



Response to the Report of the CIHR International Review Panel, 2005-2010

The Canadian Institutes of Health Research (CIHR) is mandated to have an arms-length expert review of its structure and progress on an ongoing five-year cycle. The recently-released 2005-10 report from the International Review Panel (IRP) constitutes a particularly important and insightful assessment because it reveals whether initial momentum was sustained in this five-year period, and the extent to which the agency has been responsive to the changing Canadian health landscape.

The Panel which was chosen for this task was of the highest caliber, both scientifically and in its demonstrated knowledge of how to translate discovery research into social and economic benefit. The talent and competence culled for this exercise was epitomized most notably by the Chair of the Panel, Dr Elias Zerhouni, who is now President of Global R&D at Sanofi-Aventis and the past president of the National Institutes of Health, the world's largest health research agency.

CIHR Fulfilling its Mission

Research Canada endorses wholeheartedly the view of the IRP that no other organization for health research in the world has as broad a mandate as the CIHR, and yet it is "fulfilling its mission to a surprisingly high degree". CIHR is an R&D vehicle that is working, but to be optimally effective it requires regular tuning and attention from Government.

In March 2011, the Royal Society of Britain published global citation figures for scientific journals from 2004-2008. While the US and UK continue to generate the most cited papers (30% and 8% percentage share respectively), both had declined relative to the previous period as a result of the rising scientific potency of China and other emerging nations. Canada, on the other hand, held sixth place and at 4.4%, had grown its market share, almost equaling the performance of more populous nations such as France. The fact that Canadian science is so competitive in excellence makes the continued development and effectiveness of CIHR, Canada's largest research funding agency, a national priority.

The Scope of the Review

The IRP recommendations broadly fall into two categories:

- **Internal Environment:** Where CIHR can better serve its mandate through internal change and;

- External Policy and Bureaucratic Environment: Within which CIHR must operate to achieve its goals.

The most tangible and targeted advice from the IRP is in regard to the latter category.

The Federal Research Funding System

The Canadian federal research funding system was perceived to be disjointed and uncoordinated, with multiple agencies covering similar programmatic ground yet under different Ministerial jurisdiction. At the same time, other important areas of need, such as a career salary structure to retain our best scientists, represented serious gaps.

Some agencies and funds were cited as having overlapping mandates with the CIHR because they, like the CIHR, were providing direct support for health research. And, while the Canada Foundation for Innovation (CFI) was applauded in its mandate of renewing Canada's research infrastructure, it was noted that this function was poorly coordinated with the direct funding of research experimental costs administered through CIHR. It was also noted that both CFI funds and the indirect costs of research are administered through a different department resulting in further lack of coordination. Also, concern was expressed around the lack of planning for sustaining equipment initially funded by CFI, when our most successful research centres are penalized with the lowest percentage returns from the Indirect Costs Program.

Finally, while the Canada Research Chairs program has had a major part to play in retaining the country's best talent, the provision of salary support is not coordinated with either the need for infrastructure or operating funds and by itself is an insufficient career structure to satisfy the needs of a knowledge economy.

Research Canada fully agrees fully with the IRP that government-funded research dollars should be targeted only to excellent investigators coupled with ideas that have a high chance of benefiting quality of life, the effectiveness of our health system, or generating economic benefit. Research Canada agrees with the panel that the disjointed and uncoordinated evolution and proliferation of federal health research funding programs, and the lack of coordination with provincial programs and local university and research institute support, is wasteful in terms of duplication of administrative costs, considerably slows the possible rate of scientific progress and is sapping to the morale of our scientific community.

Canadian health researchers are spending far too long preparing very similar proposals to overlapping agencies at the expense of actually generating research outcomes. Research Canada agrees with the IRP that the Government of Canada creates, with partners:

- a system for health research funding whereby the upgrade of necessary infrastructure is coordinated with the provision of direct research support;

- that the provision of indirect costs of research is directly linked to the direct support; and
- that our best researchers with proven track records have a secure career structure subject to the continuation of excellence.

The Industry and Academic Partnership

The IRP also commented on the lack of a consistent intellectual property framework in Canada, and the absence of a symbiotic relationship among industry, CIHR and academia in general. Research Canada endorses the recommendation of the IRP that CIHR should create mechanisms for scientists to seamlessly move between industry and academic environments, resulting in a broadening of career paths, an IP framework that encourages such synergies and fosters an environment where international industry recognizes Canadian health science as the first point of contact for problem solving and innovation.

In this regard, Research Canada considers the creation and funding of the Centres of Excellence for the Commercialization of Research by the Federal Government to be an excellent vehicle for building industry and academic partnerships, but suggests that the creation of such centres in the health sciences field be closely linked to CIHR's strategic goals and complimentary funding mechanisms.

The Internal Environment

The second category of recommendations by the IRP related to internal CIHR structures and strategies. Research Canada strongly endorses the recommendation that funding for randomized controlled trials be increased to a level that facilitates the undertaking of definitive studies. This is a key element of the 'Strategy for Patient-Oriented Research'. The major part of Canada's excellent international performance in health research; however, stems from fundamental discovery, and this should not be put at risk while also building a serious presence in international, definitive clinical trials.

Research Canada also endorses the recommendation that CIHR work with others to fund Canadian Centres of Excellence of Clinical and Translational Research where a critical mass of scientists with job security, coupled with effective research infrastructure, can rapidly test new innovations generated through academia and industry in a first-in-human environment, as well as developing global leadership in potentially disruptive clinical trials.

Joint Strategies across the Research Continuum

The IRP drew attention to the fact that health sciences increasingly depend on other knowledge areas to facilitate advances, including applied physics, computer science, engineering and environmental science. Research Canada agrees with the IRP that one mechanism to foster the rapid transfer of knowledge across disciplines is the expansion of joint strategies and funding programs among the granting councils. The convergence of ideas across the research continuum is the bold future of science. The policy that has

been put in place to not fund research with any direct overlap to health outside of designated joint programs has seriously impacted the ability of young scientists in the health field to quickly establish independent laboratories.

Canadian Standardized Metrics

Finally, Research Canada agrees with the IRP recommendation that CIHR establish a robust set of metrics to demonstrate the effectiveness of its investments and the return to society and the economy. Moreover, we suggest that this set of metrics should be a Canadian standard that can be applied across the health sector by all research agencies, federal, provincial or private, and by our universities and research institutes.

Canadian health science has a proud history, is a vibrant internationally respected enterprise, and it has an exciting future. A key determinant of that future is an effectively constituted and funded CIHR that works seamlessly with partners, including industry, to allow health researchers to concentrate on what they do best—high momentum research!

It is the view of Research Canada, through its members, that the IRP recommendations represent a detailed blueprint for the next phase of development for health science, and that they be rapidly adopted into the strategic plans of CIHR and by the Government of Canada specifically within its Science and Technology Strategy.