## Congress slows

Appropriations committees in both the US House of Representatives and the Senate have recommended increases in the amount of money requested by President Carter for biomedical research in his budget proposals for the fiscal year 1980 submitted to Congress at the beginning of the year. However the increases, which average about $6 \%$ over the amount spent by the US on such research in the current financial year, is less than the expected rate of inflation - and considerably lower than the $24 \%$ increase over the President's proposal voted by Congress last year.
In his budget message, the President proposed that the research budget for the National Institutes of Health should remain virtually static, at about $\$ 3.2$ billion, between 1979 and 1980. Of particular concern to many research workers had been the proposal to reduce from 5,673 to 3,062 the number of new grants and competing renewals for investigator-initiated research (implying a drop from 42 to $20 \%$ of those approved for

## growth of biomedical research

funding actually receiving support).
On the advice of its appropriations committee, the House has recommended that the NIH budget be increased next year by $\$ 202$ million - or $6.4 \%$ over the current year; the major proportion of this increase will go to support investigator-initiated research in the various institutes, with the aim of increasing the number of new grants to 5,000 .
"Thus the bill continues the real growth in federal support for basic biomedical research which has prevailed in recent years', the committee says in its report, adding that its primary objective "is to allocate funds to the most promising research endeavours as determined by the peer review system".

The committee also says that the present balance between non-competing continuations, competing renewals, and new grants 'warrants a careful review to determine whether current procedures and mechanisms leave enough room for the support of unconventional ideas and new
investigators without proven 'trackrecords' ". It has requested the director of NIH, Dr Donald Fredrickson, to undertake such as review and to make a report before 1 October.

It also suggests that the NIH should explore the possibility of starting a programme to awarding stipends to medical or dental students to spend brief periods engaged in health research projects, with the hope of attracting them to research careers and thus increase the number of MDs and DMDs going into basic and clinical research.

The Senate is yet to vote on appropriations for biomedical research. However the Senate's appropriations committee last week accepted the proposal of its subcommittee that would cut $\$ 13$ million of the increase proposed by the House, still leaving intact an increase of $6 \%$ over the current year's funding. A single figure has to be agreed by both the House and the Senate before the appropriation can become law.

## Germany's research minister calls for 'critical science'

West germany wants its scientists to be more critical in their research and to give due consideration to the disadvantages of technological advances as well as the advantages. There should be more discussion with pressure groups and the public before fundamental decisions on, say, nuclear energy are made.

This change of emphasis in Bonn's research and technology policy was outlined by Research Minister Volker Hauff when he released a major directory of research in West Germany recently. The 650-page report - Bundesbericht Forschung VI - is the Bonn government's sixth assessment of research policy, institutions and financing.

Hauff said the risks of research and technical progress should enter into decisions more than before. The government wanted to be more critical, to analyse and take account of the advantages and the disadvantages of new developments and to hold a dialogue with trade unions, individual population groups and pressure groups before taking decisions, not afterwards.

There is now a growing protest against almost every new large-scale technical construction in West Germany, even down to pressure groups against new roads and railway lines. Among the fields whose disadvantages need more critical examination, Hauff mentioned genetic engineering, the investigation of new sources of energy, and the widespread introduction of microelectronics. On the other hand, the research report, despite all the criticisms and objections surrounding Gorleben, still stands by the government's controversial "integrated disposal" policy
for getting rid of the waste from nuclear power stations.

The report records a total expenditure of DM 30,000 million for research and development last year, of which half came from the state and half came from industry. It amounted to a $2.3 \%$ share of the gross national product. The main focus of R\&D expenditure by the federal government (totalling DM8,500 million) was on the Federal Ministry of Research and Technology's promotion programmes (DM4,700 million) and on the Defence Ministry's research expenditure (DM1,700 million). The Lander on the other hand finance research mainly in the universities and other colleges.

The growth rate of the total R\&D expenditure in the Federal Republic has declined from $20 \%$ per year in 1969 to $8 \%$ in 1978.

Within the R\&D expenditure, the proportion for defence research and other government departmental research is declining, while that of the Ministry of Research and Technology's promotion programmes is rising slightly. The proportion of basic research fell from $19.5 \%$ in 1975 to $16.5 \%$ in 1979 , but should rise again slightly to $17.1 \%$ by 1981.

The report also explicity catalogues the aims of research and technology policy. In addition to the earlier three aims expansion of scientific knowledge, increase in economic efficiency and improvement in citizens' living and working conditions there are now a further two: the conservation of resources, and the "improvement of knowledge about technological risk", to provide a better basis for decision making. As far as
possible, all five aims are to be pursued with equal vigour. The inference is that the previously dominating emphasis on economic interests is to yield gradually in favour of a broader outlook. To what extent the non-economic aims stand a chance of realisation is, however, questionable.

This is evident in the Federal government's stress on how little latitude there is for 'going it alone' in the face of international competition, and in the increasing recognition that national decision-making mechanisms set narrow limits on its research and technology policy. While Research Report V was still saying briskly in 1975: "Research policy must investigate needs, evaluate various possible solutions . . . and set priorities'; this time the language is more reserved: "In an organisation of research which has, for good reasons, been designed pluralistically, government research promotion can and may lay emphasis on matters of content within a limited compass only."

Klaus Höpfner

- According to their annual report for 1978, just published, the Deutsche Forschungsgemeinschaft (which funds much of Germany's research in universities) spent over 700 million DM last year for more than 10,000 projects in all branches of science and research. The biosciences shared the largest fraction of the money, although their share sank from $37.1 \%$ (1977) to $36.2 \%$ (1978). The other natural sciences augmented their share slightly to $24.7 \%$, while engineering sciences fall $0.5 \%$ to $20.9 \%$. The most rapid increase came in the social sciences, which grew $17 \%$ from 1977 to 1978.

