Mission impossible?

Mounting criticism of the way the Bush administration handles scientific advice has put John Marburger, the US president's science adviser, in the hot seat. Geoff Brumfiel takes the temperature.

When John Marburger took over as head of Brookhaven National Laboratory in New York State six years ago, the lab was facing a public-relations disaster — a leak from a storage pool for nuclear waste had angered environmentalists and turned many local people hostile. Using a combination of patience and openness, Marburger got the facility back on an even keel.

But Brookhaven's travails were a storm in a teacup compared with the tempest the 63-year-old physicist now faces as scientific adviser to a Republican president. On 18 February, the Union of Concerned Scientists (UCS) issued an impassioned statement signed by more than 60 eminent researchers, accusing the Bush administration of misrepresenting scientific findings, suppressing reports and loading scientific advisory panels with its political supporters. "The pervasive, systematic nature of these practices is unprecedented," says Kurt Gottfried, a physicist at Cornell University and chairman of the Cambridge, Massachusetts-based group.

The statement brought to a head a range of criticisms of President George W. Bush

that have been simmering in the scientific community since he came to office in January 2001. His administration has withdrawn from the Kyoto Protocol on climate change, which was supported by environmental scientists. It has also pressed ahead with missile-defence systems that top US physicists said won't work, and set rules for stem-cell research that have riled leading biologists. In addition, it has selected members for scientific panels whom many researchers see as ideologues. Marburger, and the White House's Office of Science and Technology Policy (OSTP) which he directs, must now defend these decisions, and that charge has fuelled a debate about the role that he and the office play in the current administration.

On the outside

The OSTP is a relatively small outfit of about 60 specialist staff whose job it is to prepare advice for the president and coordinate science policy across the federal government. It was thrust on an unwilling White House by Congress in 1976 and has struggled ever since to exercise real clout. Huge government departments, such as

health and defence, direct most of the on-the-ground research, whereas the setting of science-related policies on sensitive topics, such as global warming and stem-cell research, rests chiefly with political figures in the administration. "We were the bastards at the family reunion in many ways," recalls John Gibbons, who ran the office from 1993 to 1998 for President Bill Clinton. "We were always on the outside."

From the beginning, Marburger seemed more on the outside than most. He arrived in Washington ten months after Bush took office and lacked the title of 'special assistant' to the president, which was given to previous science advisers. As a registered Democrat with few contacts in the administration, the fear was that Marburger would have little access to the president — the milestone by which many judge the success of the science adviser.

But some science advocates saw cause for optimism. Historically, the science adviser has been stuck between scientists, who want someone to represent their interests in the corridors of power, and the president, who wants someone to defend policies and deflect researchers' habitual moaning about money.

Prominent US researchers claim that John Marburger (left) lacks influence at the White House.

Under Republican administrations, the challenge of meeting both sides' expectations is particularly acute as scientists, for the most part, lean to the political left. Marburger, whom colleagues invariably describe as friendly and approachable, seemed in many ways to be the perfect person for the job. He was seen as a consensus builder, responsive to the concerns of the outside, but willing to work within the rules laid down by the president.

An open ear

Two-and-a-half years later, the verdict on his performance is mixed. In issues ranging from visas for foreign scientists to restrictions on publishing sensitive information, advocacy groups have found a receptive ear in Marburger, says Janet Shoemaker, head of public affairs at the American Society for Microbiology. But many doubt whether he has the clout in the administration to act on the input he receives. "It's been clear from the beginning that the office was not going to be an essential part of White House operations," says Mike Lubell, who heads public affairs at the American Physical Society. "Science just isn't high on the president's personal agenda."

Marburger bristles at the suggestion that his office lacks influence inside the White House. "I sit in on all the senior staff meetings every day at 7.30," he says. Although his office may eschew high-profile initiatives, it has been effective in improving coordination between agencies and securing more funding for science, he argues. Marburger says that what he lacks in Washington ties, he makes up for with his management skills, which he acquired during 14 years as president of the State University of New York in

Stony Brook and six years as director of Brookhaven. "This president came in with a business point of view, and he hired people sympathetic to that point of view," he says. "I don't think any previous science adviser, in the past two decades anyway, has had as much executive experience as I have."

Former OSTP staff and administration officials outside his office confirm that Marburger has worked well with others in the government. The office has been particularly active in defining the science and technology needs of the Bush administration's top priority — the war on terrorism. One such example came earlier this month, when Marburger helped to outline an approach for the funding and publication of biological research that might be abused by terrorists (see *Nature* **428**, 109; 2004). The result was a flexible plan that biologists have endorsed, not the draconian one some of them had feared from the security-conscious administration.

Marburger has also played a strong role in setting the budget, according to science lobbyists and congressional staff. Officials at the White House Office of Management and Budget — which writes the president's annual budget proposal — say that Marburger has been influential in budget negotiations, even winning increases for some agencies in the final stages of budget wrangling. "Jack may not get everything he wants, but he always gets something," a senior official there says.

But on political issues, such as the UCS report, Marburger seems less adept. The report was largely a rehash of complaints that had been building throughout the administration, yet Marburger seemed blind-sided by its publication. In a hastily convened press conference afterwards, he called the group's

claims a "conspiracy theory" and "a very deliberate attempt to undermine the president in a campaign year", but so far he has not provided a rebuttal to each of the statement's claims. A detailed response is expected soon.

His aggressive, yet unspecific response has drawn criticism of his performance, even from Republicans. "The way they have handled this has not reflected well on the office," says one congressional staffer. Senator John McCain (Republican, Arizona), chair of the Senate Committee on Commerce, Science and Transportation, and perhaps Bush's most persistent critic in his own party, has scheduled hearings on the UCS report. And Senator Christopher Bond (Republican, Missouri) told Marburger at a 26 February budget hearing that he was "very concerned about these accusations".

Fighting back

Marburger continues staunchly to defend the administration's approach to scientific issues. "We're not trying to make things consistent with some ideology," he says. He also complains that some problems could have been brought to his attention earlier. Referring to one of the UCS statement's allegations, that the National Cancer Institute posted outdated studies linking abortion to breast cancer on its website, he says: "Do dumb things happen from time-to-time? Yes. But if people call me up, I do something about it. We respond to evidence of problems." But the impression that the OSTP lacks influence has made outsiders reluctant to bother it with their complaints. "I don't think they have the power to intervene," says Gottfried.

The issues raised in the UCS statement look set to dog Marburger's office until November's presidential election. Earlier this month, the removal of Elizabeth Blackburn, a biologist at the University of California, San Francisco, from Bush's Council on Bioethics alarmed many scientists (see *Nature* **428**, 4; 2004), and Gottfried says that so far, more than 1,000 researchers have added their signatures to the UCS statement.

It's all a far cry from Brookhaven, where Marburger's unassuming, low-key style and his willingness to work with local environmentalists quickly drew the sting from the lab's most strident critics. In Washington, the political game is much tougher, and some senior figures are prepared to discuss the possibility that Marburger might resign. "I don't believe I would have been able to stay in that office under a presidency that has done some of the things that have been done," says Gibbons. Yet many of the administration's harshest critics do not blame Marburger personally. "Our purpose is not to make his life more difficult," says Gottfried. "There are deeper forces at work here, and science is only part of it." ■

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