



**From Invention to Innovation:
Building a globally relevant and competitive knowledge society**

**Submission to the House of Commons
Standing Committee on Finance
By Noreen Golfman, President
Canadian Federation for the Humanities and Social Sciences**

August 2010

August 12, 2010

Standing Committee on Finance
House of Commons of Canada
Ottawa, Ontario
K1A 0A6

To the Members of the Committee,

Attached please find the pre-budget submission from the Canadian Federation for the Humanities and Social Sciences, for consideration in the development of the 2011 federal budget. Representing more than 50,000 researchers in 72 scholarly associations, 75 universities and colleges, and 6 affiliates, the Canadian Federation for the Humanities and Social Sciences is the national voice for the university research and learning community in these disciplines.

We look forward to discussing our recommendations with you in greater detail at the committee hearings in September. I welcome you to contact Pierre Normand, Director of Communications, at 613.238.6112 ext. 351 or pnormand@fedcan.ca to discuss this further.

Sincerely,

A handwritten signature in black ink that reads "Noreen Golfman". The signature is written in a cursive style with a large, stylized initial "N".

Noreen Golfman
President

Executive summary

“Knowing is not enough; we must apply. Willing is not enough; we must do.”
(Goethe)

This year, Canada played host to the world, from the Olympics to the G8 and G20, while continuing to emerge from recession. Yet despite achieving these milestones, the foundations of our future prosperity must be reinforced to better address the challenges and opportunities facing our nation.

These foundations for innovation must include continued investments in research and teaching — despite fiscal constraints and pressures for the coming years. To achieve the necessary synergy and productivity, greater attention must be paid to the *human* and *organizational* dimensions of the issues facing Canadians. As we continue to strive for excellence as a nation, our investments must recognize the contributions of the social and human sciences to economic renewal.

Building on the new program architecture at the Social Sciences and Humanities Research Council (SSHRC) and inspired by some of the elements of the Canada Excellence Research Chairs and programs at the Natural Sciences and Engineering Research Council (NSERC) and the Canadian Institutes of Health Research (CIHR), the Canadian Federation for the Humanities and Social Sciences encourages the Government to make new investments in social sciences and humanities research to support the country’s overall innovation capacity. The features of this new investment should include:

- Well-defined ambitious and large themes linked to pressing socio-economic issues, with direct relevance in Canada and within the international community;
- Cross-sectoral, interdisciplinary, cross-jurisdictional work as required by the issues;
- Promoting knowledge mobilization and links with users in the public, private, and voluntary sectors;
- Strengthening the ability of not-for-profits to partner with academia to address socio-economic issues, notably by creating a level playing field for the voluntary sector to access start-up and entrepreneurial funds that are at present available only to business;
- Support for skills development and mobility nationally and internationally;
- Developing clusters of global expertise at Canadian universities; and
- Training of next-generation research talent by providing opportunities to work with best researchers and users in public, private and voluntary sectors.

“Leading business educators have long understood that a developed capacity to imagine is a keystone of a healthy business culture. Innovation requires minds that are flexible, open, and creative; literature and the arts cultivate these capacities. When they are lacking, a business culture quickly loses steam.”

(Martha Nussbaum, University of Chicago)

“Our public innovation strategies need to become more sophisticated and balanced. We need to recognize that supporting science for new inventions is not enough; we need to create an environment where business people draw on new science and many other disciplines to innovate, creating new products, services, and processes.”

(Institute for Competitiveness and Prosperity – Report on Canada 2010)

From Invention to Innovation: Building a globally relevant and competitive knowledge society

Thanks to significant discoveries and advances in technology, people and nations today are connected in ways that few had imagined just a generation ago. Canadians not only live in an increasingly connected global community, they are also much healthier, benefiting from a quality of life that is among the highest in the world. Canadians have much to be proud of, as many of the discoveries and inventions that are transforming our lives were generated at universities across the country.

But Canadians are also facing issues related to an aging population, lagging productivity, environmental sustainability, social harmony, justice, global competitiveness, and security. These cannot be solved by technology alone or singlehandedly by any organization, government or even field of research. These issues cut across sectors and jurisdictions, and finding solutions to them requires the full mobilization of our talent and expertise. It also requires a culture of innovation that values equally discovery, invention, the creation of new knowledge, and its applications to social enterprise, new business models, improved services, and better policies.

The global financial crisis that shook economies around the world continues to be a concern, despite massive government interventions. While Canada has weathered the economic downturn better than most nations, many Canadians are still apprehensive about the economic recovery and future prosperity. They also sense the opportunities of the digital age, and the extent to which new technologies, content and skills are needed to seize them.

Digital humanities: Driver in the information age

In the digital economy, the contributions of researchers in anthropology, education, ethics, history, linguistics, literary studies, media studies, philosophy, political theory, psychology and religious studies have the potential to enrich all sorts of projects bridging business, education, government, not-for-profit, and cultural organizations. A capacity for conceptual thinking, critical analysis and reflection make these researchers particularly useful, as they provide essential social, cultural and ethical anchors for society and play an integrating role in multidisciplinary projects.

*European Commission
Research Connection Conference,
Prague 2009*

MOVING FORWARD: Social Sciences and Humanities key to creativity, imagination and innovation

More than ever, knowledge and understanding of ideas and behaviour are at the heart of the economic, social, cultural and political challenges and opportunities of our age. Today's world is made up of increasingly complex and interconnected relationships that are paramount to social, cultural and economic prosperity and resilience. The increasing demand for this knowledge, combined with changes across the research landscape, presents great opportunities for social sciences and humanities researchers and their partners.

Business leaders, including Roger Martin (Dean, Rotman School of Management) and the Institute for Competiveness and Prosperity in the *Report on Canada: Beyond the Recovery* and Tom Jenkins (Executive Chairman and Chief Strategy Officer, Open Text Corporation) at the Canada 3.0 Conference, are calling for new, inclusive strategies for advancing knowledge that reflect a human dimension, especially in areas once considered exclusively scientific, medical or technological. An increasing number of partnerships are enabling the creation and sharing of research knowledge, and connections are being made across the public, private and not-for-profit sectors. There are fine examples of such research taking place around the country on topic such as aging, immigration, digital media, and Aboriginal peoples to name just a few.

Talented, skilled, creative people are at the heart of successful societies, as economist Richard Florida and others have stated. Demand is growing across the private, public and not-for-profit sectors for highly qualified personnel who are creative, analytical and articulate, as well as sophisticated in their understanding of individuals, business, communities and societies.

These important contributions by our community will be enhanced by the new program architecture at SSHRC, which is creating a simpler, more effective and flexible system for supporting research and talent development. The new Talent, Insight and Connection programs aim to meet society's current demands for increased knowledge and understanding, and to support world-class research undertaken by individual researchers, teams and cross-sector partnerships that connect the campus with larger society.

The Federation firmly believes that such approaches from all three granting councils are well-suited for creating essential new knowledge, and deserve continued and full support. With the creation of the College and Community Innovation Program, the Canada Graduate Scholarships, the Vanier Canada Graduate Scholarships, the Canada Research Chairs, the Banting Postdoctoral Fellowships and the

In Action: Linking research and communities

Mapping quality of life of Canada's small cities

This BC-based Community-University Research Alliance is exploring the changing economic, social and environmental aspects of Canada's small municipalities. 5 universities and 37 community research partners, including city councils, Aboriginal bands, museums and local NGOs, are jointly mapping the futures of these cities bound by rural traditions.

Making roads safer around the world

A video game, based on SSHRC-funded research, is educating people around the world on the dangers of drunk driving. In 2009, the US army acquired the game for its members. Police departments, schools and not-for-profit groups in Canada, the US, New Zealand and Sweden are also using the game.

Accessibility at the 2010 Olympic Games

The City of Vancouver used an accessibility tool created through SSHRC-funded research on disabilities and technology to ensure information, retail and public services at the 2010 Olympic Games were accessible to all.

Better services for seniors

The book *By Himself: The Older Man's Experience of Widowhood* is being used by social workers and caregivers to better understand the needs of seniors who have lost their wives. Based on SSHRC-funded research, the book is changing the way services are developed and delivered to older men.

Canada Excellence Research Chairs, Canadian universities are developing, attracting and retaining world-class research talent.

Still missing to achieve results is a more inclusive and nimble approach to innovation and knowledge dissemination. Investing in the development, attraction and retention of the best research talent and providing them with opportunities to collaborate with the community is in line with the federal government's goals to create talent, knowledge and entrepreneurial advantages for Canada to compete in the knowledge economy. The pursuit of excellence is also compatible with a strong commitment to diversity in attracting leading-edge researchers who reflect our nation's changing demographics.

Developing capacity for long term collaboration and creating mentoring opportunities in the public, private and voluntary sectors would significantly enhance the capacity of the social sciences and humanities research community to mobilize knowledge to the benefit of Canadians. Existing opportunities such as the Networks of Centres of Excellence (NCE) Industrial Research and Development Internships have proven how successful relationships between not-for-profits, business and academia can lead to innovative and creative results. Strengthening the ability of not-for-profits to partner with academia could expand these opportunities, notably by creating a level playing field for the voluntary sector to access funds available only to business, such as the Business-Led NCEs.

Creating new Canada Excellence Research Chairs in areas of critical socio-economic importance (see appendix for proposed list) would support the development of clusters of global expertise at Canadian universities, which are well connected with domestic and international partners.

The Canadian Federation for the Humanities and Social Sciences is recommending enhanced focus on the development and mentoring of the next generation of social science and humanities talent through new programs aimed at supporting the highest levels of excellence in collaborative settings involving business, government, not-for-profits and the voluntary sector.

From Invention to Innovation

Other nations in the world are also recognizing the critical contribution of social sciences and humanities research to address the principal challenges faced by societies today.

With its focus on solving problems and informing policy, the EU's Socio-economic Sciences and Humanities Research Programme tackles issues that are or will be crucial for societies and economies in the mid or longer term. Social sciences and humanities research is expected to make a relevant contribution to European development by identifying answers to some of its main challenges: enhancing competitiveness with social cohesion, fostering sustainable development and quality of life, exploring a European identity alongside national identities, enhancing Europe's role in international governance, and reforming political institutions at European and national levels.

The Federation identifies a number of elements that should be considered for future investments in Canada's overall innovation capacity:

- Well-defined ambitious and large themes linked to pressing socio-economic issues, with direct relevance in Canada and within the international community;
- Cross-sectoral, interdisciplinary, cross-jurisdictional work as required by the issues;
- Promoting knowledge mobilization and links with users in the public, private, and voluntary sectors;
- Strengthening the ability of not-for-profits to partner with academia notably by creating a level playing field for the voluntary sector to access start-up and entrepreneurial funds currently available only to business;
- Support for skills development and mobility nationally and internationally;
- Development of clusters of global expertise at Canadian universities; and
- Training of next-generation research talent by providing opportunities to work with best researchers and users in public, private and voluntary sectors.

Appendix: Mobilizing Research to the Benefit of Canadians

Research knowledge flows in multiple directions—across disciplines, sectors and national borders—as well as among specialists and the general public. Success in the knowledge-based society and economy requires increased access to and use of research skills, expertise and results in order to enhance quality of life and prosperity for Canadians.

With a goal to enhance the national capacity to put knowledge to work, the Federation supports new investments in programs that promote cross-sectoral, interdisciplinary and cross-jurisdictional collaboration on issues connecting the local with the global. Possible themes include:

- *Building the economy of tomorrow today*
 - Digital society and economy, digital literacy and innovation
 - Infrastructure and governance for mega-cities
 - Green energy and sustainable economies
 - Climate change, adaptation strategies
 - Prosperity and self-governance in the North
- *Creating a just, civil and prosperous society*
 - Immigration and labor, diaspora and development, racial and religious tolerance, civic engagement, and new identities
 - Diversity, equality, justice
 - Youth engagement, learning and skills, labour market
 - Aboriginal education, health, engagement
 - Aging populations, elderly care, dignified end of life, economic security, intergenerational relations
 - Community and family well-being
 - Changing realities of rural communities
- *Canada in the world*
 - Terrorism, cybercrime and public security
 - Strengthening humanitarian assistance in a connected and more vulnerable world
 - Food security
 - Global financial system and banking
 - Re-energizing the Millennium Development Goals—getting the bottom billion out of poverty
 - Human rights and democracy, gender equality, child protection
 - Social inclusion
 - International governance in a globalized world