Italian government rebuffs emerging biotechnology industry

The Italian government has complained to the European Court of Justice claiming that the European Union (EU) directive on patenting biotechnological inventions needs revision because of its inadequate consideration for the right of life and health and for the preservation of nature. The action has provoked a storm of protest from the Italian scientific community and from biotechnology companies, as both groups view it as a blow to academic entrepreneurialism and biotechnology investment at a national level.

According to Antonio De Flora, director of the National Research Council's biotechnology sector, Italy has approximately 2000 scientists involved in various forms of biotechnology who have filed around 60 patents over the last four years. "Start-up companies established by academia to exploit research, of which there are currently not more than a handful in Italy, will completely disappear under increasingly adverse conditions for developing patents," cautions De Flora.

Arturo Falaschi, president of the International Center of Genetics, Engineering and Biotechnology in Trieste, believes that the government's position will shift investment companies towards other European countries. This concern is echoed by Stefano Bennati from the Mediocredito Lombardo—an Italian bank that recently backed Genera, a gene therapy start-up company spun off from the Istituto Scientifico San Raffaele in Milan, with IL 7 billion (US\$ 4 million). "Foreign investors are desperately needed because the Italian culture is still averse to risk and fails to recognize biotechnology as a crucial engine of economic growth," says Bennati.

The EU directive, which was approved by the European Parliament last May, specifies that isolated human genes can be patented, provided that their function is known and an application defined. Transgenic animals and plants are also patentable. Elements of the human body, including partial gene sequences, are not patentable unlike in the US. The directive must be incorporated into national law by all EU member states by May 2000.

Sergio Dompé, owner of Italy's largest biotechnology company, Dompé Biotec,

which has a partnership deal with American biotechnology giant Amgen, says that the government's stance "will add to the climate of uncertainty that the country is already facing because of inadequate tax incentives and venture capital investment." Dompé estimates that Italy has no more than 12 biotechnology companies at present, with a growth rate of almost zero in the last two years. In contrast, 225 new enterprises were created in neighboring Germany between 1996 and 1998.

The Italian government's move is not only in stark contrast to the university-industry research strategy of other EU countries, but also reveals an inconsistency in science policy. "The government seems to contradict itself," says Falaschi, "Only two months ago a

government-appointed panel of experts began working on strategic plans to promote Italy as a knowledge-based economy." And a five-year national research project on biotechnology was launched last year, with annual government funding of IL15 billion, plus research grants earmarked for contacts between scientists and companies amounting to IL70 billion over three years.

Researchers are questioning what is behind the apparent U-turn in political attitude. Officials from the Ministry for Industry and Research, who would not be named, revealed that the request to oppose the EU directive came from the Italian Green Party. Although several ministers expressed concern about the consequences of the move, the head of the government Massimo D'Alema yielded to the environmentalist pressure in order to preserve political stability in an already weak government coalition.

MARTINA BALLMAIER, MILAN

Oxford opens new international biomedical sciences center

Ambitious plans to set up an international center to introduce top-level biomedical scientists from developing countries to advanced research findings and techniques will take an important step forward on April 12th when HRH the Princess Royal opens new headquarters for the Oxford International Biomedical Centre (OIBC).

The center's aim is to close the gap "between the levels of expertise within developed countries compared with emerging economies." The center is hosting a meeting on "Vaccines Today and Tomorrow" to mark the event. Attendees will include representatives from chief funding agencies, such as UNESCO and the European Union.

OIBC is the brainchild of Charles Pasternak, a membrane biophysicist and professor of biochemistry at St George's Hospital Medical School in London. Pasternak's long-term goal is to establish a major conference center in Oxford, linked to premises offering 'incubator' accommodation for small start-up biomedical companies.

Initially formed in 1992, with seed money from the pharmaceutical company SmithKline Beecham, OIBC's main activity so far has been organizing biomedical conferences. The first, held in Singapore in 1993, led to active collabora-

tion with several research institutes in the region, including the Chulabhorn Research Institute in Bangkok with which OIMC retains close ties. Other collaborative links have been signed with institutions in India, Israel and the Ukraine. Pasternak hopes that the center can help emerging economies to benefit from the experience in Britain of turning high-level research into commercial products.

The center has also been developing a program to bring promising scientists from developing countries to work with a British research team for up to a year. "Providing we are able to select people who will benefit from this arrangement, many laboratories are happy to take on such a researcher for this period," says Pasternak. "I would like the center to be similar to the International Centre for Theoretical Physics in Trieste, which helps physicists from developing countries," he adds, "but I want to do more than that, which is why I am keen to link our planned conference center to the commercial activities of small companies."

In the long term, Pasternak says he wants OIBC to become "the first Oxford College to be founded in the new millennium." A site has already been identified where this might be built, and sponsors are being sought to make it possible.

DAVID DICKSON, LONDON

Italian biotech under threat