

## Association canadienne pour les études supérieures

Pre-Budget Submission to the House of Commons Standing Committee on Finance Regarding the 2012 Federal Budget

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## **Executive Summary**

The Canadian Association for Graduate Studies (CAGS) is the national organization that promotes, advances, and fosters excellence in graduate education and university research. CAGS represents 60 Canadian universities, two graduate student organizations as well as the three federal research-granting councils.

Canada can be very proud of its world-class graduate education system. From 1999 to 2010, graduate enrolment rose by 60% and today there are more than 190,000 students pursuing full-and part-time graduate studies in Canada.

As the government moves forward with its economic plan to eliminate the deficit through judicious management of the public purse, CAGS urges the continued investment in the post secondary and the post graduate sectors to meet the present and future needs of Canadians from coast to coast. Therefore, CAGS asks that the federal government consider the following requests:

- 1. Continue to invest in the three federal research-granting councils as an investment in all Canadians and the future of an innovative Canadian economy.
- 2. Invest in the mobility of graduate students both of foreign students to Canada and Canadian students abroad.
- 3. Invest in innovative skills training for graduate students that will complement their academic expertise and make them more competitive.

## INTRODUCTION

The Canadian Association for Graduate Studies (CAGS) is the national organization that promotes, advances, and fosters excellence in graduate education and university research. CAGS was formed in 1962 and provides a venue for dialogue and cooperation for its members - 60 Canadian universities, two graduate student organizations representing over 190,000 graduate students, as well as the three federal research-granting councils.

Canada can be proud of its world-class graduate education system. It has enjoyed considerable growth in enrolment in graduate studies, both Master's and PhD's over recent years. From 1999 to 2010, graduate enrolment rose by 60% and today there are more than 190,000 students pursuing full- and part-time graduate studies in Canada. Indeed, the number of Canadians with graduate degrees (Master's and PhD's combined) rose by 28% between 2004 and 2009. <sup>1</sup>

This does not mean that Canadian universities, governments and businesses in Canada can rest on their laurels. An OECD report for 2010 placed Canada 23<sup>rd</sup> in terms of PhD graduates.<sup>2</sup> Canada as a society and as an economy needs to ensure that funding for scholarships, research and infrastructure is in place not only to maintain this level of growth but also to increase it.

Graduate education in Canada is not an end in itself. Canada requires an increasing number of graduates with advanced degrees in both the "STEM" disciplines (i.e. Science, Technology, Engineering and Mathematics) and the social sciences to meet the needs of increasingly complex public and private spheres. The number of jobs for those with graduate degrees grew from 600,000 to more than 1.3 million between 1990 and 2009 and the projections are for this trend to continue.<sup>3</sup> Everything from telecommunications to health care, policy development in

the public and private sectors, the agri-food sector and energy – as well as education benefit from the investment that is made in graduate education.

CAGS points out that the OECD calculates that the return on investment in higher education is 3 to 1. This return is not only evident in increased research, development and application activities. Canadian university degree holders contribute 44 percent of the income taxes collected by governments in Canada.<sup>4</sup>

CAGS welcomes the investments made by the federal government in the 2011 budget and recognizes that they were made despite the tight fiscal situation. These were substantial contributions, fully in line with the government's previous commitments, and included:

- \$53.5 million over five years to support the creation of 10 new Canada Excellence Research Chairs;
- an additional \$37 million per year to support the three federal research granting councils; and,
- an additional \$10 million per year, for the Indirect Costs of Research Program.

Indeed all of the above specifically address requests that CAGS has made in past pre-budget submissions. CAGS also acknowledges the additional commitments to post secondary education and to research and development in Canada as well as an ongoing commitment to create linkages with other countries at the graduate and post graduate level.

As the government moves forward with its economic plan to eliminate the deficit through judicious management of the public purse, CAGS urges the continued investment in the post secondary and the post graduate sectors to meet the present and future needs of Canadians from coast to coast. Therefore, CAGS asks that the federal government consider the following requests:

1. Continue to invest in the three federal research-granting councils as an investment in Canadians and the future of an innovative Canadian economy.

The government of Canada plays a critical role in supporting university research and graduate education through its three research-granting councils: the Canadian Institutes of Health Research, (CIHR); the Natural Sciences and Engineering Research Council of Canada, (NSERC); and the Social Sciences and Humanities Research Council of Canada (SSHRC). Recent substantial investments by the Government of Canada in prestigious scholarships and fellowships for graduate and postdoctoral researchers, including the Banting Postdoctoral Fellowship, has assisted our members to identify and support individual excellence and has helped us to compete for promising talent, whether Canadian or from abroad.

CAGS does stress that while strategic targeting may be necessary to address pressing problems, over targeting of research reduces our capacity to produce the basic research upon which future innovation is built and constrains our ability to respond quickly to unforeseen or newly emerging research questions. Participation in basic research will contribute to educating and training thousands of graduate students who will choose to enter the workforce not only in academic research but as highly skilled workers in a very diverse range of industries. We do point out that the failure to make this investment in research may cause many Canadian and international students to elect to study abroad.

CAGS recommends that while some targeting of research may be necessary, investment in basic research remains a key investment in the "seed corn" for future innovations.

## 2. Invest in the mobility of graduate students – both of foreign students to Canada and Canadian students abroad.

Advanced education is an increasingly global market. Students are more mobile and more willing to look beyond their national boundaries. In 2007, 2.8 million students were enrolled in higher education institutions outside their country, which represents a 53% increase since 1999<sup>5</sup>. Indeed, higher education institutions are among the most globally connected institutions in the world. The proportion of international graduate students in Canada has steadily increased in the past decade going from 11.1% of graduate students in 1996 to 15.0% in 2008. <sup>6</sup>Canada presently has over 300,000 foreign students. Approximately 90,000 are enrolled in universities and 25,000 are enrolled in graduate programs. <sup>7</sup>

These international students choose Canada because the level of graduate education is perceived to be very high as is the level of personal safety and security that they can expect. They make an important contribution to Canadian higher education, research and society; they bring diversity to our universities and to our country. They are a prime source of immigrants: they are well-educated, familiar with the language and culture, and are already recognized as a valuable resource by the private sector. Those who return to their home countries become leaders there and maintain excellent connections with Canada.

The competition for top graduate students worldwide is very stiff, as other advanced and emerging countries are developing and marketing their own graduate education systems. Canada needs to do more to attract the very best graduates from around the world. The universities' reputation, the availability of scholarships and affordable fees are the main factors attracting mobile international students to a country. CAGS welcomes the federal government's help in marketing Canadian universities abroad and the creation of the Vanier Scholarships which support some of the best research students to study in Canada.

The recent work to ensure that Libyan students are able to remain in Canada and continue their studies is an excellent example of the commitment that Canada does have to foreign students and the success that working in tandem does create.

Relatively few Canadian students, in comparison with U.S. and European students, choose to pursue graduate studies abroad. They must be encouraged and supported to pursue studies in other countries for their own development, to enhance the international reputation of our universities and to create the same linkages with other countries as Canada hopes to foster in the foreign students it attracts here.

CAGS requests that the Government of Canada intensify its work with Canadian institutions of higher education and their organizations, to strengthen and promote Canadian education on the international stage and examine ways of opening up more graduate scholarships to international students.

CAGS urges the Research Councils to expand their ability to support Canadian students who wish to spend part of their time studying and doing research outside Canada.

3. Invest in innovative skills training for graduate students that will complement their academic expertise and make them more competitive.

The Government of Canada has articulated the need to strengthen Canada's human infrastructure advantage so that our country can attract and retain the highly skilled people needed to thrive in a knowledge-based economy. Increasingly, funding agencies, universities, employers of highly qualified people, researchers, and graduates themselves recognize the

importance of professional skills that complement their disciplinary expertise. At the same time, an increasing number of doctoral students are pursuing careers outside academe: in fact, most of the graduates from our advanced programs are not employed in the academic sector, but work in research-intensive industries such as engineering, food science, energy, petroleum, IT, pharmaceuticals, manufacturing, and aerospace. Their ability to pursue the increasingly diverse range of career paths before them would be greatly enhanced through greater attention to professional/transferable skills.

The knowledge economy demands a high level of professional skills from all of its participants. The 2011 budget commitments are a clear recognition of the importance of this type of training: improving commercialization and supporting demonstration of new technologies in the marketplace by supporting research links between colleges, universities and businesses.

SSHRC is presently engaged in a study that will provide information about the skills needed by post graduates to successfully compete for and be successful in their careers. The CREATE program launched by NSERC and the very successful MITACS activities are excellent examples of the kind of training programs that will help outfit our students with the competencies that will enable them to thrive in an increasingly complex knowledge economy.

CAGS strongly endorses continued investments in the funding councils so that they may promote and support further professional and transferable skills in innovative programs that will provide wider skills training for graduate students in preparation for what employers need or may need in the future.

We thank the House of Commons Standing Committee on Finance for its attention to these issues which impact the future success of Canada.

<sup>&</sup>lt;sup>1</sup> AUCC Value of a Degree in Canada's Labour Market, http://www.aucc.ca/publications/auccpubs/value-of-a-degree/in-canadas-labour-market\_e.html

<sup>&</sup>lt;sup>2</sup> OECD, 2010 OECD/UIS/Eurostat data collection on careers of doctorate holders.

<sup>&</sup>lt;sup>3</sup> AUCC Value of a Degree in Canada's Labour Market, http://www.aucc.ca/publications/auccpubs/value-of-a-degree/in-canadas-labour-market e.html

<sup>&</sup>lt;sup>4</sup> Joseph Berger, Anne Motte and Andrew Parkin, The Price of Knowledge: Access and Student Finance in Canada – Third Edition, 2007, The Canada Millennium Scholarship Foundation

<sup>&</sup>lt;sup>5</sup> UNESCO, Institute for Statistics, Global Education Digest, 2009, Montreal, 2010.

<sup>&</sup>lt;sup>6</sup> Canadian Association for Graduate Studies, 39<sup>e</sup> Statistical Report, 1995-2006, Ottawa, CAGS, 2010.

<sup>&</sup>lt;sup>7</sup> AUCC The Value of a Degree in a Global Marketplace http://www.aucc.ca/publications/auccpubs/value-of-a-degree/in-a-global-marketplace\_e.html

<sup>&</sup>lt;sup>8</sup> Edu-Canada Student Pulse 2011 Results, Presentation at the National Education Marketing Roundtable, June 16, 2011