## Health Research Update

# A new approach to health research in Canada: The Canadian Institutes of Health Research

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### Introduction

A transformation is under way in the federal funding and conduct of health research in Canada. On April 1, 2000, if all goes well, the Medical Research Council of Canada (MRC) will be replaced by the Canadian Institutes of Health Research (CIHR) as the main vehicle for federally-sponsored health research. This will have profound consequences for all health researchers, as well as for Canadians generally, as the new organization will place greater emphasis on research relevant to the health needs of Canadians, and on the effective translation of research findings into strategies for their improved health and health care. This transformation will also have positive implications for those interested in research into the efficacy and safety of chiropractic.

### **Origins of CIHR**

CIHR was conceived out of a sense of desperation: in 1997–8, the largest lobbying campaign ever by health researchers and others concerned about Canada's level of investment in health research was rewarded by a significant increase in the MRC budget (see Figure 1). However, this increase merely restored MRC's budget to roughly where it had been three years earlier, before the Program Review budget cuts had taken place. Meanwhile, in the USA, the budget of the equivalent organization, the National Institutes of Health (NIH) was growing by leaps and bounds, and the level of federal funding per capita for health research in the USA was some 6–8 times that in Canada. What would it take to convince the Canadian

government that a really substantial reinvestment in health research was required?

It quickly became obvious to the MRC that there was considerable scope for improvement not only in the level of health research funding, but in the way in which that funding was invested: while there were many funders of health research in Canada, including major investments by the health research charities, there was very little coordination or integration of research efforts. Some important areas of health research, particularly those dealing with the social sciences, were neglected in the current system. In addition, there was little attention being paid to matching the research efforts underway with the current and future health needs of Canadians.

Out of this thinking, the seeds of CIHR arose: MRC presented the idea to Allan Rock, Minister of Health, who found it intriguing, and asked MRC to develop the concept further through a broad coalition of stakeholders. This CIHR task force worked hard through the fall of 1998 to define the concept, and present it to government, and in the February 1999 budget, the intention to establish CIHR was announced as the successor to MRC, along with transition funding to begin implementing the principles of CIHR (see box). Very substantial increases in funding would be available to CIHR if it lived up to its promise to improve the conduct of health research in Canada: in fact, over the next three years, the budget would increase by 84% to approximately \$500M per year (see Figure 1). Immediately following the budget announcement, Minister Rock appointed an Interim Governing Council (IGC) to oversee

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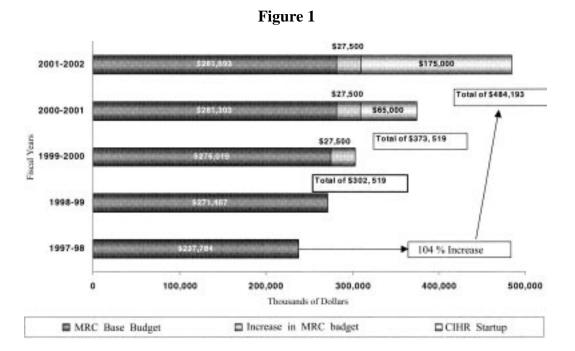
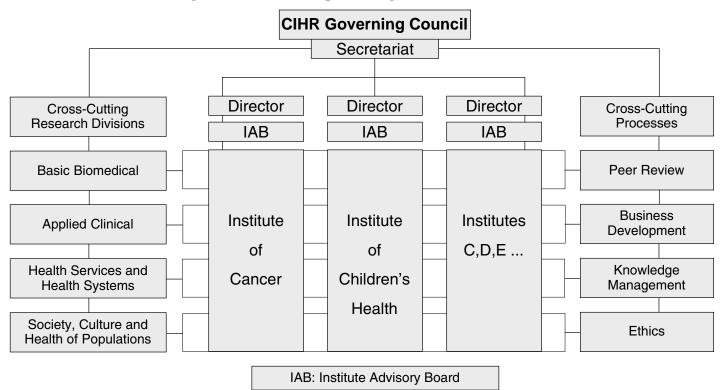


Figure 2 CIHR: Proposed Organizational Structure



the establishment of CIHR. The first task of the IGC has been to advise the government on the legislation establishing CIHR, because without that enabling legislation, funds cannot flow to the new agency. The IGC is now turning its attention to the structure and governance of CIHR, its research programs, peer review processes, and other important operational considerations, in preparation for the planned April 1, 2000 start date.

### The operation of CIHR

Many details of CIHR remain to be worked out. The IGC is at this time (late August 1999) still deliberating. However, MRC has developed a "working model" of CIHR, available on the web at http://www.mrc.gc.ca/cihr-icrs/ cihr.html. This model was put forward by MRC as advice to the IGC, and was discussed extensively by the health research community during a remarkable national consultation process which took place in May and June, during which hundreds of individual comments were received, and over 3000 researchers took part in local consultation sessions. This culminated in a "scientific summit" in Toronto in early June, where over 200 leaders of the health research community endorsed the MRC's model. In this model, the general organization of CIHR involves a governing Council (see Figure 2) with overall responsibility for CIHR, and a series of Institutes, each with its own scientific director, and an Institute advisory board (IAB), which will consist of researchers and others committed to the work of the Institute, such as representatives of relevant health research charities. The research portfolio of each Institute will include activity in each of the four crosscutting "themes" or "divisions" of health research: biomedical, clinical, health systems and services, and population health. Functions such as peer review of applications, knowledge management and ethics will be managed centrally by the CIHR Council, and will also cut across all Institutes. It is important to realize that the Institutes are "virtual": they are not bricks and mortar structures, but colleges of the researchers across Canada who are funded by CIHR to work in the area of health research which is the responsibility of each Institute. The names and mandates of the Institutes are still under debate by the IGC, but MRC has suggested a list of 15 Institutes, including one in Arthritis and Musculoskeletal Disorders, which will obviously be of interest to chiropractic researchers.

There seems to be general acceptance that CIHR will

operate in two broad funding modes: "Insight" is the word coined to describe research projects which originate from the best insights of investigators into the advances which need to be made in their field of health research; this is also referred to as "investigator-initiated" or "curiosity-oriented research". Research projects funded in Insight mode will be assigned to the most relevant Institute. The second mode is described as "Challenge". As a result of a deliberate priority-setting process, Institutes will decide where special research thrusts should occur: this may be because there is a pressing health problem, or a future threat to the health of Canadians, which needs to be addressed. The Institute will issue a "Challenge" to the research community to come up with excellent research projects to tackle the problem, and will support them with funds allocated to the Challenge program by the CIHR Council. Challenge mode is thus "targeted" research. It is anticipated that many Challenge programs will be partnered with the health research charities, or with government agencies, or industry. A critical issue for the CIHR Council will be in setting the right balance between these two funding modes. I suspect that as CIHR develops, and the individual Institutes define their own roles and achieve a sense of culture and cohesion, the proportion of funding for Challenge mode will steadily increase, allowing CIHR to fulfill its promise of research directed to important health issues. However, there must always be a strong support for the best ideas of talented Canadian health researchers through Insight mode. In describing CIHR activities, it's important to note that CIHR will also place great emphasis on the support of research training and the salary support of outstanding researchers, at all stages of their careers.

### Possible CIHR research programs

I started this article by noting that CIHR represented a transformation in health research in Canada. Perhaps I can best give a sense of this transformation by describing two new funding programs which are under discussion for early implementation in CIHR. Interdisciplinary Health Research Teams (IHRTs) are envisioned as teams of 5 or more investigators, located in more than one institution, focussed on an important health problem through an interdisciplinary approach: the team's expertise has to cross at least two of the four "themes" or "divisions" of health research, and there will be an emphasis on the translation of research findings along the continuum between "mol-

ecule and community". The team members may include those associated with any not-for-profit Canadian institution capable of conducting research. Community Alliances in Health Research (CAHRs) will link academic researchers with local communities in participatory research on health issues of concern to the community: imagine a partnership between toxicologists, environmental scientists, epidemiologists and a local board of health in investigating and mitigating the possible health impacts of an old chemical plant on the community. Interdisciplinarity, collaboration, partnership and translation will be the features of CIHR programs, building of course on the inviolable principle of research excellence as the primary criterion for funding.

### CIHR and chiropractic research

In concluding, I must point out the possible opportunities CIHR holds for the chiropractic community. The principles of partnership, which have already led MRC and the CCA into collaboration for the training of researchers with an interest in this area, will continue and be extended in CIHR, through the Challenge mode of funding, into the support of research projects. It is highly likely that there will be an Institute devoted to neuromuscular and musculoskeletal research, which will provide a scientific "home" for scientists interested in issues related to chiropractic. CIHR may also provide support for "consortia" of scientists with common research interests, located across the country, so that they can share ideas, exchange trainees, and develop innovative proposals for research projects. The chiropractic research community is ahead of the trend here, with the active consortium of Canadian chiropractic research centres already in existence! CIHR may well provide opportunities for further growth in the scope of the Consortium.

The widespread use by Canadians of chiropractic as a component of their health care demands that it is subject to rigorous scrutiny and evaluation for efficacy and safety. This task has been neglected too long, in both conventional and complementary approaches to health care. CIHR

# The proposed guiding principles of CIHR are to:

- ☐ Establish national research priorities which are linked with Canadian health policies and complement the provincial investment in research, education, and health.
- ☐ Encompass and support the spectrum of health research from basic science to clinical research to population health recognizing the important role of investigator-initiated research.
- ☐ Ensure Canadian researchers succeed in the worldwide research community through the application of peer-review as fundamental to the evaluation of research excellence and internationally competitive levels of funding.
- ☐ Encourage individual Institutes within the network to conduct unique programs from capacity-building to third party partnerships in pursuit of the goals of improved national health and well-being.
- ☐ Collaborate with all organizations that have demonstrated a capacity to support or conduct health research. CIHR supports and recognizes the major contributions to health research by voluntary health organizations, provincial granting bodies and individual research centres.
- ☐ Recognize and support the central role that universities and associated health science centres play in education, training, and in creating interdisciplinary opportunities.

should provide the structure and level of funding to begin to address this challenge. The participation of the chiropractic research community in high-quality research projects can only enhance the stature of the discipline.