

crease its launch rate. China is eager to fill the breach, and according to *China Daily*, the two satellites retrieved from faulty orbits by the shuttle will be the first commercial launches in China's Long-March-3 rocket. The launches are scheduled for 1987.

Meanwhile NASA officials have to face the music over the sudden change in the agency's fortunes. NASA's director for space flight, Rear Admiral Richard Truly, was taken to task last week by Senator Albert Gore (Democrat, Tennessee) over reductions in the number of NASA reliability and quality assurance personnel. According to Gore (relying on documents leaked by a NASA employee), these averaged 71 per cent across the agency over 15 years, as compared with a 30 per cent reduction in the size of the agency as a whole. Gore concluded that NASA, which was already drifting, "is now drifting further".

**Tim Beardsley**

### Tokyo summit

## Nakasone disappointed

#### Tokyo

OTHER than the Chernobyl incident, little attention was given to science and technology issues at the summit although appreciation was officially recorded for the continuing efforts at the international series of "biology and ethics" meetings instigated by Prime Minister Yasuhiro Nakasone (see *Nature* 308, 395; 1984). That discussion of ethics has been the sole outcome of the numerous international technology research projects put forward at successive summits is some indication of the difficulty of international cooperation outside basic science.

Conspicuous by its absence at this year's summit was the "Human Frontier Project". Thought up by Japan's Ministry of International Trade and Industry (MITI), the project for large-scale research in biology (*Nature* 320, 296; 1986) with application in mind was not presented at the summit as had been hoped. Officials from MITI have toured major Western nations to explain the project, but lack of clear details and an assured budget have so far elicited only polite encouragement. Whether anything more will come of it now depends on whether Japan's Ministry of Finance can be persuaded to put up funds on a scale sufficient to support research abroad as well as in Japan, an entirely new idea to the ministry.

During the summit, Nakasone's mind may well have been on a quite different kind of technological development — the increasingly sophisticated mortars developed by the extreme left-wing organization *Chukakuha*. Repeated rumours that the *Chukakuha* had developed mortars with a range of up to 4 km.

As it was, the rumours turned out to be

### Tropical diseases

## More research, more money?

A LEANER management and a fatter programme of basic and clinical research are planned for the Special Programme for Research and Training in Tropical Diseases (TDR) by its new director, Dr Tore Godal. When he takes over next month, initially for two years, from Dr Adetokunbo Lucas, Godal does so with the prospect of an increasing budget for TDR, which is financed by the United Nations Development Programme, the World Bank, the World Health Organization and individual countries.

Chief among the donating countries are the United States, Sweden, Denmark and Norway, from which Godal comes. The Scandinavians have always been generous towards TDR, says Godal, and there is a good chance that they will become even

more so. He would also like to persuade the United States and Britain to increase their contributions. Both take more money from TDR than they contribute, although there the similarity ends; at \$2.0 million, the US contribution was 10 per cent of the total annual budget, larger than that of any other country, whereas the UK contribution, which surpassed \$1.3 million in 1979, was cut to zero in 1982 and was \$0.3 million in 1985.

Godal would like TDR to spend more on basic aspects of parasite biology, preparing the way for new approaches to chemotherapy and vaccination, and on field research into TDR's target diseases, malaria, schistosomiasis, filariasis, leprosy, leishmaniasis and trypanosomiasis. If no more money is forthcoming, this will have to be at the expense of clinical research and the blind screening of candidate drugs. For the time being, TDR's income in terms of US dollars is increasing as a result of the fall in the value of the dollar against the currencies of many donor countries.

Malaria remains the top priority of TDR's diseases, particularly with the growing problem of resistance of malaria parasites to drugs, whereas priorities among the other five diseases will continue to change with circumstances. In recent years and with growing signs of success, TDR has spent an increasing portion of its budget on research into leprosy, the subject of Godal's own research in Oslo and with Ethiopian collaborators.

Godal views with some anxiety a proposal, to be considered by the board of TDR in June, to allow donor countries to earmark a proportion of their contribution for research on particular diseases. If implemented, this could mean that it was not scientific criteria alone that would determine what was funded, and it is the strength of its science that has accounted for TDR's past success in Godal's view.

He is less anxious about the problem of relationships with industry. While there is often a conflict of interest between donors and the pharmaceutical companies that are needed for the large-scale production of any products of TDR research, Godal considers that some of these problems have been smoothed out by experience and that *ad hoc* solutions will be possible.

With regard to administration and management, Godal's plan is for simplification. Application will be less hierarchical, and less staff will be needed.

Godal will continue to look after his doctoral students in Oslo but will otherwise devote himself wholly to TDR. He starts in Geneva on 9 June; Lucas leaves on 1 July to start working for the Carnegie Institute in New York. **Peter Newmark**

**Alun Anderson**