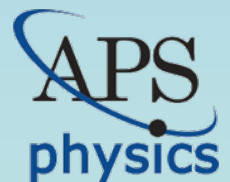


# APS UNITS

Washington, DC

April 14-15, 2011

Michael S. Lubell

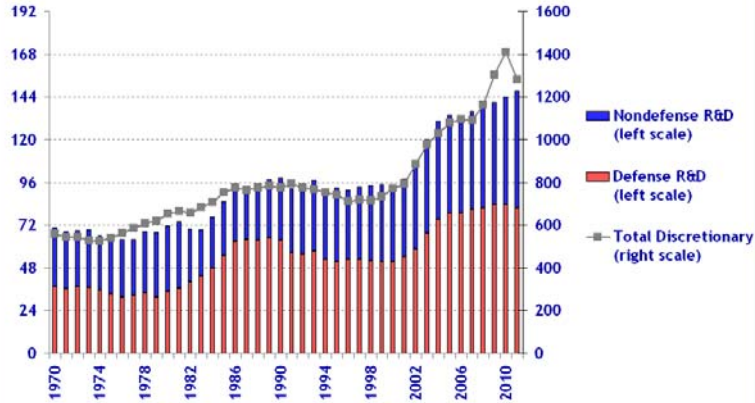


# Issues

- Budget
- Communicating with APS Members
- Public Perception of Science
- Communicating with the Public
- Lobbying

### Trends in R&D and Discretionary Spending

outlays in billions of constant FY 2010 dollars



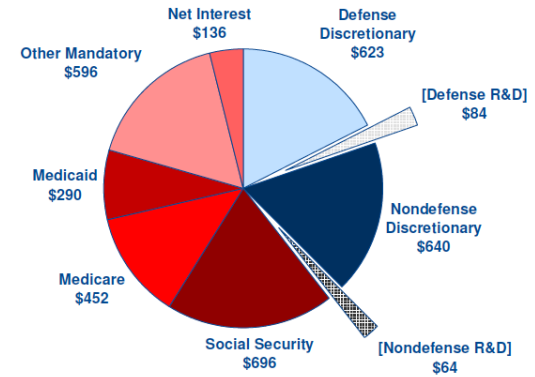
Source: Budget of the United States Government, FY 2011.  
R&D totals do not include construction of facilities and equipment.  
FY 2010-2011 data are budget projections.  
© 2010 AAAS



### Composition of the Proposed FY 2010 Budget

Total Outlays = \$3.6 trillion

outlays in billions of dollars

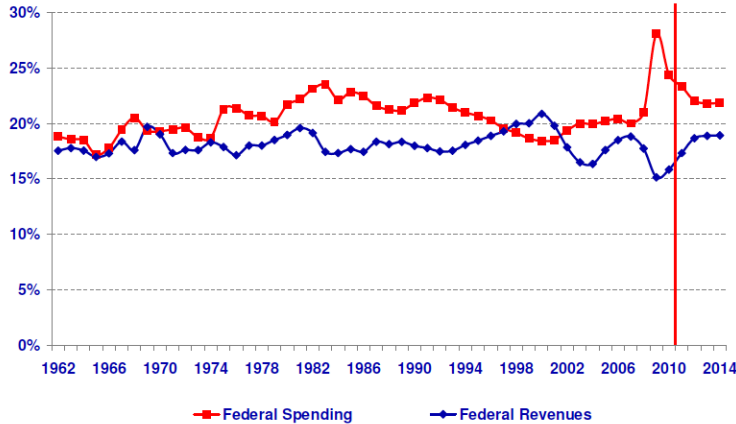


Source: Budget of the United States Government FY 2010  
Projected unified deficit is \$1.3 trillion.  
© 2009 AAAS

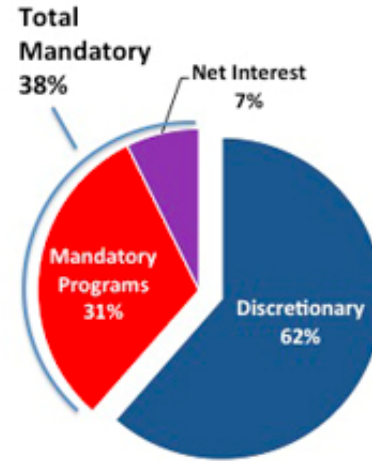


### Federal Spending and Revenues

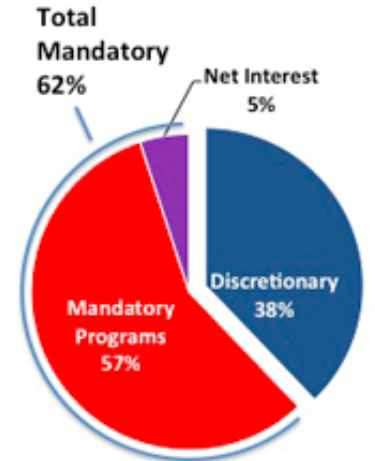
(percent of GDP)



Source: Budget of the United States Government, FY 2010.  
FY 2009 data are estimates. FY 2010-2014 data are budget projections.  
© 2010 AAAS



Total Spending 1970:  
\$900 Billion



Total Spending 2010:  
\$3.5 Trillion (est.)

## Recent Budget History Through April 15, 2011

Science Account	FY 05 (\$B)	FY 06 (\$B)	FY 07 (\$B)	FY 08 (\$B)	FY 08S (\$B)	ARRA (\$B)	FY 09 (\$B)	FY 10 (\$B)	FY 11CR (\$B)	Δ (%)
DOE SC	<i>3.57</i>	<i>3.47</i>	3.81	<i>3.85</i>	0.0625	1.60	<i>4.60</i>	<i>4.83</i>	4.89	+1.2
DOE EERE	1.16	1.16	1.46	<i>1.54</i>	0.0625	16.8	<i>1.93</i>	<i>1.95</i>	1.84	-5.6
DOE ARPA-E						0.400		0.015	0.180	NA
NSF	5.48	5.59	5.84	6.07	0.0625	3.00	6.49	6.87	6.81	-0.9
R&RA	4.23	4.45	4.76	4.82	0.0225	2.50	5.18	5.56	5.52	-0.7
MREFC	0.165	0.234	0.191	0.221		0.400	0.152	0.117	0.117	0.0
EHR	0.844	0.700	0.698	0.726	0.0400	0.100	0.845	0.873	0.863	-1.1
NIST Core	<i>0.400</i>	<i>0.431</i>	0.493	<i>0.519</i>		0.600	<i>0.597</i>	<i>0.605</i>	0.578	-4.5
STRS	<i>0.370</i>	<i>0.383</i>	0.434	<i>0.440</i>		0.220	<i>0.469</i>	<i>0.505</i>	0.508	+0.1
CRF	<i>0.030</i>	<i>0.048</i>	0.059	<i>0.109</i>		0.360	<i>0.128</i>	<i>0.100</i>	0.070	-30.0
NIST ATP/TIP	0.140	0.079	0.079	0.065			0.065	0.070	0.045	-35.7
NIH	27.90	28.54	29.23	29.46	0.130	8.50	30.30	31.01	30.75	-0.8
DOD 6.1	1.49	1.47	1.53	<i>1.47</i>			<i>1.63</i>	1.88	1.95	+3.7
DOD 6.2	4.70	5.17	5.10	<i>4.16</i>			5.08	5.06	?	?
NASA Sci	[5.50]	[5.25]	[5.25]	4.71	0.0625	0.400	4.50	4.49	4.49	0.0

*Red italics: Earmarks removed*; NASA accounts redefined in FY 2008

# Issues

- ✓ Budget
- Communicating with APS Members

# Communicating with APS Members

- *APS News*
- Unit Newsletters
- Alerts
- APS Website
- Blogs
- ???

# Issues

- ✓ Budget
- ✓ Communicating with APS Members
- Public Perception of Science

# Summary of Findings – Language & Messaging – on Federal Funding for Scientific Research

---

March 2011



#11071

**GREENBERG QUINLAN ROSNER RESEARCH**

**Bill McInturff  
Liz Harrington**

**Anna Greenberg  
Missy Egelsky**



# What We Did:

- **January/February 2011 Focus Groups:**
  - ✓ Tea Party Supporters (Columbus, OH)
  - ✓ Democrat Primary Voters (Columbus, OH)
  - ✓ Republican Primary Voters (Charlotte, NC)
  - ✓ Swing Voters (Charlotte, NC)
  
- **February 2011 National Internet Survey:**
  - ✓ 600 Registered Voters
  - ✓ 201 Tea Party Supporters
  - ✓ 220 Republican Primary Voters
  - ✓ 215 Swing Voters
  - ✓ 219 Democrat Primary Voters

**The mood of the electorate is still very pessimistic.**

**Things in the country have  
gotten off on the wrong track**

**55%**

**The quality of jobs available in  
America will get worse**

**66%**

**The United States' position  
as the world's economic  
leader will get worse**

**70%**

# The climate for increasing government spending is more difficult than any time in the past generation.



## *Increase/Decrease Budget Spending* *Difference Score (Increase Spending-Decrease Spending)*

Year	Scientific Research	Military Defense	Health Care	Government Assistance for the Unemployed	Environmental Protection	Average D/S
1987	+36%	-5%	+69%	+26%	+55%	+36%
1994	+22%	+8%	+41%	+2%	+23%	+19%
2002	N/A	+55%	+65%	+26%	+34%	+45%
2009	+25%	+22%	+51%	+29%	+27%	+31%
2011	+13%	+1%	+17%	-1%	+10%	+8%

*If you were making up the budget for the federal government this year, would you increase spending, decrease spending, or keep spending the same for \_\_\_\_\_?*

**Voters believe it is important for the United States to be the global leader in scientific research and technology. But they also believe we are not living up to this goal. Compared to other countries, only 11% grade the United States an 'A' on technological innovation.**

*Importance of the U.S. Being the Global Leader in Scientific Research*

**Very Important 54%**

**Total Important 93%**

**Not Important 7%**

*And how important do you believe it is for the United States to be the global leader in scientific research and technology?*

*Grade for the U.S. for Technological Innovation Compared to Other Countries*

*A or B*

**56%**

*C, D or F*

**46%**

*Using a grade of A, B, C, D, and F, where A is excellent and F is very poor and using any of the grades in between. How would you grade the United States when it comes to technological innovation compared with other countries?*

# Messaging and Language

# Quick Summary:

1. **Acknowledge the need for the nation to spend our funding dollars more wisely** and then identify scientific research as a way to improve our economic situation.
2. **Provide examples of past successes that made a difference in people's lives** and look to scientific research as a way to empower America's spirit of innovation.
3. **People value medical research. Talk about how scientific research has made important contributions to medical research** through discovery of cures and saving lives.
4. **People also see scientific research as important to help the U.S. develop new energy technologies to make America more energy independent.**

# Quick Summary:

- 5. It helps to talk about specific impacts and how Americans will be affected negatively by cuts to scientific research funding.** Talk about actual dollars cut and what this means in terms of studies, jobs lost and other quantifiable impacts on the United States.
- 6. Talk about how scientific research is helping to build a better America** both economically and for future generations.
- 7. It is about 'Scientific Research.'** It matters how you refer to this type of research and what you call it. Most people don't understand what basic or fundamental research is.

# What do voters see as the most important contributions of science to society?

Top Two Choices

QuickTime™ and a  
decompressor  
are needed to see this picture.



## Top Messages That Work

**It is important we as a country start learning to live within our means and work to cut the federal deficit. But we need to do this in a smart way and not just with across the board cuts without an understanding of what this means to America's future. We should be allocating money where we have the best chance of earning a good return and improving our future. The innovations and discoveries that come out of scientific research have the potential to help boost our economy and make our lives better.**

**More than half of U.S. economic growth since World War II can be traced to science-driven technological innovation. The source of much of this innovation was scientific research supported by the federal government, which helped lead to vaccines, the MRI, modern communications devices, and the Internet. If we want our children and grandchildren to have good opportunities in the future, then, as a country, we need to do what we did half a century ago and make funding scientific research a national priority. We should not cut funding to scientific research because we need to empower America's spirit of innovation not suppress it.**

**Phrases that work when talking about the positive contributions of scientific research :**

**Building a Better America**

---

**Investment in America's Success**

---

**American Spirit of Innovation**

---

**An American Economic Renewal**

---

**Empowering America's Potential**

---

**Today's Investment, Tomorrow's Discovery**

## What Doesn't Work:

- ✘ **The Race For Innovation**
- ✘ **Winning The Future**
- ✘ **American Competitiveness**
- ✘ **Unleashing America's Potential**
- ✘ **Releasing America's Spirit of Innovation**

# Issues

- ✓ Budget
- ✓ Communicating with APS Members
- ✓ Public Perception of Science
- Communicating with the Public

# Communicating with the Public

- Public Lectures
- Chambers of Commerce
- Rotary Clubs
- PTA Meetings
- Political Town Hall Meetings
- ???

# Issues

- ✓ Budget
- ✓ Communicating with APS Members
- ✓ Public Perception of Science
- ✓ Communicating with the Public
- Lobbying

# Lobbying

- CVD
- District Meetings
- Responses to APS Alerts
- APS Contact Congress Petitions: APS Meetings
- Phone Calls, E-Mails, Faxes and Letters (District Offices Only)
- Political Town Hall Meetings
- Campaign Volunteering
- Running for Office

# Issues

- ✓ Budget
- ✓ Communicating with APS Members
- ✓ Public Perception of Science
- ✓ Communicating with the Public
- ✓ Lobbying