Discovery aids cancer detection

A team of Montreal medical researchers has succeeded in producing antibodies that can detect and identify different types of cancer in humans.

The team was led by Dr. Phil Gold, who is director of the McGill Cancer Centre, a professor of medicine at McGill University and physician-in-chief at Montreal General Hospital. The Montreal physician won the first annual Ernest C. Manning Award for innovation in Canada this fall. Dr. Gold, who won the \$75 000 award for his discovery of carcinoembryonic antigen (CEA) 17 years ago, said he put the funds back into cancer research.

The discovery of CEA made it possible to detect cancer using simple blood tests. If CEA is found in a patient's blood stream, it means that a cancerous tumour is also present. The test for CEA indicates the presence of cancer, but does not show what organ is affected. The newest breakthrough by the McGill cancer research team means that physicians can now detect both cancer and the specific organ involved.



Dr. Phil Gold

Dr. Gold said that it would be a couple of years before the new antibodies would be commercially available. "In the next decade, I hope this leads to new diagnostic and therapeutic treatments we don't have now. With any luck, we are headed in the right direction," Dr. Gold said.

In another development last summer, a team of British Columbia researchers came up with a new way to look at how cancer cells move within the body, with the hope of findings ways to stop cancer from spreading. Most cancer cells moving out of a tumour are killed by natural body defences within 24 hours but it is the survivors that can mechanically deform and pass through tiny capillaries that spread the cancers. The research team at the University of British Columbia is using a video camera mounted on a powerful microscope to find out which cells are successful.

The UBC team is attempting to determine just how durable a cancer cell can be by advancing research begun in the 1970s at the US National Cancer Institute in Maryland. Using this information, the researchers hope to be able to find ways to make cancer cell walls more fragile.

Canada-US faculty exchange

The United States Information Agency in co-operation with the Canadian government has set up a program to sponsor faculty exchanges between Canadian and US universities and colleges.

The university-to-university affiliation programs between the institutions would allow only exchanges of faculty in political science, economics, environmental sciences and communications.

Grants will cover the cost of travel and modest salary supplements as needed for faculty members being exchanged. The institutions will be expected to continue salary and other benefits to participants. Support will be for a minimum of two and a maximum of three years for a total contribution not to exceed \$50 000 to cover allowable expenses for both partner institutions.

Only accredited, degree-granting US and Canadian universities and colleges are eligible for the program. Both partner institutions must have at least a four-year program.

Priority will be given to affiliations between Canadian and US institutions which: reflect sound academic objectives. careful selection of fields and innovative thrusts in educational exchange; advance the cultural and political understanding of each country about the other; enrich each institution's international program; emphasize quality faculty exchanges; demonstrate clear financial support from the applicant institution and/or from other donors; include written expression of commitment and involvement from the counterpart institutions; and indicate a multiplier effect through outreach activities.

Tourism growth forecast

Increasing consumer confidence in the first half of 1983 should mean renewed growth for Canada's tourism industry, said Minister of State (Small Business and Tourism) William Rompkey.

Last year the industry felt the effects of the recession but to a lesser degree than did other sectors of the economy, said Mr. Rompkey. More than 34 million foreign visitors came to Canada and tourism earned \$3.8 billion in 1982, the same as in 1981. Expenditures by Canadians travelling in Canada are still being added up but they are expected to match the 1981 total of \$12.7 billion. In that year both Canadians and foreign travellers spent an estimated \$16.5 billion in Canada.

The minister said travel industry indicators, including information from the travel agents, airlines, hotels and operators of events and attractions, show "cautious optimism" about its performance in 1983. He said, overseas markets will show a slight over-all growth over 1982; however, the decline in the number of American visitors should continue. Domestic travel by Canadians is expected to be the major growth area in 1983.

Over the long term, Mr. Rompkey said that Canada's tourism earnings were expected to grow to \$30 billion by 1988 and pointed to a series of major events across the country over the coming years that will help draw large numbers of visitors to Canada.

Newfoundland anniversary

In 1983, Newfoundland will be celebrating the four-hundredth anniversary of the arrival of Sir Humphrey Gilbert. Events this year also include the Universiade '83 World University Games in Edmonton, July 1-11, 1983.

1984 marks the four-hundred-andfiftieth anniversary of the landing in Canada of Jacques Cartier and extensive celebrations are planned including visits to Canada by some of the world's tall sailing ships.

Future events include Expo '86, the world transportation exposition in Vancouver, and the 1988 Winter Olympic Games which will be staged in Calgary.

Canada's tourism industry consists of more than 100 000 businesses, many of them small and Canadian-owned, that provide work for an estimated 1.1 million Canadians.