



Staffing Science Policy-Making

Daryl Chubin and Jane Maienschein

There are repeated calls for scientists worldwide to become involved in guiding government decisions concerning science. In the United States, science policy-making positions span the gamut from political appointees (through a melange of advisory panels, review groups, and professional associations) to consultants, all of whom provide commentary—solicited and unsolicited—on budgets, programs, and current science and technology issues. Neal Lane, Assistant to the President for Science and Technology Policy, has called for “civic scientists” to enter public service as staff in support of informed science policy-making.

Given the daily decisions affecting the directions and applications of science, the more staff members who understand science the better. Otherwise, valuable time is wasted and risks are taken in making uninformed decisions about funding priorities, new initiatives, and regulatory actions that increasingly depend on considered scientific judgments. One way to add scientific value to decision-making is to bring scientists into staff positions, either within a policy career path or as a temporary assignment. The question is how to attract more scientists to take up this public service and how to prepare them to contribute?

Overcoming the underlying problem of conflicting core values in the scientific and policy cultures presents a challenge. Working individually within a laboratory hierarchy, scientists are rewarded for originality and ownership of ideas. Even in collaborative projects, the leaders typically receive the credit. Despite periodic calls for rewarding departments, multidisciplinary teams, and broader collaborations, an individualistic ethic prevails. Researchers seek credit, and the community practices individual accountability for performance. Priority of discovery, authorship, and invention all circle around the traditional proprietary nature of scientific knowledge.

Scientists who move from the laboratory into public service, and from the foreground into the background, will experience culture shock. An outstanding speech or position paper on which the scientist's name does not appear replaces an article published in a peer-reviewed journal. Ego must fade from view; instead, satisfaction comes from being part of the process and seeing it work. This requires learning to speak for someone else, in someone else's voice, to someone else's credit. Why should any self-respecting scientist want to do this? Because there is more at stake than acclaim by one's professional community. There is a larger public and national interest. Beyond altruism, staff work allows another expression of the competitive values of science. In a high-stakes high-tempo environment, scientists can make a difference by drawing on their research and pedagogical skills while mastering new ones. Many have done so admirably, but we need more scientists who are willing to help staff science policy-making.

In the United States, a number of programs exist to provide orientation and on-the-job training for scientists willing to enter this public role. For example, Research!America connects scientists in all federal legislative districts with representatives there. The Ecological Society of America is cultivating a cohort of Aldo Leopold Fellows. The Congressional Fellows program of the American Association for the Advancement of Science introduces scientists to the policy-making process. Many U.S. universities now offer undergraduate and graduate students a semester in Washington as an intern in an agency, congressional office, or think tank. These programs and others put scientists into staff roles at the federal and local levels and create cohorts of politically informed citizen-scientists. We applaud these efforts and call for more.

In particular, we need more public discussion of what it means to serve as staff and why it is important for science that some scientists take on these roles. We need additional training at all levels to negotiate the clash of cultures. We need rewards for those who undertake staffing roles and do them well. These scientists should not be seen as digressing from “real science” but as facilitating the expanding reach of science as a respectable career path. Staffing science should be embraced as a necessary part of the scientific enterprise, as well as a form of public service that advances interest, appreciation, and understanding of a rapidly changing world.

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“Staffing science...[is] a necessary part of the scientific enterprise...”

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