Enhancing Public Policy  
Transforming Careers

**GOAL:** Foster scientifically informed, evidence-based policy and practice.

**STRATEGY:** Engage scientists and engineers from a broad range of disciplines, backgrounds and career stages to:

- Contribute knowledge and analytical skills to the federal government
- Learn first-hand about policymaking and implementation at the federal level
- Build S&T leadership equipped to address complex societal challenges

**OUTPUT:** Policy-savvy scientists & engineers

[aaas.org/policy-fellowships](http://aaas.org/policy-fellowships)
Enhancing Policy, Transforming Careers

aaas.org/policy-fellowships
Fellowships Offer

- Knowledge of:
  - Interactions of branches of government
  - Balance of power
  - Federal budget
  - Policymaking processes
  - Procedure

- Understanding of stakeholders and factors affecting policy

- Political awareness

Michael Donovan, Executive Branch Fellow, USAID. On detail as a Embassy Science Fellow, surveying in Majuro.
Developing Capacity

• Frame issues and messages
• Communicate to non-scientific audiences in policy language
• Strategic planning & timing
• Negotiation, persuasion, diplomacy
• Network, build alliances
• Collaborate, foster consensus
• Respond in necessary timeframes
• Balance return on investment
Transferable Skills

**SCIENCE**
- Develop hypothesis, test, analyze results
- Design, implement, manage experiments and studies
- Curiosity, analytical skills, investigate using different research methodologies
- Integrate information from disparate sources, generalize from data, ascertain patterns

**POLICY AND BEYOND**
- Creativity, problem-solving, reach conclusions
- Project management, ability to focus and multi-task
- Objectivity, ability to consider other positions, alternate options
- Technical expertise coupled with interdisciplinary and systems thinking
## Transferable Skills

### SCIENCE
- Suspend judgment, work with ambiguity
- Poster, paper presentations
- Relay complex concepts, support position with data and logic
- Write and publish papers
- Write proposals, secure grants

### POLICY AND BEYOND
- Open-minded, flexible, persistent
- Public speaking
- Persuasive, resourceful communicator, rational thinker
- Writing and editing skills
- Fundraising, grant management
Science Policy in Government

Congressional Placements

- Collect and analyze information
- Write: briefs, talking points, speeches, press releases, reports, text for bills, websites
- Meet with stakeholders
- Organize hearings
- Facilitate, negotiate legislation
- Oversight

Federal Agency Placements

- Collect and analyze information
- Write: briefs, talking points, speeches, press releases, reports, text for regulations, websites
- Meet with stakeholders
- Prep for hearings
- Facilitate, negotiate legislation
- Program development, implementation and evaluation
- Interagency collaborations
What is Science Policy?

Policy for Science
Establish guidelines and regulations on the direction, funding, and conduct of science

Science for Policy
Inform decision-making, implementation, and evaluation of policies, regulations and programs
Serving Society: Congress

- Organized press conference to announce a proposed bill on early warning systems following the Asian earthquake and tsunami
- Wrote text for a bill on water quality restoration for the Colorado River
- Coordinated oversight investigation of food safety issues & handling of peanut product recall

Michael Oleyar
ASA Congressional Fellow
At a SuperChefs against Superbugs meeting with Chef Maria Hines and members of Senator Patty Murray’s (D-WA) staff.
Serving Societies: Federal Agencies

- Led Hurricane Sandy Science Coordination task force launch of Rebuild By Design -- a multi-stage regional design competition
- Coordinated a market study of watershed services and benefits in the Chesapeake Bay
- Orchestrated international distribution of more than $5 million in famine funds to provide rust resistant wheat seed

Jun Bando
Executive Branch Fellow, U.S. Department of State
Enroute to international discussions on piracy in Indian Ocean.
2013-14 Placements
2013-2014 AAAS S&T Policy Fellows

275 Year-long Fellows
- 170 first year
- 105 second-year
- 6 short-term extensions

241 Executive Branch Fellows
- 230 selected & administered by AAAS
- 11 selected & administered by partner societies

34 Congressional Fellows
- 2 selected & sponsored by AAAS
- 32 selected & sponsored by partner societies
Fellowship Areas

- Big Data Analytics
- Congressional
- Energy, Environment & Agriculture
- Diplomacy, Security & Development
- Roger Revelle Fellowship in Global Stewardship
- Health, Education & Human Services
- Judicial Branch
Criteria

- Solid **S/T credentials** for career stage
- Show a **commitment** to apply scientific or technical expertise to serve society
- Exhibit good **communication skills**, especially to non-scientific audiences
- Demonstrate:
  - problem-solving
  - initiative
  - maturity, good judgment
  - leadership qualities
- **Match** to fellowship program area
## How Competitive Are the Fellowships?

### 2013-14 Selection Statistics

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* includes 30 dual finalists = 129 individual finalists

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Enhancing Policy, Transforming Careers

aaas.org/policy-fellowships
Professional Development

- Orientation
- Skill Development & Career Workshops
- Educational Events
- Affinity Groups
- Networking
2015-16 Application Schedule*

- Applications Open: May 1, 2014
- Applications Due: November 1, 2014
- Notification of Eligibility: Late December 2014
- Notification of Interview: February 2015
- Selection Interviews: Early March 2015
- Notification of Finalists: Mid-March 2015
- Placement Interviews: April 2015
- Placement Offers: May – June 2015
- Fellowships Begin: September 1, 2015
- Cong Placement Interviews & Offers: Mid-September - October
- Fellowships End: August 31, 2016

*Note: Partner societies have different application and interview deadlines
Alumni Fellows in Government

Frances A. Colón
Deputy Science and Technology Adviser to the Secretary of State, U.S. Department of State

Arati Prabhakar
Director, Defense Advanced Research Projects Agency, DoD

Ed Etzkorn
Program Examiner, Energy Efficiency and Renewable Energy, Office of Management and Budget

Francesca Grifo
Scientific Integrity Official, Environmental Protection Agency
Alumni Fellows in Elected Office

U.S. Representative Rush Holt (D-NJ)

State Senator Chris Rothfuss (D-WY)
Alumni Fellows in Nonprofit

Ranyee Chiang
Senior Technical Manager, Standards and Testing, United Nations Foundation, Global Alliance for Clean Cookstoves

Uday Varadarajan
Senior Analyst, Climate Policy Initiative

Jessica Tuchman Mathews
President, Carnegie Endowment for International Peace

Steven Buchsbaum
Deputy Director, Discovery at Bill & Melinda Gates Foundation
Alumni Fellows in Private Sector

**Alice Chen**  
Scientist,  
Law Firm of Keller and Heckman

**Anish Goel**  
Director, Technology Policy and Geopolitical Affairs, The Boeing Company

**Andrew Robertson**  
Director of Regulatory Policy, Merck

**Audrey Ichida**  
Senior Manager, ICF International
Alumni Fellows in Academia

Joe Helble
Professor and Dean, Thayer School of Engineering, Dartmouth

Rosalyn Hobson Hargraves
Associate Professor, Engineering, Virginia Commonwealth University

Kevin Michael Foster
Professor and Executive Director, Institute for Community, University and School Partnerships, UT Austin

Rosina Bierbaum
Professor and former Dean, School of Natural Resources and the Environment, University of Michigan; Member PCAST
Explore

**Assess** your interests, strengths, areas for growth, preferred work environment:

- Career counseling
- Personality assessment
- Capability assessment
- Values assessment

**Research** science-policy employers:

- local/state/federal/international entities; national laboratories, government contractors
- think tanks and consulting firms
- scientific and engineering associations
- nonprofit organizations, industry, academia
Explore

**Network** with people working in policy
- Opportunities, challenges, rewards
- Types of projects, work flow and environment
- Skills needed, stakeholders engaged
- Trends in the sector or field
- Salary ranges
- Paths to current position

**Experiment** with assignments
- Societies
  - policy committees
  - Congressional Hill visits
  - government relations offices
- Internships and fellowships
Engaging Scientists and Engineers in Policy (ESEP)

A coalition of organizations partnering to empower scientists and engineers to effectively engage in policy processes

- American Association for the Advancement of Science
- American Meteorological Society
- American Physical Society
- Association of American Universities
- Association of Public and Land-grant Universities
- Antioch University
- COMPASS
- Emerging Leaders in Science and Society
- Massachusetts Institute of Technology
- National Council for Science and the Environment
- Union of Concerned Scientists
- University of Colorado Boulder
Engaging Scientists and Engineers in Policy (ESEP)

**GOALS:**

*Enable, empower and equip* scientists and engineers to engage in policy processes

*Promote networking* opportunities

*Motivate engagement at all levels:* local, state, national, international

*Facilitate institutional support* for civic engagement in policy

*Promote a new generation* of civically engaged scientists and engineers
Engaging Scientists and Engineers in Policy (ESEP)

Get involved! Connect!

aaas.org/esep
Webinar: Thinking Outside the Lab

Finding a fulfilling non-research career

April 8, 2014, 1 p.m. ET

For more information and to RSVP: http://bit.ly/OFb43R
Fellowships & Resources

**AAAS S&T Policy Fellowships**
aaas.org/policy-fellowships  
**Deadline: Nov 1**

- Partner Society Fellowships
- Resource section on other fellowships
- Sci on the Fly
  http://www.aaaspolicyfellowships.org/sci-fly

**AAAS Mass Media Science & Engineering Fellowships**
www.aaas.org/programs/education/MassMedia

**ELISS: Emerging Leaders in Science and Society**
www.aaas.org/page/eliss-overview

**California S&T Policy Fellowships**
www.fellows.ccst.us

**Christine Mirzayan Science & Technology Policy Graduate Fellowships**
http://sites.nationalacademies.org/PGA/policyfellows/index.htm

**ScienceCareers.org**

**Professional Association Career Resources**