

MEDICAL RESEARCH IN CANADA

Canadian medical research on a national basis really began with the discovery of insulin in 1921. This great event in medical history triggered a chain reaction of enthusiasm in medical research which has extended with increasing intensity to its present status, it is pointed out in the April issue of "Canada's Health and Welfare". During the early days, research progressed mainly in the universities and was sustained partly by their own resources but with some support from outside agencies both in Canada and the United States. The first federal financial support, some \$53,000, was offered in 1938 through the establishment of the Associate Committee on Medical Research of the National Research Council, with Sir Frederick Banting as chairman.

Soon afterwards, World War II provided a potent if unwelcome stimulus to the progress of medical research in Canada, chiefly in respect to health problems as related to the war. Supplementing its existing Associate Committee, the National Research Council established three special committees to deal with Naval, Army and Aviation Medical Research.

The return of peace saw the resumption of normal research activities in the universities and exciting developments at the federal and provincial government levels. In 1946 the National Research Council created a Division of Medical Research to replace its original research committee, and the Department of National Defence established the Defence Research Board which, through its Medical Section, focussed its interests upon problems specifically related to health and its maintenance in the Armed Services.

In 1948, the Health Grants Programme of the Department of National Health and Welfare came into being and included a grant for Public Health Research. The impetus given to new and extended services through the grants quickly pointed up the need for stimulating and supporting research in certain fields. Accordingly, grants were offered to assist research in mental health, tuberculosis control, cancer control, child and maternal health and crippling conditions in children, leaving the Public Health Research Grant for the investigation of other public health problems. In 1950, a fourth federal government agency, the Department of Veterans Affairs, organized a programme of research in its hospitals and clinics across Canada.

Within the past ten years a number of voluntary health agencies have come into being with the encouragement and support of research as one of their principal objectives. Among them are the National Cancer Institute, which receives from the National Health Grants more than \$100,000 per annum, the Muscular Dys-

trophy Association, the Canadian Arthritis and Rheumatism Society and the National Heart Foundation of Canada. Certain provincial organizations such as the Ontario Cancer Treatment and Research Foundation, the Ontario Heart Foundation and the British Columbia Medical Research Institute are also taking an active part in research. Other foundations which have broader research interests, are sponsoring programmes in health research. Among these are the Atkinson and Bickell Foundations and the Life Insurance Officers' Association.

Thus, with a number of official, semi-official and voluntary bodies launching research programmes, a remarkable surge forward has occurred in the total medical research effort. And the curve plotting the availability of funds for research since the earliest days, while initially rather flat and unimpressive, has taken a dramatic upward swing during the past decade.

During the year 1955-56 (the latest for which figures are available), well over \$9 million was offered for medical research in Canada. In addition to grants-in-aid and research fellowships, this figure includes expenditures in government departments, such as those of the Laboratories of Hygiene and the Food and Drugs Directorate of the Department of National Health and Welfare and those of the Defence Research Board. Including the grant to the National Cancer Institute, the federal government made available \$4,455,000; provincial governments, \$345,000; Universities, \$1,350,000; voluntary agencies, \$845,000; commercial firms, \$1,600,000; and grants from the United States approximated \$595,000. These figures total \$9,190,000 which compares very favourably with the figure of \$3,260,000 for 1949-50. And yet it is becoming increasingly apparent that substantially larger amounts are urgently required for medical research.

What is this money used for? In brief, the National Research Council is primarily concerned with research of a fundamental nature involving the basic medical sciences. It also provides research fellowships designed solely for training in research.

Indicating the scope of its programme, the Defence Research Board has set up 13 advisory panels some of which involve Medical Research, Aviation Medicine, Blood Transfusion, Food Technology, Burns and Wounds, Nutrition, Radiation Protection and Treatment, and Toxicology.

The Department of Veterans Affairs is committed mainly to clinical research directed to aid the veteran, with the emphasis on problems of aging people and the aging process.

Under the Health Grants Programme of the Department of National Health and Welfare,