

CEA discovered

"In other words, we raised antibodies in animals against the tumour cells, then used the antibodies as a probe to point out or identify their corresponding antigens. That is how we found CEA. Then we asked: is there any situation where the tumour cell releases this CEA into the blood? To our complete surprise, after several years of work, we did find this material in the blood circulation. Again the penny dropped: my God, Since we can find this stuff in the circulation, it is of any value for testing people for tumours, and testing them particularly after tumours have been removed? Will the CEA go away? Will it come back before the patient has clinical recurrence of a tumour?"

It was in 1969 that Gold and Freedman — joined by Dr. D. M. P. Thomson — observed CEA in the bloodstream and began devising blood tests to detect the presence of cancer before traditional signs of the disease appeared.

Trials conducted co-operatively by the National Cancer Institute of Canada and the American Cancer Society confirmed the validity of the test.

Detection by blood tests

Dr. P. G. Scholefield, assistant director of the Canadian Institute, told a reporter in a telephone interview from his Toronto office that "What Phil Gold and Sam Freedman have done is open up a new avenue of research against cancer."

But Dr. Scholefield said the institute has no present plans to conduct a national study — as proposed by Dr. Gold — to determine how far in advance of clinical evidence the CEA blood test can spot a recurrence of cancer.

The institute, financed largely through public donations, had no plans beyond a follow-up of some patients involved in the original evaluation study.

Dr. Gold described this field as the "most exciting application of the CEA test at the moment" and he reported recurrence of the disease has been detected by blood tests from two weeks to 10 months before clinical evidence.

An unfolding story

"Hundreds and perhaps thousands of laboratories now are doing the tests in various parts of the world," Dr. Gold reported. It now appeared the test in its various forms will pick up evidence of cancer in such areas as the breast and lung as well as the bowels.

"It is not too much to hope that over the next few years, with a better understanding of the chemistry of the molecules with which we work, we will be able to specify whether it is a bowel tumour antigen, a lung tumour antigen or a breast tumour antigen. It is an unfolding story."

Economic Digest

Housing

A final count of 1974 housing starts brings the total to 222,123 units, about 17 per cent below the 1973 record, Central Mortgage and Housing Corporation, the Canadian Government housing agency, reported in January.

CMCH estimated earlier that 1974 starts had reached 220,000. More than 268,000 units were begun in 1973. Aided by the carryover from the boom in housing starts in 1973, contractors were able to complete a record 257,243 units last year, up from 246,581 in 1973. But because of the decline in housing starts in the second half of the year, there were only 168,406 units still under construction at the end of 1974. This was a decrease from 207,236 units at the end of 1973.

Saskatchewan was the only province to register a higher rate of housing starts in 1974 than in 1973. There were 7,684 starts last year, up from 6,386 in 1973. Housing starts by province with 1973 figures in brackets: Newfoundland, 4,911 (4,831); Prince Edward Island, 1,334 (2,122); Nova Scotia, 6,008 (7,734); New Brunswick, 5,861 (7,235); Quebec, 51,642 (59,550); Ontario, 85,503 (110,536); Manitoba, 8,752 (11,531); Saskatchewan, 7,684 (6,386); Alberta, 19,008 (20,977); British Columbia, 31,420 (37,627).

CMHC said starts on single-family dwellings last year were eight per cent lower than the previous year while there was an even sharper drop of 28 per cent in multiple-housing construction. Multiple-housing includes apartments, row houses and duplexes.

There were more completions last year in all categories of housing except semi-detached and duplex units where there was a decline to 12,509 from 13,479 in 1973.

CMHC financed directly 30,352 starts in 1974, an increase from 29,027 the previous year. But there was a steep decline in National Housing Act-insured loans to 31,057 from 75,649 in 1973.

Conventional private loans were down to 160,714 from 164,033.

Savings

Canadians continue to save at a near-record pace, the Canadian Banker's Association reports.

CBA figures showed personal savings deposits, the largest category of deposits with the Canadian chartered banks, were up more than 21 per cent in 1974 to a year-

end record C\$29.4 billion. The increase was the second-largest of the post-war period, exceeded only by the 23 per cent rise in 1973.

Fixed-term deposits, offering the highest rates of interest, grew at a pace almost double the growth of personal savings deposits. At C\$12.1 billion, these were up nearly 12 per cent. Personal non-chequing deposits, with somewhat lower interest rates, rose more than 23 per cent to C\$11.2 billion.

Since 1964, personal savings deposits at the chartered banks, the country's major savings institutions through almost 6,900 branches, had more than tripled.

Jobs

Unemployment rose in Canada to 6.1 per cent in December from 5.5 per cent a month earlier, Statistics Canada reported at mid-January.

Men were hit hardest as 4.5 per cent over 25 in the work force were unemployed. The rate for men between 14 and 25 went to 12.4 per cent from 10.9.

Among the provinces, the highest rate was in Newfoundland — 16.4 per cent in December compared with 14.4 per cent in November. There were jumps of a full percentage point in New Brunswick, to 10.6 per cent, and Quebec, to 8.1 per cent.

Actual figures show the total of male jobless rose to 431,000 in December, up from 327,000 the previous month, while the total for women remained steady at 166,000 in both months. In December, 1973, the jobless total for men was 374,000 while for women it was 138,000.

Bank Rate

The Bank of Canada announced on 10 January, that the Canadian Bank Rate had been reduced to 8½ per cent effective January 13, 1975. The Bank Rate had been lowered from 9½ per cent to 8¾ per cent on 18 November, 1974.

The Governor of the Bank of Canada, Mr. Gerald K. Bouey, noted that the reduction in the Bank Rate followed a decline in short-term market rates of interest in recent weeks. The Bank had regarded a reduction in interest rates from their peaks last summer as suitable to the economic and financial situation, allowing for the fact the continuing high rate of inflation made it necessary to exercise particular caution in the development of monetary policy. Rising costs rather than demand pressures were clearly now the main driving force of inflation.

Semen sales

Canada's trade in cattle semen is increasing fast: between 1970 and 1973 exports rose by 93 per cent, the Canadian Department of Agriculture reported recently. During 1973 C\$8.9 million worth of beef and dairy semen was exported to 34 countries, the largest customer being the United States which took 78 per cent.