

## Technology

**Genentech buys out partnerships***Washington*

GENENTECH Inc., one of the leaders in US biotechnology, has decided to reap an early harvest by announcing plans to buy out two of its research and development partnerships early. A limited partnership is a means by which outside investors support part of a company's research and development programme, sharing the profits if it succeeds and otherwise being able to set off the loss against taxes.

Genentech Clinical Partners Ltd (GCP) and Genentech Clinical Partners II (GCP II), have provided support and shouldered risk while Genentech's seedling products, including the human growth hormone Protropin, tissue plasminogen activator Activase and gamma interferon are being developed and tested clinically.

According to the original agreements, Genentech would not have bought out the partnerships until two years after the products from each of them had received approval from the US Food and Drug Administration (FDA). This would have been 1988 for GCP, as FDA approved Protropin this year, and a later date for GCP II, depending on FDA approval for the marketing of Activase.

Buying out the partnerships will give Genentech exclusive US rights for Protropin, Activase and gamma interferon, and all the associated profits. The partners will be offered 3,000 shares of Genentech common stock for every \$50,000 partner-

ship unit in GCP and 2,500 shares for every similar unit in GCP II. If the stock price on the date of the transactions remains at \$80, as expected, each \$50,000 investment in GCP would receive Genentech stock valued at \$240,000 and in GCP II stock valued at \$200,000.

By acting now, before the partnership agreements have expired, Genentech avoids buying completely developed products that would have to be capitalized and amortized. This development shows Genentech's faith in the products developed under the partnership agreements; on Wall Street, Genentech's stock rose by \$12.75 per share on the day after the proposed buyout was announced. The price is now about \$85.

Genentech is one of the first US biotechnology companies to become profitable. It recorded a profit of \$5.6 million (\$0.18 per share) in 1985, and its financial report to the end of September this year shows a net income of \$8.2 million, an earning for each share of \$0.23. Although the early promise of big profits for 1986 will be diluted by the one-off expense of the GCP II buyout, profits for 1986 are likely to be double those for 1985.

Genentech is also now planning a two-for-one stock split and intends, like many other leading US companies, to reincorporate in the state of Delaware to benefit from the favourable legal climate there.

**Carol Ezzell****Student squeeze in West Germany***Hamburg*

WHILE the universities in West Germany are still groaning under the burden of too many students — 1.3 million are sharing 850,000 places (see *Nature* 322, 197; 1986) — they are preparing to compete for students in the decade ahead. The number of school students is falling; the era of expansion is coming to an end.

A detailed analysis carried out at the centre for the study of regional development at Giessen and sponsored by the Deutsche Forschungsgemeinschaft (DFG) has shown that the new student generation will prefer big and old universities, so that the new and smaller institutions, particularly in Bavaria, may "have to fight for their survival".

The study is based on official university statistics, interviews with school leavers and figures from the Zentralstelle für die Vergabe von Studienplätzen (ZVS). The results are alarming for the cities concerned. Giessen, for example, with 17,500 students among its 70,000 inhabitants, will lose more than 4,000 students.

Other universities, many of which are at

present overcrowded, will not suffer so greatly. The analysis, which was carried out by Professor Ernst Giese, concluded that 22 out of 52 West German universities are "above average", in being chosen by more than 2 per cent of new undergraduates. The University of Munich attracts 8 per cent, followed by Cologne, Hamburg, Hannover, Münster, Munich (Technical University), Aachen, Bonn and Berlin (Free University) with between 5.49 and 3.5 per cent.

Old universities are preferred because of their traditions but also because of the recommendations of previous students. Universities such as Bremen, Frankfurt and Marburg, which were considered to have left-wing tendencies are well regarded now.

One of the ways in which the universities will compete is by setting up special study centres concentrating on specific subjects such as solid-state physics at Stuttgart, genetic engineering at Heidelberg and Würzburg, plant biotechnology at Hamburg and Cologne and information technology at Karlsruhe.

**Jürgen Neffe**

## Chinese-US collaboration

**NSF refuses fees***Washington*

THE National Science Foundation (NSF) is digging in its heels against what it sees as unreasonable charges levied by the Peoples' Republic of China for US field trips in the country. Officials say the Chinese policy of charging for field trips is contrary to the spirit, if not the letter, of government agreements on scientific exchanges, and have given notice that NSF will not pay for a return visit next year by a US team taking glaciological samples in the Quilian mountains in Tibet.

The US team, headed by Lonnie Thompson of Ohio State University, spent 28 days last summer in a remote glacial area 1,000 km west of Lanchow, working with scientists from the Lanchow Institute of Glaciology and Geocryology. According to NSF's Eugene Bierly, China at first asked for \$100,000 to defray expedition expenses, but after negotiations, the figure was reduced to \$80,000. Thompson plans to return next summer to bring back ice-core samples, but NSF says it will not meet field-trip expenses again on the grounds that they violate the "receiving side pays" convention that underlies the US-Chinese agreements.

Bierly said there would be no question of charging Chinese scientists for field trips in the United States, and expressed the fear that budget cuts at some Chinese research institutes might tempt them to make deals with scientists from other countries, perhaps allowing priority of access to those who pay well. Bierly said NSF is determined to "hold the line".

Others report similar difficulties with fees for access to China. Craig Black of the Los Angeles Museum of Natural History said last week at a meeting of the National Science Board that charges for biological field trips were commonplace and that it was "almost becoming competitive". Officials at the meeting were alarmed by reports of a Japanese-Chinese agreement on glaciological research according to which, it is said, Japan will pay \$1,000,000 and donate four expedition vehicles in return for access to a large tract of China. NSF officials say the foundation would be unable to offer funds on that scale.

Thompson disputes NSF's figure of \$80,000 for the fee for last year's Quilian expedition, saying it was only \$40,000. The fee was, he says, reasonable for the level of logistical support provided, and that it "would be a good deal in any other country". NSF meets expedition costs in countries with which there are not collaborative agreements. But Thompson says he has agreed with the National Geographic Society that it will pay the expedition costs next year, so NSF's stand should not imperil his venture.

**Tim Beardsley**