

ELECTION 2008

Scientists Strive for a Seat at the Table of Each Campaign

When it comes to soliciting scientific advice, Barack Obama welcomes a cast of thousands, whereas John McCain plays it close to the vest

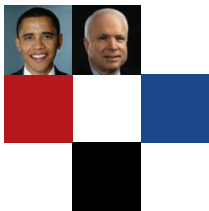
Harold Varmus has met Senator Barack Obama only once. But he's convinced that the Democratic presidential nominee "understands the important role that science must play in tackling the problems we face as a society." To prove it, the president of Memorial Sloan-Kettering Cancer Center in New York City points to the candidate's promise of "sustained and predictable increases in research funding" at the major federal science agencies.

It's no surprise that the politically active Varmus, the 1989 medicine Nobelist and former director of the U.S. National Institutes of Health (NIH), is familiar with Obama's statements on funding basic research: He helped write many of them as chair of a 40-plus-member committee of prominent researchers and educators who are advising the freshman senator from Illinois on science. The panel prepared the candidate's 6000-word response last month to 14 questions posed by a coalition of scientific organizations called Science Debate 2008 (ScienceDebate2008.org). Varmus won't say how much the answers were altered by campaign officials but allows that "we're very pleased with it. His commitment to science is absolutely apparent."

Last week, Obama's Republican opponent, Senator John McCain (AZ), provided equally lengthy answers to the same set of questions. Douglas Holtz-Eakin, who serves as the candidate's point man on many domestic policy issues, including science, health, energy, and the environment, says McCain has contacted experts on issues such as climate, space, and "science in general" but has "no formal structure" for soliciting advice. An economist and former head of the Congressional Budget Office under President George W. Bush, Holtz-Eakin says McCain relies instead on the knowledge acquired during

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Science
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his 26 years in Congress, including 6 years as chair of the Senate Commerce, Science, and Transportation Committee.

The way the answers were prepared reflects the different management styles of the two campaigns. "Obama has thousands of advisers, and McCain has two guys and a dog," cracks one academic lobbyist who requested anonymity because his organization tries to maintain ties with both camps.

The answers themselves—on research funding, science education, climate change, energy, space exploration, and other issues—reflect different political philosophies. Obama tends to assign government a larger role in

tackling those problems—a \$150 billion plan for energy independence, for example, and an \$18 billion plan to improve education. McCain, in contrast, combines his \$30 billion clean-coal program with talk about the need to curb spending and rely on the private sector.

For many U.S. academic researchers, presidential politics comes down to two big issues: getting more money for science and having a seat at the table. The first requires agreement between the president and Congress, however, and any promise to increase research spending could easily be derailed by the Iraq war, an ailing economy, and rising health care and

energy costs. That puts a premium on the second issue, namely, the appointment of people who will make the key decisions in the next Administration.

Indeed, three independent panels stuffed with science mavens have recently issued reports* emphasizing the importance of choosing an assistant to the president for science and technology soon after the election. They say that person, who would also head the Office of Science and Technology Policy (OSTP), should be part of the president's inner circle and play a major role in vetting appointments to dozens of other key science positions throughout the government.

"We had drafted white papers on several issues, but the presidents [of the three academies] worried that nobody would pay attention to them," says E. William Colglazier, executive officer of the U.S. National Academy of Sciences, which joined with the engineering academy and the Institute of Medicine in issuing a report last week on the appointment process. "They felt it was more important that the next president get very good people into key positions." Working backward, scientists reason that the more interaction with a candidate before election day, the greater the chance that he will act quickly and fill those posts with highly qualified people.

Since declaring his candidacy in February 2007, Obama has welcomed those interactions. He has solicited the views of troves of experts and created a vast network of advisers. "They didn't ask us to take a blood oath," says Varmus, who endorsed Obama with the Democratic nomination still hanging in the

*The reports were done by the Woodrow Wilson International Center for Scholars (OSTP 2.0 *Critical Upgrade*, at wilsoncenter.org); the Center for the Study of the Presidency ("Presidential Personnel and Advisory Requirements for Science and Technology," at thepresidency.org); and the three national academies (*Science and Technology for America's Progress: Ensuring the Best Presidential Appointments*, at nationalacademies.org).



Many voices. Harold Varmus (far left) and other leaders joined Barack Obama at a June economic roundtable at Carnegie Mellon University.

balance. But he says “it’s a reasonable assumption” that most of the advisers also support his candidacy.

Varmus’s panel, which includes medicine Nobelist Peter Agre and physics Nobelist Leon Lederman, is one of 20 or so advisory bodies. (The Obama campaign declined to provide a number.) Paul Kaminski, a top Pentagon official during the Clinton Administration, is heading up an eight-person group on defense science that is examining work-force, training, and acquisition issues. He’ll also be representing Obama next month at a National Academy of Engineering forum on grand challenges, opposite Carly Fiorina, the former CEO of Hewlett-Packard who was once on McCain’s list of possible running mates. There’s another Obama group on science education, and the membership is overlapping. Kaminski recently joined the science panel, for example, and Lederman also serves on a small group examining science education.

With regard to scientific input in a McCain Administration, Holtz-Eakin promises that McCain will be vigilant in ending what critics have called the Bush Administration’s war on science. “He’ll restore credibility and transparency” to the process, says Holtz-Eakin, in part by filling all six statutory positions at OSTP. Still, Holtz-Eakin knows that he’s addressing a skeptical audience.

“You can’t convince people that you’ll make sure they have access. You have to demonstrate it,” he told *Science*.

Convened this summer, Obama’s science group has held weekly teleconferences to field questions from the campaign staff and inject into the campaign issues that it feels are important. In preparing answers to Science Debate’s 14 questions, the panel’s most visible product, members sifted through Obama’s past statements, added their own perspectives, and delivered answers to Jason Furman, Obama’s director of economic policy, via his deputy, Larry Strickling.

The panel’s fingerprints are evident in the nuanced responses that Obama offers. To a question about how basic research would fare in a competition for scarce funds, for example, Obama discusses the declining success rate among applicants for NIH grants, the resulting pressure on young scientists, and the erosion of the agency’s buying power after a succession of flat budgets that followed a 6-year doubling from 1998 to 2003. In such an environment, he adds, scientists are less inclined to take risks.

“This situation is unacceptable,” he declares, offering as the solution a 10-year, across-the-board budget doubling in the physical and life sciences, mathematics, and engineering.

McCain is less sanguine than Obama about the likelihood of large increases. “I have supported increased funding at DOE [Department of Energy], NSF [National Science Foundation], and NIH for years,” he notes in his Science Debate reply, “and will continue to do so.” But he warns that “with spending constraints, it will be more important than ever to ensure that we are maximizing our investments in basic research.” And his answer omits mention of any numerical goal. In an interview last month on National Public Radio, Holtz-Eakin



Tight team. Douglas Holtz-Eakin (inset) has been the chief spokesperson for John McCain on most domestic issues.

said any call for doubling science agency budgets is “a nice, fun number . . . that doesn’t reflect a balancing of political priorities.”

In fact, it’s hard to pin down either candidate on how quickly he would like to increase federal funding for basic research. Making a video appearance this month during a cancer research telethon, Obama promised to double the budget of NIH, including the National Cancer Institute, in 5 years. That’s twice the rate described in his answers to Science Debate, which came out in August and have become the mantra for campaign surrogates. He also supports the 2007 America COMPETES Act (ACA), which is silent on NIH but which would put NSF and DOE’s Office of Science on a 7-year doubling track.

As it happens, those figures are in line with historical trends. Between 1962 and 2003, for example, the NIH budget doubled roughly every 8 years, in current dollars. NSF has seen its budget double every decade for the period from 1970 to 2000.

A statement on McCain’s Web site also promises to “fully fund” the provisions of the

COMPETES Act, which authorizes spending levels that have not been met in subsequent appropriations bills. Holtz-Eakin told *Science* that McCain “is on the record as supporting ACA” and that, if elected, his 2010 budget would reflect those targets in the physical sciences. Taking a jab at Obama’s expansive promises for increased spending in research and other domestic areas, Representative Vern Ehlers (R-MI) predicts the U.S. research enterprise will be better off under a McCain Administration, despite its more modest promises, because “he’s more likely to find the money.” But Ehlers, one of three physics Ph.D.s in Congress and a staunch supporter of science, admits that McCain hasn’t sought his advice on the topic. (His colleague, Representative Rush Holt (D-NJ), has spoken for Obama, although during a recent interview with *Science* he deferred several questions to the campaign staff.)

Obama’s aides and outside advisers play down the discrepancies in Obama’s statements on NIH doubling while at the same time perpetuating them. Domestic policy director Neera Tanden, who joined the campaign this summer after many years advising Senator Hillary Clinton (D-NY) on health-care issues, says a 5-year doubling of the NIH budget “is the right thing to do” and that it is needed to keep pace with the rapid advances in the field. Tanden also says the disruptions caused by a stagnant NIH budget after the previous doubling aren’t inevitable. “There’s no reason to assume you would have another crash landing,” she says.

Gilbert Omenn, a professor of medicine and public health at the University of Michigan, Ann Arbor, and a former president of AAAS (which publishes *Science*) who serves on Obama’s science advisory panel, acknowledges that the different timetables “are very awkward” and that the candidate’s promises “add up to a lot of commitments.” But he’s confident that Obama “will be able to figure out the best combination of variables to allow for a sustained investment.”

In the end, of course, promises are only that. “Remember, it’s a campaign, not governance,” notes Lederman when asked if his group expects to have an impact on Obama’s education policies if he takes office in January. A seat at the table may be a better bet, says Kaminski. “I would expect some of [his defense advisers] to take key positions in his Administration.” That is, if they turn out to have bet on the winning candidate.

—JEFFREY MERVIS