



**Canadian Consortium for Research
Consortium Canadien pour la Recherche**

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**A Brief to the
House of Commons
Standing Committee on Finance
by the
Canadian Consortium for Research
September 2005**

Chair

Chemical Institute of Canada

Steering Committee Members

Canadian Association of Physicists
Canadian Association of University Teachers
Canadian Federation for the Humanities and Social Sciences
Canadian Federation of Biological Societies
Canadian Psychological Association
Chemical Institute of Canada

PART ONE - INTRODUCTION

The Canadian Consortium for Research (CCR) is a coalition of 15 national organizations representing over 500,000 individuals on the front lines of research and study in Canada. Our members are from the public and private sectors and engage in basic and applied research, study and practice in the natural sciences, social sciences and humanities. The working experience of our members has informed the Consortium's deliberations and shaped our recommendations to the Committee.

Our advice is straightforward. To build a dynamic and productive economy - one in which Canadians enjoy the best quality of life and the highest possible standard of living - the federal government must significantly increase its spending to support:

- the core operations of post-secondary institutions through a dedicated transfer;
- the federal research granting agencies; and
- its own research infrastructure.

PART TWO - RECOMMENDATIONS

Recommendation One – Increase Funding for the Core Operating Costs of Post-secondary Education Institutions through the Creation of a Dedicated Federal/Provincial Transfer

Post-secondary education institutions are the cornerstones of a modern, productive economy. They play a central role in the creation of new knowledge and the preparation of our next generation of researchers. Yet, by any measure government support, both federal and provincial, for the core operations of the post-secondary sector is woefully inadequate. Estimates based on Department of Finance Fiscal Reference Tables indicate a 40% real per capita decline in federal cash support for post-secondary education between 1992 and 2004. Provincial support over the same period declined 8.6%. The result is a university and college system starved for cash. Ontario, for example, ranked 59th out of 60 North American jurisdictions in 2004 in per capita spending on post-secondary education. That placed it ahead of only Tennessee. In practical terms this funding shortfall undermines quality and accessibility by driving tuition fees higher, increasing teacher/student ratios, increasing dependence on part-time faculty and forcing institutions to turn to special interest groups for money. Educational opportunities for students at both the undergraduate and graduate levels are suffering. The physical infrastructure – libraries, laboratories, buildings and grounds - of universities and colleges is also under threat. The most recent estimates (2001) of the Canadian Association of University Business Officers (CAUBO) set deferred maintenance costs in the university sector at \$3.6 billion.

Correcting this funding shortfall will contribute significantly to improving Canada's economic productivity and improving the lives of future generations. The federal and provincial governments must recognize their mutual responsibility, set aside their differences and create a dedicated federal/provincial transfer to fund the core operations of post-secondary education. To be successful the transfer must:

- be governed by nationally established principles ensuring accessibility, quality and academic integrity;
- contain binding enforcement mechanisms; and
- to avoid perennial federal provincial disputes over the transfer amount, be set at a fixed percentage of GDP (a target of 0.5% GDP would restore federal funding to that of the late 1970's).

The Consortium has been calling for the creation of a dedicated federal transfer for post-secondary education since 2000 and it was pleased when the Finance Committee endorsed the concept in its 2004 Report. Momentum for this idea is growing, with provincial governments coming onside. Now is the time for the Government of Canada to take the lead and push forward with this critical step to placing our nation on the road to greater prosperity. The Federal Government has made important investments in university research. Support for the core funding of universities will address critical needs and magnify the impact of the research investments.

Recommendation Two - Increase the Budgets of the Federal Research Granting Agencies

In addition to funding the core operating costs of post-secondary institutions, the Government of Canada plays another critical role in supporting research in Canada - through its research agencies, the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council (NSERC) and the Canadian Institutes for Health Research.

Funding for these agencies declined dramatically through the 1990's but has risen in recent years. The research community acknowledges and applauds these increases. Nonetheless, the current level of funding still leaves the agencies unable to meet the growing needs of a new generation of researchers coming into Canadian universities. If Canada is to maintain or increase its ranking as an international leader in research, greater investment is necessary. The Government must:

- as a priority, strengthen social, human and cultural research in Canada by increasing the Social Sciences and Humanities Research Council's funding to \$460 million by 2008-2009 (more than half of all faculty and graduate students work and study in the social sciences and humanities, yet SSHRC's budget is less than half of that of the other agencies - it is past time that this imbalance be corrected);
- increase the budget of the Canadian Institutes for Health Research to \$1 billion by 2008-2009; and
- increase the budget of the Natural Sciences and Engineering Research Council to \$1.2 billion by 2008-2009.

To ensure greater accountability, efficiency and strategic planning in the expenditure of these funds, the Consortium recommends that the agencies be permitted to carry over unexpended allocations from one fiscal year to the next.

The Consortium recommends that the scientific rigour of research be the determinative factor in resource allocation. The issue of how to facilitate greater private sector involvement in research in Canada, while still ensuring that scientific excellence is the primary criterion in research funding, is of great concern to the Consortium.

Recommendation Three - Re-invest in Government Research Infrastructure

Increased support for post-secondary institutions and the research granting agencies is essential, but the government must also re-invest in its own research infrastructure. In addition to a myriad of day to day policy choices, Canada also faces major challenges on climate change, energy, pandemic response, drug safety and national security. To deal effectively with this array of issues, it is imperative that the Government have its own reliable, disinterested source of research, knowledge and advice to rely upon. Government departments and agencies, such as Natural Resources Canada, Environment Canada, Fisheries and Oceans Canada, Health Canada, Agriculture and Agri-Food Canada and the National Research Council (NRC) can fill this role.

In addition to being independent, these organizations also engage in extraordinary work. At a time when the Government is experimenting with new mechanisms for facilitating research, it must not forget the successes of traditional models. Canadian Nobel Laureate Gerhard Herzberg's pioneering achievements in molecular spectroscopy at the National Research Council is one example of that organization's outstanding contribution to science. Similar success stories can be found within government departments. The groundbreaking work of Dr.

Keith Downey at Agriculture Canada (together with Dr. Burton Craig at the NRC) led to the development of the modern Canola industry, an industry that contributes more than \$6 billion annually to the Canadian economy.

Despite the extraordinary service these departments and agencies have rendered to Canadians, they are all suffering from the lack of necessary financial support. In preparing this brief, the Consortium turned to Statistics Canada for basic quantitative data on Canada's economy, population and education systems. We found an agency struggling to provide information in an atmosphere of chronic under-staffing - beset by retirements and without money to replace departing employees. To correct this particular situation, and the broader problem, the Government must direct attention to assessing and supporting the research expenditure needs of its own departments and agencies. The Consortium was pleased with the creation and mandate of the National Science Advisor (NSA) several years ago. This office should be sufficiently funded to properly undertake major projects including a review of the government's research infrastructure and its needs.

PART THREE - CONCLUSION

Structural factors in the Canadian economy, notably a high level of foreign ownership and a reliance on resource extraction, mean that a large proportion of the research conducted in Canada is performed in the public sector. Because of this, and the direct relationship between a research intensive society and a modern, productive economy, the Government of Canada must generously fund Canada's research capabilities. The Canadian Consortium for Research recommends that the Government:

- **One - Increase Funding for the Core Operating Costs of Post-secondary Education Institutions through the Creation of a Dedicated Federal/Provincial Transfer.** To be successful the transfer must:
 - be governed by nationally established principles ensuring accessibility, quality and academic integrity;
 - contain binding enforcement mechanisms; and
 - to avoid perennial federal provincial disputes over the transfer amount, be set at a fixed percentage of GDP (a target of 0.5% GDP would restore federal funding to that of the late 1970's).

- **Two - Increase the budgets of the federal research granting agencies.** Specifically:
 - strengthen social, human and cultural research in Canada by increasing the Social Sciences and Humanities Research Council's funding to \$460 million by 2008-2009;
 - increase the budget of the Canadian Institutes for Health Research to \$1 billion by 2008-2009; and
 - increase the budget of the Natural Sciences and Engineering Research Council to \$1.2 billion by 2008-2009.

- **Three - Re-invest in Government Research Infrastructure** including government departments and agencies such as the National Research Council. These institutions have a history of extraordinary achievement. They are ideally suited to provide the government with its own source of research, knowledge and advice, un beholden to special interests or private agendas.