#### Pfizer's \$63 million technology spend

Aiming to enhance its drug discovery platform, Pfizer Inc. (New York) struck three technology access deals in June. A five-year, \$50 million technology-acquisition agreement with Aurora Biosciences (San Diego, CA) provides Pfizer with reporters, assays, high-throughput screening, and other automated systems, as well as a team of scientists to carry out compound screening, profiling, and genomics research. Additional access to ultra highthroughput screening technology is gained through a three-year, \$16 million arrangement with Evotec BioSystems (Hamburg). Moreover, a \$27 million deal with Neurogen Corp. (Branford, CT), also for three years, will provide Pfizer with a system to test the activity of new chemicals without having to synthesize them, thereby drastically reducing screening time. (Neurogen claims its software system allows it to generate drug discovery data in two weeks, compared to several months the traditional way.) While validating the technologies offered by these relatively small biotechnology companies and providing them with revenue streams, the deals should allow Pfizer to increase efficiency and capacity of identifying new drug candidates.

### New Japan association for biotech commerce

In June, heads of 51 major Japanese companies launched the Japan Bioindustrialists' Association, an independent organization that will represent and support biotechnology-related industries in Japan. The move comes in response to growing concern that Japan lacks a strong biotechnology industry that can commercially exploit such efforts as the new national project to identify and map single nucleotide polymorphisms (see p. 744). The association, comprising presidents and chief executives of leading chemical, food, pharmaceutical, and apparatus firms, will call for the active involvement of companies in different sectors to promote commercialization of biotechnology-related research. In particular, the association will oversee effective implementation of a government program aimed at expanding Japan's biotechnology market 25-fold by 2010 (Nature Biotechnol. 17, 320). According to Katsuhiro Utada, chairman of the new association and director of the Japan Bioindustry Association (JBA; Tokyo), which represents the government, academia, and industry, the new association will lobby the government for help in building an encouraging infrastructure. This includes increased support for venture businesses, tax reforms, more funding for R&D, and relaxation of the civil service law, which prohibits university academics from taking part in profit-making activities.

# Biopharmaceutical sector performance, 2nd quarter 1999 120 Initial public offerings, 2nd quarter 1999 The second quarter saw 6 IPOs, raising a total of \$233 million 100 April May June 90 80 70 60 50 40 30 20

### Huia cloned back to life?



In July, the Maori tribe Ngati Huia agreed to support the cloning of the Huia, an extinct bird that once flourished in New Zealand. The decision was made during a conference held in Hastings where scientists and ethicists considered the associated technical and ethical issues. The conference was sponsored by cyberuni.org, a California-based start-up that intends to be "the world's university," providing courses

and assessment materials to tertiary "host" institutions. "Far more important than sorting out the hurdles that face the project technically," says cyberuni.org co-founder Michael Cullen, "the maori tribe supports attempts to clone the Huia, which is of great cultural importance to them." Cullen says the next step is to look for whole cells or nuclei in the tendon and bones of stuffed specimen birds, then, using the same technique that produced Dolly, transfer the nuclear material into a cell of a magpie, culture an embryo, and implant for gestation. If whole cells can't be found, ambitious attempts will be made to assemble a complete set of genetic material from recoverable fragments. Cyberuni.org will contribute US\$100,000 funds towards costs of cloning, which will be carried out at the University of Otago. "It's the kind of activity that we think cyberuni should be involved in", says Cullen. The total project could take five years.

## The price of everything

What's in a title? Well, about £15,000 (US\$23,000) a year if you're in charge of research and development at a UK biotechnology-based company, according to a new survey\* of 54 UK companies from accountants, PriceWaterhouseCoopers (London). For "Heads of R&D", the median salary is around £59,000 (US\$90,000) compared with nearly £75,000 (US\$115,000) for the similar job of "chief science officer" (CSO). The differential between salaries in public and private companies is much more marked for heads of R&D than for CSOs: CSOs are only about 25% better off in public companies, but the median salary for a head of R&D is over 50% higher in a public company than in a private one.

\*Leadership in Life Sciences - A Survey of Executive Remuneration is priced at £175 (US\$240) from mossy.kennedy@uk.pwcglobal.com