“Science is driving a lot of policy, but there’s a real dearth of people on the Hill who have a technical background,” says Hsu. “We’re dealing with issues where the science is under contention, and when you have staff members who can’t evaluate the technical information being presented, that increases their reliance on outside voices—who have a vested interest in a certain outcome—for validating information.”

Being one of the few scientists working on the Hill, Hsu was able to use her Ph.D. training to analyze the scientific basis of policies. “One of the unique things scientists bring to the policy world is the ability to assess whether the information underlying a decision actually justifies the decision,” she says. “We’re trained to find flaws in logic, and that skill is extremely useful in analyzing policy.”

Hsu has a few pieces of advice for scientists who would like to engage in policy. The first is to vote, and not just in presidential elections. Congressional gridlock in recent years is forcing some federal-scale decisions, such as how to finance transportation infrastructure improvements, onto states and municipalities. And local and state governments

Meet the 2016 Fellow, Julia Bradley-Cook

Julia Bradley-Cook has been selected as the 2016 ASA, CSSA, and SSSA Congressional Science Fellow. She is an ecosystem scientist with a focus on soils, sustainability, climate change, and the polar regions. During her Ph.D. research at Dartmouth, Bradley-Cook studied Arctic permafrost soils to understand the effects of climate change on the large amounts of carbon that they contain. As a NSF IGERT Polar Environmental Change Fellow and a NSF GK-12 Graduate STEM Fellow, Bradley-Cook connected her research to society through science outreach and leadership in a science policy student organization. Prior to starting graduate school, Bradley-Cook worked for two non-governmental organizations in Namibia, the Gobabeb Training and Research Center and the Desert Research Foundation of Namibia, where she conducted research on carbon offsets and renewable energy in rural areas. This work in environmental monitoring, agricultural systems, conservation, and development opened her eyes to the importance of integrating science and policy for effective decision making. Bradley-Cook earned a B.A. in biology from Grinnell College in 2006.

Bradley-Cook is honored to be the recipient of the ASA, CSSA, and SSSA Congressional Science Fellowship. She is excited to learn more about the legislative process and contribute her scientific perspective to the policy discussion. She intends to liaise between the policy and scientific communities by developing opportunities to connect critical scientific knowledge to policy, and bring knowledge of policymaking back to scientists.
play a pivotal role in determining how federal policies are implemented. Your vote in state and local elections can have an even greater impact than in federal elections.

She also encourages scientists to identify their strengths outside of science and combine these with their technical skills. She outlines a few areas where scientists can use their non-scientific skills in advocacy.

1. The pen is mightier than the sword. If your talent lies in writing, use it. Whether it’s a letter to the editor or written testimony or even an email to your elected officials, use that strength to try to influence policy issues.

2. A picture is worth a 1,000 words. The ability to communicate an issue through a visual can often be more effective than writing, especially as visual and interactive communication platforms outcompete printed books and newspapers.

3. The more the merrier. Often the most important action you can take is to just show up at an event. The size of an audience at a local or state meeting can have a huge impact on elected officials.

4. The power of theater. Maybe you have a flair for the dramatic. A skit, a commentary on YouTube, or an in-person meeting are other powerful ways for scientists to engage in advocacy.

Hsu has gained invaluable perspective through her tenure as the ASA, CSSA, SSSA Fellow and intends on using that knowledge in her future endeavors. “I recognize that to influence a process, you have to understand it,” she says. “It’s the same when running an experiment. Until you understand all the steps in an experiment, it’s hard to organize your time and resources effectively. The fellowship has given me more power to be effective at influencing the policy process because I understand it better.”

If you have an interest in working at the intersection of science and policy, consider applying for the 2017 ASA, CSSA, and SSSA Congressional Science Fellowship. The application process is now open, and we will be taking applications until 15 Jan. 2016. Be a voice for our sciences and apply for the fellowship today!