

Graaff accelerator at the University of Montreal and the Dalhousie Aquatron. In 1967, recognizing the need to bring groups of talented researchers together as well as to develop strength and depth in critical areas, the National Research Council initiated a new program of negotiated development grants intended to encourage research in areas important to the scientific, economic, regional and resource development of Canada. The first awards were in the field of materials science. In 1971 another type of negotiated grant, the project grant, of direct industrial significance, was initiated. This was designed to encourage and support the spin-off into Canadian industry of research developments arising in the course of university research. Close collaboration with a Canadian company is a prerequisite for one of these grants. The first such grant funded a group of chemical engineers undertaking research on the utilization of peat moss in the manufacture of hardboard and in the treatment of industrial waste. It is expected that greater emphasis will be placed on these negotiated grants in the future.

General research grants are awarded annually to Canadian universities where substantial National Research Council supported research is being done. The university is free to use the funds for the purpose of promoting scientific research in those fields supported by the National Research Council. These grants totalled \$3 million in 1972.

In addition to the grants programs the National Research Council also provides substantial support to individuals through scholarships and fellowships. In 1972, 2,309 persons were granted awards (out of 6,046 applicants). Postgraduate scholarships and postdoctorate fellowships are awarded in the fields of science normally supported by the National Research Council. In 1971 the Council initiated a program of postdoctorate fellowships tenable in Canadian industrial firms. These now account for almost 40% of all its postdoctorate fellowships. To encourage closer collaboration between industries and universities it also provides fellowships to university professors tenable in Canadian industry and to industrial scientists and engineers tenable in Canadian universities.

The Medical Research Council supports research and development in the health sciences (excluding public health) in Canadian universities and affiliated institutions. Research is supported primarily in the faculties of medicine, dentistry and pharmacy; however, projects in other areas which are relevant to health problems are considered. Research funds are distributed through three main programs: grants-in-aid of research, direct personnel support and special programs. The 1973-74 expenditures of the Medical Research Council were \$41 million.

The major portion of Medical Research Council expenditures are for grants-in-aid of research, of which there are two main types: operating grants and major equipment grants. These are intended to cover the normal direct costs of research. Grant expenditures were almost \$26 million in 1973-74. To encourage maximum utilization of facilities major equipment grants are normally made to the head of the department or division where the equipment will be located. Wherever possible, highly specialized equipment is provided for regional or national use, an example being the high-resolution mass spectrograph facility at McMaster University. Operating grants represent the bulk of the expenditures of the grants program. Normally made to a principal investigator to support his own research, such grants are not intended to cover the entire costs of a project; space and basic facilities must be provided by the institution. The scientific merit of applications is assessed by the Council's Grants Committees, composed of working scientists assisted by external reviewers.

The Medical Research Council program of direct personnel support includes studentships, fellowships, scholarships and associateships. Studentships support predoctoral graduate students for work leading to a higher degree. Fellowships permit those already holding advanced degrees to undertake research training in the health sciences; those who have completed their formal research training are provided an opportunity to demonstrate their independent research ability through the scholarships program. Finally, associateships provide salary support for a limited number of highly qualified investigators in Canadian universities to enable them to engage in independent research on a full-time basis.

The special programs of the Medical Research Council include the financing of Medical Research Council Groups for research in especially productive areas, for example, the Group for medical genetics at McGill University. Development grants assist universities in recruiting highly qualified investigators for full-time positions in areas (geographic or subject) needing development. In addition, to encourage collaboration and exchange of information, the Coun-