US National Institutes of Health

New clinical trials

Washington

Dr James B. Wyngaarden has finally been sworn in as director of the National Institutes of Health (NIH), the US health research agency, and so has come out of the shadows where he has been hiding, in a sense, since his name surfaced as the Administration's candidate for the post last autumn. He has now begun interviewing candidates for those institutes that have no permanent directors at the moment (some of the posts have been vacant for months).

Last month Wyngaarden also held his first press conference in his new capacity, and the debut produced one serious slip — a statement that his personal belief favoured freedom of individual choice regarding abortion — which was immediately attacked by anti-abortionists, who are very active in Washington these days. He also said, speaking personally, that he would have “no problem” with carrying forward NIH's research in animal *in vitro* fertilization to the human level. Whether NIH should sponsor research on human *in vitro* fertilization has been a controversial subject — so controversial that possible government guidelines have been pending, but not issued, since the time of the Carter Administration.

But when he spoke officially, Wyngaarden indicated his views for the future of NIH — which he has had ample time to work out in the long months of warm-up for the job. He said he wants to keep the present balance of activities, particularly the level of 50 per cent of NIH funding allocated for basic science including investigator-initiated grants. He also favours continuing use of training grants and fellowships as a means of producing good basic biomedical scientists. He said he agreed “fundamentally” with the stabilization programme meant to insulate NIH from budget swings that was introduced by his predecessor, Donald K. Fredrickson. Wyngaarden also defended peer review as a “brilliant creation” of one of his predecessors, James A. Shannon, and said that NIH were not at the moment well placed to embrace more institutes. All this was hardly surprising, given Wyngaarden's background in academic medicine at Duke University School of Medicine.

Wyngaarden did, however, express interest in starting new clinical trials. NIH still run several, but some have come under criticism for being very expensive and sometimes not useful. No new clinical trials have been initiated by NIH since 1978. But Wyngaarden said he was considering suggestions for new clinical trials in the cancer, cardiovascular and arthritis fields that might well be worth starting even though they would commit funds for many years and take money away from

investigator-initiated grants. New clinical trials would, of course, mean a change of the balance of activities of NIH. But such a change, if it comes, is some time off, as Wyngaarden has much to do now to get NIH running again. **Deborah Shapley**

Biotechnology

Yugoslav plan

Zagreb

Yugoslavia is planning a major drive in biotechnology, based on a projected new institute on the Dalmatian coast. The new scheme, which now awaits federal approval, has the backing of the government of the Croatian Republic, and is intended both to enhance the international prestige of Yugoslav science and to help the drive to develop science-based industry.

The present stagnation of the Yugoslav economy has made it impossible for science and industry to continue its recent course of dependence on foreign licences and the import of obsolescent technologies. Indeed last year's Congress of Self-Management stressed unequivocally the need for home-grown technology.

Some research institutes embarked on such a course several years ago. Thus the Jozef Stefan physics institute in Ljubljana supplies knowhow to a range of industries from medical technology to nuclear power and the Immunology Institute of the University of Zagreb has become a major earner of hard currency by means of sales of sera and sophisticated pharmaceuticals, including interferon.

The new emphasis on science-based industry, however, accords well with the desire of Yugoslav — and particularly Croatian — biologists to see their country take a lead position in biotechnology. During the academic year 1979–80 a group headed by Dr Marija Alacevic of the Department of Biotechnology of the University of Zagreb raised the possibility of founding an international institute for molecular genetics somewhere on the Croatian coast.

Several coastal towns were asked to tender for providing a site. Dubrovnik, which already boasts an Inter-University Centre of Postgraduate Studies, was tipped as favourite. Just before the closing date, however, Split made an intriguing counter-proposal. The institute, Split suggested, could be housed in the Villa Dalmatia, one of the residences of the late President Tito. The proposal now only awaits official ratification. Apart from symbolic implications, Split has other advantages including a long-standing academic tradition which, in 1974, culminated in the foundation of a university.

The choice of biotechnology seems to be dictated partly by economic considerations — the costs involved in biotechnology, while not negligible, are modest. Moreover, Yugoslavia has a long tradition in organic chemistry and can boast two

Nobel prize winners — Ruzicka and Prelog — in this field.

Supporters of the institute already speak of the projected institute as “international”. There is hope that the European Molecular Biology Organization (EMBO) will help but that would mean that Yugoslavia would first have to join EMBO — a proposal already formally made by the Yugoslav scientific community to the federal government. Yugoslav participation in international scientific research has not always been auspicious — although a founding member of CERN, for example, Yugoslavia had to drop out because it could not meet the financial contributions.

According to Professor Ivo Slaus, the chairman of the steering committee for the institute, even if no international support is forthcoming, the Croatian scientific community would still wish the institute to be “international” in the wider sense of the word. The Republic of Croatia has already allotted 15 million dinars (£188,000) for preliminary work and part of this sum will be spent on a conference next year to launch the new institute and to ensure that it does not duplicate the work of existing institutes (such as Szeged in Hungary).

Vera Rich

UK–Argentine cooperation

Shadows of war

The storm clouds over the South Atlantic are casting long shadows over scientific relations between Argentina and the United Kingdom. Scientific collaboration between the two countries had been growing but it now looks as though several promising projects may be blighted. The rumblings have already caused the postponement of the Sixteenth International Symposium on Remote Sensing of Environment, which was to have been held in Buenos Aires this week. Organized jointly by the Environmental Research Institute of Michigan and the Comisión Nacional de Investigaciones Espaciales, the conference was to have heard 200 papers. When the Falklands crisis erupted, many intended participants withdrew their papers and gave notice that they would not attend the symposium.

Scientific collaboration between Britain and Argentina — in the form of joint university projects, exchange visitors and fellowships — has been nurtured over the past few years by the Royal Society and the British Council. The Royal Society and Conicet (its Argentine equivalent) have had a reciprocal agreement for some ten years — 110 scientists a year have been exchanged. All this has now been put on ice. The Royal Society recently sent out a letter to scientists it had planned to sponsor on visits to Argentina saying that, in view of present circumstances, all exchanges should be halted.

The British Council has increasingly encouraged British academics to put out

feelers and develop reciprocal research projects with Argentina. Through the council's office in Buenos Aires, Argentine universities would suggest projects for possible cooperation and the council would then approach the universities in Britain. Travel expenses were paid by the visiting country's organization, the council or Conicet, and subsistence by the host. The council has now closed its office in Buenos Aires and recalled its staff.

When the Falklands crisis broke, eighteen jointly-funded university projects were under way. In the past year the British Council has sponsored 7 long-term scholarships, 36 visitors and 17 lecture trips. The numbers may not be great but the Royal Society, the British Council and many academics have expressed their profound regret that the present situation may put a big question mark over such agreements.

Several promising projects have been nipped in the bud. Imperial College and the Centro de Investigaciones Ópticas (CIOP), La Plata, have for the past eighteen months been discussing the setting up of a joint laser physics research project. Professor G.H.C. New of Imperial College recently paid a visit to Argentina to give a series of lectures and arrange future collaboration. As well as exchanging postdoctoral fellows on extended visits — beneficial for each party in providing highly specialist researchers free — it was also hoped that a British specialist would go out to Argentina to teach and act as a consultant at CIOP.

Professor J. Barber (Pure and Applied Biology, Imperial College) has also recently been to Argentina to coordinate a joint photosynthesis research project. The oceanography department at the University of Southampton has been making moves to coordinate research with Argentina, particularly in the area of oil exploration. Professor A.P.M. Lockwood has been closely involved in talks to set up training exercises particularly in his capacity as a delegate of TEMA (Training and Education for Mutual Advantage), part of UNESCO's International Oceanographic Commission.

Both Argentine and British scientists are concerned that the Falklands crisis will seriously damage opportunities for scientific cooperation. In particular, many Argentine scientists in Britain are worried that if they leave the country to attend conferences abroad, they may have problems getting back into Britain. In April, both Britain and Argentina introduced a visa requirement. A spokesman for the Home Office did say, however, that he could not foresee any problem if Argentine nationals applied for re-entry visas before leaving the country. What is clear is that many academics feel uncomfortable in a situation where politics is impinging on their research. As one who has recently visited Argentina said, "They're a wonderful country and wonderful people. It's very, very sad".

Jane Wynn

Australian telesatellites

Outback opened

Canberra

Australia will have its own domestic communications satellite by the end of 1985. In a statement to the House of Representatives on 6 May, the then Minister for Communications, Mr Ian Sinclair, announced that Hughes Communications International will build the space segment of a domestic satellite. The system, known as Aussat, will be owned and operated from the start as a commercial venture by Aussat Pty Ltd. Although Aussat is at present wholly owned by the federal government, the government intends to sell 49 per cent of its equity to the private sector as soon as practicable, in line with its free-market policy principles.

The contract with Hughes, the sealing of which seems imminent, specifies three satellites for the system — two in orbit and one on ground standby, with the option of a fourth satellite should demand justify it. The satellites will have an operational lifetime of seven years and function in the super-high frequency (gigahertz) range with four high-power and eleven low-power transponders. The net result will be a versatile satellite of limited capacity, primarily suitable for television networks. Provisional bookings with the European Ariane launch vehicle and with NASA's Space Shuttle or Delta rocket have been secured. The fixed-price package offered by Hughes, including the launching and construction of two ground control stations, will cost A\$166 million (£95 million). Of this, only A\$5.1 million will be spent on local technology, which is a sad reflection on the dearth of innovation in the Australian electronics industry.

Aussat promises a glittering array of services including direct television broadcasting to widely scattered homes throughout the continent, business communications and remote educational and medical services. Both the School of the Air, plagued by poor reception, and the Royal Flying Doctor Service will get a new lease of life. The satellite will also bring telephone services to the outback as well as a back-up service for trunk lines between major cities. Unfortunately, the more imaginative aspects of satellite telecommunications such as "teleconferencing", direct radio contacts and electronic news gathering are ruled out in this satellite because of its frequency allocation and limited number of transponders.

The principal government user of Aussat will be the Australian Broadcasting Commission, which has reserved all the four high-power transponders on the first satellite for its Homestead and Community Broadcast Satellite Service. The beneficiaries will be farmers and station-owners who can afford A\$1,000 for the purchase of a 1.2-metre diameter recep-

tion dish. For the rest of Australian viewers, the satellite will bring more of the same; the Australian Broadcasting Commission is likely to increase the proportion of its programmes relayed in real time, rather than on film or tape, to its network. On the other hand, Aussat may facilitate the production of special-interest programmes for small groups such as ethnic communities, for which there is insufficient local appeal but which may be viable on a national basis.

Other public users will be Telecom, who will provide the remote telephony and business services, the Department of Transport, which will use the facility for aeronautical and marine communications and the state police departments.

The commercial television stations are expected to be the principal private users. There is, however, the possibility of using

the high-power transponders on the second satellite on a pre-emptive basis, in which case the fourth satellite will certainly be needed. Significantly, Aussat will provide the first opportunity for a private operator to compete with Telecom. At present, legislation ensures that Telecom has a monopoly in all landlines and terrestrial microwave links. However, Telecom has a statutory obligation to weight its charges for profitable services in order to cross-subsidize telephone services in rural areas. A competitor, not hampered by these obligations nor by having to contend with the growing union activism within Telecom, could under-cut Telecom for its business services via satellite and still make massive profits.

The substantial private equity in Aussat raises political questions of regulating ownership, access and frequency allocation. The satellite, by enhancing television networking, will undermine the position of commercial stations not having access to it. Consequently there is a real danger that the media, now already in a few private hands, will be even further concentrated. Another problem to be tackled is the possible piracy of the downlink beam by neighbouring countries or illegitimate access to international and overseas databanks. Australian legislators will have to resolve these problems with little by way of precedent.

Vimala Sarma