

# One way to help science: become Republican

Shawn Lawrence Otto

In the US, science has increasingly taken a backstage to politics in policy decisions. But as the country enters the presidential primary season this month, one of the most counterintuitive but effective ways for researchers to make a difference may be to join the GOP.



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Currently, nine out of ten scientists that identify with one of America's two major political parties say they are Democrats<sup>1</sup>. That's understandable, given that many Republican politicians have adopted an antiscience stance on issues ranging from evolution to climate change. But it's dangerous for scientists to disengage from half of the political establishment, because doing so may relegate scientific knowledge to the status of partisan opinion. In fact, instead of dismissing the GOP outright, the 39% of US researchers who are politically unaligned with either major party may want to consider becoming Republicans.

It's all but a formality that President Barack Obama will become candidate Obama once again this year. As the presidential election heats up, it's important to keep pushing Obama on his stated science and technology policy, which includes pledges to increase support for key research funding agencies and to form a new translational research center at the US National Institutes of Health. But the only way to advance science in the White House next year is to have two science-friendly candidates on the ticket come November—and that means actively pushing for one to win the Republican nomination.

Whether the current contenders on the Republican side as *Nature Medicine* went to press can be described as science minded is debatable. In recent months, each of them has taken one or more antiscience positions, ranging from denying climate change and rejecting evolution to asserting the dangers of the human papilloma virus (HPV) vaccine. But the reason for this embarrassing display of antiscience rhetoric is that many of the 44% of Republican primary voters who are evangelical Christians<sup>2</sup> reject climate change as a socialist plot<sup>3</sup>, evolution as a humanist plot<sup>4</sup> and HPV vaccination as an anti-abstinence plot<sup>5</sup>. In order to win the party nomination, candidates must cater to these voters.

It wasn't always like this. At one time, antiscience statements would have ended a political career. President John F. Kennedy went out of his way to assure the American public that he wouldn't let his Catholic religion interfere with his reason when leading the nation. Now, candidates for president make almost the opposite assurances: they won't let science interfere with their values.

"Whenever the people are well informed," Thomas Jefferson wrote, "they can be trusted with their own government"<sup>6</sup>. But, despite the fact that we live in an age of transformative science when our major unresolved policy challenges increasingly demand solutions rooted in evidence, politicians deny the scientific consensus or run from objective truths.

To counter the antiscience agenda, four years ago I cofounded an organization called ScienceDebate.org, an attempt to get the candidates for president to debate the top science issues of the day—topics including climate change, biomedical research, biodiversity loss, energy policy and economic competitiveness. By bringing policymakers together with scientists, the media and the public, my cofounders and I reasoned that we could restore science to its rightful place in the public dialogue. Thousands of researchers agreed, and the American Association for the Advancement of Science and the National Academies signed on.

Shortly before the 2008 Pennsylvania primaries, we invited the candidates for president at the time—Obama, Hillary Clinton and John

McCain—to debate the "14 top science questions facing America" at ScienceDebate 2008. They turned us down. Instead, Clinton and Obama attended the Compassion Forum at Messiah College near Harrisburg, Pennsylvania, where, ironically, they were asked questions about science, including stem cell research and evolution<sup>7</sup>. Eventually, Obama and McCain did engage us online, but refused to debate science on television.

This antiscience hegemony must be broken for the sake of the country and of science. If every nonaligned scientist in the nation became active in grassroots Republican politics, two things would happen: the voting power of antiscience fundamentalists would be quickly diluted, and those same members of the Republican base would be exposed to scientific thinking. They would learn that researchers are generally nice people and that their thinking processes have some convincing merits.

This dilution and reeducation would carve out some political space for GOP candidates to embrace and articulate more reasoned positions. What's more, it would raise the bar for Democrats by not letting them make the simple acceptance of science a political virtue. The importance of this was underscored by the Obama administration's recent override of the US Food and Drug Administration's science-based approval of over-the-counter availability of the emergency contraceptive levonorgestrel to all females capable of bearing children.

Scientists should also feel inspired to contact their elected representatives and volunteer to serve on their science advisory committees—or offer to form them if they don't exist. They should write op-eds in major newspapers urging politicians to base decisions on science and criticizing them when they don't. Scientists should encourage politicians to sign the American Science Pledge, a commitment to base public policy decisions on the best available scientific knowledge rather than opinion or belief. They should support ScienceDebate.org and encourage candidates to participate in its debates. And they should run for elected office themselves.

Notably, those scientists who get involved during the primaries still have the freedom to choose between both parties come 6 November. But democratic society relies on a plurality of voices to arrive at balanced policy. And with the voice of science absent, antiscience voices take up a greater share of the discussion. It's time for researchers to reengage in the civic dialogue.

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