Merck promises large grant to university if Canada extends patent protection

Quebec. A subsidiary of the world's largest drug company has pledged C\$15 million (US\$12 million) for Canada's first molecular medicine and therapeutics centre if the parliament approves legislation to extend patent protection for new drugs. The legislation, expected to be passed by the end of the year, is the government's reward to the pharmaceutical industry for more than doubling its research and development spending since the last extension in patent law was granted in 1987 (see *Nature* 355, 666; 1992); the grant from Merck Frosst Canada Inc. is the biggest single investment by industry in university-based biomedical research in Canada.

Canadian pharmaceutical companies have announced new investments in research totalling \$400 million since the government last January endorsed the international trade proposal that led to Bill C-91. The bill would extend market exclusivity for three years for most new drugs and modify Canada's system of 'compulsory licensing', which makes it relatively easy for generic drug companies to get permission to copy and sell brandname products.

The centre, to be located at the University of British Columbia (UBC), is seen as the first step in creating a fully fledged

pharmaceutical industry on the country's western shore. Its director will be Michael Hayden, professor of medical genetics at UBC, who will investigate the way in which genes confer susceptibility to disease as well as trying to develop new treatments.

Hayden, who specializes in the genetic aspects of Huntington's disease, submitted a proposal for the centre to Merck, which has funded his research for several years. Hayden is director and a founder of the Canadian Genetic Diseases Network — a consortium of genetics researchers linked with eight universities and two industrial partners under the federal Centres of Excellence programme. One of the network's achievements was the recent codiscovery by Robert Korneluk of Ottawa of the gene that causes myotonic dystrophy.

The new centre will have major programmes in molecular genetics, in creating animal models for human genetic disease through gene targeting and transgenics and in gene therapy. Although the centre will be independent, its scientists will interact with Merck researchers worldwide and some will hold joint appointments at UBC.

"We will have a strong fellows programme to recruit postdocs at a critical stage in their career", said Hayden. "Individuals

within the centre will be encouraged to raise support for their own research." Hayden expects to hire ten new faculty members in the first phase of a projected staff of 200 graduate students, postdoctoral researchers, visiting scientists and managers.

Merck's money will be used to operate the centre and support research, and Hayden expects the provincial government to pay for laboratories and office space. "We are hoping to have a commitment for the building by January and to occupy it by early 1994", he says. The programme will be affiliated with human genome projects in Canada and around the world, but its focus will be on biology, not technology.

The bulk of Canada's pharmaceutical industry is in Montreal and Toronto, with only one member of the Pharmaceutical Manufacturers Association of Canada, Quadriologic, located in Vancouver despite efforts by the provincial government to attract other companies. Although approval of the bill is expected, opponents are concerned that its passage may lead to a sharp rise in the price of drugs. Provincial health ministers last month set up a task force to suggest ways to limit the extent to which companies would be allowed to raise prices.

David Spurgeon

Toshiba to help US students think about technology

Washington. When the US National Science Teachers Association (NSTA) wanted to hold a group competition among US elementary and secondary students to stimulate their interest in how the world works, association officials knew it would not come cheaply. What NSTA needed was a high-technology company that saw the contest as a way to help strengthen US science education and to restore the country's sagging reputation for technical innovation.

Last week, the contest* was announced at a festive press conference featuring, among others, the actor who portrays Mr Sulu in "Star Trek". But the star of the show, the company with deep pockets and vision, was an actor more often cast as a technological enemy of the United States: the Toshiba Corporation, along with the Toshiba America Group Companies and the Toshiba America Foundation.

"American companies are too concerned about short-term profits to be interested in something of this magnitude", says William Aldridge, NSTA's executive director. "It's a shame. Lots of US companies are trying to help in the schools, but nobody is doing anything quite this big."

Toshiba has pledged \$1 million a year, for at least the next three years, to finance a contest that NSTA expects to become an annual event. The contest, called Exploravision, asks students to imagine what an existing technology might look like in 20 years and how its evolution will affect soci-

ety. Students must work in groups of four, and will compete for prizes in one of four categories corresponding to age.

Instead of the usual report, students must prepare a set of ten video 'storyboards' describing various points in their narrative. Those advancing to regional competition will be given money to make videos of their entries. The winning teams will be chosen next June in Washington, DC; first prize is a \$10,000 US savings bond for each team member plus \$1,000 in Toshiba products for the teacher and \$6,000 for the school.

Unlike many programmes in which companies develop curricula and send trained personnel to neighbourhood schools, Toshiba will allow NSTA free rein to run the programme. "They are the ones who know what's needed, who to contact and how to do it", says John Sumansky, executive director of the Toshiba America Foundation.

Toshiba's corporate goals are equally straightforward. "We want to help children discover and articulate the role of science and technology in their lives", says Tadao Taguchi, head of Toshiba America and a director of the parent company.

Simple words, perhaps, but apparently they are still a bit too hard for a US-based company to utter.

Jeffrey Mervis

* For more information, write to NSTA at 1742 Connecticut Avenue NW, Washington, DC 20009 or telephone (202) 328-5800.

Correction

The researchers at the US National Institutes of Health responsible for the first clinical trial of a gene therapy involving adenosine deaminase (ADA) deficiency were incorrectly identified in a recent article in *Nature* (359, 188; 1992). They are W. French Anderson and R. Michael Blaese. □