

Everyone agrees that if Canada is to have an independent economic future it must be able to generate its own research and development, instead of relying on that developed by other countries. This fall former Science and Technology Minister Judd Buchanan made a lot of promises on how this was going to improve. Recent announcements have shown this has not happened. Instead, a potential area of long term Canadian development is being undercut by nearsighted and directionless cutbacks.

by Lou MacPhail
of the Ontario
for Canadian University Press

The dismissal of eighty-five researchers from the Department of National Health and Welfare in Ottawa "reflects a disastrous lack of forward planning by the federal government and completely contradicts the government's commitment to boost investment in Canadian research and development," according to Dr. Serge Federoff, Chairman of the Canadian Federation of Biological Societies.

The Society feels Canadian science was again victimized by the federal government when figures recently released by the Professional Institute of the Public Service showed that at least eighty-five professional researchers in the Department of National Health and Welfare in the Ottawa Region alone, will lose their jobs next April.

Dr. Federoff said "the government's action comes at a time when scientific research in Canada is already suffering from a long-standing neglect by the government and that these latest cutbacks can only result in a complete loss of confidence by the scientific community."

The eighty-five researchers who had been working in the fields of biology, chemistry, nursing, medicine, scientific research and scientific regulation, have been declared "surplus". Only twenty-one of them will be reassigned to lower or non-research positions.

A total of 660 Ottawa Region National Health and Welfare employees will lose their jobs in the spring of this year as part of the government's \$2.5 billion dollar expenditure cutback which was announced last September.

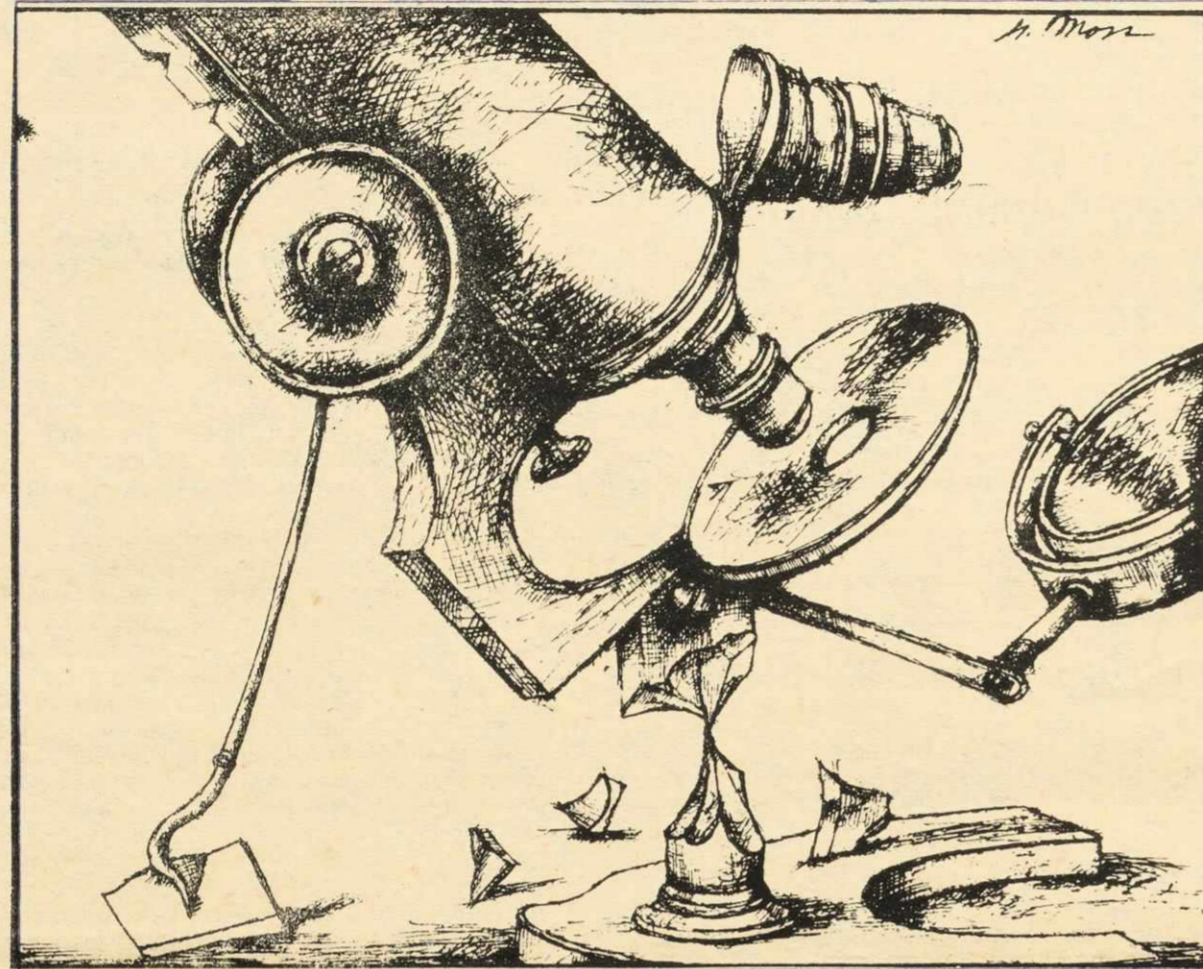
Other departments suffering massive science and technology cutbacks include Fisheries, Agriculture, Communications, Atomic Energy Canada Ltd. and Statistics Canada.

When Ministers met on November 8, 1978 at the first Federal-Provincial Conference on Industrial Research and Development they agreed that Canada's low investment in industrial research and development was seriously affecting price stability, employment, productivity, total output and other medium and long-term economic objectives. They also agreed that every effort should be made to ensure a higher level of support for research and development and innovation in Canada through encouragement and stimulation of the private sector.

They felt that tax incentives, made with special consideration to the promotion and strengthening of research intensive industries and the encouragement of small firms, were an 'essential tool' for the growth of research and development in the private sector.

Authorities from the Canadian Federation of Biological Societies think tax incentives will do nothing, or very little, to encourage research and development in Canada. Research intensive industries are, for the most part, owned by foreign multinationals who have already estab-

Cutbacks hit Canadian research



BY GEOFFREY MOSS

lished intensive research programs in other countries and have little interest in Canada.

The low priority placed on Canadian research and development by foreign parent companies was illustrated in the results of a recent **Toronto Star** survey.

Ford Motor Company, which ranks first in Canada in terms of dollar sales, and had a 1975 research and development budget of \$1,170 million said most of their money was spent on programs in the U.S., Britain and Germany. They do some research and development in Canada but there are no figures available.

General Motors ranks second in Canada and spent \$1,451 million on research and development in 1977, but they did not have any figures for a Canadian program "partly because we are still trying to find out how Ottawa defines research and development."

Chrysler and Honeywell said that they don't do any research and development in Canada. Union Carbide and Kodak admitted to minute amounts of research in Canada, but said that most of their work was done at the parent companies in the U.S.

On the other hand, the rest of the private sector is in greater need of the direct assistance the federal government is cutting back on, and the tax incentives are of little value to them.

In a brief from the Association of Universities and Colleges of Canada responding to the Ministry of State for Science and Technology's (MOSST) discussion paper 'Measures to Strengthen and Encourage Research and Development in Canada', it was stated that "None of the functions of the modern university can be enriched if immediate, short-term goals of national interest become the preponderant motive for the research activities of these institutions. . . the primary potential of

university research for society must be regarded as a long-term capability through the creation of knowledge and the training of future generations of researchers."

"An important national concern is the maintenance and strengthening of the universities' ability and capacity for basic research. The universities remain the primary resource in Canada for basic research and they cannot be adequately supported if all new funds are to be tied to mission-oriented research, even under ideal cooperative relations among government, industry and universities."

"Canadian universities, in contributing to mission-oriented research through contracts with the Department of Supply and Services, have demonstrated unique research capabilities. It is regrettable that they can only be involved on a basis secondary to the industrial sector under the federal government's 'contracting out' policy which gives preference to industry.

So that society may derive more benefit from university-based capabilities, the Association recommends that a separate university 'contracting out' policy be developed."

"We agree with the MOSST discussion paper that most research positions in future years will be in the industrial and business sectors. We cannot, however, support the conclusion that, for graduates to have an industrial orientation, their training should increasingly be in applied research related to areas of national concern. . . Basic research training, if of high quality, gives to the student experience that is as applicable to research in the industrial sector as it is to further basic research in the university. . . Universities will only be able to fulfil their role in the training of research manpower for industry if they themselves have a continuous infusion of young scholars into their faculty ranks."

"The Association of Universities and Colleges of Canada is concerned that this new investment by the government in research and development may be wasted if the existing basic research programmes in universities are allowed to deteriorate further."

The federal budget and Canadian Industrial Research and Development program as increased the scientific research allowance for companies doing research and development by an additional 50 per cent deduction from income in respect of "qualified expenditures" in excess of a specified base period amount.

In addition to the 150 per cent scientific research allowance, the investment tax credit for research and development introduced in the March 31, 1977 budget, has been extended indefinitely.

Investment after November 16, 1978 for scientific research by Canadian-controlled private corporations will qualify for a credit of twenty-five per cent, but only for which the corporation is entitled to the small business deduction as defined in the Income Tax Act.

The Canadian Federation of Biological Societies says that "While last April's budget and the current one will give an estimated \$0 million in indirect research and development assistance to the industrial sector, this should be measured against the much larger direct cash reductions of federally-funded research in university and in-house laboratories. According to the MOSST document dated November 1, 1978, these cutbacks to science programmes will total \$39.5 million in 1979 and \$165.8 million in 1979-80."

John K. Marczyk, Executive Secretary for Science Policy, feels that the detrimental effect of the direct cutbacks made by the government will by far outweigh any positive effects the proposed tax incentives program would have on improving research and development in Canada.

"The federal government is trying to move out as fast as possible. It's saying let's go ahead and do things, but at the same time it's taking away the opportunities," he said.

Issues arising from meetings which Dr. Federoff felt could form the basis of future policy activities are as follows:

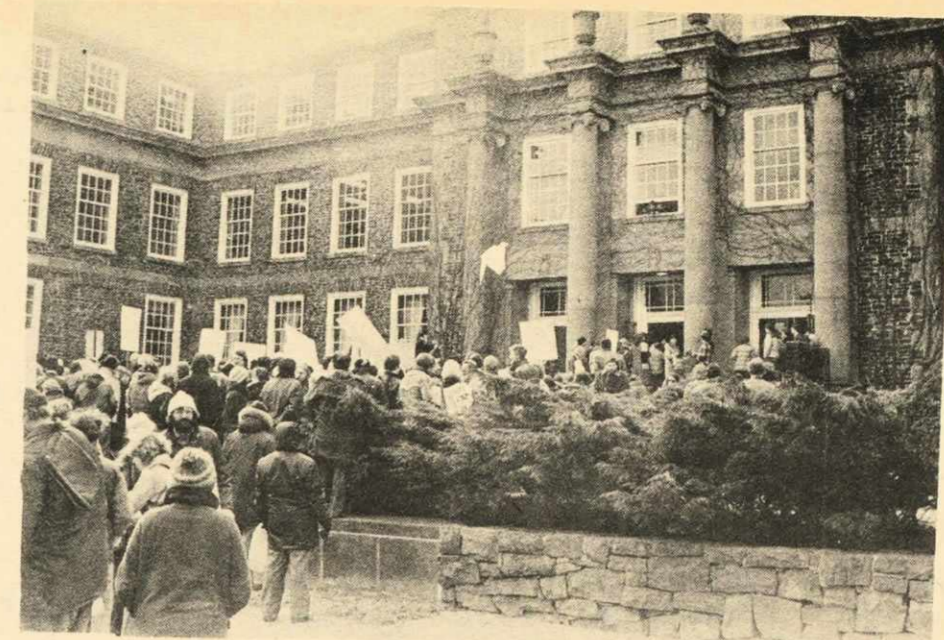
The development of industrial research and development will depend on change to a climate conducive to innovations, easy access to graduate academics and good prospects for capital investment.

New industries in the country most likely will develop through the initiatives of individual entrepreneurs, rather than the expansion of multinationals. The workable interphase at present exists between universities and industry needs encouragement for future development.

In these considerations, regional distribution cannot be forgotten. Balance between provincial and federal government research funding must be carefully considered and co-ordinated. A federal-provincial conference dealing with these matters should be encouraged. The scientific community and the universities should be represented.

Two point five per cent of the G.N.P. is the amount per developed countries are spending on research and development. It should be a reasonable goal for Canada to achieve.

An analysis of the government's target of spending 5 per cent of G.N.P. on research and development concluded that "to reach the target within five years, industrial research and development will have to increase at an annual rate of 27 per cent, government research and development at 10 per cent and university research and development at 30 per cent."



Cleaners day



Vice-president (administration) Louis Vagianos during yesterday's Day of Protest. Chanting demonstrators stayed in the A&A building for almost an hour, after the noon-hour rally.

