British say Pasteur Institute slighted their help on AIDS test

Industry slows research gains in Portugal

Paris. Researchers at the Institute of Cancer Research (ICR) in London say that their patience is at an end after waiting eight years for the Institut Pasteur to acknowledge their contribution to the development of the Pasteur's AIDS blood test.

The situation has not prevented the ICR's Robin Weiss, a central figure in the disagreement, from maintaining good relationships with several researchers at the Pasteur. Just last week, in fact, Weiss completed a

be filed within a month. In July 1984, Weiss authorized the Pasteur to use the infected CEM line.

The Pasteur used the CEM line for the development of its test and, thanks to a peculiarity of this line — its lack of class II HLA antigens — there were fewer false positives with the Pasteur than with the US blood test. Weiss holds a patent on a process used by the Wellcome Foundation to manufacture a blood test for the HIV virus that differs from that developed jointly by researchers at the Pasteur and the US National Institutes of Health (NIH).

It was two years before the Pasteur replied. On 12 February 1986, Montagnier said in a letter to Weiss that "the Pasteur Institute, and particularly myself, is willing to find with you an agreement that will recognize your contribution". In March the president of the institute's board, François Jacob, wrote to Weiss to confirm that sentiment. And in June, Montagnier and

Danielle Berneman, of the Pasteur's patent office, met ICR administrators in London. The last communication was a letter, dated 1 August 1986, from Berneman to ICR that "I shall get in touch with you again in September to discuss in full detail our agreement."

In 1986, the Pasteur was locked in a legal dispute with NIH over differing claims to ownership of the royalties to the blood test and was not eager to have its 1984 offer to ICR made public. NIH scientists led by Robert Gallo had, in fact, accomplished the same feat for which Pasteur had proposed co-ownership with ICR, namely, mass-producing the AIDS virus on a T-cell line. Pasteur officials acknowledged then that ICR "had a case" for being recognized but asked it to remain patient.

Pasteur officials say that Weiss's CEM cell subline was contaminated by mycoplasma and that Montagnier had to reinfect it, thus reducing the value of ICR's contribution to the blood test. But Pasteur officials told ICR two years later that they still felt an agreement was appropriate.

The experience has soured Weiss on further collaboration with the institute. "I have little appetite to enter into new negotiations... because the Institut Pasteur has not honoured a previous cooperative agreement", he wrote in March 1992, replying to a query for a cooperative agreement involving another retrovirus, HTLV-I.

Bernard Seytre

Lisbon. The gap between the quality of research at universities and that done in industrial laboratories is hampering the growth of Portuguese science, according to a report published earlier this month by the Organisation for Economic Cooperation and Development (OECD). The report also cites the lack of mobility among Portuguese researchers as an obstacle to developing centres of excellence.

The OECD report praised the marked improvement of Portuguese science, particularly since 1986, and says that some of it is "excellent by international standards". That improvement is due in part to the creation in the past decade of 50 nonprofit research associations, run jointly by universities and private companies, that attempt to bypass the bureaucracy that can strangle government-owned laboratories. But the report warns that the changes have occurred "in an unbalanced way", without clear priorities for stimulating economic development.

Industry, considered the weakest link in science and technology research in Portugal, employs only 25 per cent of the country's 6,500 researchers. Renowned for its lack of innovation, the private sector still focuses largely on low-technology products and prefers to buy expertise from abroad rather than make use of local talent. Portuguese companies have filed for only four European patents in the past two years.

Three years ago, with the help of the European Communities, the government launched a four-year, ECU304 million (US\$410 million) programme to support some 2,000 doctoral students and to strengthen the country's research infrastructure. The effort is expected to raise the country's annual investment in science beyond its current level of 55 billion escudos (US\$440 million).

But this programme, half of which is funded by the European Communities, may create its own problems if Portugal fails to increase the proportion of its resources — 0.8 per cent of the country's gross national product — going into research. Although the government says it expects most scientific graduates to take jobs with industry, the OECD report predicts that there will not be enough jobs to go around.

Despite the close links between Portuguese scientists and foreign researchers and the large number of Portuguese who are trained abroad, Portugal does not suffer a brain drain. Most researchers return to their original university after working abroad. Those who remain, according to the report, rarely move to another part of the country or switch universities. **José Victor Malheiros**

Weiss, left, and Montagnier . . . still good friends.

three-month sabbatical at the institute. Although ICR has asked for a share of the French royalties from the AIDS blood test (in 1991, the Pasteur received about US\$1 million from its licensees), Weiss says that the issue is "one of honour".

At issue are the results of a collaboration begun when Pasteur researchers could not grow enough AIDS virus (then called LAV) to test blood on a large scale, let alone to produce test kits for sale. In February 1984, the Pasteur sent a sample of LAV to ICR with the specific, but not exclusive, goal of "infecting cell lines". Researchers at ICR successfully infected a T-cell line known as CEM and in May sent it to the Pasteur.

The French were grateful. In a letter dated 15 June to Weiss, then director of ICR, Jean-Claude Chermann, signing for Luc Montagnier, wrote that "the line can now be considered as a good virus producer. . . . It is therefore of potential use for medical and industrial applications, and the Institut Pasteur Fondation (IPF) will be interested for its application to AIDS and related diseases and to share the property with you and your institute. Enclosed is an agreement prepared by our legal department."

The proposed agreement says that the Pasteur and ICR are co-owners of the infected T-cell subline and the process of continuous production of retroviruses, that the Pasteur "will pay a royalty" to ICR if the strain or process is used for industrial purposes and that a joint patent application will