

Expert Panel Report on R&D proposes fundamental changes to Canada's Innovation System

In October 2010 the Federal government charged Open Text President Tom Jenkins, U of T president David Naylor and a distinguished panel of business and academic experts with undertaking a comprehensive review of state of federal funding of research and development (R&D) in Canada. The panel's mandate was a comprehensive review of federal programs that support business innovation, examining 60 of the over 100 programs¹ accounting for \$4.96 billion of the \$6.44 billion total in federal R&D spending 2010-2011. In their report, submitted to the Minister of State for Science and Technology on October 17th, while expressing strong support for the funding of basic curiosity-driven research, the panel proposes a number of fundamental changes to the way that the government supports business-facing research and development. If adopted, the measures proposed will present new expanded areas of opportunity to York researchers to obtain funding for their research and for the mobilization of their findings into the external community. It could also pose some new challenges. Indeed, the recommendations have the potential over time to fundamentally change the way the federal government supports research and works to direct research into innovation.

The recommendation to develop a new granting council, the Industrial Research Innovation Council (IRIC) offers the potential for the greatest impact on York researchers, if adopted. This new "business-facing" council would provide a receptacle under which a large number of funding programs presently dispersed through the federal system would be consolidated and rationalized. Including funding transferred from NRC programming and savings obtained through the streamlining of the SR&ED tax credit program, this new council could consolidate oversight and delivery of up to \$5B in federal R&D funding under one roof. Its mandate would be to provide business oriented innovation programs, including talent development programs aimed at producing graduates that are more accessible to businesses and are better prepared for introduction into the business world in industries important to the Canadian economy.

Part of the motivation for this recommendation is that the panel found that there is a strong endorsement by the Canadian business community for wider participation in programs that blend science and/or technology skills with management training. Additional motivation is the perceived need for more efficient and targeted collaboration between post-secondary institutions and businesses.

IRIC is also envisioned as an umbrella council that would partner with the tri-council agencies and their programs to oversee business-facing programs that are administered by those agencies, with a role including evaluation and possible consolidation of funding programs. This could lead to some changes in the way tri-council programs are delivered and administered, particularly the business-oriented programming of NSERC and the CIHR. At the same time the report does emphasize the importance of fundamental research in all its forms, and urges the government to commit to investing basic research at internationally competitive levels and to review and modernize their approach to supporting the total institutional costs of research.

¹ Federal programming considered ranged from the National Research Council (NRC) to tricouncil to the Industrial Research Assistance Program (IRAP) to the Scientific Research and Experimental Development (SR&ED) tax credit program

There are many potential opportunities for York researchers and our training programs should these changes be adopted. New opportunities for innovative training programs, new funding avenues for developing research programs, easier access to business and the community for the transfer of ideas to productive societal benefits, easier and more complete access that will facilitate understanding of the questions and problems for which innovative solutions are needed in translating research into action.

However, there are several associated challenges. York researchers and the York research community will need to be aware of and work to anticipate change in the research funding system so as to be able to maximally benefit from opportunities. As federal priorities often influence provincial and nongovernmental agency priorities, we can expect spill over from federal reform that will impact more broadly on the availability of research funding opportunities. Further, there is an important role for this institution and our research community in ensuring that government and the IRIC are fully cognizant and appreciative that social innovation provides benefits to Canadian Society and indeed to the Canadian Economy that are at least equal in importance to Canada's future as technological and scientific innovation.

A second major recommendation of the panel is to fundamentally change the model under which the National Research Council operates. Business oriented units or units that can develop a business focus are proposed to be consolidated into an industry-oriented not for profit organization under the IRIC umbrella with a mandate to undertake collaborative R&D projects and services. Funding for this NRC remnant would be overseen by IRIC and derived from revenue earned from its collaborative activities with business and base funding derived from the current NRC budget. Such a transition might also be expected to provide new partnership opportunities for business oriented University researchers.

A second group of NRC units, those fundamentally oriented towards basic research would enter into formal affiliations with universities and provincial partners, with the transition assisted through a portion of NRC funding currently supporting these activities and new partnership agreements. The extent to which this path towards university integration for these units provides an opportunity for York would remain to be seen. However, the motivation for collaborative integration would be very strong as units of NRC unable or unwilling to affiliate or orient towards business could simply be wound down.

A final portion of NRC activity would be transitioned to the creation of an Institute providing services in support of a public policy mandate that would be incorporated into relevant federal departments and agencies. How this will impact the means through which the government seeks public policy advice – and impact of such a change on the access and influence of University public policy researchers with the federal government would remain to be seen. However, it would be a development that would bear careful attention in the University Community as it develops as it could equally well present expanded opportunities for University researcher engagement.

Three other major recommendations have less obvious potential for broad immediate impact on York researchers, but may specifically advantage researchers with programs currently oriented towards realizing the commercial value or savings potential of their research products. In particular the report urges that Federal procurement include "innovation quotas" that mandate spending on the new and

innovative products. This government “pull” is meant to complement and enhance the market “pull” for innovation. It offers the potential for increased engagement of researchers with commercial partners focused on meeting government procurement needs. For, researchers interested in direct commercialization the report urges an expanded mandate for the Business Development Bank of Canada to support start up stage financing and later stage venture capital funding. It also argues for the simplification of the SR&ED program to allow for great participation in the program by SMEs.

The final major recommendation of the panel is to establish a clear federal voice for innovation by assigning responsibility and accountability for business innovation to a single designated Minister of Innovation. This Minister would be responsible for building a national consensus and innovation partnerships with the provinces and territories. They would also be responsible for developing outcome-oriented performance objectives in the area of business related innovation across all federal departments and programs. Importantly IRIC, tri-council and potentially other granting programs, such as CFI, would fall under this Ministry. This structure further highlights the importance of York and York researchers to educate and inform government on the essential role for social and humanities-oriented research and the mobilization of the knowledge generated by this research into our communities as well as our businesses.

To advise the Innovation Minister, the report proposes the transformation of the governments present internal Science, Technology and Innovation Council (STIC) into an external Innovation Advisory Committee. This new group would advise the Minister through a “demand-pull” focused Business Innovation Committee and a “supply-push” focused Science and Research Committee. Notably absent in this early iteration is a mechanism to advise on the importance of the social science and humanities in the innovation agenda.

All of the Report’s recommendations are being proposed as revenue/expense neutral for the government, meaning they propose no new funding for the federal research and development system. While seeming modest in objective, it is nonetheless bold in a context where government has mandated an overall 5% decrease in federal spending.

We now wait to learn the extent to which the government will respond this Report, which is not expected to occur until spring 2012. However, regardless of the degree to which this report is adopted, it is important to recognize the momentum building in Ottawa for change in the research and development landscape and the fundamental commitment to developing the Country’s innovation agendas. Virtually every government agency and program is engaged in strategic planning exercises of one form or another, virtual all with at least one eye on the innovation agenda. This includes funding agencies like the Canada Foundation for Innovation and Genome Canada. The tri-councils are also well immersed in this discussion as most notably evidenced by the recent shifts in NSERC and SSHRC programming. We do indeed live in exciting times and it is up to us all to make it a time of opportunity.