

JOSH MARTIN



Let science be a springboard for politics

Governing well demands the same mindset as doing good research, says James Martin.

As they make plans for Fourth of July fireworks and barbecues, many Americans also think of Thomas Jefferson penning the US Declaration of Independence. Fewer realize that Jefferson regularly corresponded with scientists of his era, such as the chemist Joseph Priestley, credited with the discovery of oxygen. Priestley also enjoyed meeting with his friend Benjamin Franklin, the American statesman and inventor, to discuss ideas ranging from electricity to the theory of gases to the necessity to defend religious freedom.

Although governments retain science advisers, shape priorities for research and fund most academic science, the social worlds of science and politics have become estranged. Scientists' engagement in civic life has come to be denigrated as an intellectually inferior pursuit. Unless research programmes are threatened, scientists have generally been silent on politics. Now, in today's hyperpolarized environment, many are re-engaging, and even running for office (see *Nature* 544, 259–261; 2017).

I am a chemistry professor who teaches undergraduates, runs a research lab and serves as an elected official — as a board member of the United States' fifteenth-largest school system serving students from kindergarten to the end of their secondary education. Our 181 schools will enrol 161,000 students next year.

I'm hardly the first scientist to hold elected office, but I think my experience applies to any researcher hoping to engage more in civic life.

My first step into the discomfort zone of politics occurred when I was elected chair of the university faculty at North Carolina State University in Raleigh. Too often, faculty governance is dismissed as irrelevant, but participation by researchers and instructors is often the best antidote to ineffective policy. I led a revision of post-tenure review policy that was more faculty-centric (for instance, it let externally reviewed publications and grants replace some requirements for external letters).

My move into public elected office started from my own children's classrooms. The Wake County Public School System in North Carolina is known for effective integration, making sure students of different races and economic levels are taught together in the same classrooms; several inner-city schools are ranked among the nation's top performers.

In 2009, a partisan group aimed at reversing pro-integration policies took control of our board of education and began threatening our schools. That prompted me to start attending and speaking out at board meetings. In 2011, urged on by community members and my then 13- and 16-year-old children, I ran for the school board and am now serving my second term.

Scientists are as strange to most politicians as politicians are to scientists, but our perspective is invaluable to democratic governance.

In my role as elected official, I often rely on my experience in distilling reams of data into straightforward visuals. My expertise in deciphering chemical-reaction mechanisms has taught me to ask questions from multiple perspectives and to consider alternative explanations. This helps when balancing the needs of diverse constituencies.

I frame and ask questions long before I seek answers. I collect a lot of data: both statistics and conversations with constituents. I also continually remind myself that governance, like research, is slow and methodical. In both areas, perhaps 90% of one's time is spent on uninspiring grunt work. But if you are not fully engaged, you miss opportunities.

Governing is so much more than fighting for any one issue. My advice for scientists seeking political office is to run as someone who brings experience and insight, not as an activist with an agenda. And

make an effort to observe the work of an office before you run for it. I attended all school-board meetings for two years before I put my name on the ballot. With that understanding of how things work, I was much more effective once elected. (Those thinking of running for office should know that many senior politicians got their first exposure to elected office by serving on school boards.)

If we scientists want folks in office who understand science, we need to support them. One reason there are so many lawyers in office is that they support one another in political campaigns. By contrast, colleagues routinely assume that I have stopped doing research to become involved in politics, and grant reviewers often perceive political engagement as a distraction.

But persistence has won respect within academia and the broader community. My students take my engagement as evidence that I care about their education. (A few even confessed to stealing a campaign sign as a souvenir during last autumn's election.) My political work to address achievement gaps and unconscious bias against females and minorities has improved my teaching. When I discuss the history of science, I highlight the fact that much of it comes from 'dead white guys', and that I want to make sure the next generation of science history is made by a more diverse group. After completing my course, one student wrote to me noting that few instructors notice minority-student isolation.

Science and society would be better if scientists were more politically active, both within and outside their institutions. In ancient Greece, scholars took it for granted that they would ponder both the natural and political sciences. I don't believe it is a coincidence that democracy emerged in such a setting. ■

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