Your Role in Changing Hearts and Minds for Science
WARNING: Failure to be an advocate can be hazardous to your research career
Resolve to Engage in 2017

Why researchers should resolve to engage in 2017

Debates over climate change and genome editing present the need for researchers to venture beyond their comfort zones to engage with citizens — and they should receive credit for doing so.

04 January 2017

“Liberal elites tell us that ‘the science is settled’, and that people must have faith in their predictions. But science is never settled.”

“The EPA [Environmental Protection Agency] could overturn its own endangerment finding, which, according to the Supreme Court, compels the agency to regulate carbon dioxide. The EPA has just been handed a loaded gun to accomplish just that ... The paper 'The art and science of climate model tuning' is written by Frederic Hourdin and 15 co-authors. It details the phenomenal amount of adjustment that has been applied to the GCMs [global climate models] in order to get them to simulate the 20th Century or just the present climate.”

Related stories:
- How Woody Guthrie can help us fight for science
- Simply studying populism is no longer enough
- Take the time and effort to correct misinformation

The first quote is from a Washington Examiner article reposted by the American Enterprise Institute, and the second is from the Cato Institute — both US think tanks that support free markets.
Today’s Objectives

• Gain insight into effective arguments for investing in science and connecting with the policymaking process
• Sharpen techniques for communicating the value of science
• Develop a working model for your department
Thank you!

My follow up after last year’s meeting included...

- Meetings with Alan Landay, with introductions to key NIH staffers; new effort on microbiome
- Follow up with Katherine Knight, making the case for advocacy as part of training
- Follow up with Sandy Weller; and her experience with a campaign contribution
- Follow up with Satya Dandekar, review of candidates running in the Davis area
“To bridge this gap in understanding and shared engagement, future biomedical scientists and physician scientists alike must be prepared to articulate to the public and its elected representatives the immediate and potential future impact of their work.”

Implementation of training through a new competitive grant process, leading to mandated training.

-Excerpt from Vision 2.3: Ensure that the NIH-trained workforce is fluent in the public context of science. Full report is available at www.nihvp.org
A Challenge: Pass the Starbucks Test
Model Departmental Advocacy Program

*University of Maryland School of Medicine, Department of Biochemistry and Molecular Biology; Richard Eckert, Chairman*

- Science Advocacy Committee managed by faculty member, staffed by admin assistant; each spend 72 hrs/yr
- Twice per year 4-6 person teams visit each of Maryland’s Reps and Senators, at either home office or Washington, DC
- All team members are trained on current themes of advocacy
- Records kept, follow up letters sent, regular communication between meetings
- Participation is not tied to tenure/promotion, but it is expected of all faculty and students
- Regular but not constant communication with UMD government affairs office and with the Dean
“...public sentiment is everything. With public sentiment, nothing can fail; without it nothing can succeed.”

President Abraham Lincoln
Elected Officials Should Heed the Advice of Scientists

In thinking about threats to your health, how important is it that elected officials at all levels listen to advice from scientists?

- Very Important: 54%
- Somewhat Important: 36%
- Not too Important: 7%
- Not at all Important: 2%
- Not Sure: 3%

Source: A Research!America survey of U.S. adults conducted in partnership with Zogby Analytics in January 2016.
Public Paradox

Public Has Overwhelmingly Positive View of Science

PEW/AAAS 2015

Net Positive 79%

Net Negative 16%

Neutral / Unsure 5%

Source: Public and Scientists’ Views on Science and Society, PEW Research & AAAS, 2015

Yet Science Near Top of Fed Programs the Public is Willing to See Cut in a Deficit Reduction Environment

<table>
<thead>
<tr>
<th>Top Domestic Program Willing to Cut to Reduce Deficit Among All Voters</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Defense</td>
<td>21%</td>
</tr>
<tr>
<td>Scientific Research</td>
<td>19%</td>
</tr>
<tr>
<td>Unemployment Benefits</td>
<td>9%</td>
</tr>
<tr>
<td>Public Education</td>
<td>7%</td>
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<tr>
<td>Social Security</td>
<td>5%</td>
</tr>
<tr>
<td>Medicare</td>
<td>5%</td>
</tr>
<tr>
<td>Roads, Bridges, and Infrastructure</td>
<td>4%</td>
</tr>
<tr>
<td>Veterans Benefits</td>
<td>2%</td>
</tr>
<tr>
<td>Medical Research</td>
<td>2%</td>
</tr>
<tr>
<td>None of these</td>
<td>26%</td>
</tr>
</tbody>
</table>

If you had to choose one, which of the following domestic programs would you be willing to cut government spending on in order to reduce the federal deficit? Source: Public Opinion Strategies/Greenberg Quinlan Rosner - Research Funding - 2011

Public willing to see Cuts to scientific research
ScienceCounts Phase I Findings

• Americans overwhelmingly view science favorably and trust scientists, but only 1 in 4 believe government’s role in funding science is irreplaceable.

• Segmentation: One can divide the public into four groups from most to least likely to act. These groups differ from most to least interested in science.

• Effective message platforms: Science is hope, serve greater good, look forward, highlight benefits. Economic, competitive & jobs arguments less successful.
Important for Scientists to Engage with Public on Research

How important is it for scientists to inform elected officials and the public about their research and its impact on society?

Source: A Research!America and ScienceDebate.org survey of U.S. adults conducted in partnership with Zogby Analytics in September 2015.
“Scientists must take off their lab coats and engage the people of their communities and states. They must be willing to defend and spread the good news about science.”

*Science* magazine editorial, June 2014
Remember the most important four words a researcher can say and convey:
“I work for you.”
Suzanne Ffolkes
Vice President, Communications
“What you understand well can be communicated well. It's a matter of not just discipline but obligation to the public for scientists to communicate both the excitement of science, the prospects of science and the accomplishments of science.”

Elias A. Zerhouni, M.D.
**Most Trusted Spokespersons for Science?**

How trustworthy do you consider each of the following to be as spokespersons for science?

- **Scientists**: 40% Very trustworthy, 42% Somewhat trustworthy, 8% Not very trustworthy, 9% Not at all trustworthy, 15% Not sure.
- **Health care professionals**: 25% Very trustworthy, 54% Somewhat trustworthy, 8% Not very trustworthy, 10% Not at all trustworthy, 17% Not sure.
- **Patient organizations**: 15% Very trustworthy, 51% Somewhat trustworthy, 14% Not very trustworthy, 16% Not at all trustworthy, 12% Not sure.
- **Journalists**: 9% Very trustworthy, 32% Somewhat trustworthy, 31% Not very trustworthy, 17% Not at all trustworthy, 12% Not sure.
- **Bloggers**: 7% Very trustworthy, 18% Somewhat trustworthy, 35% Not very trustworthy, 25% Not at all trustworthy, 15% Not sure.
- **Business leaders**: 7% Very trustworthy, 26% Somewhat trustworthy, 34% Not very trustworthy, 21% Not at all trustworthy, 12% Not sure.
- **Elected officials**: 6% Very trustworthy, 17% Somewhat trustworthy, 35% Not very trustworthy, 30% Not at all trustworthy, 12% Not sure.

Source: A Research!America survey of U.S. adults conducted in partnership with Zogby Analytics in January 2017
Why Aren’t More Scientists 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

Rank order of responses based on formal and informal polling of scientists
Tools You Can Use
“Bridge” Expressions of Concern to Success and Shared Aspiration
THEN... 130,000 new cases of HIV infection occurred annually during the peak of the AIDS epidemic in the 1980s, and most cases were fatal.

NOW... The development of Highly Active Antiretroviral Therapy (HAART), revolutionized the battle against HIV/AIDS and transformed the virus from a death sentence to a manageable chronic condition.

IMAGINE... A universal HIV vaccine and complete eradication of HIV/AIDS.

Research is the future!
In 2015, Americans spent $14.3 billion on Super Bowl-related purchases.

That amount is enough to fund the National Institute of General Medical Sciences (NIGMS) for 6 years.

Sources: NRF; NIH
Engage Emotion: You Can’t Use Facts To Change Feelings

- Time and again, research has shown that facts and rational analysis do not convince people to change behavior. Behavior change begins when people see something that makes them feel something.
- If you want to change the narrative around a cause, you have to start by changing the way people feel.
Build a Better Narrative

• Research shows the most effective leaders are the best storytellers. Why? Because narrative is our single greatest instrument in fueling action from those around us - stories literally change brains and behaviors.

• We are exposed to literally 148 newspapers worth of information every day. We discard 90% of the content that we receive, immediately.

• To be successful, you have to build a narrative that is in the 10% of content that people retain and use.
Identify a Deep Need

- The first reason we have not been able to engage the audience is simple: we are telling the wrong story.
- We are telling our story, not theirs.
- The first thing you must do is convey that your mission helps to meet their needs.
How to Think About Communication to Non-Scientists

- Know your audience
- Use the Then-Now-Imagine message frame
- Be in the moment
- Understand and align with public sentiment
- Convey personal commitment/passion

Communicating well demonstrates accountability
Tell Your Story, Not Your Data!

“I'll pause for a moment so you can let this information sink in.”
Genomic data for prediction of clinical outcomes in brain cancer
“Hello. I’m Jane Smith, a post-doc from University of Anytown USA in your district. As a [scientist], my research focuses on [area] that could result in improvements in [disease]. As a member of your district, I want to thank you for supporting medical research. Unfortunately, cutting-edge research is at risk of delays due to inadequate federal funding. It will greatly help me and my colleagues continue our research if Rep. John/Jane Doe is resolute in his/her support of funding increases to the NIH in FY18 and beyond.”
Key Components

1. Introduction
2. Research Problem
3. “So What?”
4. Take Home Message
1. The Introduction

- One sentence:
  Your name, position, and institution

- Straightforward, succinct with areas to elaborate
2. Research Problem

- A very basic research summary
- What is the problem?
- What are potential solutions or interesting questions raised by your research?
- How does it benefit human health and/or the community?
3. So What?

- Relevance to your audience
- Potential impact of your research
- Why does your research matter?
4. Take Home Message

- Think about what you’d like your audience to remember after your conversation.

- This will be different, depending on the audience or individual.
What Can You Do?

- Empower scientists
- Value public engagement and advocacy in your department and institution
- Recognize and empower colleagues who advocate
- Model engagement in advocacy yourself

*Research!America provides training sessions at member institutions.*
What Can You Do?

• Conduct monthly brown-bags for non-scientists in your department
  • Use interview format, not PowerPoints
  • Ask your non-scientist colleagues for advice
What Can You Do?

• Get to know small business people in your community — vendors to your lab

• Enlist them as advocates — if you are better funded, they win in several ways
What Can You Do?

- Invite a journalist to talk about how science news is covered by media
  - Work with your institution’s media relations office
  - Ask journalists for their advice on talking to media
- Build relationships!
Connecting the Dots: Science Communications Workshop

Hosted by Research!America and George Washington University

Instructors shared communication techniques to engage nonscientists
“You need to make me care and understand it, in such a way that I can explain it in 35 seconds. “And please remember that I struggled with high school chemistry.”

– Peter Haskell, general assignment reporter, WCBS-FM, New York at the UMDNJ Media Science Forum
Be in the Moment: Social Media

## Social Media Platforms Used Most Often by Scientists

<table>
<thead>
<tr>
<th>Social Media Service</th>
<th>Average Rank</th>
<th>Users (n)</th>
<th>Non-users (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>1.5</td>
<td>512</td>
<td>34</td>
</tr>
<tr>
<td>Facebook</td>
<td>2</td>
<td>479</td>
<td>67</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>4</td>
<td>399</td>
<td>147</td>
</tr>
<tr>
<td>Wordpress</td>
<td>4.5</td>
<td>233</td>
<td>313</td>
</tr>
<tr>
<td>Google +</td>
<td>4.9</td>
<td>273</td>
<td>272</td>
</tr>
<tr>
<td>Instagram</td>
<td>5.0</td>
<td>163</td>
<td>383</td>
</tr>
<tr>
<td>Research Gate</td>
<td>5.1</td>
<td>210</td>
<td>335</td>
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<tr>
<td>Reddit</td>
<td>5.4</td>
<td>125</td>
<td>421</td>
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<tr>
<td>Pinterest</td>
<td>5.7</td>
<td>141</td>
<td>405</td>
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<tr>
<td>Mendeley</td>
<td>5.8</td>
<td>167</td>
<td>379</td>
</tr>
<tr>
<td>Tumblr</td>
<td>6.1</td>
<td>127</td>
<td>419</td>
</tr>
<tr>
<td>Blogger</td>
<td>6.1</td>
<td>113</td>
<td>432</td>
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<tr>
<td>FourSquare</td>
<td>7.8</td>
<td>61</td>
<td>484</td>
</tr>
<tr>
<td>MySpace</td>
<td>8.8</td>
<td>44</td>
<td>502</td>
</tr>
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[http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0162680](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0162680)
“Everybody in the science and technology community who cares about the future of the world should be tithing 10% of his or her time to interacting with the public in the policy process.”

-- 2007 AAAS Presidential Address
Ellie Dehoney

Vice President, Policy and Advocacy
Overview

1. Laying the Groundwork
2. Mechanics
3. Challenge
4. Tools you can use
Know Your Institution’s Policies

- It is critical to know and understand your institution’s rules and regulations regarding advocacy.
Advocacy vs. Lobbying

To **advocate** means to speak up, to plead the case of another or to champion a general cause.

*It is something that most of us routinely do on behalf of our families, our neighbors, our friends and ourselves.*

**Lobbying**, in general, consists of communications intended to influence specific legislation.

**Research!America** does both.
Current Context for Advocacy

Opportunities:

- Key champions for medical/health research on both sides of aisle still hold leadership positions in Congress
- Priorities on job creation, economic growth and maintaining competitiveness

Challenges:

- Tight budget caps create uncertainty
- Potential for an anti-science climate or one in which science is cut out of policymaking
- Health care cost and coverage issues could crowd out research

Engagement and advocacy by scientists has never been more important!
“Though there are increasing demands to curtail spending and to balance the federal budget, we must make the commitment to invest in science, engineering, healthcare and other areas that will make the lives of Americans better, safer and more prosperous.”

“We must balance a thriving economy with conserving our resources and protecting our citizens from threats. Science will inform our decisions on what regulations to keep, rescind or add. A vibrant, robust free market system will regulate the private sector.”

“Science is science and facts are facts. My administration will ensure that there will be total transparency and accountability without political bias. The American people deserve this and I will make sure this is the culture of my administration.”
Advocacy Works: 21st Century Cures

- Propelled medical progress into the spotlight
- Collaborative legislative model that brings patients to the table with policymakers, industry, researchers, and other advocates
- Demonstrates that better health transcends partisanship, civility is a possibility, and gridlock need not be the rule
- Connects the dots between discovery, development and delivery

“Bipartisan passage of the 21st Century Cures Act is a victory for patients and their loved ones – and that ultimately means all of us…”

Statement by Research!America President and CEO Mary Woolley on Passage of 21st Century Cures Act (HR 6)

July 10, 2015
Current Advocacy Agenda

- Build champions for research in the new Administration and Congress
- Advance evidence-based policymaking as Congress considers science and engineering-relevant legislation
- Help prevent deep cuts to non-defense discretionary spending
- Secure budget increases for NIH, FDA, CDC, AHRQ, NSF and other research agencies in FY17 and FY18
- As infrastructure investment is considered, make the case for bolstering our nation’s science and public health infrastructure
- Protect health services research (HSR) and social, behavioral, economic (SBE) research from ongoing threats of budget cuts
- Push for permanent repeal of medical device excise tax
Preparation: Part I

- Research your policymaker:
  - Does he/she sponsor events for constituents (coffees, lunches, Town Hall, etc)
  - Committee assignments? Leadership?
  - Find statements made, positions taken or bills introduced with which you agree
  - Is funding for research addressed on his/her website?
Preparation: Part II

- Know Your Ask(s):
  - Include NIH and NSF funding in your appropriations requests
  - Please complete the appropriations process this year
  - Join a Congressional Caucus
  - Visit my lab
Phone Calls

• Start with a “Thank You”
• Ask to speak with the legislative assistant handling health (NIH) or science (NSF) issues
• If you can’t get past staff assistant, ask him or her to share your name, the town you’re from, and your comment with the policymaker
• Ask for a written response
What Type of Correspondence Should I Send?

- Because volume matters, form letters and emails make a difference. But ...
- Personal emails are better
- Personal letters are best
Meetings

- Most offices only take meetings with constituents
- Call and ask to speak with the legislative assistant handling health (NIH) or science (NSF)
- For in-state meetings, ask to speak with district or state director
Expect some tough questions

- Why should the federal government be funding research?
- NIH funding was included in the 21stCC Cures bill, why do you need more?
- I’m sorry, I’m on my way to votes, what can you tell me quickly?
  - Don’t: Worry if you can’t answer a question! It’s an opportunity to follow up.
Important Reminders

- Make your “Ask”
  - Don’t leave without making a clear “ask” during the meeting
  - If you have a one-page document containing salient arguments or statistics, leave it with the staff and ask that it be shared with the policymaker
- Write thank-you email to staffer and offer to serve as resource
- Check back in
Campaign Contributions/Fundraisers

- Hard line between personal staff and political staff
- Ask to speak with the Chief of Staff on a fundraising matter
- You may be referred to campaign office, if it is operational
Challenge
Connect with your three Congressional Representatives by 2/17/17

- Week of January 30: Senior Senator
- Week of February 6: Junior Senator
- Week of February 13: Your Rep in the House
  - Look up Legislative Director here: http://congressional-staff.insidegov.com
  - House: First.Last@mail.house.gov
  - Senate: First_Last@Senator.senate.gov
Connect with your three Congressional Representatives by 2/17/17

Email Format
- Intro
- Ask(s)
- Offer to be a resource
- Closing
  - Ask for name of legislative assistant

Follow Up
- Weigh in on appropriations priorities
- Share item of interest
Porter’s Principles

- Our simple guide for meetings with Members of Congress, as well as advocacy messages for making research to improve health a higher national priority.

http://www.researchamerica.org/advocacy-and-action
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