

Biotechnology

Genentech plumps for relaxin

Canberra

GENENTECH Inc. (San Francisco) will have exclusive rights to develop human relaxin, a protein sequenced after its gene was cloned in *Escherichia coli* by Dr Hugh Niall's group at the Howard Florey Institute, University of Melbourne, in collaboration with Dr John Shine of the Research School of Biological Sciences, Australian National University (see *Nature* 17 February, p.628-631). The agreement, signed by the Florey Institute and announced by the director of the institute, Professor Derek Denton, last Thursday, is believed to be Genentech's first foray in Australia. The company won the contract against British, Japanese and other American bidders by virtue of its track record and the attraction of collaboration with Genentech's scientists. Its terms ensure that the Florey Institute will accrue royalties, some of which will flow to the Australian National University, if the hormone is successfully marketed.

Relaxin is a peptide hormone synthesized in the corpora lutea of ovaries of pregnant women. It remodels the reproductive tract to facilitate the birth process by softening bone connective tissue to allow stretching during birth. But its therapeutic usefulness in alleviating the pain of childbirth or in conditions such as rheumatoid arthritis has yet to be demonstrated.

Corporate sponsorship of basic research is likely to increase in the virtual absence of government support specifically for biotechnology.

At present the dual support system for biotechnology funding — a A\$2.5 million allocation from the Australian Industrial Research and Development Incentives Scheme — proposed by the previous government is in abeyance. Since the foundations had already been laid by the Department of Science and Technology and the Australian Science and Technology Council, the new government accepted the system to avoid the delay and administrative duplication that a different scheme might entail. The Minister for Science and Technology, Mr Barry Jones, is enthusiastic about biotechnology but all government spending initiatives, including election promises, are being reviewed by the Minister of Finance, Mr John Dawkins, in the light of the A\$9.6 thousand million budget deficit for 1983-84 predicted by the Treasury.

Judging by what overseas biotechnology companies are spending on research and development, the proposed sum seems hardly adequate and unless implemented this financial year may not help scientists now busily signing contracts. Described by Niall as "a step in the right direction", the A\$5 million, as pointed out by Shine, will

not take a single product off the laboratory benches and carry it through the market.

In the meantime, Australian companies are playing safe. They will support only projects for which the financial returns seem assured. Most companies are prepared to take an idea only as far as necessary in order to patent it, and then sell it to a company that will take it the rest of the way. Only one company, Biotechnology Australia, which does in-house research and has the backing of Conzinc Riotinto Australia, appears capable of taking risks.

Vimala Sarma

Cool on malaria

GENENTECH, the California biotechnology company, has withdrawn from its negotiations with the New York University Medical Center (NYUMC) over the development of a possible vaccine against malaria. One issue that has arisen is whether a commercial partner can accept the terms set by the World Health Organization (WHO) in supporting the research.

WHO has long supported Dr Ruth Nussenzweig's malaria research at NYUMC, which has concentrated upon the sporozoite stage of the malaria parasite — the form injected into the bloodstream through a mosquito bite. In 1981, NYUMC decided that patents should be filed. The content of the patents has not been disclosed but they are presumed to cover the use of monoclonal antibodies, developed by Ruth Nussenzweig and her husband Victor against the sporozoite surface protein, to clone and express the gene for the protein. An account of this last step will appear in next week's *Nature*.

The initial stages of the project, which had not been carried out when Genentech first expressed interest in collaboration, have since been completed with the help of Dr Nigel Godson's laboratory at NYUMC. So far it is only the gene for a monkey malarial sporozoite that has been cloned.

Meanwhile the negotiations with Genentech were widely reported to have ground to a halt with its demand for exclusive rights on the vaccine, pitted against WHO's standard contractual demand for public access to any discovery emerging from the research it sponsors. Shirley Clayton, Genentech's treasurer, this week denied that that was a determining factor in the company's withdrawal from the negotiations. She said that negotiations were never more than very preliminary and have stopped because the company has decided to concentrate its efforts on projects already in hand rather than be distracted by new ones. Peter Newmark

Soviet space programme

International flavour

THE Soviet space programme is acquiring distinctive French and Ukrainian accents. Two major events last month — the launch of the Astron high-altitude satellite and the Comecon meeting in Kiev to prepare for the Halley's Comet mission — illustrate the French connection.

The French are to contribute equipment to the Vega mission (to Halley's Comet with a Venus fly-by) and also participated in the development of the ultraviolet telescope aboard Astron. Both events also had a strong Ukrainian slant — the 80 cm diameter optical telescope carried by Astron was developed by the Crimean Astrophysical Observatory, while the head of the special coordinating committee of Vega is Yaroslav Stepanovych Yatskiv, director of the astronomical observatory of the Ukrainian Academy of Sciences.

The choice of Dr Yatskiv — a mere corresponding member of the Ukrainian Academy — as head of so important a committee is surprising, since such posts are more than likely to be determined on the basis of rank. During the recent celebrations of the sixtieth anniversary of the Soviet Union, there was, it is true, a definite emphasis on the contribution of the academies of the fourteen non-Russian republics to All-Union and world science, whereas during the past two decades the usual trend has been to stress their role as a science base for local research and development. If, however, the chairmanship of the Vega committee was to go to a non-Russian, the most obvious candidate would at first glance appear to have been Academician Viktor Ambartsumyan, president of the Armenian Academy and himself a noted astrophysicist.

Moreover, although several of the Republic academies have established lead positions in certain fields (lasers in Byelorussia, pure mathematics in Lithuania, genetic engineering in Georgia), the speciality that immediately springs to mind for Ukraine is not astrophysics but cybernetics and also — as a result of the filial devotion of the academy's president Borys Yevhenovych Paton, who lauds it on every occasion — welding technology.

In fact, however, the Ukrainian observatories, in particular the Crimean and Khar'kov University observatories and the Principal Observatory of the academy, together with the academy's Institute of Radiophysics and Electronics, have already played a major role in the Soviet space programme. Techniques and instruments originally developed in Ukraine for meteorological observations of the oceans from Cosmos satellites were subsequently applied to mapping the surface of Venus. (Thus the planetological programme will