

Science and politics of molecular biology

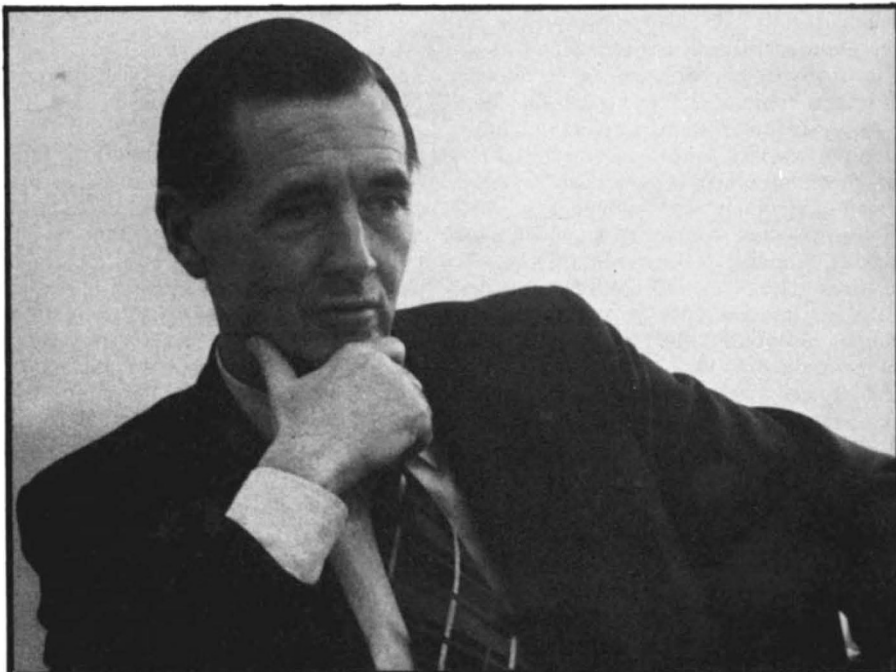
by Eleanor Lawrence

MORE money for molecular biology could be the most cost-effective way of reducing Britain's massive health bill, according to Professor John Paul of the Beatson Institute for Cancer Research. Professor Paul told the British Association Annual Meeting that Britain is now approaching the limits of what our society can pay for in terms of direct medical care, and the only way to eventually reduce the bill was by a three to four-fold increase in government funding for biomedical research and especially for molecular biology.

Ill health costs Britain about one quarter of the annual Gross National Product each year when loss of production and social security benefits are included. But medical research accounted for £800 million, only 0.15% of the total GNP (1972 figures), of which the government contributed £25 million to basic research through the Medical Research Council. Defence research on the other hand was supported to the tune of £250 million in the same year.

In the past, biomedical research had brought the infectious diseases more or less under control, said Professor Paul, and indeed we could not afford such massive spending on ill health now, if this had not happened. But we are now left with a residue of degenerative diseases and the second most frequent cause of death—cancer, which had proved difficult to combat by traditional medical means. Professor Paul believes that we are on the brink of a rapid advance in the understanding and treatment of cancer, and that this will result from the application of the ideas and methods of molecular biology.

Twenty-one years of basic research in molecular biology have brought it to a point at which, through the relatively new branch of 'molecular pathology', its principles and methodology can be applied to the study of disease. About £1 million is spent on molecular biology, of which the MRC contributes the greatest part. Although research into molecular biology takes up about 5% of the MRC budget, in national terms this is very modest financing compared with for instance the United States. Professor Paul believes that molecular biologists should not hesitate to become involved in the 'political' arena and argue on political and social grounds for an increase in government finance as it is becoming increasingly clear that molecular biology ("that apparently most abstract of biological sciences") is a highly political subject. □



Room at the top in space

A YEAR ago the ministers of the 10 European Space Research Organisation (ESRO) countries reached final agreement on the formation of a single European space body—the European Space Agency, and a package of projects on which to embark itself. The Agency was due to come into force on April 1 1974, already three months later than the original target date, but in the event this date too proved ill-chosen. The ESA is still not in being.

The lapse is more apparent than real. The money is secure with guarantees from each of the 10 member countries and with what amounts to a bond deposited on the largest project of all—the \$300 million development of the Spacelab element in the American space shuttle programme for the 1980s.

Most of the planned projects are trundling on and fairly well on schedule and within their budgets. A key meeting of national delegates takes place on September 27, and at the full ESRO Council on October 8 there is every hope that 'baptism' of the new management can be confirmed.

It may take another two years for the ESA Convention to be ratified by all 10 member states. In the meantime the organisation continues to run on the ESRO Convention. ESRO is already a very different animal from the ESRO of last year. The total budget this year is \$240 million, against a mere \$40 million in 1973. The Spacelab contract has been let. The more than two years of stalemate on the joint US-ESRO-Canada Aerosat project—to set up a pre-operational system for evaluation of air traffic control and navigation satellites in cooperation with air-lines flying the Atlantic—has been resolved.

This has hinged on what to Europeans has seemed a technicality, finding an acceptable industrial partner among American companies to act for the US Government opposite ESRO and Canada on the management board. The Memorandum of Understanding between the three parties originally to be signed in January 1972 was finally completed in Paris last month. Last week the Aerosat Board chose Comsat (out of five contenders) as the American partner and its head visits Paris soon to pursue details. The target date for launching the first Aerosat over the Atlantic, mid-1978, should now be met.

The credit for most of this must go to the head of Administration, Roy Gibson (pictured above), who has been acting director-general for the past months and was ESRO's chief negotiator at the original Aerosat talks in 1971. Latterly the work of the eight senior posts in ESRO has been shared between three people, with Gibson sustaining the lion's share.

In the face of the increased volume of work this hiatus at the top at ESRO has been serious. Two of the best men among ESRO's senior and most experienced staff have left for good. The five senior posts that are vacant cannot be filled till the director-general is appointed, since political considerations enter into the distribution of seats among the member countries. Of the sitting executives, one is English, one a Swede, one Italian. The most widely promoted candidates for the top job are the French ex-head of ELDO, the much respected General Aubinière, and a German civil servant, Dr Schmidt-Kuster. There is also a case to be made for Gibson himself. □