Scientists fight for right to withhold data

[WASHINGTON] A law forcing scientists to hand over raw data under the Freedom of Information Act (FOIA) could be weakened by new proposals from the White House.

But the plan by the White House Office of Management and Budget (OMB) to interpret the law narrowly has done little to dampen resistance from universities and scientific societies, who want it revoked. They acknowledge the OMB move as an effort to take researchers' concerns into account. But they still fear the law would expose researchers to harassment from people who wish to interfere with their work, while making it difficult to protect confidential data related to medical studies or intellectual property claims.

The proposed rule, published on 4 February, explains how the OMB will implement a piece of legislation added to last October's Omnibus Appropriations bill by Senator Richard Shelby (Republican, Alabama). Shelby's law, incorporated at the last minute, requires non-government scientists on federal grants to hand over all raw data to third parties who request it under the FOIA.

The OMB rule, on the other hand, would only require raw data to be made available when the final research findings had already been published, and only if that research had been "used by the federal government in developing policy or rules". Comments are invited until 5 April, after which the OMB will issue a binding rule.

A 1980 Supreme Court ruling confirmed that university researchers and other people on grants are not subject to FOIA requests, which are mainly used as a means to obtain government documents. Scientists fear that the new law will expose researchers in controversial areas — such as global warming or the epidemiological study of the effects of pollutants — to demands from interest groups who want to see all their notebooks, papers and computer records.

Shelby had quietly inserted his legislation into the 4,000-page omnibus appropriations bill in response to a case in 1997, when industrial groups failed to persuade Harvard University to hand over the raw data behind a piece of published research cited by the Environmental Protection Agency in support of tightening regulations on fuel emissions. The study included medical details provided on condition of anonymity: researchers said that, even with names taken out, people could still be identified. A few other scientists have been allowed to use the data. But industry groups such as the American Petroleum Institute say that the data should be available for review by any qualified investigators with "a legitimate scientific interest".

"A researcher's notebooks are full of raw material, just like an FBI file, not all of which

Shelby: researchers united in opposition.

that is acceptable to the research community. But he adds: "I think the problem is that the basic statute is bad, and a lot of people believe that you can never make a bad law good." It is "very probable" that the association of medical colleges would now back legislation to repeal the Shelby legislation, he says. "We still think this is very troubling."

"We believe that OMB has made a good-faith effort, and has demonstrated sensitivity to our community's concerns," said Nils Hasselmo, president of the Association of American Universities, which represents the

is of equal standing," says David Korn, senior vice-president for research at the American Association of Medical Colleges. "To require all of that to be made publicly available is just bad science policy."

Korn describes the proposed White House rule as "a very valiant effort" to implement the law in a manner

leading US research universities. "We are consulting with our campuses and other scientific societies to provide extensive comments to OMB."

George Brown (California), the senior Democrat on the House Science Committee, has already proposed such legislation. But, says Korn: "Republican members are going to have to get on to this if it is going to go anywhere." Republican supporters of science such as John Porter (Illinois) have joined Brown in expressing their concern on the issue. But it will be awkward for them to propose the immediate repeal of a provision which was added to the appropriations bill by leading senators of their own party.

Shelby's office said that he had not yet reviewed the proposed rule.

Lawyers at the National Institutes of Health (NIH), meanwhile, have warned scientists that they will have to pay themselves for extra administrative work they do to satisfy demands made under the new law. NIH won't be able to pay for such work, they say, and even if NIH obtains a fee from the organization asking for the data, the money will go straight to the US Treasury. Colin Macilwain

SOIREE aims to iron out atmospheric puzzle

[LONDON] Oceanographers are trying to resolve a decade-long debate over the way iron levels in the oceans influence global climate. Researchers from six countries participating in the Southern Ocean Iron Release Experiment (SOIREE), led by New Zealand's National Institute of Water and Atmospheric Research, set sail from Wellington, New Zealand, last week on the research vessel *Tangaroa*.

The circulation and mixing of the Southern Ocean is such that the availability of iron to phytoplankton may have directly affected its ability to lock up atmospheric carbon dioxide. In the Southern Ocean, as in around one-third of the world's oceans, phytoplankton growth fails to make full use of available nitrate and phosphate nutrients. This suggests that other factors are limiting photosynthesis, and with it the ability of phytoplankton to fix carbon dioxide, an important greenhouse gas.

Iron is essential for photosynthesis, and a shortage has been shown to limit growth in the equatorial Pacific Ocean, where surface waters fertilized with iron 'bloomed' (see *Nature* 383, 495–501; 1996). This oceanic region seems to have been rich in iron in the geological past, but this probably had little effect on atmospheric carbon dioxide levels — the physical circulation would have prevented any extra carbon fixed being locked away in the deep ocean.

Into deep water: *Tangaroa* faces stormy weather as it tackles the climate-change issue.

In contrast, if phytoplankton productivity in the Southern Ocean is limited by a shortage of iron — the main question SOIREE aims to answer — an increase in iron levels may have significantly reduced the concentration of atmospheric carbon dioxide in the past. Much of the consequently fixed carbon in surface waters would be expected to be physically mixed down into deep waters, removing it from contact with the atmosphere for long enough to diminish atmospheric levels.

The major problem facing the expedition is the weather. Storms in the rough Southern Ocean will make it difficult to find the 10–15 day window of calm seas needed to maintain and follow the 50 square kilometres of surface ocean that will be seeded with ferrous sulphate. Philip Newton