

CANADIAN INSTITUTES OF HEALTH RESEARCH

CIHR HIV/AIDS RESEARCH INITIATIVE

DRAFT STRATEGIC PLAN 2008-2013



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Executive Summary

The **mandate** of the CIHR HIV/AIDS Research Initiative is to identify priorities for and administer HIV/AIDS research support on behalf of the Canadian Institutes of Health Research (CIHR).

Within the context of CIHR's overall mandate and strategic priorities, the CIHR HIV/AIDS Research Initiative's **mission** is to:

Provide national leadership in the support and facilitation of HIV/AIDS research, research capacity building, research partnerships and knowledge translation that contributes to ending the spread of HIV and improves the lives of people living with or susceptible to HIV/AIDS.

The CIHR HIV/AIDS Research Initiative's **vision** is to:

Position Canada as a global leader in HIV/AIDS research that has national and global impact on the HIV/AIDS epidemic.

The **values** that guide the CIHR HIV/AIDS Research Initiative's decisions, strategies and actions are **excellence, innovation, collaboration, inclusiveness, transparency and accountability**.

The **strategic research priorities** of the CIHR HIV/AIDS Research Initiative 2008-2013 are:

- Health systems, services and policy
- Resilience, vulnerability and determinants of health
- Prevention technologies and interventions
- Drug development, toxicities and resistance
- Pathogenesis
- Issues of co-infection.

The **strategic goals** of the CIHR HIV/AIDS Research Initiative 2008 – 2013 are:

Outstanding research: Support world-class research in HIV/AIDS that creates important knowledge and new insights relevant to a national and global response to the HIV/AIDS epidemic.

Outstanding researchers in innovative environments: Attract, train and retain outstanding HIV/AIDS research personnel across a wide range of disciplines required to effectively address HIV/AIDS.

Transforming health research into action: Promote translation of HIV/AIDS research results into action.

Effective partnerships and public engagement: Develop partnerships that engage stakeholders and advance the CIHR HIV/AIDS Research Initiative agenda and Canada's response to the HIV/AIDS epidemic.

Organizational excellence: Maintain and enhance operational excellence.

I. Mandate, Mission, Vision and Values of the CIHR HIV/AIDS Research Initiative

The **mandate** of the CIHR HIV/AIDS Research Initiative is to identify priorities for and administer HIV/AIDS research support on behalf of the Canadian Institutes of Health Research.

Within the context of CIHR's overall mandate and strategic priorities, the CIHR HIV/AIDS Research Initiative's **mission** is to:

Provide national leadership in the support and facilitation of HIV/AIDS research, research capacity building, research partnerships and knowledge translation that contributes to ending the spread of HIV and improves the lives of people living with or susceptible to HIV/AIDS.

The CIHR HIV/AIDS Research Initiative's **vision** is to:

Position Canada as a global leader in HIV/AIDS research that has national and global impact on the HIV/AIDS epidemic.

The **values** that guide the CIHR HIV/AIDS Research Initiative's decisions, strategies and actions are:

Excellence: Support excellence in scientific research and knowledge translation.

Innovation: Encourage and facilitate the introduction of new ideas, approaches, opportunities and practices.

Collaboration: Demonstrate positive, responsible, ethical and mutually respectful behaviours in all relationships with partner organizations, researchers, trainees, stakeholder communities and people living with and vulnerable to HIV/AIDS.

Inclusiveness: Consult individuals and community representatives of populations and organizations with a stake in HIV/AIDS research.

Transparency and accountability: Ensure that decision-making processes are fair, open, and grounded in sound ethical principles, that conflicts of interest are disclosed and managed appropriately, and that straightforward accountability mechanisms and performance indicators are implemented for all activities.

II. Introduction

As the Government of Canada's agency for health research, CIHR provides leadership and direction for the *Federal Initiative to Address HIV/AIDS in Canada (Federal Initiative)* and the *Canadian HIV Vaccine Initiative (CHVI)*. A central component of CIHR's contribution to these initiatives is the identification of research priorities and development of collaborative research initiatives to reduce the burden of HIV/AIDS domestically and internationally.

Since 2000, the Institute of Infection and Immunity has had a mandate to develop and coordinate infection and immunity research and ensure that research results are translated and applied to improving the health and quality of life of Canadians. The Institute's strategic plan (2007-2012) envisions the Institute as a catalyst for the development of infection and immunity research areas that have long-term potential for significant social and economic impact. The Institute will focus investments from 2007 to 2012, in five areas, one of which is HIV/AIDS.

The Institute of Infection and Immunity acts as the CIHR lead in the area of HIV/AIDS research on behalf of all 13 CIHR Institutes, and coordinates CIHR's HIV/AIDS research support programs. The CIHR HIV/AIDS Research Initiative oversees the allocation of related research funding on behalf of the Institute.

The Institute's efforts are guided by the CIHR HIV/AIDS Research Advisory Committee (CHARAC) whose membership ensures that the Initiative is shaped by a group of individuals that collectively possess in-depth knowledge of a wide range of issues related to HIV/AIDS and which encourages communication between CIHR Institutes and stakeholders interested in HIV/AIDS research (see Appendix A: CHARAC membership).

HIV/AIDS research is eligible for funding through CIHR open competition programs. In addition, the CIHR HIV/AIDS Research Initiative has five funding streams within which HIV/AIDS research is supported. These are:

- Biomedical/Clinical Research
- Health Services/Population Health Research
- Community Based Research
- CIHR HIV/AIDS Clinical Trials Network
- Canadian HIV Vaccine Initiative.

III. Strategic Research Priorities

The CIHR HIV/AIDS Research Initiative has identified six priority research themes with which future CIHR HIV/AIDS research support programs will be aligned, 2008-2013. These research priorities promote population-specific approaches targeting key populations identified by the Federal Initiative including people living with HIV/AIDS, men who have sex with men, injection drug users, Aboriginal Peoples, prison inmates, youth at risk, women at risk and people from countries where HIV is endemic, and are also relevant to global HIV/AIDS research aligned with CIHR policies.

- Health systems, services and policy
- Resilience, vulnerability and determinants of health
- Prevention technologies and interventions
- Drug development, toxicities and resistance
- Pathogenesis
- Issues of co-infection

Each research priority theme is summarized briefly below:

Health systems, services and policy

Increasing access to and uptake of testing, care, treatment and prevention services are fundamental to Canada's ability to get ahead and stay ahead of the epidemic. Understanding the barriers to accessing services as well as the factors that promote access to care are important to ensuring sound decision-making and public policy directions in health care settings. Ensuring a strong and vibrant community of health human resources is also an important component of HIV/AIDS access and treatment.

Increased access to care and services often triggers an associated increase in health care costs. As prevention- and treatment-related research advances and new strategies and technologies are proven effective, types and standards of care change. The impact of increased access to current services and the launch of new services and products must be understood in order to anticipate and predict needed shifts in health system policies, programs and services, and in healthcare practices. Research foci may include:

- access to, uptake, quality and effectiveness of testing, prevention, care and treatment services;
- understanding barriers and facilitators to access, particularly for key populations;
- sustainability of improved access to services including economic impacts and balancing cost-effectiveness of services with access for populations that are hard to reach, incarcerated or in transition to communities;

- strategies/interventions to increase quality and uptake of and adherence to prevention, care and treatment programs;
- the impact of accessing treatment and care on the individual, family and community; and
- regulatory issues such as accelerated approval and post-approval surveillance of prevention and treatment products.

Resilience, vulnerability and determinants of health

Rates of HIV infection vary greatly in different populations in Canada and around the world. A better understanding of what makes some populations particularly vulnerable to HIV and other infectious diseases while other populations experiencing similar conditions seem to be more resilient is critical to effectively addressing the HIV/AIDS epidemic. Determinants of health (e.g., employment, housing, social inclusion/ exclusion, psychological factors) can have a major impact on the health and well-being of individuals and communities, including their vulnerability to and ability to cope with HIV infection. Additional research on the role of stigma and discrimination towards people living with HIV, and the experience of vulnerable populations will contribute to a better understanding of these issues and their impacts. Research in this area of focus may include:

- impact of structural, social, cultural and individual determinants of health on transmission and acquisition of HIV and common co-infections, and on quality of life for those infected;
- effective strategies to decrease vulnerabilities and increase resilience in specific populations;
- how different individuals and communities are affected by and deal with HIV/AIDS; and
- other factors (e.g., mental health) that result in increased susceptibility to HIV infection in specific populations.

Prevention technologies and interventions

Improved prevention strategies are required to reverse increasing infection rates that are occurring in some populations and reduce the spread of HIV. Behavioral, social and medical interventions are all important aspects of a comprehensive approach to the prevention of HIV. Biomedical and clinical research in prevention technologies such as vaccines and microbicides, as well as culturally sensitive behavioural and social intervention studies and analyses of legal and policy issues are required. Related research may include:

- development of therapeutic and preventative vaccines;

- investigations which lead to the discovery of new strategies such as microbicides or pre- and post-exposure prophylaxis;
- research on behavioral and social interventions specifically for key populations; and
- effects of legal and policy frameworks which have implications for prevention such as harm reduction strategies for injection drug users and expansion of treatment programs to prevent new infections.

Drug development, toxicities and resistance

The development of new and more effective drug therapies for combating HIV infection is required. Although current treatments are effective in extending life for those infected with HIV, there are serious complications associated with these treatments including drug toxicities and drug resistance. Treatment regimens can also be extremely challenging in terms of adherence and the assessment thereof. The identification of new, less toxic drugs and simplified treatment schedules continues to be of great importance to those infected with HIV. Research related to this focus may include:

- identification, development and testing of new drug therapies, including combination and salvage therapies;
- Understanding the mechanisms of drug resistance and toxicity;
- Role of therapeutic drug monitoring; and
- Understanding treatment needs and developing therapies appropriate for specific populations.

Pathogenesis

Fundamental to our control and treatment of HIV is an increase in knowledge of the underlying mechanisms of the virus itself and the host's response to it. This research is critical to the future development of new HIV treatment and prevention strategies. All areas of investigation contributing to a more complete understanding of HIV pathogenesis are viewed as important. Research in this area of focus may include:

- host-virus extracellular and intracellular interactions (i.e. restriction factors, cell tropism);
- virus assembly and release;
- immunology, including cellular, humoral and innate immunity, and correlates of protective immunity;

- molecular and cellular determinants involved in virus transmission and disease progression (including latency and activation);
- viral-induced end organ injury (e.g., nervous, renal, and integument systems); and
- experimental human- or animal-based model systems.

Issues of co-infection

It is very common for individuals who become HIV infected to have or remain vulnerable to other diseases. This is in part due to the situations responsible for the initial infection such as substance use, mental illness, and homelessness as well as biological factors, particularly immunosuppression. The common risk factors for HIV and other infections are addressed in the priority on *Resilience, vulnerability and determinants of health*. This co-infection priority focuses on the consequences of HIV infection for other conditions, the development of treatments specific to the needs of co-infected individuals and understanding the biological factors that make people infected with HIV vulnerable to other infectious diseases. Research supported in this area of focus may include:

- biological factors that contribute to the incidence of co-infection of HIV with other sexually transmitted infections (e.g., herpes simplex virus-2) and other infectious diseases;
- impact of co-infections such as hepatitis C virus, tuberculosis, malaria and other infectious agents on HIV and the health of people with HIV/AIDS, and the impact of HIV on co-infections;
- effective treatments for co-infected individuals and AIDS-related illnesses; and
- issues relating to infection with multiple strains of HIV.

These six priorities will be used to guide the CIHR strategic investments in HIV/AIDS research and *Federal Initiative* funding administered by CIHR. CHARAC will review funding allocated to the various topics and the need to update the priorities on an annual basis.

CIHR investments in the CHVI are aligned with the above priorities. Specific research priorities for the CHVI will be identified through additional consultation mechanisms.

III. Strategic Goals, Objectives and Actions

The CIHR HIV/AIDS Research Initiative has identified five strategic goals to be pursued to 2013. These strategic goals align with CIHR “key outcome areas.” They have been assembled with the long-term development of Canada’s HIV/AIDS research community in mind and are intended to maximize Canada’s global response to the HIV/AIDS epidemic.

In addition, strategic objectives to be achieved and key actions including activities and programs to be implemented in relation to strategic goals are identified below. Many of the objectives and activities are interdependent, and achievements in one area will facilitate progress and performance in other areas.

Outstanding research

Strategic Goal 1: Support world-class research in HIV/AIDS that creates important knowledge and new insights relevant to a national and global response to the HIV/AIDS epidemic.

Objective 1.1: Catalyze and support research that addresses the goals and strategic priorities of the CIHR HIV/AIDS Research Initiative.

- Develop strategic HIV/AIDS funding opportunities to advance excellent research in priority areas across all funding streams.
- Support HIV/AIDS research that has potential for global impact and improving the lives of people living with or susceptible to HIV/AIDS.
- Establish development programs that facilitate Canadian HIV/AIDS researchers and stakeholder group participation in national and international HIV/AIDS research funding programs aligned with Canada’s strategic priorities.

Outstanding researchers in innovative environments

Strategic Goal 2: Attract, train and retain outstanding HIV/AIDS research personnel across a wide range of disciplines required to effectively address HIV/AIDS.

Objective 2.1: Support and invest in Canadian HIV/AIDS investigators.

- Implement and administer a research trainee awards program that encourages young investigators to pursue HIV/AIDS research careers.
- Implement and administer research programs and awards that support HIV/AIDS investigators at different points in their career.

Objective 2.2: Contribute to the development of a highly skilled, multidisciplinary community of investigators, research trainees and HIV/AIDS stakeholders conducting and applying HIV/AIDS research in priority areas and settings.

- Support multidisciplinary HIV/AIDS research and research capacity building initiatives.
- Support unique capacity building initiatives within the Community Based Research Program.

Transforming health research into action

Strategic Goal 3: Promote the translation of HIV/AIDS research results into action.

Objective 3.1: Promote initiatives that facilitate the translation, communication and use of HIV/AIDS research results.

- Promote the collaborative production of knowledge by supporting research involving researchers and end users/community partners.
- Promote HIV/AIDS researcher awareness of and access to existing CIHR knowledge translation support programs.
- Encourage all HIV/AIDS researchers to explore opportunities to share research results with other researchers, with *Federal Initiative* and *CHVI* partners, and with end-users and stakeholder organizations whose mandates are to translate research to specific target audiences.

Effective partnerships and public engagement

Strategic Goal 4: Develop partnerships that engage stakeholders and advance the CIHR HIV/AIDS Research Initiative agenda and Canada's response to the HIV/AIDS epidemic.

Objective 4.1: Maintain and enhance relationships with national HIV/AIDS research partners, *Federal Initiative* partners, *CHVI* partners, HIV/AIDS advisory bodies, and community based stakeholder groups.

- Engage HIV/AIDS research partners (such as the Canadian Association for HIV Research), *Federal Initiative* partners, *CHVI* partners, advisory committees, HIV/AIDS researchers and community stakeholders¹ as appropriate in consultation processes, identification of research priorities and the development of new funding opportunities to support HIV/AIDS research.
- Increase coordination of HIV/AIDS research in Canada and the impact of strategic programs through the promotion and support of collaborative programs with other funders.
- CIHR HIV/AIDS Research Initiative representatives participate in *Federal Initiative* and *CHVI* committees and in national and international committees aligned with HIV/AIDS research priorities.

Objective 4.2: Create opportunities for international research collaboration and promotion of Canadian HIV/AIDS research contributions to addressing HIV/AIDS in international settings.

- Encourage engagement of international research partners to enhance research and research training opportunities for Canadian investigators.
- Earmark funds to facilitate Canadian HIV/AIDS researchers' development of research plans and proposals to secure funding for projects as part of international research teams that are aligned with CIHR HIV/AIDS Research Initiative priorities.
- Develop research funding programs under the *Canadian HIV Vaccine Initiative*.

¹ Stakeholders may include "internal" stakeholders such as Institute-funded scientists, clinician-scientists (i.e., nurses, physicians and other health care professionals involved in research), community based researchers, CIHR administrators, other CIHR Institutes, and clinical and academic trainees; "interface" stakeholders such as universities, healthcare delivery organizations, public health agencies, infection and immunity international research collaborators, other funders of infectious and immune disease research and infection and immune disease-related professional groups; and "external" stakeholders such as federal and provincial governments, policy and program officials, industry, non-governmental organizations [NGOs], Canadian researchers in other disciplines, international researchers, trainees from other disciplines, professional groups, special interest groups, disease-based communities and patients, media and the public.

Organizational excellence

Strategic Goal 5: **Maintain and enhance operational excellence.**

Objective 5.1: Model best practices in program planning, management, administration and implementation.

- Develop and maintain a strategic and operational plan to guide the priorities and activities of the CIHR HIV/AIDS Research Initiative.
- Develop a performance measurement and evaluation framework associated with the strategic goals and objectives of the CIHR HIV/AIDS Research Initiative.
- Monitor progress towards strategic goals and objectives through systematic tracking of performance and outcome measures.
- Ensure financial transparency and accountability of the Initiative through regular progress reports to CHARAC, the Institute of Infection and Immunity Institute Advisory Board, CIHR Research and Knowledge Translation Committee, and Treasury Board *via* the *Federal Initiative* and *CHVI*.

Objective 5.2: Increase the CIHR HIV/AIDS Research Initiative's national and international visibility and strengthen the sense of community among HIV/AIDS researchers and other research funding organizations.

- Develop a communications plan and marketing strategy in consultation with stakeholder groups to guide the CIHR HIV/AIDS Research Initiative's communication activities and increase the profile of the Initiative.
- Maintain web-based information that facilitates awareness, understanding and information-sharing about the CIHR HIV/AIDS Research Initiative with researchers and stakeholders.
- Facilitate communication of CIHR HIV/AIDS research outcomes to government, health agencies, Canadian and international research communities.

Objective 5.3: Enable organizational flexibility and responsiveness.

- Ensure that the CIHR HIV/AIDS Research Initiative has the ability to respond rapidly and decisively to emerging HIV/AIDS research needs and threats to the health of Canadians.

Appendix A: CIHR HIV/AIDS Research Advisory Committee Membership

Chair

Michael Grant, Professor, Faculty of Medicine, Memorial University

Members

CIHR Institute of Aboriginal Peoples' Health

Charlotte Loppie, Assistant Professor, Faculty of Health Professions, Dalhousie University

CIHR Institute of Health Services and Policy Research

Martin Schechter, Professor and Head, Department of Health Care and Epidemiology, Faculty of Medicine, University of British Columbia

CIHR Institute of Neurosciences, Mental Health and Addiction

Doug Zochodne, Professor, Clinical Neurosciences, University of Calgary

CIHR Institute of Population and Public Health

Catherine Hankins, Chief Scientific Advisor, UNAIDS, Social Mobilisation and Strategic Information

HIV/AIDS Community Representatives

Walter Hiebert, MN, PHA, Vancouver Coastal Health

Sean Hosein, Science and Medicine Editor, Canadian AIDS Treatment Information Exchange

HIV/AIDS Researchers

Aslam Anis, Director, Centre for Health Evaluation and Outcome Sciences (CHEOS)

Marina Klein, Assistant Professor, Department of Medicine, McGill University

Michel Tremblay, Professor, Faculty of Medicine, Université Laval

Catherine Worthington, Associate Professor, Social Work, University of Calgary

Ministerial Council on HIV/AIDS

Anita Rachlis, Professor, Department of Medicine, University of Toronto

Public Health Agency of Canada

Nina Arron, Director, HIV/AIDS Policy, Coordination and Programs Division

ex officio

Bhagirath Singh, Scientific Director, CIHR Institute of Infection and Immunity

Bruce Moor, Assistant Director, CIHR Institute of Infection and Immunity

CIHR HIV/AIDS Research Initiative Team

Jennifer Gunning - Team Lead

Paula Kirton - Special Advisor

Jennifer Ralph - Program Officer

Suzette Dos Santos - Program Officer

Susan Lalumière - Project Officer

Appendix A: Con't.

Former CIHR HIV/AIDS Research Advisory Committee Members

Jonathan Angel, Professor, Department of Medicine, University of Ottawa, 2003-2006

Michel Bergeron, Director, Division of Microbiology and Le Centre de Recherche en Infectiologie de L'université Laval, Chair 2003-2004

Paula Braitstein, Assistant Research Professor in Medicine (Kenya), Indiana University, 2003-2004

Liviana Calzavara, Associate Professor, Department of Public Health Sciences, University of Toronto, 2003-2006

Rene Lavoie, Coordinator, Coalition des organismes communautaires québécois de lutte contre le sida, 2003-2004

Earl Nowgesic, Associate Director, Institute of Aboriginal People's Health, 2003-2006

Christopher Power, Professor, Department of Medicine (Neurology), University of Alberta, Member and Chair 2003-2007

Remi Quirion, Scientific Director, Institute of Neurosciences, Mental Health and Addictions, 2003-2005

Robb Travers, Scientist and Director of Community Based Research, Ontario HIV Treatment Network, 2003-2006

Paul Sandstrom, Director, National HIV and Retrovirology Laboratories, Public Health Agency of Canada, 2003-2005

Mark Wainberg, Director, McGill AIDS Centre, 2003-2007

Donald Weaver, Professor, Departments of Chemistry and Medicine, Dalhousie University, 2005-2007