

## American science

## Supply-siders now

## Washington

"We are now forging a substantially closer relationship with both the legislative and executive branches of Congress", the retiring president of the American Association for the Advancement of Science (AAAS), Dr Alan Bromley of Yale University, said on the opening day of the association's annual meeting in Washington on Monday.

Dr Bromley listed various ways in which AAAS was exercising what he described as a "service role" for private and public science decision-makers. Such activities range from providing testimony to congressional hearings to preparing regular and widely quoted assessments of the impact of federal policy on the size of the US research and development effort.

But if a considerable amount of AAAS's time is now spent helping the government to do its job, there has also been an expansion of effort to compensate for federal actions — for example, the cutting back of support for science education in schools.

Following up an initiative launched at last year's annual meeting in Toronto, the chairman of the AAAS board of directors,

Dr Frederick Mosteller, announced that the association had just received a \$6.5 million grant from Philips Petroleum for a series of television films to complement the work of mathematics teachers in public schools "by making mathematics more lively and significant".

Another educational initiative is the publication of a set of science teacher notes based on articles appearing in AAAS's monthly science magazine *Science* 82. The association is also convening two conferences later this year with leaders of various scientific and technical societies, the first dealing with urgent policy issues in science education, the second concentrating on the growing shortage of science and mathematics teachers.

Inevitably, a prominent theme of this year's meeting is the impact of the Reagan Administration's cuts in public spending on scientific research. In an address on Sunday evening, the President's Science Advisor, Dr George (Jay) Keyworth, emphasized again the Administration's awareness of the importance of basic science, promising that the next "budget submission will clearly reflect that".

He also again warned that there were hard choices to be made. In the short term, there was general acceptance at the meeting that such a policy was appropriate. Dr Bromley pointed to the Department of

Energy's High Energy Physics Advisory Board and the Nuclear Science Advisory Committee as examples of ways that scientists in a particular fields, when finances get tight, have been able to determine their own scientific priorities.

But in the longer term, it was said, repeated budget cuts will be severely disruptive. Figures produced by AAAS itself last week showed that for the two-year period 1981–82, the result of federal actions will be to reduce the civilian research and development budget by about 16 per cent in real terms (constant dollars), with a 22.2 per cent growth in the military research and development budget over this period.

Another issue being hotly debated in the meeting rooms and corridors is the current dispute about creationism and the teaching of evolutionary theory in public schools. On Monday morning, the AAAS board unanimously passed a resolution that "creationist groups are imposing beliefs disguised as science upon teachers and students to the detriment and distortion of public education in the United States".

Registration at the 1982 meeting is expected to be about 5,000 which AAAS officials say is approximately the same as the last time the association held its annual meeting in Washington three years ago. Next year, in Detroit, they are hoping for something better, by moving the timing of the meeting from January to May.

That decision has been partly determined by the weather. During last year's meeting, Toronto experienced its coldest winters for almost a century, with temperatures of  $-30^{\circ}\text{C}$ . The previous year, San Francisco airport had been closed by fog. **David Dickson**

## Biomedical research

## NIH takes a cut

## Washington

The National Institutes of Health (NIH) told recipients of biomedical research grants and contracts last week that new and continuation grant awards made in the next three months are likely to be 4 per cent lower than initially proposed by President Reagan in his budget request to Congress last March.

It could have been worse. A revised budget request, issued in September, demanded a further 12 per cent reduction in all discretionary public spending and many federal agencies have had their activities curtailed significantly in the drive to reduce the federal deficit. As it is the NIH budget for 1982 — the fiscal year which started last October — will only increase by 2.2 per cent, considerably less than the current rate of inflation, and the first significant drop in real terms for federal support of biomedical research since the mid-1970s.

However, in the short term, no major damage seems to have been inflicted, and

## UK director for US Biogen laboratory

Dr Richard Flavell, one of Britain's whizz-kids of gene cloning, is to leave the country to become research director of Biogen Inc., the American arm of the international biotechnology firm, Biogen NV.

Flavell is currently leader of the only gene cloning group at the National Institute of Medical Research (NIMR), Mill Hill, London, one of the two principal laboratories of the UK Medical Research Council. Gene cloning is also done at other laboratories of the council — notably at Hills Road, Cambridge — but there is a strong feeling that application of the technique, central now to the whole of molecular biology, should be more in Britain. The loss of Dr Flavell is thus significant, particularly at a time when NIMR is seeking a new director and re-considering its role within British biology.

In fact, Flavell has officially been granted "leave of absence" from Mill Hill for two years; but it seems unlikely that two years hence Flavell will want to leave Cambridge, Massachusetts, where the Biogen laboratory is being set up.

Flavell will continue to direct a group at Mill Hill, if at a distance, but he wishes to take some of the more fashionable work with him. He expects that half-a-dozen of his Mill Hill team will go with him to Biogen, taking with

them expertise on the H-2 regions of the mouse genome. These regions code for histocompatibility antigens in the mouse, and it may be speculated that Biogen will now take an interest in the generation of reagents for tissue-typing in man, using the equivalent human HLA regions. Flavell will leave at Mill Hill the part of his group which deals with the globin genes, also important in immunology but less at the centre of attention now than H-2 and HLA.

At Biogen, Flavell will take over a fledgling staff of 20 scientists, which he will increase to 75 by the end of 1982. He will, of course, be concerned mostly with fostering the commercial interests of Biogen through research, but has been guaranteed the opportunity to pursue his own basic research — largely through the Mill Hill team he takes with him.

Flavell cannot say yet what the research interests of his new laboratory will be; but according to Professor Charles Weissmann of Zurich, who is chairman of the scientific council of Biogen, the Cambridge laboratory was originally planned to pay closer attention to the chemical and processing aspects of biotechnology than Biogen's Geneva laboratory which was founded earlier (see *Nature* 27 October 1981, p.599). Whether Flavell will in fact follow this line is open to question.

**Robert Walgate**