

The rise of the bean counters

The Office of Management and Budget always exerts a powerful influence over the US government. But it is now taking a higher profile, and a stronger interest in science. Should researchers be alarmed? Colin Macilwain reports.

People who work for the White House Office of Management and Budget (OMB) don't expect to be loved. Responsible for managing the federal government's vast bureaucracy and monitoring its spending, the OMB is widely seen by those it oversees as the devil in disguise. "They're looking for the horns and the tail as soon as you walk in the door," says one former OMB official, who used to keep tabs on the National Institutes of Health.

Adored they may not be, but OMB staff are certainly powerful — especially in fram-

ing the president's annual budget request to Congress. Under Mitch Daniels, appointed as OMB director a year ago, the office has risen to even greater prominence and, some would say, notoriety. As its officials pore over their portfolios, research agencies have come under close scrutiny. Most significantly, Daniels has launched a drive to measure the performance of all branches of the US government, including research and development (R&D) programmes. Those who lobby on behalf of science are alarmed — especially by the idea that spending on fundamental research will be judged by formal 'performance criteria'.

For scientists who have so far remained blissfully ignorant of the OMB, now may be the time to sit up and take notice. The office has become increasingly active in proposing changes to the government's scientific programmes. Early last year, for example, it suggested giving NASA control of the astronomy programmes run by the National Science Foundation (NSF) (see *Nature* **410**, 853; 2001). The idea was later rejected after consideration by a panel of the National Academy of Sciences, but it served as a signal of the OMB's intention to take a more hands-on approach to science policy. And President George W. Bush's second budget request, due to be presented on 4 February, might contain further indications of the OMB's heightened influence.

OMB analysts, who work in the modest New Executive Office Building just a short distance from the White House, are a sharp bunch — in the words of one former employee: "The smartest group of people I've ever worked with." They need to be — about 200 analysts cover the entire federal budget, with just 20 or so overseeing an annual government R&D spend that currently amounts to some \$104 billion (see graph, opposite).

These bright sparks are typically young, and work punishing hours. One ex-OMB staffer recalls phoning colleagues at home at four in the morning. "There was no griping," he says. Although the professional analysts

are civil servants, and so are not tied to any particular administration, they take their orders from Daniels and the half-dozen other political appointees who run the office from the more opulent surroundings of the Old Executive Office Building, next door to the White House.

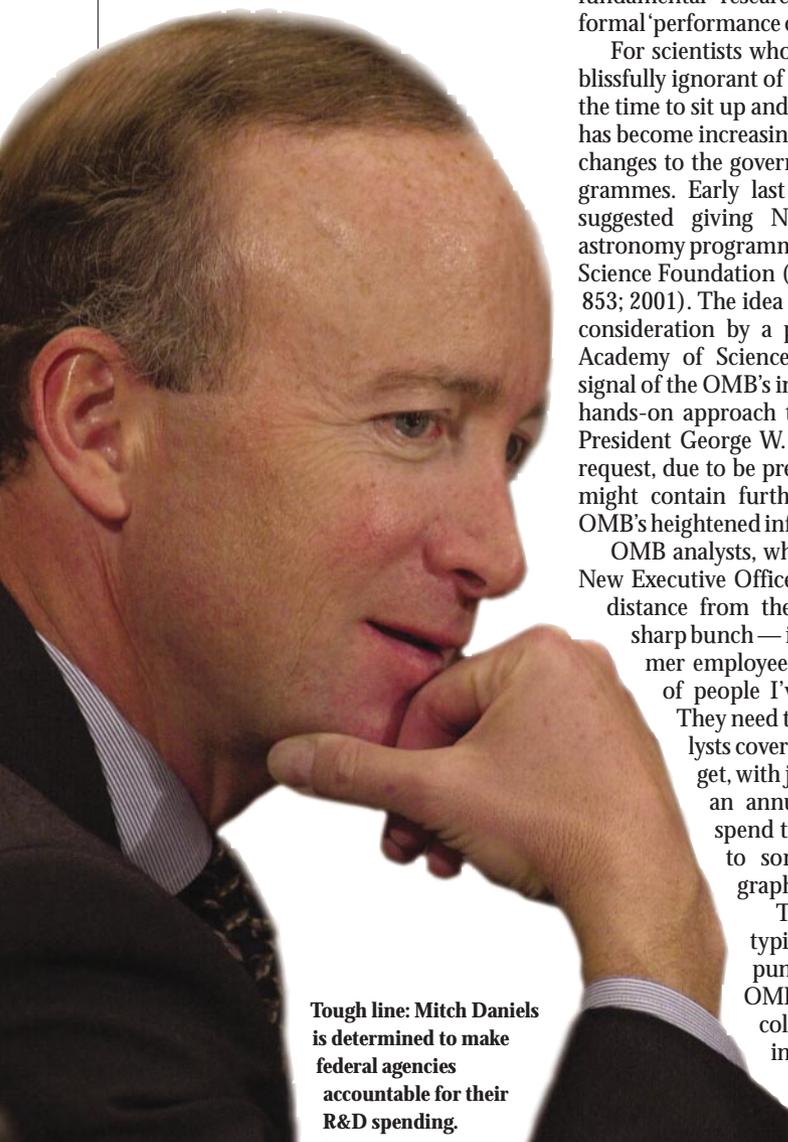
The OMB's current high profile stems from this political inner circle. Daniels, who declined to be interviewed for this article, worked for Republican Senator Richard Lugar (Indiana) and for President Ronald Reagan during the 1980s. In 1997, he became a senior vice-president for the drugs giant Eli Lilly. He now seems to be relishing his public persona as the 'hard man' of the Bush administration. Daniels has been scathingly critical of those — including Republican leaders in Congress — who he sees as being unhelpful to the smooth running of the annual budget process.

Management mindset

The OMB typically exerts more influence when the Republicans control the White House. And the current administration, dominated by a corporate mindset, sets particular store on management efficiency. This isn't simply an aversion to spending money — next week's budget request is likely to propose more deficit spending in a year than Bill Clinton managed in the last four of his presidency. "I think the change is more philosophical," says Nora Noonan, an OMB analyst until 1992 who now runs NASA's National Space Science and Technology Center in Huntsville, Alabama. "It's about being fixated on the president's management agenda."

When it comes to science policy, the OMB's profile has been raised further by Bush's failure to make appointments to the White House Office of Science and Technology Policy (OSTP) until after his science adviser, physicist John Marburger, arrived to head the office in October. "There's been a vacuum in science policy in this administration, and the OMB has filled it," says one congressional official.

Science lobbyists aren't wildly optimistic that Marburger will be able to restore the OSTP's influence. "OMB always calls the shots anyway," says Michael Lubell, a physics professor at the City University of New York and head of public affairs at the American



Tough line: Mitch Daniels is determined to make federal agencies accountable for their R&D spending.

D. COOK/AP



Uprooted? Under a controversial proposal, control of some research, including this Smithsonian Tropical Research Institute study of the forest canopy in Panama, would have moved over to the National Science Foundation.

Physical Society. “The question now is whether the science adviser can influence OMB decision making. I hope Marburger is able to establish himself.”

These worries spilled over on 8 January, when Marburger held a question-and-answer session at the annual meeting of the American Astronomical Society in Washington. Queries about the OSTP itself were few and far between, as Marburger was peppered with anxious enquiries about the OMB’s performance-assessment exercise. “What we need to do is to be more explicit about how we make our choices, and to incorporate that into performance assessment,” Marburger told the restless astronomers.

The performance assessment — tested at parts of the Department of Energy last year and set to sweep through the entire government R&D portfolio this spring — is causing alarm among advocates of basic research. “The science community is worrying about it, as it worries about any threat of accountability — for reasons good and bad,” says an official with a leading university lobby group.

The idea first surfaced in Bush’s management agenda, a 60-page document published in August. Written by the OMB, the document pledged to set “objective investment criteria” for R&D, with those for basic

science scheduled to be agreed and issued this spring (see *Nature* 413, 5; 2001).

“The guidelines that are being established carry several risks,” says Lubell. In particular, he and other lobbyists are worried at indications that fundamental research will be assessed over a three-year timescale. For Lubell, this is far too short. Another physicist, Mildred Dresselhaus of the Massachusetts Institute of Technology, who ran the Department of Energy’s Office of Science under Clinton, agrees that scientists “have cause for concern”.

OMB officials say that the proposal simply builds on an effort, until recently losing momentum, to implement the 1993 Government Performance and Results Act, which requires every federal agency to measure performance and adjust budgets accordingly. As to the timescale for assessing fundamental research, an OMB official told *Nature* that some agencies were considering reviews of their programmes every three years — but this needn’t mean that research must be measured on its results over this timeframe.

Ratings game

In recent briefings, the OMB has told apprehensive lobbyists and officials that it is considering a list of six criteria to measure research performance. At a packed forum on 15 January, organized in Washington by the American Chemical Society, Marcus Peacock, the OMB’s associate director for natural resources, energy and science, said that the list includes such items as: “Is there a clear public benefit, but a lack of private support?” and “Are there alternatives to direct funding, such as tax incentives?” Ominously, another asks: “Does the programme have an exit strategy?”

The trial run at the Department of Energy got off to a slow start, Peacock admitted to the forum, but he said that the criteria are now shaping up for use in all agencies. The OMB is now trying to reassure scientists about the process. Daniels himself wrote to

Nature in October (see *Nature* 413, 566; 2001) in an attempt to allay any fears. “We anticipated that people would be afraid that we were going to use exact criteria for basic research, when everyone knows that it is hard to measure or predict its outcomes,” one OMB official told *Nature*, adding that the final guidelines will be drawn up “with plenty of input from outsiders”. Consultation will include a workshop in late February at the National Academy of Sciences in Washington.

Meanwhile, the OMB continues to instigate policy initiatives aimed, it says, at improving the management of science across government. The proposed transfer of astronomy from the NSF to NASA was one example. Another was the idea, floated late last year, of folding some research programmes of the Smithsonian Institution, the US Geological Survey (USGS) and the National Oceanic and Atmospheric Administration (NOAA) into the NSF.

Critics of the OMB, who are legion, see an ulterior budgetary motive in these proposals. The transfers might, they point out, allow Bush nominally to raise the NSF’s budget, and declare that he was supporting science, while really just moving the cash from other agencies whose involvement in science is less visible. Like the astronomy transfer, the Smithsonian proposal is now reportedly dead (see *Nature* 415, 252; 2002). But scientists funded by the USGS and NOAA will be scouring the fine print of next week’s budget proposal to see what happens to their programmes.

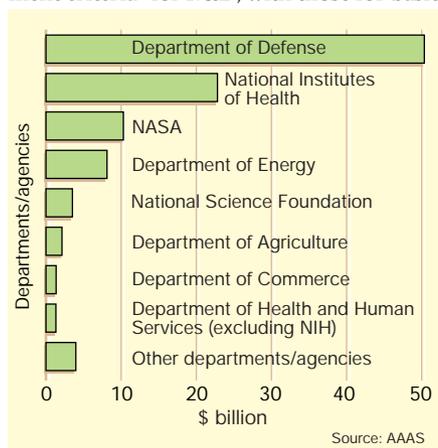
Defenders of the OMB say that it is probing management changes that deserve to be considered. And not everyone sees the OMB’s increased influence on science policy as a bad thing. Professional staff at the office tend to understand the role of basic research better than many other government officials, say the OMB’s supporters. Indeed, many OMB alumni have gone on to fill top administrative posts in research-intensive organizations in both the public and private sectors. “Most scientists have bought into the view that OMB is evil,” says one of its former staff. “The truth is about 180 degrees removed from that.”

But both critics and supporters agree that whether or not the OMB’s individual management proposals are taken up matters little to Daniels and his staff. Although some players in the Bush administration might go to bed fretting that a negative story in *The Washington Post* will shatter their position in the capital’s power structure, OMB staff from Daniels down can sleep soundly in the safe knowledge that their influence will endure. ■

Colin Macilwain is *Nature’s* news editor.

▶ www.whitehouse.gov/omb

▶ www.whitehouse.gov/omb/budget/fy2002/mgmt.pdf



Up for grabs: the US government’s spending on R&D will amount to some \$104 billion in 2002.