

Exploring a career in science policy at the National Academies

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With a background in engineering, I have worked in the energy and environment field for more than a decade, in research, consulting and design capacities. I couldn't help but notice that the achievements and innovations in California, where I was working as an energy engineer, is due in large part to good policy. The question of how to translate anomalous success stories, such as California's, more widely intrigued me. Surely, climate change mitigation and sustainable development cannot be achieved without good policy? These questions and an interest in viewing research out from under the trenches, where I had spent the previous four years completing my doctorate, convinced me to pursue the Christine Mirzayan fellowship at the National Academies.

Based in Washington D.C., the National Academies mission is to "improve government decision making and public policy, increase public education and understanding" in matters involving science, engineering, technology, and health. Due to its convening power, the National Academies attracts the world's top experts. Twenty-six of us arrived in Washington D.C. for the winter 2007 fellowship program, passionate and eager to learn about the world of science policy. The fellowship provides several graduate and post-graduate students with an opportunity to view their respective fields from a bird's eye view and provides a unique opportunity to interact with the world's brightest and most influential leaders in the areas of science, technology and health.

The fellowship is offered three times a year and is typically ten weeks long. Some fellows, including myself, remained for an additional ten weeks. The application process consists of an on-line application and phone interview. I was selected by the Science and Technology for Sustainability (STS) Roundtable. STS is a unique entity within the National Academies. It refrains from making policy recommendations, but hosts workshops and generates reports and white papers that address important issues that are cross-cutting to several different departments, or "boards" as they are called at the

National Academies. The interdisciplinary nature of sustainability is reflected in the Roundtable composition. Experts across the private, public and academic sectors participate in the Science and Technology for Sustainability Roundtable.

The fellowship includes a one week orientation with a comprehensive introduction to federal government, policy, and the National Academies. It provides an opportunity to interact with other fellows. Our fellowship cohort included an impressive diversity of educational, cultural and professional backgrounds — ranging from biologists, neural scientists, engineers and lawyers, and a few international students. The daily breakfasts and lunches, and frequent happy hours facilitated getting to know one another! A key fellowship activity is the group project, in which the fellows select a relevant science policy subject and organize a public workshop. The selection of the topic was conducted in typical National Academies consensus-building style. Several ideas were discussed thoroughly before selecting the topic. Three groups were formed. Our group chose to organize a workshop on renewable energy, with the purpose of exploring international lessons.

The core of the fellowship was the work I conducted with the Science and Technology for Sustainability Roundtable. I worked on two important issues, the sustainability aspects of biofuels and partnerships for sustainability. For biofuels, I conducted a variety of tasks, including research, attending and organizing workshops, writing briefing memos, and interacting with experts. With the global rise in food prices, concerns about climate change impacts, and a federal mandate to increase biofuel production, biofuels was a high-profile and important policy topic to work on. For several years, the Science and Technology for Sustainability Roundtable has been investigating how partnerships, such as between the public and private sectors, can facilitate the transition of sustainability from concept to practice. With this project, I had an opportunity to compose a white paper that served as a primer for a *Partnerships for Sustainability* workshop that the Roundtable held in June.

Beyond the project work, the interaction with Science and Technology for Sustainability and National Academies colleagues provided a wonderful opportunity to hear firsthand about the world of science policy from those that have been engaged with public policy for decades.

The Christine Mirzayan fellowship was an invaluable learning experience that convinced me to return for more! Beginning in September I'll be a fellow with the American Association for the Advancement of Science (AAAS), working with the Climate Change Partnership Division on energy efficiency and renewable energy policy. With a summer to cool off (literally) in northern California, working at the Lawrence Berkeley National Laboratory, I am ready to plunge back into the excitement, frustration and chaos. After all, who could resist an opportunity to work on energy policy at a time when the federal government is likely to take climate change action!

Find out more about the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program and many other career opportunities available from the National Academies at national-academies.org/grantprograms.html.

Author's Profile:

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