Advising the Federal Government

Susan L. Graham
University of California, Berkeley

LISPI

November 6, 2017
How does the Government Learn about Science and Technology (Policy)?

- Hires experts
- Workshops (e.g. CCC-sponsored) Beth
- Professional societies
- National Research Council
  - Computer Science and Telecommunications Board (1986) Lyn
  - Forum on Cyber Resilience (2015) Fred
- Federal Advisory Committees
Science Advice to the President

- **1941-1947 – Office of Science and Technology Development**
  - Created during WWII

- **1951-1973 – President’s Science Advisory Committee**
  - Part of office of defense mobilization
  - Moved to White House in 1957; abolished in 1973

- **1976-now – Office of Science and Technology Policy**
  - Established by Congress
Current Advisory Structure

President’s Science Advisor

PCAST
OSTP
NSTC

Environment and Energy
National Security and International Affairs
Science
Technology and Innovation
Office of the Chief Technology Officer
Big Data and Privacy

• May 2013 – Snowden released classified documents
• Jan 2014 – POTUS requested 2 reports
  • Podesta – policy study
  • PCAST – technology study
• I chaired the PCAST study with Bill Press
• POTUS wanted reports in 90 days
Technology and Aging

Letter report on hearing


- Social connectivity and emotional health
- Changes in cognitive ability
- Changes in physical ability
The Science in Forensic Science

• DNA analysis – single source and simple mixtures
• DNA analysis – complex mixtures
• Bitemark analysis
• Latent fingerprint analysis
• Firearms analysis
• Footwear analysis
• Hair analysis
• Foundational validity
• Validity as applied

What about digital forensics?
Lessons Learned

Computing is ubiquitous – it’s always relevant.
We are the experts – it’s important that we participate.

Policy must be resilient in the face of change.

Advising informs our own research - the opportunities to learn are enormous.

A good advisor understands what’s needed and how to provide it. If you do a good job, you’ll be asked again.
Questions?