Washington

Last week's congressional elections, which gave the Democrats a 26-seat gain in the House of Representatives, returned all but two of the senators and congressmen who hold key positions on science and environment committees. The two losers were Senator Howard Cannon (Democrat, Nevada), the ranking Democrat on the Commerce, Science and Transportation Committee, and Senator Harrison Schmitt (Republican, New Mexico), a former astronaut and the only PhD scientist running for the Senate.

Cannon, who lost in a close race in his increasingly Republican state, has been a senator for 24 years. He was recently instrumental in pushing through legislation to guarantee continued funding of the Landsat remote-sensing programme.

Schmitt, who is completing his first term, has been a staunch supporter of President Reagan's economic policies, although he recently went against the Administration in sponsoring legislation to increase spending on science education. Schmitt also supported a shift in funding from the Department of Defense to the National Aeronautics and Space Administration for shuttle operations and for increased space and aeronautics research.

Three supporters of environmental legislation in the Senate who faced strong opposition in the election will all be back: Robert Stafford (Republican, Vermont), George Mitchell (Democrat, Maine) and John Chafee (Republican, Rhode Island).

In the House of Representatives, all the key players on science and the environment committees will be returning, although George Brown (Democrat, California), a strong advocate of science education and research, was pushed to sending out a plea during the campaign for financial support from scientists and educators.

At the other extreme, Senator William Proxmire (Democrat, Wisconsin) of Golden Fleece Award fame proved much more popular among his constituents than among the nation's scientists. He wound up with 64 per cent of the vote, having spent less than \$150 on his re-election campaign.

A resolution calling for immediate negotiations toward a bilateral nuclear freeze was passed in eight states. Although the resolutions are not binding, the Reagan Administration had campaigned heavily for their defeat, arguing that a freeze would endanger US security. Voters in Massachusetts, Michigan, Montana, New Jersey, North Dakota, Oregon and Rhode Island passed the measure by a wide margin. It narrowly passed in California and failed in Arizona, the only other state where it was on the ballot paper. Stephen Budiansky

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West Germany science Federal plans

The implications for science of the change in government in West Germany are emerging only gradually. The new CDU/CSU/FDP coalition is clearly going to be cautious in what it does at least until after the federal election next March. In any case, the vast and decentralized structure of German science makes it impossible to implement changes quickly. An indication of the new team's plans has been given by Dr Heinz Riesenhuber, CDU minister at the Research and Technology Ministry (BMFT) in speeches at a joint industry/BMFT seminar on technology transfer and at a meeting of the Fraunhofer-Gesellschaft in Munich.

Dr Riesenhuber made it clear that direct support of individual projects will be run down in favour of indirect support through tax relief, low interest loans, allowances and subsidies. The rundown can be seen as a continuation of the previous administration's policy under which barely half as many projects were started in 1981 as in 1979. Dr Riesenhuber hopes that indirect support will encourage more marketoriented research and he singled out the energy saving programme for particular criticism, saying that the returns for the DM 4,350 million (US \$1,700 million) spent are quite inadequate.

In a similar vein, at the technology transfer meeting, the minister demanded that work at the 12 large state-supported research centres should concentrate more on market-oriented work and suggested that there should be more independent cooperation between research and industry. He expressed a belief that there is a pool of research results which could lead to industrial innovation at little or no cost. This seems questionable, for while it may have been possible to carry out development on a shoestring fifty years ago, modern requirements for quality and reliability in products and processes have made the step from research to production both expensive and time-consuming. If Reisenhuber's pronouncements are a foretaste of the kind of shift in emphasis that has occurred in science budgets in the United Kingdom and in the United States during the past decade, scientists working in basic research and on long-term projects will have to fight hard for their corners.

In more concrete terms, the draft budget for 1983 shows that the immediate effects will be small. The total research budget is DM 6,911.8 million (US \$2,710 million), a decrease of 2.4 per cent compared with the draft budget of the previous government and of about 2.2 per cent compared with 1982. Details have not yet been announced and the proposals may be modified when they are discussed in the Bundestag on 11 November. J.S. Dunnett

Side effect scare hits French trials

Paris

Four patients out of eleven being treated for cancer with French alpha-interferon have died from the same cause this year in France — myocardial infarction, a failure of a section of heart muscle through the loss of local blood supply. As a result, Jack Ralite, the French minister of health, has cancelled the trials, at least until Institut Pasteur Production (IPP), which produces the drug, can repurify its stocks and perform new toxicity tests on the material.

The deaths could be attributable to the interferon itself, or to impurities in it, or it could be just a run of bad luck. Several other countries are performing human trials with interferon and there have been no reports of the heart disease syndrome, and IPP uses essentially the same production method as Dr Kari Cantell, who has supplied much of the world's alpha-interferon: extraction from bloodbank leukocytes.

But the sequence of four similar deaths was too much to ignore. The scientific council which was set up to advise Ralite specifically on trials with the IPP interferon (the only French source) advised him to halt the trials. According to the president of the council, medical statistician Professor Robert Flamant, suspicions were first raised when the first two patients both died of myocardial infarction near the end of their treatment. They were both women 50–60 years old with acute breast cancer, who had been treated by other drugs and with radiation. The deaths led to "discussions" in the council, but they were dismissed as coincidence.

There was no problem with the third patient treated — nor any cure. But the fourth, a kidney cancer case, died of myocardial infarction actually during one of the interferon infusions.

At this point the council decided to change the method of introduction of the drug, which until then had been the "more aggressive" intravenous route rather than the intramuscular route which is usually preferred but which limits the size of the doses. This was fine for six patients, but in the seventh, with a slight increase of dose, there was another myocardial infarction. It was "less clear" in this case that interferon might be to blame, as the patient had a history of slight heart trouble. But it was enough to lead the council to stop the tests, especially since they also noted that a child had suffered great shock - and just survived — when given an injection of the interferon for a virus infection.

Flamant, however, expects his council to reauthorize the trials when IPP has