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This is just the first stage of a development programme in three stages which will eventually multiply the whole museum's floor space eight times at the cost of some \$18 million - \$13 million in the form of a grant from the Province of Ontario and \$5 million raised by trustees and the community.

Before the Moore bequest, the gallery had more than 5,000 works of art in its permanent collection, reaching from the fourteenth century Italian Madonna with Saints (by the Master of the Strauss Madonna) to such 20th century works as Picasso's Seated Woman and Henry Moore's Working Model for Three-piece Sculpture No. 3: Vertebrae. Earlier masterpieces include Tintoretto's Christ washing his disciples' feet, Rubens' The Elevation of the Cross, and portraits by Rembrandt, Frans Hals, Van Dyck, Hogarth, Reynolds, John Singer Sargent and Augustus John.

There are landscapes by Poussin, Claude Lorrain and Salomon van Ruysdale. Gainsborough's The Harvest Wagon, Fuseli's Lear banishing Cordelia and Canaletto's The Bacino di San Marco from the Piazzetta are included in the

eighteenth century collection. Other treasures from the European collection include works by Delacroix, Renoir, Fantin-Latour, the French Impressionists (Pissaro, Monet, Bonnard), Vuillard, Degas and Tissot. In the contemporary field the gallery has key examples of various artists' work.

The largest part of the collection of paintings is nevertheless Canadian, including a large representation of contemporary works and going back through the famous Group of Seven to Cornelius Krieghoff.

The increase of exhibition space, which will enable 25 per cent instead of the present 5 per cent of the whole collection to be on display at one time, is only part of a wide development programme which includes lounges and dining rooms and lots of resting places to help visitors avoid "museum fatigue." The extension department which organises travelling exhibitions is to have its own gallery for previews and the education programme, including a seven day a week studio workshop programme, is to be given increased facilities and space. ♦

# McGill professor fights cancer and the 'evil eye'

By Joseph MacSween

Cancer . . . the evil eye. The two concepts are not far apart in the supposedly sophisticated society of 1975, says Dr. Phil Gold, co-discoverer of a new test for cancer.

Dr. Gold told a reporter that grief surrounding cancer is in a class by itself because — unlike heart disease, for instance — cancer remains a "socially unacceptable" disease. "People don't want to talk about it," said the 38-year-old scientist-physician. "They call it by a variety of terms. It

seems almost as though the evil eye has to be warded off if you say the bad word."

That is one reason why Dr. Gold wants lay people to know more about the "unfolding story" of the war against cancer: "It is unfortunate that in most minds cancer remains a terminal illness despite the fact that it is curable in many instances." Statisticians say that medical science can cure nearly one of every two cancer victims and the key to successful treatment is early detection.

This is the field in which a major contribution was made by Dr. Gold, senior "investigator" of the division of clinical immunology at Montreal General Hospital, professor of medicine and physiology at McGill University and senior physician in the department of medicine.

## First tests

Phil Gold was only 26 and an intern in 1963 when he and Dr. Samuel O. Freedman, director of the immunology clinic, began the experiments that resulted in the first blood test for cancer. By 1965 the Gold-Freedman team demonstrated by immunological techniques that a substance known as CEA-carcino-embryonic antigen — is present\* in cancerous bowel cells, pinpointing for the first time a constituent of cancer cells that does not exist in normal tissues. An antigen is a substance that stimulates production of antibodies and, strangely, CEA is known otherwise only in normal human embryos, vanishing before birth and not reappearing during normal healthy life.

Why did the discovery of CEA in cancer take place in Montreal?

Dr. Gold, a Montrealer of energetic, outgoing personality, said he was fortunate to have worked at McGill as a graduate student in physiology under Dr. Arnold Burgen, now director of Britain's Medical Research Council.

"I have always been interested in the investigative aspect of things and probably would have stayed on in research, but Dr. Burgen suggested I should gain some background in medicine," said Dr. Gold. "As an intern at the Montreal General I attended two evening lectures in rapid succession. I heard at one of them that after all those years of research we still did not know what was different about a cancer cell. In the second lecture, someone discussed the phenomenon of immunologic tolerance, which was then new and exciting. The penny dropped. It seemed to me that the phenomenon might be applied to the investigation of cancer."

He took the idea to Dr. Freedman, immunologist at the hospital, and that was the beginning of a fruitful professional and personal friendship. "Dr. Freedman thought the idea might be feasible and from that time forward, the project came into being," said Dr. Gold. "We asked ourselves: is there some component, function, constituent, in the tumour cell that distinguishes it from the normal cell from which it presumably comes? Scientists had looked at this problem through innumerable other techniques but the immunologic approach seemed promising because it is oriented toward specific things. We then asked ourselves: if we immunise rabbits with normal and tumour tissues under different circumstances, will the antibodies that these animals produce show us something specific about the tumour system that is absent from the normal system?"