To prevent science from continuing its worrying slide towards politicization, here’s a New Year’s resolution for scientists, especially in the United States: gain the confidence of people and politicians across the political spectrum by demonstrating that science is bipartisan.

That President Barack Obama chose to mention “technology, discovery and innovation” in his passionate victory speech in November shows just how strongly science has come, over the past decade or so, to be a part of the identity of one political party, the Democrats, in the United States. The highest-profile voices in the scientific community have avidly pursued this embrace. For the third presidential election in a row, dozens of Nobel prizewinners in physics, chemistry and medicine signed a letter endorsing the Democratic candidate.

The 2012 letter argued that Obama would ensure progress on the economy, health and the environment by continuing “America’s proud legacy of discovery and invention”, and that his Republican opponent, Mitt Romney, would “devastate a long tradition of support for public research and investment in science”. The signatories wrote “as winners of the Nobel Prizes in Science”, thus cleansing their endorsement of the taint of partisanship by invoking their authority as pre-eminent scientists.

But even Nobel prizewinners are citizens with political preferences. Of the 43 (out of 68) signatories on record as having made past political donations, only five had ever contributed to a Republican candidate, and none did so in the last election cycle. If the laureates are speaking on behalf of science, then science is revealing itself, like the unions, the civil service, environmentalists and tort lawyers, to be a Democratic interest, not a democratic one.

This is dangerous for science and for the nation. The claim that Republicans are anti-science is a staple of Democratic political rhetoric, but bipartisan support among politicians for national investment in science, especially basic research, is still strong. For more than 40 years, US government science spending has commanded a remarkably stable 10% of the annual expenditure for non-defence discretionary programmes. In good economic times, science budgets have gone up; in bad times, they have gone down. There have been more good times than bad, and science has prospered.

In the current period of dire fiscal stress, one way to undermine this stable funding and bipartisan support would be to convince Republicans, who control the House of Representatives, that science is a Democratic special interest.

This concern rests on clear precedent. Conservatives in the US government have long been hostile to social science, which they believe tilts towards liberal political agendas. Consequently, the social sciences have remained poorly funded and politically vulnerable, and every so often Republicans threaten to eliminate the entire National Science Foundation budget for social science.

As scientists seek to provide policy-relevant knowledge on complex, interdisciplinary problems ranging from fisheries depletion and carbon emissions to obesity and natural hazards, the boundary between the natural and the social sciences has blurred more than many scientists want to acknowledge. With Republicans generally sceptical of government’s ability and authority to direct social and economic change, the enthusiasm with which leading scientists align themselves with the Democratic party can only reinforce conservative suspicions that for contentious issues such as climate change, natural-resource management and policies around reproduction, all science is social science.

The US scientific community must decide if it wants to be a Democratic interest group or if it wants to reassert its value as an independent national asset. If scientists want to claim that their recommendations are independent of their political beliefs, they ought to be able to show that those recommendations have the support of scientists with conflicting beliefs. Expert panels advising the government on politically divisive issues could strengthen their authority by demonstrating political diversity. The National Academies, as well as many government agencies, already try to balance representation from the academic, non-governmental and private sectors on many science advisory panels; it would be only a small step to be equally explicit about ideological or political diversity. Such information could be given voluntarily.

To connect scientific advice to bipartisanship would benefit political debate. Volatile issues, such as the regulation of environmental and public-health risks, often lead to accusations of ‘junk science’ from opposing sides. Politicians would find it more difficult to attack science endorsed by avowedly bipartisan groups of scientists, and more difficult to justify their policy preferences by scientific claims that were contradicted by bipartisan panels.

During the cold war, scientists from America and the Soviet Union developed lines of communication to improve the prospects for peace. Given the bitter ideological divisions in the United States today, scientists could reach across the political divide once again and set an example for all.

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