

By Gabrielle Kardon

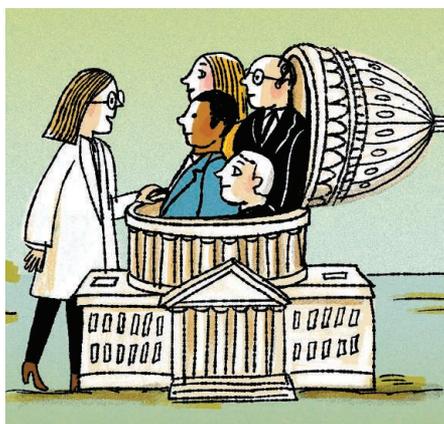
Step out of the lab and engage

Last month I found myself sitting on a leather couch, my black dress smoothed over my knees, in a hushed wood-paneled room in Washington, D.C. The silence was broken by a group of lobbyists for the aerospace industry bantering about labor costs. I panicked for a moment. “Why am I here waiting in the anteroom of this senator’s office?” I asked myself. I had a mission—advocating for science funding—but I felt out of my element. Normally, I would be sitting in jeans and a T-shirt peering down a microscope at sections of muscle tissue. But I reminded myself that scientists have an important role to play in public policy.

My path to active policy engagement began when a graduate student and I stumbled into studying a common but relatively unstudied birth defect. Congenital diaphragmatic hernia (CDH), in which the diaphragm muscle does not develop properly, ultimately kills 50% of afflicted infants. After the excitement of publishing our research, I realized that I knew little about how this birth defect actually affects people’s lives. So I reached out to Cherubs, a community of CDH patients and parents, which enthusiastically embraced my lab and me. In 2015, when I heard the group was lobbying Congress for increased research funding, I decided to join the effort. I was curious whether our concerns would resonate with our elected officials.

We visited more than a dozen members of Congress. The highlight was a discussion with then-Senator Jeff Sessions (R-AL), whose grandson is a CDH survivor. Fifteen CDH patients and parents crowded around a table in his conference room and took turns narrating their health care struggles. The senator (who is now the attorney general) then singled me out as the only scientist in the room and asked about the latest discoveries in CDH research. We chatted for a few minutes about the complicated genetics underlying CDH, and I saw how his personal connection with CDH sparked a sincere interest in the underlying science.

Then, last month, emboldened by this first visit and motivated by recent political events, I decided to speak with my senators and representative when I was in Washington, D.C., for a science meeting. My most memorable visit was with Representative Chris Stewart (R-UT). Again, a key to the success of this conversation was finding common interests. What resonated with him was hearing about the economics of running a lab that relies on funding from the National Institutes of Health (NIH). He was clearly interested in how



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many people I employ and the effects of a flatlined NIH budget on the lab’s personnel and productivity, and I realized that few nonscientists understand the practical realities of conducting scientific research.

Did my visits to Congress make any difference? I know that Sessions’s office made yearly inquiries into NIH funding for birth defects when he was a senator and that Representative Stewart now knows that a developmental biology lab is like a small business, but I’m not sure how much further the impact extends. A better question may be, “Will I visit Congress again?” I can answer that with an unqualified “yes!” It is critical that we scientists engage, communicate our science, and make it accessible to the larger community. Most members of the public have never met a scientist and may not know how science works, but we can each do our small part to change that. As I sit here writing this piece, I chide myself for not spending this time on the undone work that is piling up—experiments, manuscripts, grants, and lectures. But I’ve decided that replacing just one coffee hour a month with an outreach activity is a reasonable goal.

My advice is to find some way to tell your own science story that will resonate with your listeners. You could take a few hours during your next trip to Washington, D.C., to visit your senators and representatives. Attend town meetings and speak up. Volunteer in classrooms at your local schools. Participate in the March for Science. Step out of the lab, step in from the field, and engage. ■

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