World Class to Second Class?
Acting Now to Assure Continued U.S. Leadership in Science and Innovation

Mary Woolley, President, Research!America

May 9, 2012
Oregon Health & Science University Research Week
Portland, OR
Research!America and OHSU

- OHSU has been a Research!America member since 1994
- Research!America is a proud advocate for OHSU research; we value working in partnership
The Honorable Mark O. Hatfield

- Research!America Award winner, 1999
- Noted for his leadership in Congress for research
- Buildings at OHSU, NIH are among those that bear his name
Research in Oregon

<table>
<thead>
<tr>
<th>Source</th>
<th>Funding (in thousands)</th>
<th>State Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH</td>
<td>$303,560</td>
<td>21</td>
</tr>
<tr>
<td>CDC</td>
<td>$69,199</td>
<td>30</td>
</tr>
<tr>
<td>NSF</td>
<td>$81,275</td>
<td>22</td>
</tr>
<tr>
<td>AHRQ</td>
<td>$13,275</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>$457,318</td>
<td>25</td>
</tr>
<tr>
<td>Population</td>
<td>3,831,074</td>
<td>27</td>
</tr>
</tbody>
</table>

More than 6,000 jobs in Oregon are supported by funding from the National Institutes of Health alone.

Sources: Research!America; United for Medical Research
China, On the Rise

“U.S. R&D expenditures accounted for about 31% of the worldwide total, down from 38% a decade earlier. The combined R&D expenditures of 10 Asian economies [including China and Japan] rose steadily to reach U.S. levels in 2009, driven mostly by China, now the second largest R&D performing nation.”

Source: National Science Board, Science and Engineering Indicators 2012
U.S. Science is Still Doing Well, But Consider...

- In 2012, China plans to spend 26% more on government-funded basic research; Russia is increasing research support by 65% during the next five years.
- The U.S. ranks sixth in R&D spending as a percentage of GDP.
- The FY11 budget funded only one in six NIH grant applications, the lowest rate on record.
- The funding and policy outlook is grim.

a 10% payline isn't funding it's a lottery
To our valued customers:

We are sad to say we are permanently closing our doors at Mistral on December 20th. We have enjoyed our time here at the Ferry Blg. and have valued your support. You can reach us in touch with us at

The

"Congressional Job Approval Essentially Flat at 12%”
(gallup.com, March 21, 2012)
Unsettled Climate for Science and Advocacy

- Overriding concern re: job creation, economic growth and competitiveness
- Threat of sequestration
- Election-year politics
- Health care issues
- Influence of the Tea Party
- Scientists are not speaking out
Three Budgets, But None Prioritizes Research

- President’s budget and Ryan budget: surrogates for the election-year debate on the proper role of government, but neither likely to prevail
- Conrad budget: Based on Simpson-Bowles (both spending cuts and revenue increases)
- None of the three prioritize research

Appropriations continue on another track: priorities will be set and money will be spent
Appropriations Gridlock

Where we are now

- Budget Control Act (BCA)
- Supercommittee failure
- FY12 ray of hope
- FY13 President’s budget
- Ryan and Conrad budgets
- House and Senate budget allocations
- President refuses to sign appropriations bills
- Symbolic effort by House to prevent sequestration

Where we may be headed

- Gridlock
- Potential outcomes: further efforts to prevent sequestration; sequestration and appropriations decisions punted to 2013
What Would Sequestration Mean for Research in the U.S.?

Compared to FY11 and assuming a conservative 7.8% cut:

- NIH would lose about $2.4 billion
- FDA would lose approximately $200 million
- CDC funding could be $440 million less
- NIH would fund around 2,300 fewer grants in FY13
- In addition, NIH would likely be forced to cut back on existing grants, shortening them or reducing their dollar limits
- Funding for NSF would be cut by approximately $530 million, including a cut of $430 million from research grants.

Sources: Research!America analysis; NIH Director’s testimony before Senate LHHS Appropriations Subcommittee, March 28, 2012
What Would Sequestration Mean for Oregon?

• Under a 7.8% sequestration, or across-the-board cut, Oregon could lose about $24 million in new NIH awards compared to FY11 funding*

• Oregon received $303 million in NIH awards in FY11; assuming a 7.8% sequestration cut, it would support 483 fewer jobs

*Assumes across-the-board cuts affect all institutions equally
Sources: Research!America analysis, United for Medical Research
WARNING: Failure to be an advocate can be hazardous to your research career.
Key Congressional Decision Makers: Senate

Sen. Daniel Inouye
(D-HI)
Chair, Senate Appropriations Committee

Sen. Tom Harkin
(D-IA)
Chair, LHHS, Appropriations Subcommittee

Sen. Harry Reid
(D-NV)
Senate Majority Leader

Sen. Dick Durbin
(D-IL)
Senate Majority Whip

Sen. Kent Conrad
(D-ND)
Chair, Budget Committee
Key Congressional Decision Makers: House

Rep. Hal Rogers (R-KY)  
Chair, House Appropriations Committee

Rep. Dennis Rehberg (R-MT)  
Chair, House LHHS Appropriations Subcommittee

Rep. John Boehner (R-OH)  
Speaker of the House

Rep. Paul Ryan (R-WI)  
Chair, House Budget Committee

Rep. Eric Cantor (R-VA)  
House Majority Leader
Oregon’s Congressional Delegation: Leaders for Health

Sen. Ron Wyden (D)
- Extensive involvement in 21st Century Nanotechnology R&D Act
- Original sponsor of the Improving Access to Clinical Trials Act
- Work with House Budget Committee Chair Rep. Paul Ryan (R-WI) on Medicare proposal
- Signee of the 2012 Casey-Burr letter (for continued investment in NIH)

Sen. Jeff Merkley (D)
- Member of the Senate HELP Committee
- Signee of the 2012 Casey-Burr letter (for continued investment in NIH)
Oregon’s Congressional Delegation: Leaders for Health

Rep. Earl Blumenauer (D-3rd)
- Co-chair of the House Neuroscience Caucus

Rep. Suzanne Bonamici (D-1st)
- Member, Budget Committee and Committee on Science, Space & Technology

Rep. Peter DeFazio (D-4th)
- Member of seven health-related caucuses
- Extensively involved in health care and health insurance issues

Rep. Kurt Schrader (D-5th)
- Developed New Democrat Coalition Principles for Supporting Innovation in our Nation’s Health Care System with Rep. Allyson Schwartz (D-Pa.)

Rep. Greg Walden (R-2nd)
- GOP deputy whip; member, House Energy & Commerce Committee
- Leadership in rural health care issues
Research!America’s Mission

Making research to improve health a higher national priority

Research!America is an innovator in advocacy for research
Research!America: 23 Years of Putting Research on the Public Agenda

• Nonprofit alliance with member organizations drawn from academia, business, patient organizations and scientific societies representing more than 125 million Americans

• Distinguished, all-volunteer board includes former elected and appointed officials, media and public relations leaders, and leaders from alliance member organizations
“I believe the economic destiny of America lies in science, technology, innovation and research.”

Research!America Chair and Former Congressman John Edward Porter
Key Objectives

- Increase investment in domestic health-related R&D
- Increase investment in global health-related R&D
- Ensure that R&D investments reach patients by improving the policy environment
- Promote science overall and counter attacks made on science
Selected Research!America

Accomplishments:

- Leadership in advocacy for 2009 ARRA (stimulus) funding for federal research agencies
- Leadership in advocacy for FY12 NIH budget increase
- Ongoing leadership in:
  - public opinion polling on medical and health research
  - message development for research advocacy
  - media attention to research
Rehberg championed a $1 billion increase to NIH’s FY12 budget
“...public sentiment is everything. With public sentiment, nothing can fail; without it nothing can succeed.”

President Abraham Lincoln
Commissioning public opinion polls on research issues for more than 20 years:
  • National Polls
  • State-Based Polls
  • Issue-Specific Polls

Telephone (random-digit dialing) polls are conducted with a sample size of 800-1000 adults (age 18+) and a maximum theoretical sampling error of +/- 3.5%. Data are demographically representative of adult U.S. residents (state or national).

Online polls are conducted with a sample size of 1000-2000 adults and sampling error of +/-3.1%. The data are weighted in two stages to ensure accurate representation of the U.S. adult population.
Less Than A Quarter Believe U.S. Leads the World in Medical Research

In the area of medical and health research, compared to other countries, do you think the U.S. is first in the world, is it ahead of other leading countries, behind other leading countries or about the same as other leading countries?

- 23% First in the world
- 45% Ahead of other leading countries
- 20% Behind other leading countries
- 12% Not sure

Source: A Research!America poll of likely voters conducted in partnership with JZ Analytics in March 2012.
Over Half Skeptical that U.S. Will Be a Leader in Health Care

In your view, which of the following will be considered the No. 1 world leader in health care in the year 2020?

- United States: 47%
- China: 2%
- India: 18%
- European Union: 3%
- Brazil: 2%
- Not sure: 2%

Source: A Research!America poll of likely voters conducted in partnership with JZ Analytics in March 2012.
Over Half Doubt U.S. Leadership in Science and Technology in 2020

In your view, which of the following will be considered the No. 1 world leader in science and technology in the year 2020?

- United States: 42%
- China: 26%
- India: 7%
- European Union: 2%
- Brazil: 0%
- Not sure: 23%

Source: A Research!America poll of likely voters conducted in partnership with JZ Analytics in March 2012.
Despite Skepticism, Americans Aspire to World Leadership

... If current trends continue, other nations will soon match U.S. investment in research and development. In your opinion, how important is it for the United States to maintain its world leadership role?

64% Very important
27% Somewhat important
 3% Somewhat unimportant
 2% Very unimportant
 2% Not sure

Source: A Research!America poll of likely voters conducted in partnership with JZ Analytics in March 2012.
Majority: Medical Research Should be Exempt from Across-the-Board Cuts

The Budget Control Act of 2011 includes provisions that will require an across-the-board cut of approximately 9% to discretionary spending programs — including spending on medical and health research. In consideration of this, which of the following statements is closer to your view?

- 54% Government spending on medical and health research saves lives, creates jobs and fuels innovation and should be exempt from across-the-board cuts
- 34% Funding for health research is adequate and the country has other budget priorities now, including the deficit
- 12% Not sure

Source: A Research!America poll of likely voters conducted in partnership with JZ Analytics in March 2012.
Oregonians: Eliminating Health Disparities Important

Studies show that certain health problems such as diabetes, heart disease and infant mortality happen more often among people with lower incomes and among minorities. How important do you feel it is to conduct medical or health research to understand and eliminate these differences?

- Very: 63%
- Somewhat: 30%
- Not very/Not at all: 7%

Very Important to Eliminate Health Disparities

Studies show that certain health problems such as diabetes, heart disease and infant mortality happen more often among minorities or citizens with lower incomes. How important do you feel it is to conduct medical or health research to understand and eliminate these differences?

46% Very important
36% Somewhat important
9% Somewhat unimportant
4% Very unimportant
5% Not sure

Source: Your Candidates-Your Health Public Opinion Poll, October 2011, JZ Analytics for Research!America
Advances in Science Have Been Beneficial, Americans Say

Do you agree or disagree with the following statement? “Overall, advances in science have benefited society and have helped make life easier for most people.”

- Strongly agree: 38%
- Somewhat agree: 48%
- Somewhat disagree: 4%
- Strongly disagree: 2%
- Not sure: 8%

Source: National Public Opinion Poll, October 2011, JZ Analytics for Research!America
Public Perceptions of Science and Scientists

Science’s impact on society is:
- Mostly positive: 84%
- Mostly negative: 6%
- Other/don’t know: 10%

Professions contributing “a lot to society’s well-being”:
- Members of military: 84%
- Teachers: 77%
- Scientists: 70%
- Medical doctors: 69%

Pew Research Center for the People & the Press, July 2009
And Yet, Despite High Levels of Public Confidence, Scientists are Invisible in Our Society...
How Many Americans Can Name a Living Scientist?

Can you name a living scientist? (first volunteered responses)
Most Americans Can’t Name a Living Scientist

Can you name a living scientist? (first volunteered responses)

- Yes: 34%
- No: 66%

- Stephen Hawking: 15%
- James Watson: 1%
- Jane Goodall: 1%
- Bill Nye: 1%
- Michio Kaku: 1%
- Neil Degrasse Tyson: 1%
- Other: 14%

Source: Your Congress - Your Health Survey, March 2011
Charlton Research Company for Research!America
Do Americans Know Where Medical Research is Conducted?

Can you name any institution, company or organization where medical and health research is conducted?
Most Americans Don’t Know Where Research is Conducted

Can you name any institution, company or organization where medical and health research is conducted?

- **I can**
  - Mayo Clinic 10%
  - CDC 9%
  - NIH 7%
  - Johns Hopkins 6%
  - St. Jude 4%
  - Pfizer 3%
  - American Cancer Society 3%
  - Merck 2%
  - Duke Univ./Med. Ctr. 1%
  - OR Heath & Sci. Univ. 1%
  - UCSF 1%
  - Other 52%

- **I cannot**

Source: National Public Opinion Poll, October 2011, JZ Analytics for Research!America
Few Americans Recognize the National Institutes of Health

What is the name of the government agency that funds most of the medical research paid for by taxpayers in this country? (first volunteered responses)

Source: Research Enterprise Poll, February 2010
Charlton Research Company for Research!America
Most Do Not Recognize NSF

What is the name of the government agency that funds most of the basic research and educational programming in the sciences, mathematics and engineering in this country?

Source: Your Congress-Your Health Survey, 2007
Charlton Research Company for Research!America
Most Don’t Know Their Elected Officials’ Positions on Research

How well informed would you say you are about the positions of your senators and representative when it comes to their support of medical, health and scientific research?

- Very well informed: 8%
- Somewhat well informed: 7%
- Somewhat uninformed: 24%
- Very uninformed: 25%
- Not sure: 36%

Source: National Public Opinion Poll, October 2011, JZ Analytics for Research!America
Your Candidates-Your Health for the 2012 Elections

• Outreach to candidates
Candidates for federal office will be invited to participate by providing responses to a questionnaire about health, research and related issues

• Extensive public outreach through the Research!America advocacy network and sponsoring partners to encourage candidates for federal office to share their views

Oregon’s primary is on May 15!

www.yourcandidatesyourhealth.org
Creating Champions in Science in Congress: 101

- Candidates for election who don’t talk about R&D before they are elected are highly unlikely to become champions once in office.
- Candidates listen to potential voters.
A Challenge: Pass the Starbucks Test
Why Aren’t More Scientists Engaged in Public Outreach?
Why Aren’t More Researchers Engaged in Public Outreach?

- Don’t have time
- Aren’t being asked
- Don’t know how
- “Involvement makes no difference”
- Apathy/don’t want to
- Lack of incentives
- “Non-scientists won’t understand”
- Liability/fear of being misinterpreted
- Happy with the job others are doing
What Can You Do Right Now?

- Emphasize how research drives economic activity in every state and creates good jobs.
- Volunteer as an adviser to your Member of Congress and/or a candidate; Oregon primaries are May 15!
- Encourage your colleagues in advocacy.
- Show up at campaign events.
- Get involved in Research!America’s Your Candidates-Your Health initiative.
“Everybody in the science and technology community who cares about the future of the world should be tithing 10 percent of his or her time to interacting with the public in the policy process.”

John P. Holdren, PhD
President Obama’s Science Adviser
Economic Impact Messages

- Research drives innovation and productivity
- Research creates jobs
- Research fuels local & regional economies
- Research helps control health care costs
- Research can contribute to growth and savings in all types of businesses
- Research is an investment, not a cost
- Cutting research is not a deficit-reduction strategy
Advocacy in Action: Kerri Mowen, PhD

- Assistant professor, Dept. of Chemical Physiology, The Scripps Research Institute, La Jolla, CA
- Worried about cuts in NIH funding, she created an online petition; 4,000 people signed on
- That led to a front-page story in the San Diego Union-Tribune, calling more attention to the issue
Put a Face on Research: YOURS!
Researchers serve the public’s interest — like elected representatives. That’s why the most important four words a researcher can say and convey are ...
“I work for you.”
Connect With Us

www.researchamerica.org/blog
www.researchamerica.org/facebook
www.twitter.com/researchamerica
www.youtube.com/researchamerica