SCIENCESCOPE

edited by CHRISTOPHER ANDERSON

U.K. Halts cDNA Patenting...

Read our lips: no new patents. That's the message from the U.K. Medical Research Council (MRC), which has decided that it will stop filing patents on the complementary DNA fragments sequenced by its Human Genome Resource Center in London.

MRC opposed patents on such uncharacterized gene fragments when, in summer 1991, the U.S. National Institutes of Health (NIH) filed a patent for hundreds of cDNA sequences obtained by then-NIH researcher Craig Venter. But MRC followed suit in early 1992, saying it had to protect Britain's commercial interests.

MRC has now decided that these commercial interests aren't strong enough to justify further filings. But it's keeping alive its original patent application to get a definitive ruling on the patentability of such DNA fragments. "Having opened the can of worms, we've really got to empty it," says David Owen, MRC's technology transfer chief.

New patents aren't an issue for NIH: It has had no major cDNA sequencing effort since Venter left last year to form a private sector sequencing outfit. But incoming NIH Director Harold Varmus must decide whether to persist with NIH's original patent. In August, the application was rejected for a second time by the U.S. Patent Office, and the next step would be an appeal before the Department of Commerce's Patent Review Board.

Varmus has declined to comment on the issue before he officially takes office. But NIH genome project head Francis Collins believes the issue of patentability must be resolved quickly, pointing to major cDNA efforts under way at several companies, at least one of which has already filed for a patent (*Science*, 13 January, p. 302). In the meantime, most companies are refusing to release any cDNA sequences, a trend Collins says "is turning into a serious situation."

CERN

Ring, ring. Opportunity calling for Russians at CERN?

Russians Turn From SSC To CERN

Russian physicists who had hitched their wagon to the U.S. Superconducting Super Collider (SSC) may have an easier time recovering from its cancellation than their American colleagues. Last week they signed a deal with the CERN particle physics center in Geneva that may allow them to contribute to Europe's planned Large Hadron Collider (LHC) much as they were doing with the SSC.

The new 3-year agreement between Russia and CERN allows Russian groups to provide equipment for new projects, and supplements a previous agreement that gives Russian physicists the chance to work with CERN scientists on existing experiments. It comes at the right time for 12 Russian research institutes, which had $50 million worth of contracts to supply hardware for the SSC. Although the contracts may have been small potatoes to an $11 billion project, they represented a valuable source of hard currency for impoverished Russian physicists.

Since the LHC project hasn't been formally approved yet, it's too early to say what hardware the Russians could provide. Some CERN member states may also oppose the idea of a nonmember building parts for the LHC. Russia's main contribution to the SSC involved building magnets and other equipment for the SSC, but Russian physicists say they could also supply cheap superconducting cable for the LHC magnets. Indeed, Vitaly Kaftanov of Moscow's Institute of Theoretical and Experimental Physics, a regular visitor to Geneva, hopes Russia may even be able to join CERN at a discount in return for supplying LHC hardware.

...While CDC Drops Indian Tissue Claim

Gene patents aren't the only intellectual property controversy dogging science agencies. Early this week, the U.S. Centers for Disease Control and Prevention (CDC) abandoned plans to patent a cell line from a Panamanian tribeswoman after organizations of indigenous peoples and their backers claimed it was an example of "bio-piracy."

CDC researchers obtained the original sample from a 26-year-old female through "oral informed consent" in early 1990 while researching the Guaymi Indians, who show an unusually high incidence of Human T-lymphotropic virus type II (HTLV-II). They filed a patent in November 1991 because, says Jonathan Kaplan, one of the CDC scientists, "the government encourages scientists to patent anything of interest." Among the possible commercial uses: Cell lines grown from these samples could be used to culture HTLV-II in the laboratory. The cell line was also deposited in the American Type Culture Collection (ATCC).

But in August, the Rural Advancement Foundation International (RAFI), a Canadian organization that supports the rights of indigenous peoples, sounded the alarm after discovering the patent application in an ATCC database search. The group complained that the patent represented the sort of profiteering from the biological inheritance of indigenous people that could become commonplace as a result of the proposed Human Genome Diversity Project, a project to sample DNA from some 700 ethnic communities.

Ironically, says Kaplan, there have been no requests for the cell line since it was deposited, and CDC had been planning to abandon the application for lack of commercial interest. The controversy initially caused CDC to consider continuing the patent, while transferring all rights to the Guaymi, but in the end officials decided to walk away quietly, leaving the policy debate on such patents unresolved.

Health Plan Targets Prevention

As expected, President Clinton's new health care reform plan is a mixture of good and bad news for basic research. Although it contains a promised special "research initiative" focused on prevention, more than half of the increased spending would be devoted to data analysis and clinical outcome studies rather than to basic science.

Clinton's plan, unveiled last week, also does not say how he plans to pay for the new spending. Without some clever funding mechanism, says an aide to Senator Tom Harkin (D–IA), chairman of the Senate appropriations subcommittee on health, legislators will be hard-pressed to find more money for medical research. Harkin had proposed a $6 billion trust fund to pay for new biomedical research (*Science*, 24 September, p. 1667), but had little success in convincing Clinton to include it in the health plan. Harkin, along with Senator Mark Hatfield (R–OR), plans to introduce a new bill to create a $5 billion research fund.

The Clinton plan, meanwhile, calls for a $550 million increase in spending for health research initiatives in 1995. The total would rise to $900 million in 1996, $1 billion in 1997, and $1.1 billion a year between 1998 and 2000. But only about half would be spent on "prevention research" based primarily at the National Institutes of Health; the rest will be spent on studies by other health care agencies.