

# international news

Just four years ago, President Nixon signed into law a piece of legislation which has fundamentally changed government support of biomedical research in the United States. Called the National Cancer Act, the legislation was designed, in Mr Nixon's words, to launch "a great crusade against cancer". The crusade has always been controversial, causing deep divisions within the biomedical research community about how it should be managed. But it has recently come in for some fresh criticism which bears especially close watching. In fact, the indications are that a major political debate about the structure and scope of the cancer research programme is beginning to take shape.

Even before Mr Nixon put his signature to the National Cancer Act, the measure was controversial. The chief bone of contention in the early days was the justifiable resistance within the scientific community to the notion that cancer research could be managed like an Apollo-style effort to land men on the Moon. Though concerns over the NASA-like approach persist, frequently finding expression in attacks on the huge amount of money being spent on efforts to track down human cancer viruses, criticisms of the cancer research crusade have recently coalesced around two arguments, both of which have been raised in debates in Congress in the past few weeks. The first is the argument that rapid increases in funds for cancer research have siphoned money from other, equally deserving, research programmes. And the second is the contention that the cancer crusade has concentrated on an elusive search for cures and treatments at the expense of prevention—in short, environmental causes of cancer have been relatively neglected.

The first complaint is by no means novel. In fact it was raised three years ago when Mr Nixon cut back research budgets across the board but spared the politically sensitive cancer programme from the axe. The matter took on a new dimension last September, however, when a group of Senators, led by Gaylord Nelson of Wisconsin and Alan Cranston of California, proposed an amendment to a budget bill which would have pared down the budget for the National Cancer Institute and redistributed some of the savings to other institutes of the National Institutes of Health (NIH).

The amendment was soundly defeated, but the issue of research priorities got a good airing on the Senate floor.

Armed with a sheaf of statistics and with letters of support from former NIH directors and top government health officials, Nelson and Cranston provided details of how the budgets have grown for cancer research and, to a lesser extent heart research (which was aided by the National Heart, Lung and Blood Act of 1972), while budgets

## Cancer controversy recommences

by Colin Norman, Washington

for other NIH institutes have languished. Between 1970 and 1975, the budget for the National Cancer Institute (NCI) rose by 280%, from \$182 million to \$669 million, and the budget for the National Heart and Lung Institute (NHLI) increased from \$159 million to \$303 million, while spending on all the other 11 institutes rose by only about 20%, from \$750 to \$908 million. In constant dollar terms, NCI's budget rose by 186%, NHLI's increased by 52%, while the rest of NIH suffered a 13% drop in funds.

Although few Senators were willing to vote for a redistribution of funds to less politically favoured research programmes, the matter of biomedical research priorities is now under intense scrutiny by a top-level Presidential commission which is examining NIH's research policies. Established last year by a bill sponsored by Senator Edward Kennedy, the commission is due to issue a report by April 30, and its findings are likely to spark a fundamental re-examination of biomedical research policies and priorities.

The second major complaint raised recently about the cancer crusade is that the effort is devoting insufficient attention to finding ways to prevent, rather than to treat or cure, cancers. The impetus for such complaints is generated by two factors. The first is the growing realisation that the majority of human cancers may be linked to environmental factors, such as carcinogens encountered in the work place and in the general environment (including cigarette smoke). The second is the fact that in spite of massive expenditures on cancer research, survival rates for people suffering from

many of the leading cancer killers have improved little since the 1950s.

Thus, Russell Train, the head of the Environmental Protection Agency, pointed out in a recent speech that as many as 60–90% of human cancers can be traced to environmental causes, and he suggested that "we may be approaching the whole question of human health from the wrong side . . . an ounce of prevention may well be worth a pound of cure".

Similar sentiments were expressed more bluntly last year by a sub-committee of the National Cancer Advisory Board, NCI's top advisory body. The sub-committee, which was chaired by Dr Philippe Shubik of the University of Nebraska, expressed its "sense of general astonishment" that the cancer programme "does not appear to have accorded an adequate priority nor sense of urgency to the field of environmental carcinogenesis". The sub-committee's report went on to recommend that more money be put into chemical carcinogenesis (it estimated that less than 10% of NCI's budget is now spent on such studies) and it suggested that if necessary some money should be reprogrammed from other fields, such as tumour virology.

NCI officials have generally countered that they are spending much more than 10% of their budget on environmental carcinogenesis, and that if good research proposals in that field come along, they will certainly be funded. Nevertheless, complaints about lack of attention to environmental carcinogenesis have percolated through to Capitol Hill, and last month Congress approved an appropriations bill for NIH (which has since been vetoed by President Ford), which contained \$3 million to establish a research programme on job-related cancers.

With discoveries of new occupational and environmental carcinogens—such as the link between vinyl chloride gas and liver cancer in plastics workers—continuing to flood in, the death rate from cancer continuing to increase (it rose dramatically in the first six months of 1975 in the US, but the increase may be a statistical quirk), and the cancer programme continuing to occupy a politically favoured position in the federal budget, it seems inevitable that there will be a renewed political debate about the structure and scope of the cancer programme this year. □