

Stopping the Brain-Drain of highly-qualified researchers, graduate students and research assistants.

BACKGROUND

A better balance between funding for research infrastructure and funding for research personnel is needed in order to ensure the adequate use of the research infrastructure investments. The 2009 Budget proposed several initiatives related to higher education and university research, including: Investments in university/research infrastructure; and decreases in funding for the federal research-granting councils. \$2 billion will be provided to modernize universities (70% of the funds) and colleges (30% of the funds). Distribution of funds will be based on project merit and readiness. Preference will be given to projects at universities that can improve the quality of research and development at the institution. The funds will pay for up to half of project costs.

Additionally, the Budget provided:

- \$750 million to the Canada Foundation for Innovation
- \$150 million to increase funding for commendable projects in the 2009 Leading Edge and New Initiatives Funds Competition
- \$600 million for future activities of the Foundation
- \$50 million to the Institute for Quantum Computing based at the University of Waterloo to support the creation of a world-class research facility
- \$87.5 million over 3 years to temporarily increase the Canada Graduate Scholarships Program
- \$3.5 million over 2 years to offer an additional 600 graduate internships in science and business through the Industrial Research and Development Internship Program

The **Canadian Association of Physicists** noted the federal budget provides various additional supports for the research and development enterprises but also a reduction in tri-council funding. CIHR, NSERC and SSHRC are actually being asked to find savings of \$147.9 million over 3 years. The granting councils, the NRC and the Canadian Space Agency were among the 21 government departments and agencies reviewed for this budget and a total savings of \$349M were identified.

Canadian universities play a key role in fostering research. They perform more than one-third of all R&D in Canada and carry out the majority of this country's basic research. There have been significant investments in university research since 1997. However, key competitor countries have also increased their support for their university research activities and new competitor nations are emerging.

To ensure that Canadian universities and colleges can attract, retain and train the researchers and graduate students that this country must have to compete in a knowledge economy, they require internationally competitive levels of support for both the direct and indirect costs of research, the research infrastructure, as well as for the attraction and retention of highly qualified research talent.

Noting the strong support by the province of Ontario for research and innovation **the Council of Ontario Universities** in May 2009 state "Ontario can be proud of the robust research programs at our universities which are not only creating new ways to treat patients and prevent disease, but are shaping social policy, developing new product and services, finding energy alternatives and solving industrial issues," said Paul Genest, President & CEO of the Council.

Associations of Universities and Colleges of Canada (AUCC) concluded in a May 2009 report (Canada's Science, Technology and Innovation System: State of the Nation 2008) that Canada is a solid mid-level performer and must keep working to improve its global performance and reputation. The report identified areas of vulnerability and offered several suggestions for action. The AUCC will continue to work with all sectors to ensure that Canada becomes a leading R&D nation, stated Claire Morris, President and CEO of AUCC.

Memorial University of Newfoundland and Labrador believes the benefits of apparent new funding for universities may be offset by actual cuts to national research granting councils and agencies that will have a negative impact on research activity in Newfoundland and Labrador.

The three national granting councils include the Social Sciences and Humanities Research Council (SSHRC), the Natural Science and Engineering Research Council (NSERC) and the Canadian Institutes for Health Research (CIHR).

The federal budget calls for funding of the three granting agencies to be reduced by more than \$87 million over the next three years from the current levels of about \$1.7 billion. The federal budget also includes cuts to funding for Genome Canada putting 2,000 high technology jobs at risk.

“A great deal of this research at Memorial University is supported by the granting councils and agencies like Genome Canada,” said Dr. Campbell. “Without doubt, this federal budget will negatively affect the level of research we are able to undertake here in Newfoundland and Labrador, and these cuts will put our emerging status as a national research leader at risk.”

Confederation of Alberta Faculty Associations “One major surprise in the budget, given the government’s stated desire to develop the potential of academic research, is the failure to provide new money for the granting councils. CIHR, NSERC and SSHRC are actually being asked to find savings (\$147.9 million over 3 years) ... According to the government, these savings ‘will be used in this budget to support repairs at post-secondary institutions, to upgrade key Arctic research facilities, to expand the Canada Graduate Scholarships program and graduate internships, and to support new world-class research facilities.’ “Overall, it is difficult not to see Budget 2009 as something of a missed opportunity for bold spending initiatives in our sector.”

In the 2009 Federal Budget it was difficult to determine where the R&D dollars were going and whether or not the investments in research infrastructure would create the needed intellectual property which will positively impact Canada’s economy, and would it have an impact to hiring students, graduates for research.

Recommendation

The Government of Canada work with its provincial and territorial counterparts to review the R&D granting structure to find a better balance between funding for research infrastructure and funding for core faculty, graduate students and research personnel, thereby ensuring that the investments in research infrastructure will create the needed intellectual property, product development and commercialization to positively impact Canada’s economy.