

The AMS Congressional Science Fellowship Program: Why You Should Consider It



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“Politics is harder than physics.”—Albert Einstein

Are you about to finish your Ph.D., and are you interested in career paths other than the academic one? Have you become disenchanted with the publish or perish life? Are you interested in policy issues related to the atmosphere? Are you looking for an interesting way to spend your sabbatical? Would you like to look into the possibility of working for Congress? Would you like to be the only expert in meteorology or climate on a House or Senate committee, and help to write new legislation? Would you like to find out how government works, and how laws are made? If you can answer “Yes” to any of these questions, I urge you to apply to be an AMS Congressional Science Fellow.

In 1986 I was heavily involved in research into nuclear winter, the climatic effects of smoke from fires from burning cities and other targets that would result after a large-scale nuclear holocaust (Turco et al. 1983; Robock 1984). I was worried about the policy implications of the climate modeling I was conducting, and I was deeply involved in the controversy over the scientific results and the widely divided response of policy makers to our findings. I was frustrated that many of my scientific colleagues felt that even scientific research into this subject was too “political” and not something a “legitimate scientist” should do. In fact, at one of the first meetings on this subject at the National Academy of Sciences, a colleague from Lawrence Livermore National Laboratory told me that

the policy implications should be left to policy specialists, and that scientists should confine themselves to just the scientific research.

I felt that if I discovered a danger to society, using public funds to support my work, it was my duty to report these findings to the public and make sure that their implications were understood. I could not trust the “policy experts,” who had a great stake in the status quo. But what to do? I was overdue for my first sabbatical at the University of Maryland, and so I applied for the American Association for the Advancement of Science (AAAS) and American Geophysical Union (AGU) Congressional Science Fellowship programs. I thought that perhaps if I worked for Congress, I could have more of an impact on policy. At that time, AAAS sponsored two fellows each year, AGU sponsored one, and the American Meteorological Society (AMS) had not yet started a similar program. I was awarded an AAAS Fellowship, and spent the 1986–1987 academic year working for Congress.

The AAAS Congressional Science and Engineering Fellowship program is “designed to provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to bring technical backgrounds and external perspectives to the decision-making process in government” (AAAS 2000). Approximately 30 different professional societies sponsor fellowships, and AAAS administers the program in Washington. The program begins with a fascinating two-week orientation program including visits to all the parts of Congress (including the Library of Congress), executive and judicial offices such as the State Department and Office of Science and Technology Policy, and lectures from experts and politicians. This part of the program

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by itself makes the entire experience worthwhile. The Fellow then chooses which committee or personal staff to serve on.

I served as a legislative assistant for environmental affairs for Congressman Bill Green from New York City. He served on the Appropriations Subcommittee that decided on funding for the National Science Foundation, the Environmental Protection Agency, the National Aeronautics and Space Administration (NASA), and the Office of Science and Technology Policy (the President's Science Advisor). I also served on the Energy and Environment Study Conference, a caucus co-chaired by Bill Green and then-Senator Al Gore. I wrote a report for Congress on climate change and its funding (Robock 1987). When I asked Shelby Tilford, then in charge of the NASA global change program, how much NASA spent each year on climate change studies, I quickly found myself in his office. He spent hours explaining the budget and how important each component was to me. (My subsequent inquiries about NASA funding for my own research have been greeted not always so enthusiastically.)

We dealt with issues such as climate change, ozone depletion, and acid rain (Robock 1988). I found little interest in nuclear winter and was not able to have any impact on that issue. But I was enriched and changed by the experience.

The ozone depletion debate is over, but climate change and acid rain are still on the table. In addition, such issues as the role of the private sector in providing weather and climate services, data access and exchange when some national weather services are charging for observations, and air quality regulations demand expert knowledge that you could provide. There are virtually no scientists in Congress or on their staffs and the Congressional Science Fellows provide the majority of scientific expertise each year.

About one-third of the Fellows find jobs in Washington in a job that is close to their fellowship job, about one-third return to their previous position, and about one-third find a new job, with the fellowship experience as a valuable step in that process. I returned to academia, with a new appreciation of being my own boss, having my own office, being able to dress like a student rather than a lawyer, and being free to express myself without fear of political repercussions. I wrote several papers as a direct or indirect result of the experience (Green 1987; Robock 1987, 1988, 1989a,b).

A Congressional Fellowship is a lot like being a Peace Corps Volunteer, which I was in the Philippines in 1970–72 before graduate school (Robock 1989c,d).

You visit a strange culture with a strange language. You try to teach them about your culture. You try to give some technical assistance. And you try to learn their culture and language. If you have some success in the first and second objectives, that is fine, but like the Peace Corps, the third goal is usually the most successful.

The year I spent as a Congressional Fellow was extremely interesting and stimulating. Although I would have liked to have made a meaningful tangible contribution to making the world a better place, my more realistic goal was to have a Peace Corps-type experience. I also wanted to see if I could find a more meaningful and interesting occupation for myself involved in public policy, either in the Executive Branch of government or in Congress. I feel that I succeeded at these more modest goals.

I learned how Congress works and interacts with the constituents (us) and with the Executive Branch. I learned how powerful the president is to set the framework and tone for government policy and spending. I felt quite frustrated during hearings sitting in the back as a staffer while my friends were up at the table testifying. I did not feel comfortable having to worry about expressing my own feelings, and how they would reflect on my boss. And after a break from teaching and research for a year, I felt refreshed and eager to get back to these activities. My research and teaching since then have been conducted with a much greater understanding of the political and governmental process.

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