

Science advocacy, defined

When one thinks of advocacy, the first—usually cynical—idea that comes to mind is generously compensated lobbyists walking the halls of legislature and advocating on behalf of their clients over expensive dinners. While this image may make for great television drama, it is an incomplete picture, especially as regards science advocacy.

According to the Merriam-Webster dictionary, an “advocate” is “a person who works for a cause or group.” This definition aptly describes a science advocate, and it was underscored in the NextGenVOICES survey on advocacy in the 4 April 2014 issue of *Science*. When young investigators were asked what they would do if they had five extra hours to advocate for science, the majority desired to engage with the public and to inspire students and teachers alike about the wonders and power of science and technology. Others wanted to bring their stories to government in the hope of inspiring support for the next generation of researchers.

The recognition that scientific research involves more than simply working alone in a lab and publishing the results demonstrates that these survey participants view their place at the intersection of science and society in a more nuanced fashion. They combine both a passion for their work and a sense of responsibility for contributing to a broader discourse. *Science’s* “Outside the Tower” (see page 279), written by scientists or citizen scientists, will highlight projects or events that engage the public.

The relationship between science policy and advocacy is also a nuanced one. Science can be a powerful tool for developing policies (e.g., public health, food safety), and at the same time policies can have a powerful impact on the conduct of science, in ways that extend far beyond public funding allocations alone.

If scientists want to advocate for science, they need to add some additional skills to an already exceptional skill

set. Being outstanding in one’s field does not make one an engaging communicator. Learning how to communicate science to a lay audience is as much an art as it is a science, and more institutions offer such courses.

For science policy, it is incumbent on researchers to gain a better understanding of the relationship between science and policy, the roles of the executive and legislative branches of government, and the responsibility that comes with being a reputable advocate. A communicator extraordinaire may do more harm than good if she or he does not understand or appreciate the broader context within which the debate over science policy is conducted.

Fortunately, there is a hunger and desire to learn about science policy and advocacy. The 40-year success of the AAAS Science and Technology Policy Fellowships, and the recently held Catalyzing Advocacy in Science and Engineering workshop for graduate students, demonstrate this point. The workshop (arranged by AAAS and other organizations) introduced students to the role of science in policy-making with the goal of empowering them with ways to become a voice for science throughout their career. As one participant stated, “I finally understood science policy and how it is present in different ways in a lot of aspects of our lives

as citizens and scientists.” Or the tweet from another student: “Scientists that know how to talk to Congress are worth their weight in gold.”

To paraphrase Thomas Kuhn, the physicist and historian, science is more than just a set of discrete facts, theories, and methods. It comprises individuals across a multitude of disciplines, sectors, and nations who contribute to the “constellation” that we call science. So scientists should recognize their star quality and hone their skills to become effective advocates for science, whether at elementary schools, museums, churches, or even the halls of government.

– Joanne Padrón Carney



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