

# FROM PIPETTES TO POLICY: CAREER OPPORTUNITIES IN SCIENCE POLICY

Yvette R. Seger, PhD January 23, 2018

# **Topics Covered**

#### My background

Who am I and how did I get here?

#### What is science policy?

- What is it?
- What do policy people do?

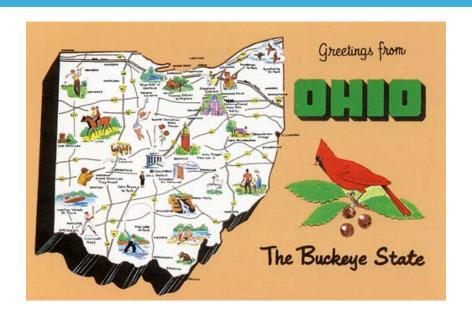
#### Pursuing a career in science policy

- Skills that transfer from bench to Beltway
- Strategies to develop policy-specific skills
- Jump-starting a career in science policy



# My Background

### About Me...



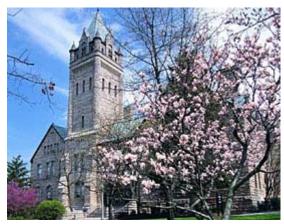








# **Educational Background**



**BA, Ohio Wesleyan University**Zoology (Genetics) and Politics & Government



PhD, SUNY-Stony Brook Genetics (Hannon Lab, CSHL)



# Career Highlights

National Academies – Committee on Science, Engineering, and Public Policy

Christine Mirzayan Science and Technology Policy Fellow (Summer 2004)

FasterCures (2004 – 2006)

Research Associate

National Institutes of Health – Office of the Director (2006 – 2009)

Senior Health Science Policy Analyst (Secretary's Advisory Committee on Genetics, Health, and Society)

Discovery Logic/Thomson Reuters (2009 – 2013)

Senior Scientific Analyst
Strategy Associate
Project Manager/Project Lead

Federation of American Societies for Experimental Biology (2013 – present)

**Director of Science Policy** 

#### What does FASEB do?

- Our Mission...
  - Advance health and welfare by promoting progress and education in biological and biomedical sciences through service to our member societies and collaborative advocacy.
- It is accomplished through Public Affairs activities including...
  - Policy research and development
  - Advocacy and our role as government liaison
  - Coalition building
  - Communication and outreach



#### Who are we?

#### 31 Professional Societies

#### Over 130,000 Scientists











American Society for Nutrition

Excellence in Nutrition Research and Practice





































SOCIETY FOR PEDIATRIC RESEARCH















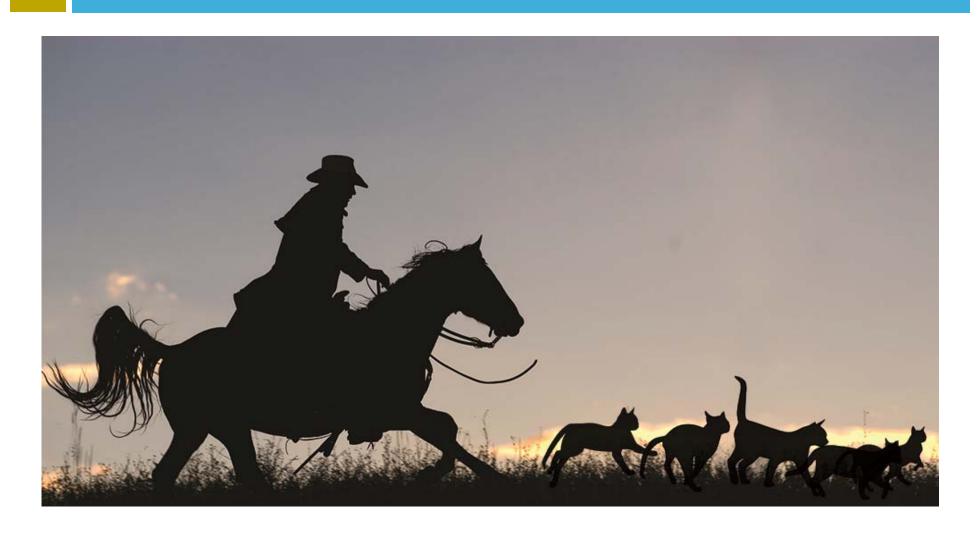




# What Everyone Thinks I Do...



# What I Actually Do...





# No really...what do you do?

- Manage the FASEB's science policy team and portfolio
- Gather information and develop strategy
- Write (a lot)
- Talk (even more, especially on the phone)
- Prepare FASEB's leadership for speaking gigs
- Develop resources for scientists and the public
- Plan events
- Attend meetings
- Network



# What is Science Policy?

# Categories of Science Policy

- Science for Policy
  - Application of science to develop and drive policy decisions
- Policy for Science
  - Government laws, regulations, and policies that affect scientists and the research and development enterprise

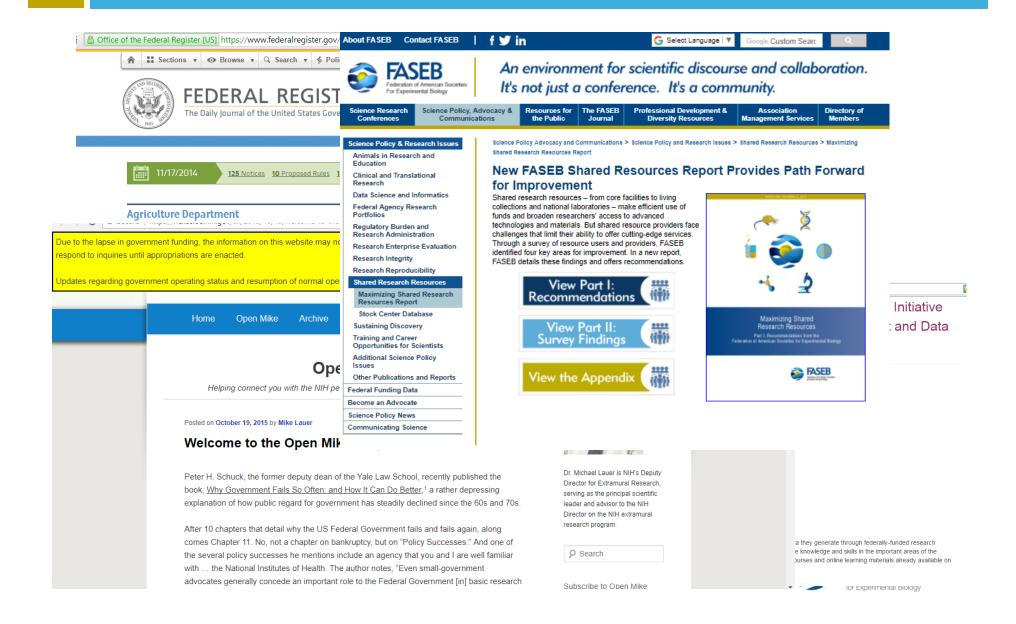


# Who Drives Policy Development?

- Executive Branch (President, OSTP)
- Legislative Branch (Congress)
- Judicial Branch (Supreme Court)
- Federal Agencies (NIH, NSF, USDA, FDA, etc.)
- Federal Advisory Committees (NAS/IOM, ACD, SACHRP)
- State Governments
- Universities
- Accrediting/Licensing Organizations
- Professional Organizations
- Industry
- Think Tanks
- Disease Advocacy Organizations



# Step 1: Someone has an idea



# Step 2: Collect Information

- Responses to Requests for Information
- Expert Interviews
- Testimony/Public Comments
- Database Combing
- Literature Search



# Step 3: Develop Recommendations

 Data and feedback are used to develop recommendations (in theory, this should make everyone's job easier/keep people safe/decrease costs – but this is not always the case)

...and the process continues...





# Is Science Policy for You?

#### Do you enjoy...

- □ Learning a little bit about a lot of issues (instead of a lot about one topic)?
- □ Keeping up with current events and issues in science?
- Interacting with people and resolving disagreements?
- Teaching scientific concepts (explaining scientific information to non-scientists?)
- □ A fast-paced working environment?
- □ Writing for non-scientific audiences?
- □ Working under the pressure of tight deadlines?



# Skills that Transfer to Policy

- Understanding of the scientific process
- Subject matter expertise
- Analytical/critical thinking skills
- Ability to interpret and synthesize data
- Framing/communicating results
- Project management/collaboration skills



# Skills You May Need to Develop

#### Communication

- Convey scientific information and its importance to non-scientists
- Non-technical writing
- Public speaking



#### Consensus Building

FASEB statements reflect the views of 31 diverse organizations

#### Networking

Being well-connected and fostering professional relationships



#### To Postdoc or Not to Postdoc?

- What are your policy interests?
- Are you interested in policies related to a specific area of science?
- How close do you want to stay to science?

Pro Tip: ALWAYS go into a postdoc with a PLAN.



#### Where do you find science policy professionals?

- Government and government advisory bodies
  - Congress
  - White House
  - Science agencies (NIH, NSF, etc.)
  - National Academies
- □ Associations (scientific societies, disease organizations)
- Industry (pharmaceutical and biotech companies)
- Universities (government relations offices)
- Think Tanks
- Start Ups 
  ✓



### Pathways to Careers in Science Policy

#### Great ways to dip your toe into science policy:

- Join and participate in a scientific society or organization
- ☐ Stay informed on science issues in the news
- □ Teach or mentor in your community
- ☐ Volunteer at a local science museum
- □ Contribute articles or letters to local newspapers and/or institution or society newsletters
- □ Participate in a Capitol Hill Day
- □ Invite elected officials to your lab
- Network to make contacts outside your field (and keep them)



### Pathways to Careers in Science Policy

#### Great ways to transition to a science policy career:

- □ Organize policy discussion groups
- ☐ Work on a political campaign
- Informational interviews with science policy professionals
- □ Internships with institutional Offices of Government Relations, Technology Transfer, or Sponsored Research
- Internships with foundations or advocacy organizations
- Established Fellowship programs (AAAS, National Academies, Society Fellowships, etc.)



# Reasons to Pursue a Fellowship

- Enrich scientific training with policy experience
- Interest in assisting with the development of policy in a specific area
- Desire to "test-drive" a career in policy



## Fellowship Goals

- Increase awareness of the policy process within the scientific community
- Incorporate subject matter experts (e.g., YOU) into the development of policy
- Engage researchers in advocacy activities
- Enhance communication skills of scientists
- Expand career opportunities available for PhDtrained scientists



# Finding a Fellowship

- Professional Societies/Associations
- Foundations
- Government Agencies (State & Federal)
- Institutional

FASEB Website: <a href="http://bit.ly/1Y0xuP9">http://bit.ly/1Y0xuP9</a>

#### **AAAS** Website:

http://www.aaas.org/page/stpf/fellowship-resources



#### For More Information...

#### **FASEB Office of Public Affairs**

http://www.faseb.org/Science-Policy-and-Advocacy.aspx

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# Questions/Discussion