

Making Science a Presidential Priority

Science Debate 2008 wants to put scientific issues front and center in the Presidential race by hosting a debate among candidates

Special Report by John Carey, February 8, 2008

When most of the Republican candidates for President proclaimed that they did not believe in evolution during a debate last year, astrophysicist Lawrence Krauss was one of many who were aghast. The Case Western University professor and best-selling author was even more upset when former Arkansas Governor Mike Huckabee shrugged off concerns, saying that he was running for President, not writing a middle-school curriculum. "How could being scientifically illiterate be perfectly acceptable?" Krauss asks. "No one would accept a candidate who, say, denied the Holocaust."

Instead of just fuming, Krauss seized on an idea then being proposed by screenwriter/director Matthew Chapman to stage a Presidential campaign debate focused on science. He linked up with Chapman and two other proponents, journalist Chris Mooney, author of *The Republican War on Science*, and screenwriter Shawn Lawrence Otto. In December, the group launched an effort to elevate the visibility of science in the Presidential race, starting an organization called Science Debate 2008.

Today, it's still hard to imagine science as a hot-button issue on the order of, say, religious faith or the war in Iraq. It's not even clear that a debate will happen: On Feb. 7, Science Debate 2008 sent invitations to the campaigns to participate in an event tentatively scheduled for April. There's been no response yet to the invitation, or to *BusinessWeek's* queries.

Frustrations with the Current Administration

However, the fact that more than 12,000 scientists have signed onto the effort, along with prestigious organizations such as the National Academies of Sciences, Engineering & Medicine and the Association for the Advancement of Science (AAAS), shows how serious some researchers are about elevating the profile of science in this election. "It's hard to get 12,000 scientists to agree on anything," says Alan Leschner, chief of AAAS and former director of the National Institute on Drug Abuse. "But science is the biggest issue facing modern society, and we are concerned that only one candidate—Hillary Clinton—has so far devoted any energy to science."

There's also a palatable hunger in the scientific community for a government that bases its policies on science, after years of decisions from the Bush Administration that they believe ignored scientific reality. "We have all become painfully aware in recent years that it is not only irresponsible but dangerous and expensive to distort and repackage scientific conclusions for political purposes," Otto explained in a recent editorial on the Salon Web site.

A couple of examples: The Bush Administration's conviction that Iraq was trying to build nuclear weapons might not have survived had the White House heeded scientists who pointed out that the aluminum tubes acquired by Iraq (cited as evidence of weapons building) were actually the wrong size for uranium enrichment, says Krauss. Or perhaps the Administration wouldn't have started its \$1.2 billion Hydrogen Fuel Initiative if it had asked the National Academy of Sciences for advice first, instead of after. (The NAS was tepid on the idea, feeling its contribution to solving the nation's dependence on oil wasn't as great as the Administration claimed.)

There's no guarantee, of course, that any Presidential Administration will follow the science when the politics point in a different direction. Rice University professor and former White House science adviser Neal Lane recalls how President Bill Clinton backed away from expanding needle-exchange programs, even though the approach had clearly been shown to reduce transmission of AIDS and other diseases from dirty needles.

Consideration and Funding Sought

But rather than expecting firm positions on specific issues, what scientists mainly want now from the Presidential candidates are assurances that the next Administration will at least listen to the science and take it into consideration. "We don't want them to think about one or two hot-button issues, but rather how they would use science to inform decisions, and how they would use science and research to address the country's problems," explains Barry Toiv, spokesman for the Association of American Universities.

The research community, including high-tech companies, also wants the next President to boost funding for science. The main argument is that tomorrow's innovations, economic growth, and America's competitiveness all depend on investments today in research. "Science is not just a nice story," says Krauss. "Our standard of living today [depends] on research done a generation ago."

This argument was laid out in great detail in a recent NAS report, "Rising Above the Gathering Storm." And after strong lobbying by scientific and industry groups, Congress was sufficiently convinced of the need to pass a law authorizing increases in basic research. But it didn't happen. At the end of 2007, the appropriations committees balked at actually providing the money. "We really felt the rug was pulled out from under us," says Robert Spurrier Boege, executive director of the Alliance for Science & Technology Research in America (ASTRA).

The result has been continuing declines in government funding in many areas of science and technology. The fallout has already begun. Two of nation's top physics facilities, the Stanford Linear Accelerator and Fermilab, are laying off staff. On Feb. 12, top universities and business groups will hold a press conference to call on Congress to address the problem.

Some Worry the Effort Could Backfire

Researchers are also hoping a Presidential debate on science would help get this message across. They like some of what the candidates have said so far. (For a summary, see election2008.aaas.org/comparisons.) Hillary Clinton and Barack Obama both support big increases in basic research, along with targeted investments in energy. And like the two Democrats, John McCain promises action against global warming, though he's been silent on most other science issues.

Some experts warn that the effort to inject scientific issues into the Presidential race could backfire. "Anything that gets elevated on the political agenda has risks," explains Lane. It might be better to work quietly behind the scenes, suggests David Goldston, visiting lecturer at Harvard and former staff director of the House Science Committee. Scientists may feel slighted if their concerns are not in the limelight, but a high profile is not always the road to success, he argues. A case in point: Doubling of the National Institutes of Health's budget became a top political cause. But it happened too quickly and with too little care, leading to severe strains now that the budget has leveled off.

There's also the danger that scientists will be seen as just another interest group with its hand out. "The research community needs a more compelling message than 'give us 7% more money than last year,'" says Tom Kalil, special assistant to the chancellor for science and technology at the University of California at Berkeley and former deputy director of the National Economic Council during the Clinton Administration.

Krauss and his partners in the effort to get science higher on the agenda believe they have the right message: Our future prosperity, safety, and health depend on research, he says. We'll soon find out how much the candidates agree with that.

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