

prising a personal letter to his son, at present studying in the United States, an unidentified leaflet and an anonymous "Code of conduct during this testing time" addressed to Polish academics. Dr Herczynski now faces trial before a summary court. **Vera Rich**

## NATO civil research

# More wanted

Applicants for NATO (North Atlantic Treaty Organization) fellowships will have less chance of success this year than ever before. Applications have risen by 30 per cent, while the number of fellowships (about 800) remains constant. The NATO science committee will have to apply "new criteria" to make selections, a spokesman said last week. One possibility is that group applicants will be favoured over individuals.

NATO staff pinpoint four reasons for the increase in applications — financial difficulties among the 15 member countries, an increase in the number of papers now citing NATO as a supporting agency, a deliberate "willingness" on the part of NATO to expand the programme and a policy of greater visibility, including advertising in *Nature*.

The willingness to expand, however, is restricted to the NATO Science Committee, headed by Frenchman Professor Robert Chabbal (at present NATO's Assistant Secretary-General for Scientific and Environmental Affairs). The Civil Budget Committee, from which Chabbal draws his funds, is not so willing. To cope with the increase in applications for fellowships and for summer-school sponsorship, and for increased travel costs, the committee would have to increase its budget next year by 25–30 per cent in real terms, to \$23–24 million. In fact, it may be lucky to get 15 per cent extra, just enough to cover the depreciation of the Belgian franc.

Pressing his case, Chabbal claimed last week that the NATQ civil science programme (which completely avoids military research) is substantial and important. It accounts for half of all summer-school and training fellowships. Schools such as the Ettore Majorana at Erice, Sicily, and Les Houches in the Alps, get 60 per cent of their money from NATO, said Chabbal.

Meanwhile the committee will press ahead with new plans. It runs advisory panels which help to provide seed money for communications in new fields, largely by establishing "advanced workshops", and this year it will create two new panels: one on global transport mechanisms (in the atmosphere, ocean and mantle) and one on the selective activation of molecules (for example by laser). These panels would be expected to launch six workshops a year for a maximum of five years.

The committee is also experimenting with links between an industry in one

country and a university in another, in a programme dubbed the "double jump". Finance will be *à la carte* — only interested countries need support it. So far only two such fellowships have been organized, but many more are planned — Dr Mario di Lullo, organizer of the "double jump" programme, believes that it will not run into the protectionist difficulties that sometimes face the European Commission — that one nation's industry does not reveal its secrets to nationals of another. **Robert Walgate**

## British biotechnology

# Out of the blue

In an unusual move, the British University Grants Committee is earmarking part of its annual budget to develop a specific topic — biotechnology. The committee plans that £800,000 will be spent in each of the next three academic years on fostering biotechnology in a handful of universities. The committee had previously been reluctant to earmark grants, preferring that universities should spend their income as they wished, relying on the research councils to encourage centres in particular topics by means of research grants.

The scale of the recent budget cuts seems to have prompted a change of heart. The committee, worried that universities may pare all their activities rather than cut them selectively, clearly hopes that earmarked grants will make the future pattern of university research more pointed. The £800,000 set aside for biotechnology will be taken from the money reserved for restructuring the reduced university system which in the next academic year (1982–83) will be £50 million. Most of that sum is expected to be spent on payments to redundant academics, leaving uncertain the amount available for fostering priorities.

So far, three centres — at University College London, the University of Birmingham and the University of Manchester Institute of Science and Technology — have been awarded annual grants of £100,000 each to develop biotechnology. Five other centres are expected to receive similar grants soon. The money will be paid as a separate item in each of the next three years, after which it will be incorporated in the recipients' recurrent grants.

The grants committee says that the recipients must decide for themselves how to spend their extra money. Nevertheless, it expects them to forge closer links with industry, chiefly by encouraging the process engineering side of biotechnology, to develop postgraduate rather than undergraduate courses and to appoint some permanent staff, thus fulfilling the recommendation of a Royal Society report which nearly two years ago called for twenty more university posts in

biotechnology.

The research councils welcome the new grants, seeing no conflict between the grants committee's assessment of priority and their own. The Science and Engineering Research Council, in particular, welcomes the grants as a way of supporting staff and equipment which could not be paid for out of its research awards.

**Judy Redfearn**

## Development and drugs

# More not less

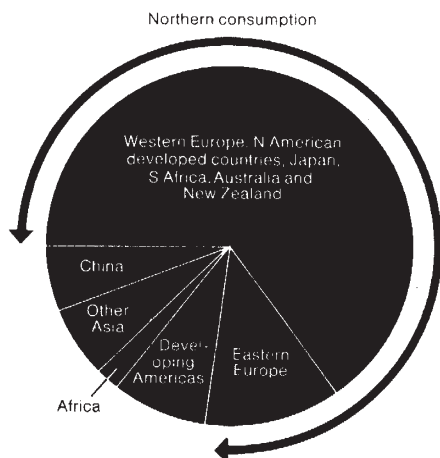
The latest shot in the long-running battle between the pharmaceuticals industry and its detractors, in which the health problems of developing countries provide the battleground, has been fired by the Office of Health Economics (OHE). Despite its governmental sounding title and Whitehall address, the office is sponsored by the UK pharmaceuticals industry and its main task is to carry out research on the economic aspects of medical care. Its latest contribution, *Medicines, Health and the Poor World* by David Taylor, is a response to recent criticisms of the industry's marketing practices.

The large multinational companies have been accused of over-aggressively selling unsuitable drugs in the developing countries, leading to only a minimal improvement in the health of the population and sometimes proving positively harmful. Chief among the industry's critics have been aid organizations such as Oxfam and War on Want and the pressure group Social Audit.

The report acknowledges that some drugs have been "inappropriately" sold in the past but claims that the industry itself is now more capable of policing its methods of promotion and that the important role of drugs in improving health care in developing nations may be obscured by concentration on abuse in some areas.

Although a typical poor nation may spend around a quarter of its central government health budget on pharmaceuticals, the report says, 60–70 per cent of the people do not have regular access even to the most basic drugs. So while it is important that those drugs now being sold to the "wealthier" members of developing societies are properly advertised and correctly used, it is even more important to find ways of getting the basic drugs to the mass of the population deprived of them. Whether the past performance of the multinational companies has contributed to the weaknesses of governmental health services in the developing countries, or whether the unavoidable difficulties have limited the ability of the drug companies to act effectively, remains a point of conflict.

Better distribution of a limited range of medicines and vaccines, together with research aimed specifically at new pharmaceuticals for the developing world, are the urgent needs, says OHE. The World



World pharmaceutical consumption for 1980 (total \$76,000 million, manufacturer's prices).

Health Organization (WHO) has put considerable effort into work on new medicines and vaccines for diseases such as malaria, onchocerciasis, leprosy and leishmaniasis, but the report argues that the commercial companies cannot take on work on new drugs for these diseases because of the harsh economic realities of the marketplace — the return from sales of "Third World-oriented" drugs would not cover the cost of their development.

Thus OHE argues that the major drug companies should be used as contractors by WHO and governments to carry out the expensive first stages of developing drugs for diseases in developing countries. It is argued that this approach would be the most cost-effective way for the developed nations to help the poorer nations achieve better health standards.

To put the expenditure involved in finding new drugs into context, the total research and development spending by the UK pharmaceuticals industry is around £300 million per year, compared with the £1,000 million spent annually by the UK government on overseas aid. So an increase of just 5 per cent in this aid budget would provide £50 million, which if spent on contracted research could support a significant effort to find drugs important to developing countries.

On the supply of existing medicines to the developing countries, the OHE report is critical of the WHO programme on "essential" drugs. As for policing the marketing and advertising methods used to promote drugs in the Third World, OHE sees the international code of marketing practice drawn up recently by the International Federation of Pharmaceutical Manufacturing Associations as the best hope for the future. The federation, it is argued, would be well able to regulate the activities of the major international companies because it is in the companies' interest to be seen to be acting responsibly throughout the world. WHO is seen by the industry as being open to political pressures and therefore ineffectual as a controlling body.

Charles Wenz

## US weather and ocean research

# Outlook bleak

### Washington

The major controversy in Washington this week has been the fate of the federal budget, as congressional leaders and the President joust with each other, leaving the outcome in doubt. No less concerned are the atmospheric scientists and oceanographers, especially those involved in international programmes, many of which have been cut back in the President's proposed budget. Ocean and atmospheric research has always had friends in Congress, and they are trying to have the funds restored. But whether the money can be put back, and then retained in a final budget package, is in doubt.

Marked for the axe are funds for joint US-Canadian efforts to clean up the Great Lakes, half of the satellite capability that provides weather data to nations in Asia, Africa and South America, funds to study and prevent ocean dumping (including radioactive waste), and the World Climate Program, the successor to the Global Atmospheric Research Program, which is a major international effort run from Geneva.

The Canadian government has been very upset about the proposed cut-back in US efforts to help study, monitor and clean up the Great Lakes, to which the US government is committed under several agreements with Canada. Under the proposed Reagan budget, two laboratories would be closed down and one programme office severely curtailed.

One laboratory is run by the Environmental Protection Agency (EPA) at Grosse Ile, Michigan, near Detroit. The other is run by the National Oceanic and Atmospheric Administration (NOAA) at Ann Arbor, Michigan.

The Administration justifies the cuts by claiming that most of the research needed to identify Great Lakes pollution has been done, and that cleaning up is a responsibility of the states that border them.

But the Canadian government's view is that still more pollution problems are being unearthed, such as the identification and reduction of such toxic substances as mirex and dioxin which have recently been found in "hot spots" in all the lakes except Lake Superior, and that the international commitments are federal, not state, issues. According to one Canadian official the cuts amount to "an attempt by the United States to renege on its water quality agreement of 1978" with Canada. This is strong language, given the historical close cooperation between the two countries — at least until the advent of the acid rain dispute and the Great Lakes budget cuts.

The Administration also wants to cut NOAA funds for ocean dumping research and marine pollution generally. NOAA runs most of the government's research in

this area. The work concentrates on the area off the north-east coast of the United States which has the worst pollution problem, a major fishing ground and possible oil development. The rationale for the cut is that northeastern states should individually bear these costs. Congressmen seeking to restore the funds argue that these are national problems, especially in the light of renewed talk of disposing of radioactive and other forms of waste in the oceans.

For the second year in a row, the Administration has tried virtually to eliminate one of the ocean research programmes most popular on university campuses in the United States, the \$35 million per year Sea Grant programme. For 1983, the Administration proposes only \$1.7 million. However, as in 1982, representatives and senators are expected to get the funds restored. About half of the Sea Grant funds go for research, and the other half for community services related to the oceans issue.

The proposed Administration budget would also cut \$6 million of the \$7 million going to weather modification research, as part of a 40 per cent cut in atmospheric research funds. Likewise, a programme to upgrade the old weather radars on which continental US weather forecasting relies heavily is being slowed drastically. The Administration contends that weather is a local issue. Friends of NOAA counter, however, that weather modification and atmospheric research are important basic research programmes.

Of worldwide interest is a cut of \$24 million that would decrease the launch rate of the NOAA series of polar-orbiting weather satellites, so that there would be one instead of two in orbit at any given time. These satellites complement the existing two GEOS geosynchronous satellites that provide "side views" of the Earth's weather, including the familiar television-screen images, to many countries that have receivers.

Representative James H. Scheuer, chairman of the House Science and Technology Committee's subcommittee on natural resources, agriculture research and environment, is trying to get the second NOAA satellite restored.

Scheuer argues that while the geosynchronous satellites indicate current weather, mostly in the middle and lower latitudes, the polar-orbiting satellites are essential to forecasting worldwide. Only they can acquire the quantitative data needed for modelling the Earth's weather, and only they can track the Arctic and Antarctic air masses moving towards the inhabited regions. The NOAA series satellites are thus crucial to weather prediction in parts of the world, such as Asia, Africa and Australia, that other satellites do not "look at" as often as at North America and Europe.

Two satellites provide twice as many passes over a region as one, and so improve