

Science Council of Canada

that in 1925 the National Research Council's expenditures were \$139,000, while in 1965 they were \$61 million. Naturally this leads to growing pains. We all hope that this new Science Council will help to eliminate some of these pains. It should, and I sincerely hope will, direct money to the proper research projects. It should, and I hope will, stimulate the government to largely increase its support for research.

While I do not think that any particular phase of research merits much more help than that given to any other, it might be worth while to examine one branch more exhaustively; let us pick medical research for this. This is one branch that admittedly does need help, especially since we are preparing to introduce medicare in the near future. I previously stated that Canada lost 820 physicians and surgeons in two years. Since our universities graduate approximately 1,000 of these people each year, we lost 40 per cent of them to the United States. It is no wonder we lost them since the Canadian government's aid to medical research in the past year was only about \$15 million; this is about 75 cents for every Canadian. Aid from private sources and \$1½ million from the United States National Institute of Health added about another \$5 million to this. This does not stand comparison with the United States where the National Institute spent \$1,072 million on medical research or \$5.35 per capita.

The Hall report gives us a good indication why our doctors go to the United States. It tells us that the Canadian doctor who is 30 years of age and holds an M.D. and a Ph.D. is able to get a research post in the United States which will pay him \$15,000 a year and give him good facilities. I hope we notice that it says "give him good facilities". If he stays in Canada he likely becomes a lecturer at a Canadian university at a salary of \$7,500 without many of the facilities he would have had in the United States.

John Cowan in an article in *Commentator*, which he called "Brain Drain—Nobody's Fault But Ours", said that only 67 per cent of applications for grants in aid of research were approved by the Medical Research Council. He considers this rejection as dangerously high. He was most disturbed by the fact that the more expensive projects which tended to be more imaginative and to take off into new fields were most likely to be rejected. He thought this tended to create an attitude on the part of the scientists to, in Mr. Cowan's words "apply for only small things, do not try for anything new and risky, stick

[Mr. Cantelon.]

to good conservative research techniques, and you will get what you apply for."

The Saskatoon *Star-Phoenix* of March 19, 1966 pointed out that last January some 400 medical teachers and researchers forecast for the Prime Minister the financial aid which they thought would be needed in the next five years just to maintain present standards of medical practice. I quote from the article in the *Star-Phoenix*:

New hospitals and equipment would cost about \$150,000,000; staffs of medical schools and hospitals would have to be doubled in teaching and research.

Research, administered by the Medical Research Council, would have to be doubled from \$21,500,000 in 1965-66 to \$87,100,000 by 1969-70, with Ottawa providing \$80,000,000 of that amount. In addition, universities must contribute \$15,000,000 annually or four times their present contributions.

So a manpower shortage in medical research, teaching, and practitioners is facing us. Thus far our medical personnel requirements are being supplemented by the British Isles, Europe and Asia, but as those countries experience a fall-short, they will keep their doctors at home.

Thus we may find that Canada has a national medical care plan, and the provinces have their plans administered on compulsory and voluntary bases according to the respective government policies. Unless the doctors are available to serve the people, the medical care plans lose their significance, because they are immobilized. Among the priorities we hear about, the problem of medical research, teaching, and supply of doctors, should be moved to the top of the list.

Since, then, the Science Council should be one more factor that would help us to enlarge research, it has my unqualified endorsement. More than that, not only do we need to keep the men who can do the research for us, but we need to see that these men get the space and the equipment which will enable them to do a first rate job, and which of course will keep them here in Canada.

As Dr. D. V. Bates, assistant dean for graduate studies in research at McGill University's medical faculty said—and I quote from the *Ottawa Journal* of January 23, 1965:

"We can't bring scientists and show them empty floor space. How can we recruit good men? They can't work without tools."

Dr. Bates said in an interview the Canadian government has said that "no mechanism exists" for capital grants to universities. He was in Toronto to attend the Canadian Society of Clinical Investigators convention.

He named McGill, Dalhousie, University of British Columbia and the University of Western Ontario as the four schools. He said \$4,000,000 is needed to equip the new buildings.

Lest you think I have devoted too much emphasis to a discussion of medical research, let me assure you that such was not my intention. All phases of research in chemistry, physics, the biological sciences, mechanics,