

Biotechnology

Looking ahead

Bethesda Research Laboratories (BRL), the Maryland company that shook the US biotechnology industry by announcing that cash-flow problems had made it necessary to make redundant more than a third of its 450 staff, seems — at least temporarily — to be out of the woods.

Company officials are confidently predicting that, despite the setback to its expansion plans, BRL will double this year the \$10 million sales which it achieved in 1981, thus maintaining the pattern of geometrical growth that the company has managed since its foundation in 1976. Comparable sales increases are being talked about for 1983 and 1984. Private investors in BRL have endorsed the line being pushed by Mr Stephen Turner, BRL's founder and president, that "leaner is fitter" — the argument, ironically, that is being used by President Reagan's science adviser, Dr Jay Keyworth, to justify cuts in federal support for research and development.

The company has just announced that it has been able to raise an extra \$5 million from its original investors, many of whom are based in Europe. According to Mr Turner, this should be enough to provide a stable base for a steady expansion of its product range, originally focused on restriction enzymes but subsequently expanded to include other biological

products such as monoclonal antibodies as well as diagnostic screening kits and a nucleic acid analyser.

Mr Turner blames the company's recent difficulties on the rapid drying up of venture capital in the United States in the past six months. Last year, anticipating that it would have little difficulty in raising an anticipated \$40 million through a public stock offering, the company laid the groundwork for an ambitious expansion programme, dividing its research products division into separate molecular biology and biological chemistry sections, and significantly increasing its research staff.

In recent months, however, a declining inflation rate and new tax incentives have taken some of the glamour out of venture capital dealings as an alternative to other, more traditional forms of investment. In addition, much of the available venture capital is said to have been soaked up by some of the early public offerings — such as that launched by Cetus a year ago, which managed to raise over \$100 million in the largest new issue ever experienced by Wall Street.

As a result, many of the small biotechnology companies launched in the past two or three years are experiencing severe difficulties in raising the capital they need to keep going, a situation that Mr Turner believes could last for at least another year. Several industry analysts expect that up to one half of the companies could disappear within the next few years, some being absorbed into larger

corporations, others filing for bankruptcy or actively seeking mergers. BRL claims to be in a stronger situation than some of the other companies since it is already selling products on the market.

"The days of over-expectation and pure speculation are behind us and the time has come to fine-tune operations and get down to the business of running a business," says Mr Turner. "That's what we have done at BRL."

Similar sentiments are expressed by Frederick R. Adler, a New York lawyer who has helped to set up a number of high technology companies in the computer field, and who has recently been appointed to BRL's board of directors. "The computer industry taught us that business can successfully serve science. We're now translating that lesson to biotechnology", he says.

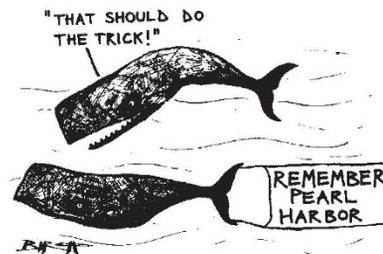
David Dickson

Sperm whale catch limits

No decision

A head-on clash between conservationist countries and Japan, the main whaling nation, was averted on Thursday when a special meeting in the United Kingdom of the International Whaling Commission (IWC) agreed to defer a decision on sperm whale catch limits until the annual general meeting in July. The conservationist countries abandoned their attempt to impose a total ban on sperm whaling after the scientific committee failed to produce a conclusive report.

Catch limits are usually set at the annual meeting of IWC. Last week's special meeting was convened because the scientific committee had not been able to offer unequivocal advice to the July 1981 meeting. Earlier this year, 32 scientists from 12 countries met in Cambridge to analyse sperm whale stocks. Computer tests were run using two rival models, one backed by the Japanese, the other developed by the International Institute of Environment and Development (IIED).



All except the Japanese scientists at last week's meeting supported the IIED model. However, the committee failed to offer any definite advice on catch limits. According to IWC criteria that stocks should be protected when they fall below ten per cent of maximum sustained yield (the maximum number of whales that can be harvested on an infinite basis without a decline in population), the IIED analysis indicated

Rorvik versus Bromhall

Washington

Hailed in 1978 on the book jacket as "the scientific breakthrough of the century", David Rorvik's book *In His Image: The cloning of a Human* was declared by a Philadelphia judge the same year to be "a hoax and a fraud". Rorvik returns to a Philadelphia court next week when Dr Derek Bromhall from the University of Oxford, who claims that his research was misused, will sue for damages against Rorvik and his publisher Lippincott and Co. (now owned by Harper and Row).

Mr Allan Friedman, Bromhall's lawyer and an associate of the firm Raynes, McCarty, Binder and Mundy, claims that Lippincott showed "reckless disregard for publishing ethics". He says that his client's case turns on two issues. The first is the claim that Rorvik invaded Dr Bromhall's privacy by quoting his cloning techniques in the text and by mentioning his name in the book's footnotes as a "personal communication" without approval. The second claim is that Mr Rorvik fraudulently acquired an abstract of Dr Bromhall's doctoral thesis by representing himself as a scientific researcher preparing a project on mammalian cloning.

Mr Rorvik's attorney, Samuel Klein of Kohn, Savett, Marian and Graf, claims that Bromhall's information did not

include "novel and unique" concepts, that the thesis was already on microfilm and that a summary had already appeared in the scientific literature (*Nature* 258, 719; 1975). Furthermore, he adds, there has never been disagreement over the fact that all references to Bromhall's work were fully accurate.

Mr Klein also plans to argue that in the single letter written by Mr Rorvik to Dr Bromhall, his client identified himself as a freelance journalist and that Dr Bromhall's presentation of his nine-page abstract was unsolicited. There was no oral communication between Rorvik and Bromhall at the time of this correspondence.

The trial promises to become heated, for neither party plans to settle out of court. Mr Klein also says he will question Dr Bromhall's wish to keep his distance from the book in light of the fact that Dr Bromhall "voluntarily associated himself" with the film *Boys of Brazil*, which portrayed the cloning of multiple Hitlers. But Friedman says that Bromhall's voluntary association with a film presented as fiction is very different from an involuntary association with a book whose author claimed it to be non-fiction.

The trial is expected to last several weeks and many scientists will make appearances for both sides.

Michael D. Stein