The Computing Research Association’s Computing Community Consortium offers the Leadership in Science Policy Institute (LiSPI) to educate computing researchers on how science policy in the U.S. is formulated and how our government works. LiSPI features presentations and discussions with science policy experts, current and former Hill staff, and relevant agency and Administration personnel about mechanics of the legislative process, interacting with agencies, advisory committees, and the federal case for computing.

**Thursday, Nov 21**

**Welcome** *(Fred B. Schneider, Cornell)*
Lay out the goals of the workshop: to provide a crash-course in relevant science policy issues and the mechanics of policymaking, including a sense of how federal science policy is crafted, how it’s implemented, and where are the opportunities for members of the community to participate in the policy-making process.

**The Federal Case for Computing** *(Peter Harsha, CRA)*
The computing research portfolio of the Federal government is spread across 14 different agencies and accounts for over $4 billion annually. Each year, significant portions of the investment are reassessed by the agencies, the White House, and ultimately Congress, who must decide where taxpayer dollars will be spent. This session will explore the arguments that the computing community has been using to justify receiving taxpayer dollars in support of its research.

**The Federal Budget Process** *(Matt Hourihan, AAAS)*
A walk through the Federal budget process led by Della Cronin, long-time education policy professional for DC government relations firm Washington Partners, LLC. Della will discuss the mechanics of the budget process (including key milestones and inflection points in the process, and key agencies for the science community) and speculate about some of the challenges ahead for the community, including how the overall Federal budget situation and political environment are likely to impact science budgets.

**Providing Testimony** *(Greg Hager, Johns Hopkins University; Fred B. Schneider, Cornell)*
There are many ways Congress gathers the information it needs to make policy decisions, including informal consultations with experts, hosting briefings on particular topics, input from concerned constituents, or congressional hearings. A congressional hearing represents the principal formal way Congress gets input for defining future legislation. Congressional committees frequently look to members of the computing research community to serve as witnesses for congressional hearings to provide technical expertise on the policy issues before them. Greg Hager and Fred Schneider will share their
experiences as witnesses before Congress and pass along practical advice about how to prepare, what to expect, and how to be effective.

Advisory Committees and How to Serve on One (Susan Graham, UC Berkeley; Lynnette Millett, CSTB; Mark Hill, CCC)
Advisory committees exist for every level of the Federal Government. Some oversee particular programs, others advise offices, directorates, or agencies, and there are a range of Presidentially-appointed panels, too. This session provides an understanding about those committees – including how they work (in theory and in practice), why they might not work, how their membership is chosen, and whom they are intended to influence and then actually influence. Being an effective member on one of these committees often requires different strategy and tactics from what works in a university setting. The speakers will give thoughts on why it’s important to serve and will explain in some detail the dynamics of how issues get raised and vetted, and how outcomes get finalized and disseminated.

Having the Conversation (Part One) (Joel Widder, Federal Science Partners)
This session provides an opportunity for participants to start putting into practice some of the things they’ve learned. Participants will get a sense of how policymakers approach meetings with researchers and how researchers can be best prepared to deliver useful input. In this first part of the session, Elizabeth Grossman will describe typical interactions with Congressional staff, provide tips and techniques to make those interactions productive, and assign homework that participants will prepare for part two of the session, Tuesday morning.

Expert Panel – Communicating the Importance of the Field (Congressional Staff)
Participants will hear from a panel featuring current staff from the House Science, Space and Technology Committee. They will discuss the unique difficulties of communicating the value of research to policymakers, and the difficulties of prioritizing science investments in the current political climate. Arguments that are helpful and those that are ineffective will be surveyed. Protocol for interactions and follow-up will also be discussed.

Reception (Mark Hill, CCC)

Thursday, Nov 22

Interacting with Agencies/Creating New Initiatives (Kathleen Fisher, Tufts; Jim Kurose, UMass; TBD)
The agencies are where the science-policy rubber hits the road, where decisions made in both the Administrative and Legislative branches get implemented, and the most common venue for individuals in the science community to interact with the federal government. To influence policy decisions at the agency level requires a somewhat different skill set and somewhat different approach than is effective for influencing your faculty peers, the Congress, or the White House. Agencies also provide opportunities for individuals in the
community to directly shape federal policy in their field, by serving on an agency advisory committee, or by taking a rotation as a program manager, division director, or office director. This session will cover the agency budget process and will discuss opportunities for scientists to advise and engage federal science agencies like NSF, NIH, and DOD. The speakers will discuss the mechanics of how agency new initiatives get started, focusing on the culture and traditions that constitute the lens through which agencies view themselves and are viewed by others. In practical terms, how is success measured? To what extent is outside advice sought and in support of what kinds of activities? What kinds of advice and modes of engagement are unlikely to be effective?

**Embedding Researchers into Non-Research Agencies and the White House** *(Randy Bryant, CMU; Ed Felten, Princeton; Stephanie Forrest, ASU)*

Federal science agencies are generally well connected to the communities they serve. Agencies like the National Science Foundation and DARPA rely on a constant flow of people from the research community to help craft and shape research programs that move the field forward and address agency missions. Non-science Federal agencies, like the Federal Trade Commission and Department of State, have other mission needs and do not have that natural connection to the research community, yet they too benefit from ready access to technical expertise. The speakers will discuss their experiences in incorporating technical expertise into regulatory agencies and the White House, the opportunities at other agencies, and how they found themselves in a position to serve.

**Having the Conversation (Part 2)** *(Joel Widder, Federal Science Partners; Peter Harsha, CRA)*

Continuing the session begun Monday evening, participants will get an opportunity to put this advice into use through role-play, presenting their homework to a panel of former congressional (and White House) staff who will provide constructive advice.

**Wrap-up and Post-Workshop Homework** *(Fred Schneider)*