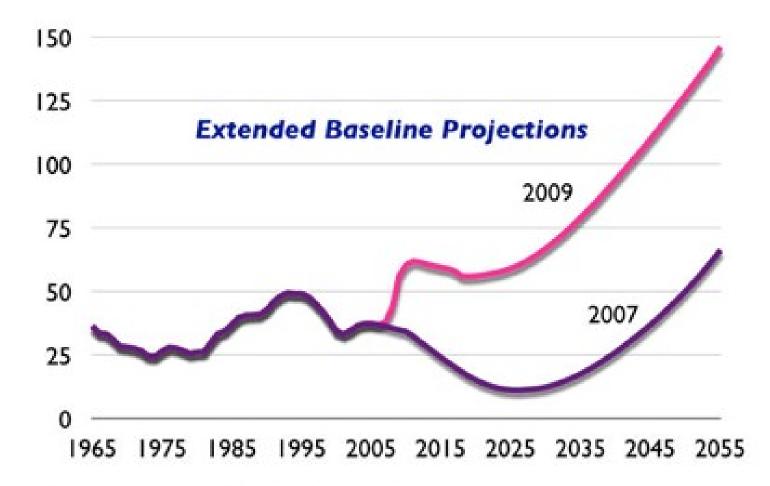


Federal deficit projections





Projections of Federal Debt Held by the Public Percent of GDP



SOURCE: Congressional Budget Office, 2007 and 2009.



What can a scientist do?

- Help advocate for basic research
 - Your field and others
 - Applications and "spin offs" are important sufficient
- Understand the bigger problems
 - They will affect you, both as a citizen and a scientist
 - Advocate for sensible policies
 - Become involved technically



Questions?/Comments?