
Cultivating the Policymaker Within

Monday, February 3, 2020

Author(s)

Sanae Ferreira

Elizabeth Necka

Andrea Stathopoulos

We've all been there: with some time between when you start to think about applying to the AAAS Science & Technology Policy Fellowship (STPF) and when you actually apply, and you may have wondered, "How can I prepare myself now to be successful as a fellow?"

Knowing what they now know, we've asked current and alumni STPF fellows to weigh in on skills or experiences they had *prior* to applying to the fellowship that particularly served them well in their placements. There are many paths that lead to STPF and to a career in science policy. We hope that this post will inspire you to find the right fit of activities to help you to succeed with your graduate degree in the science policy space.

A Note to Prospective STPF Fellows: The following is *not* a checklist. Within are insights that

hopefully can inform or inspire you to identify which of the activities you may currently be engaged in, or are curious about, that could serve you well in a policy fellowship. You do not need to immediately go out and volunteer for a political campaign, organize a graduate workshop, or lead a club as president just to be competitive. This piece is divided into sections to let you capitalize on strengths you already have and identify areas where you might want to grow - consider it inspirational, rather than prescriptive.

Researcher as Policymaker: Expert knowledge and synthesis

For many science policymakers, your graduate degree already includes a hefty toolkit of experiences. Fellows who end up at the National Institutes of Health (NIH), National Science Foundation (NSF), or other agencies that administer grants find that experiences as a researcher applying for federal research funding can enhance their working knowledge of agency priorities and operations, “enabling [them] to jump into multiple projects and contribute from an early stage in [their] fellowship,” says Dr. Kelly Singel. “I helped [my PI] write and submit 3 R01s during my postdoc.... This exposure to the NIH extramural funding mechanisms ... helped me step into my role as a AAAS STPF at NIH with a very strong foundational knowledge of NIH and all of the Institutes and Centers. As my team is leading the coordination of the new NIH-wide Strategic Plan for FY21-25, this knowledge of NIH has been very beneficial.”

For other fellows, skills cultivated in graduate school that you might not expect to be very relevant for policy end up playing a surprisingly large role. A common sentiment among fellows we spoke with at a variety of agencies, including NIH, the US Department of Agriculture (USDA), and the Department of Defense (DoD), was that they wish they had focused more on developing technical skills like computer programming, coding, and statistics, which can be used for policy analysis or analyzing big datasets.

Another skill from your graduate training that will emerge as essential to success in your fellowship is communication. “Quickly analyzing information from a variety of sources and synthesizing it into a cohesive document” is one of the most useful skills that Dr. Jennifer Rowland uses on a day-to-day basis. This is a skill that most scientists develop throughout the course of their training, and one that can pay dividends in terms of your success – whether you are communicating in a few sentences via email or in a more formal document that is several pages long. Experiences communicating scientific concepts to non-expert audiences throughout the course of graduate study can also ease the transition to a policy position.

When a representative from the University Public Relations team helped Dr. Wynn Meyer prepare a speech about her research for the board of a hospital, “he told me I couldn’t use words like ‘chromosomes’ or ‘meiosis’, [and] I was about to tear my hair out. Now I appreciate the experience because it better prepared me for situations where I have to convey scientific concepts succinctly without any jargon.”

If you’re early in your graduate career, keep in mind the ways that the skills that you’re developing as a scientist might be useful off the bench. Invest in opportunities to grow as a scientist, because there’s a good chance that such growth will make you a better candidate for the next phase of your career, whether it be in research, as an STPF fellow, or elsewhere. Online resources (such as [Coursera \(https://www.coursera.org/\)](https://www.coursera.org/) or [CodeAcademy \(https://www.codecademy.com/\)](https://www.codecademy.com/)) can help you hone your quantitative analysis skills, and opportunities abound to engage with non-expert audiences ([NerdNite \(https://nerdnite.com/\)](https://nerdnite.com/) or [StoryCollider \(https://www.storycollider.org/\)](https://www.storycollider.org/) are great

options for urbanites).

Team Player as Policymaker: Collaboration and communication

Teamwork is another area that Fellows identified as being particularly useful in their government roles. Skills useful for working in teams include networking and communicating, but go beyond that to also include the flexibility often required, especially when the teammates - or even the projects - are outside your field of academic training.

Many fellows find themselves in offices where collaboration is the norm and working together with a group is required to get the job done. Dr. Deven Patel explains, “Knowing that stakeholders of a project are participating with a variety of perspectives and personal interests, and how to navigate the focus of collaborative efforts on a larger project, has been helpful as I started the fellowship.”

Dr. Stephen Jett echoed that team-based research experience prepared him to “communicate comfortably and effectively to people with different areas of expertise” and that this “was a skill crucial to having a successful fellowship experience.”

One invaluable communication skill in Dr. Andrea Stathopoulos’ toolbox is “being able to quickly translate the science” for a general audience or between disciplines, depending on who is “in the room” and according to the need. If you are already working on an interdisciplinary research team, you are well on your way to honing this skill!

There is a lot to learn by being a part of a team that provides leadership in a particular area to a larger organization. Dr. Sanae Ferreira has been learning from leadership in her organization by observing examples of how “different levels of management within the leadership team within my organization lead and handle tricky situations. People prefer to be heard, and oftentimes, wording a question that helps people find the answer themselves can result in a better outcome than a mandate from above.”

Being able to communicate clearly is a daily fellowship task when writing reports, dealing with Congressional representatives, or speaking with colleagues outside your scientific discipline. Outside your day-to-day responsibilities, though, are lots of opportunities to grow your professional network. Networking is tricky, and can feel awkward or like you are forcing conversation. However, our surveyed fellows felt that networking skills were an integral part of really making the most of this fellowship opportunity.

Dr. Ashley Pierce describes the fellowship as incredibly “immersive” and Dr. Natalie Hengstebeck feels that a “broader network... or work with more mentors in the spaces I want to work” would have helped with navigating her new position. Practice makes perfect, but enthusiasm can certainly make up for a lack of practice when it comes to networking. Fellows agree that personal relationships are important in building consensus and influencing policy, so the skill will pay off inside the office, too.

You can hone your skills at communicating with diverse audiences and meet lots of new people organically the more you get involved in “extracurricular” activities. When networking, it helps to have some simple questions prepared to be most effective: people love to talk about themselves so it is easy to ask “What do you do?” or “How did you transition into your current role?” Another great question is “Is there someone you suggest I speak with next?” as this question neatly ends the

conversation and naturally leads into a follow-up and a growing network!

Leader as Policymaker: Taking initiative and being adaptable

If you've read this far, chances are you're the type to take initiative and commit to challenges. The AAAS fellowship program is, after all, an attractive opportunity for leaders-in-training. During the fellowship, you can take the skills included in your hard-earned advanced degree, and find a fresh environment in the federal government in which to apply them - all while learning and practicing leadership among a myriad of other employable skills.

Finding ways to shine as a leader starts with saying "YES" to new opportunities. Being willing to try something new is a leadership trait that fellows find helpful to identify new ways to explore and ultimately excel in their new positions. As Dr. Chelsea Marcho experienced, it takes a little bit of courage and curiosity to take a chance on something that could be very rewarding: "During my Ph.D. training, I had my hands in multiple projects and enthusiastically accepted the chance to work on collaborations with other labs, even when they were somewhat outside my field. The willingness to try new things or reach out beyond my skill set or background prepared me to work at an agency that I was largely unfamiliar with in a field that I have no experience in."

Dr. Brynn Hollingsworth has a number of suggestions of ways she took the initiative at her previous position. Running meetings and following up with meeting minutes serve her well in her current role in "company and university outreach, organizing and running teleconferences with them, and following up about funding opportunities and other requested information. I think this is a common skill used among many offices across the government."

Flexibility and adaptability are leadership skills that come in handy when it becomes necessary to shift gears. Dr. Judit Ungvari notes that, "no matter how much preparation is done, you have to be adaptable to the conditions, flexible to be able to deal with last minute changes or decisions that completely derail your plans. Having to deal with that for years on end prepared me with the ever-changing challenges that my career can bring, and built up my resilience." She adds that formal training in negotiations and diplomatic communication "should be part of the academic's toolkit everywhere, with training starting in graduate school and continuing to established faculty as well." Learning how to "effectively negotiate priorities" in the fellowship years proved an important skill for Dr. Miranda Paley, too.

YOU as policymaker

For those who have already applied to the fellowship, whether as a newly minted graduate, with decades of experience in academia or beyond, or somewhere in between, there are opportunities to make the most of this period between application submission and potential interviews! Outside the lab, you might seek opportunities to write for the public, or to manage an extracurricular organization. To really perfect your networking skills, you can consider working with a career coach or simply reaching out to current or alumni fellows. Practice making small, manageable goals and identifying what works best - these will become your personalized strategy to [sustainably build your network](https://spie.org/Publications/Book/2535499?SSO=1) (<https://spie.org/Publications/Book/2535499?SSO=1>). As you refresh your knowledge about the agencies where fellows are [placed](https://www.ckieffer.com/blog/visualization-of-aaas-stpf-trends) (<https://www.ckieffer.com/blog/visualization-of-aaas-stpf-trends>), remember that this is a professional development opportunity and you don't have to be adept at all of this just yet. If you're eager to launch, you can use the advice outlined here to prepare yourself for a fresh career in the policy arena.

Acknowledgements

The richness of experiences shared above wouldn't have been possible without the thoughtful reflection of the fellows quoted in this piece. We would also like to especially thank the following [current and alumni fellows \(http://aaaspolicyfellowships.org/directory\)](http://aaaspolicyfellowships.org/directory) who generously contributed their time and experiences: Thomas Anderson, Stephanie Davis, Steph Guerra, Natalie Hengstebeck, Brynn Hollingsworth, Stephen Jett, Philip Ko, Georgia Lagoudas, Erica Landis, Chelsea Marcho, Nicholas Montoni, Terrence Mosley, Deven Patel, Ashley M. Pierce, Kelly Singel, David Spencer, Judit Ungvari, Goli Yamini, and Angelica van Goor. We'd also like to acknowledge Cameron Kieffer for his research on the placements of fellows, and Christina C.C. Willis for *Sustainable Networking for Scientists and Engineers*.

Image: Pixabay

Source URL: <https://www.aaaspolicyfellowships.org/blog/cultivating-policymaker-within>

List of links present in page

- <https://www.coursera.org/>
- <https://www.codecademy.com/>
- <https://nerdnite.com/>
- <https://www.storycollider.org/>
- <https://spie.org/Publications/Book/2535499?SSO=1>
- <https://www.ckieffer.com/blog/visualization-of-aaas-stpf-trends>
- <http://aaaspolicyfellowships.org/directory>