## nature

## An agency undermined by silence

The National Science Foundation has found itself stranded by the US budgetary battles, while other, more contentious agencies know what they will have to spend. Scientists and science's beneficiaries need to sharpen their political wits.

For science agencies in the United States, the current budget wars have come to resemble a frantic game of musical chairs. The music is due to stop again at the end of this week, and the National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF) will be among those scrambling to find a seat.

Four months into the 1996 financial year, neither of the two agencies has a budget. What makes the citizenry a touch cynical about the process is its apparent randomness. The NSF, which funds most non-biomedical university science in the United States, has no enemies to speak of in Washington, but five weeks of government shutdowns since October and the continuing absence of a 1996 budget have thrown its operations into chaos.

By contrast, the Department of Energy, whose operations and, indeed, very existence are subject to fierce political controversy, received a budget last November. Its laboratories — the core of physics research in the United States — have been working normally since then. The National Institutes of Health (NIH), the biomedical research agency, was dragged into the shutdown over Christmas but was dramatically rescued two weeks ago (see *Nature* 379, 101; 1996) and now stands aside from the mêlée with an almost generous budget increase of 6 per cent.

There is a widespread view (yet to be proved) that NASA's close ties with aerospace contractors will ultimately save it from too much further damage. But the people at NSF are beginning to feel isolated, unprotected and angry — as was made vividly clear last week by NSF's director, Neal Lane, speaking at a meeting of the American Astronomical Society. According to him, it could take NSF all year to get back to normal service.

Lane also issued a thinly disguised plea for scientists to mount a far stronger lobby on NSF's behalf, noting the "perceived stony silence of the science and technology community" over the past year — a manifest lack of concern that has not gone unnoticed in Washington. In off-the-record briefings, NSF officials go further, criticizing the powerful university lobby for fiddling over the Christmas holiday while Congress let the NSF burn. And where was the voice of industry?

There is no doubt that the community has been slow to rally behind NSF during this, its latest hour of need. But mitigating factors need to be appreciated. December and January are relatively quiet months for grant renewals. The agency's \$2-billion research budget is spread across all scientific disciplines, so that few of them are entirely dependent on the NSF (ground-based astronomy is one exception) in the way medical schools, for example, are entirely dependent on the NIH. Most universities were able to pay researchers whose grants were held up by the shutdown without placing undue strain on their financial resources.

Additionally, it is hard to see what the community could do for NSF, since no tangible proposal existed (or exists now) for it to rally behind. NIH managed to be rescued from the budget rubble because the Speaker of the House of Representatives, Newt Gingrich, has developed a soft spot for biomedical research, and because the spectre of victims of AIDS and other illnesses being yanked from clinical trials was too much for the public to bear. And NIH needed to be plucked from an appropriations bill — Labor, Health and Human Services and Education — so

chronically bogged down that it may never pass into law.

NSF has neither such special friends nor so emotive a case for special treatment, and the authors of its appropriations bill — the Veterans' Affairs, Housing and Urban Development and Independent Agencies (VA-HUD) bill — still hope to hold their work together, negotiate with the president, and pass something into law.

So the nation's most universally respected science agency limps on without a budget, its staff branded "non-essential" and months behind in their work of selecting and dispensing 20,000 research grants a year, and with the persistent threat of further shutdowns pending.

Lane is prohibited by law from orchestrating support for his own agency, but during the past year other groups — such as the Science Coalition, founded last year by Harvard and a group of other leading research universities — have sought to build support for science on a broad front. Until the latest crisis, they appeared to be having some success, with lawmakers led by Robert Walker (Republican, Pennsylvania), chair of the Science committee in the House of Representatives, showing firm support for the NSF.

Lane refers to the situation since October as "an unprecedented, abominable mess" but nonetheless hopes that it will serve to wake up the community. The normally mild-mannered NSF director says that what he calls "the entire sordid episode" has irreversibly changed the image of public service. He is right to be "very worried" about the implications for NSF as well as other agencies.

There have been many opprobrious adjectives used to describe the budget battle, not just by officials of the Clinton administration, such as Lane, but also by members of a disgruntled public across America. Some sense of proportion should be retained, however: the shutdowns at least represent a real effort by the political class to grapple with tough fiscal problems.

The final outcome of that effort will almost certainly be a plan to balance the budget by 2002, which will involve drastic cuts in discretionary spending over coming years. Science and technology consume one-seventh of that discretionary spending — \$70 billion a year — and will not be immune from the intense and repeated scrutiny which will fall on all government programmes.

So the battle must be joined. Science has a good story to tell. The Consortium for Oceanographic Research and Education (CORE), a research lobby group headed by the former energy secretary, Admiral James Watkins, is showing the way ahead at a joint hearing this week of three powerful House of Representatives committees, for which CORE has been pushing for months (see page 283). Watkins and Lane will join Bruce Alberts, the president of the National Academy of Sciences, Admiral Jeremy Boorda, head of the Navy, and others to explain to Congress why America needs the ocean sciences.

The hearing carries an implicit message for the rest of the scientific community, too. Scientists live off the federal government, but do too little to sustain the system that enables them to do their work. Since the Republican election victory of November 1994, there has been too much hand-wringing in the community, and not enough constructive engagement.