Panelists

Dena Vellano, PhD
Research Fellow, U.S. Environmental Protection Agency (EPA)
Executive Branch Fellow, U.S. EPA, 2011-13

Michael Smith, PhD
Senior Program Manager, Environment and Planning, AECOM
Executive Branch Fellow, U.S. EPA, 2006-07

Priya Shete, MD
Physician, Pulmonary and Critical Care Medicine at UCSF and San Francisco Hospital
Executive Branch Fellow, U.S. Agency for International Development, 2010-12
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; and
- build S&T leadership equipped to address complex societal challenges.

OUTPUT: Policy-savvy scientists & engineers
40 Years of Monumental **Experiences**, Fundamental **Contributions**, Substantial **Results**.

![Diagram](image)

**Columns:**
- Local
- State
- Regional
- International

**Center Section:**
FEDERAL
Fellowships Offer

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

- Understanding of stakeholders and factors affecting policy

- Political awareness

Michael Donovan, 2011-13 DSD Fellow, USAID. On detail as an Embassy Science Fellow, surveying in Majuro.
Building Capacity

- Frame issues and messages
- Communicate to non-scientific audiences
- Write in policy language
- Strategic planning and timing
- Respond in necessary timeframes
- Balance return on investment
- Negotiation, persuasion, diplomacy
- Collaborate, foster consensus
- Network, build alliances
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
• Research options
• Meet with stakeholders
• Write: briefings, talking points, speeches, press releases, reports, text for bills, websites
• Organize hearings
• Facilitate, negotiate legislation
• Oversight

Federal Agency Placements
• Collect and analyze information
• Research options
• Meet with stakeholders
• Write: talking points, speeches, press releases, reports, websites
• Prep for hearings
• Interagency collaborations
• Program development, implementation and evaluation
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

• Drafted portions of text for a bill on water quality restoration for the Colorado River

• Coordinated oversight investigation of food safety issues following a peanut product recall

• Organized press conference to announce a proposed bill on early warning systems following the Asian earthquake and tsunami

Michael Oleyar, D.O., 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

- Coordinated a market study of watershed services and benefits in the Chesapeake Bay
- Drafted factsheet talking points used by President Obama during bilateral meetings with President of Costa Rica
- Led Hurricane Sandy Science Coordination task force launch of Rebuild By Design -- a multi-stage regional design competition
- Orchestrated distribution of more than $5 million in famine funds to provide rust resistant wheat seed
Executive Branch Placements
### 2013-2014 AAAS S&T Policy Fellows

![Image of Fellows](image)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Administered by</th>
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<tbody>
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<td><strong>Year-long Fellows</strong></td>
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<td>- 1st year</td>
<td>175</td>
<td>AAAS</td>
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<td>- 2nd year</td>
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<td>- Short-term extensions</td>
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<td><strong>Congressional Fellows</strong></td>
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<tr>
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<td>32</td>
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</table>
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**

40 Years of Monumental **Experiences**, Fundamental **Contributions**, Substantial **Results**.

fellowships.aaas.org
## How Competitive Are the Fellowships?

### 2013-14 Selection Statistics

<table>
<thead>
<tr>
<th></th>
<th>APPS</th>
<th>APPS TO SCs</th>
<th>SEMI FINALISTS</th>
<th>INTERVIEWS</th>
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<td>164</td>
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<td>HEHS</td>
<td>280</td>
<td>126</td>
<td>72</td>
<td>71</td>
<td>44</td>
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<td><strong>Total</strong></td>
<td>841</td>
<td>483</td>
<td>275</td>
<td>273</td>
<td>159*</td>
</tr>
</tbody>
</table>

* includes 30 dual finalists = 129 individual finalists
Stipend & Support

- **STIPEND/SALARY:** $75,000 – $99,000
- **HEALTH INSURANCE:** Individual to family coverage
- **RELOCATION REIMBURSEMENT***: Up to $4,000 if relocation is >50 miles from DC
- **TRAVEL/TRAINING ALLOWANCE***: Up to $4,000 with prior approval
- **PROFESSIONAL DEVELOPMENT:** Intensive orientation and year-long program
- **ALUMNI NETWORK:** >2,800 alumni around the world

* Varies by agency
Professional Development

- Orientation
- Skill Development & Career Workshops
- Educational Events
- Affinity Groups
- Networking

Kei Koizumi, Assistant Director for Federal R&D at the White House Office of Science and Technology Policy at a AAAS Symposium
Alumni Fellows in Government

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

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

Arati Prabhakar
Director, Defense Advanced Research Projects Agency, DoD

Tanuja Rastogi
Advisor, Nutrition Policy, Programmes and Innovations, UN World Food Programme
Alumni Fellows in Elected Office

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

State Senator Chris Rothfuss (D-WY)

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Alumni Fellows in Nonprofit

Francesca Grifo
Senior Scientist and Science Policy Fellow at Union of Concerned Scientists

Uday Varadarajan
Senior Analyst, Climate Policy Initiative

Jessica Tuchman Mathews
President, Carnegie Endowment for International Peace

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

Alice Chen
Scientist
Keller and Heckman, LLC

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

Audrey Ichida
Senior Manager
ICF International

Andrew Robertson
Director of Regulatory Policy, Merck
Alumni Fellows in Academia

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

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

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

Rosalyn Hobson Hargraves
Associate Professor, Engineering, Virginia Commonwealth University
Explore

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

Career counseling
Personality assessment
Capability assessment
Values assessment

Options

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

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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

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fellowships.aaas.org
Fellowships & Resources

AAAS S&T Policy Fellowships
fellowships.aaas.org

Deadline: Nov 1

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

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
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