Canadian Institutes of Health Research

HIV/AIDS RESEARCH INITIATIVE

STRATEGIC PLAN 2008-2013



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Message from the Scientific Director



The Institute of Infection and Immunity (III) was established by the Canadian Institutes of Health Research (CIHR) in 2000 to champion Canada's robust infection and immunity research community and build upon its ability to protect the health of Canadians. The Institute of Infection and Immunity is the lead institute for CIHR's HIV/AIDS research effort. HIV/AIDS research was identified as one of the Institute's strategic priorities in its first strategic plan and remains one of five research priorities identified in its current strategic plan, 2007-2012.

The HIV/AIDS epidemic spans the globe and there is currently no cure. But there is an international resolve to respond strategically to the need for preventive, curative, social and economic measures to

address HIV/AIDS and bring its spread to a halt.

The Government of Canada and Canadian research community are committed to fighting the HIV/AIDS epidemic. Canadians understand that what happens globally matters locally and that excellent and strategically focused Canadian HIV/AIDS research can have a global impact on preventing the spread of HIV and improving and protecting the health and quality of life of people living with HIV/AIDS.

Canada has a strong tradition of excellence and innovation in HIV/AIDS research and CIHR overall has invested \$132 million in HIV/AIDS research since 2000. While research on HIV/AIDS is relevant to all 13 CIHR Institutes and is broader than any single Institute's mandate, on behalf of CIHR, the Institute of Infection and Immunity manages the related funding. In addition to the ongoing CIHR investment in HIV/AIDS research, the Institute also manages HIV/AIDS research made possible through the funding of the Canadian Strategy on HIV/AIDS program (to 2003-04) and more recently the Federal Initiative to Address HIV/AIDS in Canada by the Government of Canada. CIHR, working through the Institute of Infection and Immunity and in partnership with Health Canada, the Public Health Agency of Canada and Correctional Service of Canada, oversees the research component of the Federal Initiative to Address HIV/AIDS in Canada. Also on behalf of CIHR, the Institute of Infection and Immunity manages research funding related to the Canadian HIV Vaccine Initiative (CHVI), a collaboration between the Government of Canada and the Bill and Melinda Gates Foundation supporting the discovery and delivery of a safe and effective HIV vaccine

The development of this strategic plan has been undertaken through the CIHR HIV/AIDS Research Initiative, an administrative team within CIHR, and the CIHR HIV/AIDS Research Advisory Committee (CHARAC) – a group of external experts, representatives of various CIHR Institutes and community representatives that provide advice to the Institute of Infection and Immunity and to the CIHR Research and Knowledge Translation Committee with respect to HIV/AIDS research priorities.

This strategic plan is nested and aligned within the Institute of Infection and Immunity's overarching strategic plan 2007-2012. I congratulate the HIV/AIDS researchers, stakeholders and community organizations that have contributed to the development of this plan. In addition to the many individuals and groups that provided valuable suggestions and advice throughout the process, I also gratefully acknowledge the key role that various CIHR Institute Directors and III's Institute Advisory Board members have played in this plan's preparation.

Finally, I would like to thank the members of CHARAC (previously chaired by Dr. Christopher Power from the University of Alberta and currently chaired by Dr. Michael Grant from Memorial University of Newfoundland) as well as the CIHR HIV/AIDS Research Initiative team (led by Jennifer Gunning to January 2008 and subsequently by Andrew Matejcic) for their collective efforts in bringing this plan to fruition.

Bhagirath Singh, Ph.D.

Scientific Director

Institute of Infection and Immunity

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September 2008



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Executive Summary

The mandate of the Canadian Institutes of Health Research (CIHR) HIV/AIDS Research Initiative is to identify priorities for and administer HIV/AIDS research support on behalf of CIHR in fulfillment of CIHR's partnership responsibilities within the Federal Initiative to Address HIVIAIDS in Canada.

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; and
- Issues of co-infection and co-morbidity.

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

- 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;
- Attract, train and retain outstanding HIV/AIDS research personnel across a wide range of disciplines required to effectively address HIV/AIDS;
- Promote translation of HIV/AIDS research results into action;
- Develop partnerships that engage stakeholders and advance the CIHR HIV/AIDS Research Initiative agenda and Canada's response to the HIV/AIDS epidemic, nationally and globally; and
- Maintain and enhance operational excellence.

I. Introduction



Canadian researchers understand that what happens globally matters locally and vice versa – that excellent research undertaken in Canada can have a global impact. As a result, Canadian HIV/AIDS researchers have invested significant energy in research that will enable Canadians to more effectively address the medical, social, health and economic challenges of HIV/AIDS.

The HIV/AIDS epidemic is one of the most significant health challenges of our times. Since the first case of HIV/AIDS was identified more than two decades ago, the epidemic has claimed the lives of over 25 million people. In its path remain partners, children, parents, friends, communities and countries changed forever by the health, social and economic consequences of this deadly virus. Although Africa remains the continent most severely affected, the HIV/AIDS epidemic has a global reach and Canadian health care has been transformed in the wake of its world-wide advance.

By August 2006, close to 13,326 Canadians were reported to have died from HIV/AIDS¹ and another 58,000 were estimated to be living with the infection,² a 16% increase in the number of Canadians living with HIV/AIDS since 2000. While the number of new infections in Canada in 2005 was higher than in 2002, death rates have fallen significantly year over year due to medical advances that have increased the life expectancy of those infected.

HIV/AIDS has had its greatest impact on Canadian populations vulnerable to a range of health, human rights, social and economic inequities. Men who have sex with men remain the population in Canada with the highest rate of infection at 45%, but HIV/AIDS is increasingly reaching other populations including Aboriginal people, for whom the rate of infection is growing faster than any other group. Aboriginals accounted for 9% of new infections in 2005 – an overall infection rate that is nearly three times higher than among non-Aboriginals. In addition, women, injection drug users, inmates, youth and people from countries where HIV/AIDS is endemic are also experiencing increasing rates of infection. Further, it is estimated that over 27% of infected Canadians do not know that they have HIV.

In spite of significant advances in the diagnosis, treatment and management of HIV/AIDS, in the third decade of the AIDS epidemic it is estimated that 39.5 million people are living with this disease world-wide.³ While research has paved the way for the development of therapeutics

Public Health Agency of Canada. HIV and AIDS in Canada. Surveillance Report to June 30, 2006. Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada, 2006, p. 43.

² Public Health Agency of Canada. HIV/AIDS Epi Updates, August 2006, Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada, 2006, p. 1

³ Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), Aids Epidemic Update December 2006, Global Summary of the AIDS Epidemic, December 2006, p. 1.

facilitating disease management strategies that prolong the lives of those with HIV/AIDS, the prevention of HIV and cure of AIDS remains a global priority for HIV/AIDS researchers. Canada has contributed significantly to the medical aspects of the epidemic and has, in addition, taken up the challenge of addressing the social and economic factors and inequities that leave people vulnerable to HIV/AIDS.

The first case of AIDS was diagnosed in Canada in the early 1980s. A decade later, in 1990, the Government of Canada launched the *National AIDS Strategy* in recognition of the need for a formal approach to dealing with the growing epidemic. Since this time, Canada's strategy to address HIV/AIDS has evolved in response to national and global advances and to national and international lessons learned in the fight against this epidemic.

In 1998, the Government of Canada announced the *Canadian Strategy on HIVIAIDS*, which guided the national response to HIV/AIDS until 2004. This strategy directed \$12 million per year to extramural HIV/AIDS research. The Medical Research Council of Canada (MRC) and, after 2000, CIHR⁵, initially managed the biomedical and clinical stream of this extramural research program. An additional three funding streams, including \$3.2 million in research infrastructure to support a Canadian HIV Clinical Trials Network; the epidemiology and public health research stream for which \$2.4 million was allocated; and the Community-Based Research Program supported by \$1.8 million, were originally administered by Health Canada's National Health Research and Development Program (NHRDP).

When the NHRDP was subsumed into CIHR in 2001, responsibilities for the investment of the HIV/AIDS-related epidemiology and public health research stream and the administration of the Canadian HIV Trials Network were transferred to CIHR. The NHRDP's *Community-Based Research Program* was briefly managed by Health Canada, which subsequently transferred responsibility for the delivery of the program to CIHR in 2004.

By 2000, federal, provincial, territorial and municipal government agencies and departments, as well as community based stakeholder organizations, health professionals, researchers, educators and individual HIV/AIDS activists were united in their recognition of the need for a more coordinated and strategic response to the HIV/AIDS epidemic.

From an initial planning meeting held in 2000 at Gray Rocks, Quebec, it was clear that there was broad support for the development of a national strategy to address HIV/AIDS premised on greater collaboration across organizations, sectors and levels of government and enhanced sharing of knowledge, skills and

⁴ See Appendix C for a chronology of the development of Canada's HIV/AIDS research strategy.

⁵ See Appendix A for an overview of the mandates and roles of the Canadian Institutes of Health Research and the Institute of Infection and Immunity.

resources within a common framework. General consensus on the need for a more effective approach to addressing HIV/AIDS led to the formation of a pan-Canadian alliance of HIV/AIDS-related stakeholder organizations.

A pan-Canadian, multi-stakeholder consensus strategy was issued in final form in October 2005 in a report entitled *Leading Together: Canada Takes Action on HIVIAIDS (2005-2010) (Leading Together)*. For its part, the Government of Canada issued its strategic plan in late 2004 entitled *Federal Initiative to Address HIVIAIDS in Canada: Strengthening Federal Action in the Canadian Response to HIVIAIDS (Federal Initiative)* representing a commitment on the part of the Government of Canada to strategic action in advance of the publication of the Leading Together initiative. The *Federal Initiative* represented the next generation of a national HIVIAIDS strategy evolving from the 1998 *Canadian Strategy on HIVIAIDS* and from lessons learned by the United Nations General Assembly Special Session Declaration of Commitment on HIVIAIDS 2001, which called for reinforced regional, national and international responses to HIVIAIDS and specifically for national strategic plans.

The Federal Initiative aims to realize a Canada free from HIV and AIDS and the underlying conditions that make Canadians vulnerable to the epidemic. It has committed the Government of Canada to develop both biomedical and population-specific responses to the HIV/AIDS epidemic and acknowledges that addressing the root causes of the HIV/AIDS epidemic is the only way to bring it to an end.

Programs associated with *The Federal Initiative* were launched in 2005 as a permanent commitment on the part of the Government of Canada to address HIV/AIDS and received permanent funding. The level of ongoing HIV/AIDS funding for all initiatives doubled from \$42.2 million to \$84.4 million annually in 2008-2009. In 2007-08, the *Federal Initiative to Address HIV/AIDS* in Canada made available over \$19 million for HIV/AIDS research that has increased in 2008-09 to a sustained investment of \$22.6 million annually.

The Federal Initiative identified four implementation partner organizations — CIHR, Health Canada, Correctional Service of Canada and the Public Health Agency of Canada. While each partner has a specific role to play in addressing the epidemic and its root causes, the success of the Federal Initiative depends on close collaboration and coordination among partners.

Working with other federal departments and agencies, provincial and territorial governments, non-governmental organizations and other stakeholders, the four implementation partners are committed to working towards the following goals:

- Prevent the acquisition and transmission of new infections;
- Slow the progression of the disease and improve quality of life;

⁶ See Appendix B for an overview of The Federal Initiative to Address HIV/AIDS in Canada: Strengthening Federal Action in the Canadian Response to HIV/AIDS.

- Reduce the social and economic impact of HIV/AIDS; and
- Contribute to the global effort to reduce the spread of HIV and mitigate the impact of the disease.

Setting future directions for HIV/AIDS research in Canada is a central responsibility of CIHR, which is the agency that delivers the HIV/AIDS research component of the Federal Initiative. The Federal Initiative recognizes the importance of a strong research agenda to guide Canada's response to HIV/AIDS. Within CIHR, the Institute of Infection and Immunity provides leadership to the development and support of research programs enabled by the Federal Initiative.

The Institute of Infection and Immunity has been committed to HIV/AIDS as a research priority for the past five years and has confirmed HIV/AIDS as one of five priority research themes in the Institute's strategic plan 2007-2012.⁷ The Institute is committed to supporting HIV/AIDS research, capacity building and knowledge translation initiatives across all CIHR themes for health research. The Institute identifies priorities, builds partnerships and develops strategic funding initiatives in order to advance the Canadian HIV/AIDS research agenda. In support of the *Federal Initiative*, the Institute manages a discrete administrative unit, called the CIHR HIV/AIDS Research Initiative, which reports through the Institute to CIHR, as well as directly to the *Federal Initiative* and through the *Federal Initiative* to Treasury Board. The CIHR HIV/AIDS Research Initiative provides day-to-day management and administration of CIHR contributions and obligations to the *Federal Initiative*.

The Institute provides input to federal policy makers on the need for increased investment in research on HIV/AIDS. In 2003, after consultation with various stakeholders, CIHR struck a new sub-committee of the Institute Advisory Board to advise it on the strategic development of its research agenda in the area of HIV/AIDS. Endorsed by the President of CIHR and the CIHR Research Priorities and Planning Committee (RPPC), this committee, known as the CIHR HIV/AIDS Research Advisory Committee (CHARAC),⁸ is composed of individuals with in-depth knowledge of all aspects of Canadian HIV/AIDS research, an understanding of the complex dynamics of the HIV/AIDS community, an ability to make recommendations on research policies and programs that would be supported by all of CIHR, and a capacity to act as a champion for HIV/AIDS researchers and individuals living with and/or vulnerable to HIV/AIDS.

CHARAC's mandate is to make recommendations to the Institute of Infection and Immunity and to the Research and Knowledge Translation Committee (RKTC) [formerly the RPPC] of CIHR regarding research priorities for HIV/AIDS. In particular, CHARAC provides advice to the CIHR Institute of Infection and

⁷ The other four priority areas are 1) Emerging Infections and Microbial Resistance: Solutions from innovation in tools and technologies; 2) Immunotherapy: New approaches through systems biology; 3) Pandemic Influenza Preparedness: Prevention, therapy and public health challenges; 4) Vaccines of the 21st Century: Integrating innate and adaptive immunity and novel vaccine technologies.

⁸ See Appendix D for a list of the CIHR HIV/AIDS Research Advisory Committee Membership and Appendix E for the Committee's terms of reference.

Immunity Advisory Board regarding strategic initiatives to advance the Canadian research agenda in HIV/AIDS. CHARAC, with the support of a dedicated subcommittee, also advises on the CIHR *Community-Based Research Program*.

CHARAC membership enables the Committee to be a voice for HIV/AIDS researchers, and facilitates communication between stakeholders interested in HIV/AIDS research.

In 2005, CHARAC undertook to identify strategic priorities for CIHR HIV/AIDS research that would enable CIHR to systematically invest in HIV/AIDS research in a manner reflective of the priorities and values of the full range of stakeholders involved.

With the guidance of CHARAC and through consultation with a wide range of stakeholders, six priority research themes were identified for CIHR investments in HIV/AIDS research. These themes were:

- Health systems, services and policy;
- Resilience, vulnerability and determinants of health;
- Prevention technologies and interventions;
- Drug development, toxicities and resistance;
- Pathogenesis; and
- Issues of co-infection.⁹

CHARAC subsequently recommended that these research priorities be situated within a strategic plan specifically for the CIHR HIV/AIDS Research Initiative and aligned with the CIHR Blueprint for Health Research and Innovation and the Institute of Infection and Immunity Strategic Plan 2007-2012.

CIHR and the Federal Initiative have identified that, in addition to world-class basic and applied research, maintaining and enhancing the infrastructure for HIV/AIDS clinical trials is a key component of a comprehensive research response to the HIV/AIDS epidemic. The Canadian HIV Trials Network (CTN) has been a key feature of the Government of Canada's national strategy on HIV/AIDS since 1990. With support from the Federal Initiative, CIHR will continue to invest in significant HIV/AIDS clinical trials network infrastructure in order to position Canada as a global leader in HIV/AIDS clinical research and to facilitate the development of the research infrastructure necessary to support a collaborative environment for researchers conducting excellent, ethically sound pan-Canadian HIV/AIDS clinical trials.

In addition, the Institute of Infection and Immunity is a partner in the Canadian HIV Vaccine Initiative (CHVI), a collaboration between the Government of Canada and the Bill and Melinda Gates Foundation that aims to enhance Canada's contributions to the discovery and delivery of a safe and effective HIV vaccine. This

⁹ Following public consultation on this strategic plan in early 2008, the description of the 6th priority, "Issues of co-infection," was modified to incorporate "co-morbidity" in the title.

initiative is an example of how partnerships can leverage funding and increase the impact of Government of Canada support in CIHR and Federal Initiative priority areas.

The commitment of CIHR to HIV/AIDS research has been extensive and the stakeholder community has been invited to play a leading role in shaping the nature of that commitment. Given that the CIHR HIV/AIDS Research Initiative is a high profile program within CIHR with significant visibility among researchers and HIV/AIDS stakeholder communities, a strategic plan that defines its goals and objectives and guides its activities and investments over the next five years is warranted and timely.

This document aims to position Canada's strategic HIV/AIDS research priorities in the context of an overarching strategic plan that will serve as a useful guide for future CIHR HIV/AIDS Research Initiative investments.



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



The **mandate** of the Canadian Institutes of Health Research (CIHR) HIV/AIDS Research Initiative is to identify priorities for and administer HIV/AIDS research support on behalf of CIHR in fulfillment of CIHR's partnership responsibilities within the *Federal Initiative to Address HIV/AIDS in Canada*.

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.

III. Strategic Research Priorities



Defining research priorities is a key responsibility for all CIHR Institutes. A central component of CIHR's contribution to the *Federal Initiative to Address HIVIAIDS in Canada* is the identification of national HIV/AIDS research priorities.

HIV/AIDS research is eligible for funding through the CIHR Open Competitions Program. In addition, the CIHR HIV/AIDS Research Initiative has four funding streams within which HIV/AIDS research will be supported. These are:

- Biomedical/Clinical Research;
- Health Services/Population Health Research;
- Community-Based Research; and
- HIV/AIDS Clinical Trials Network.

The Federal Initiative to Address HIV/AIDS in Canada has made a strong commitment to support population-specific responses to the HIV/AIDS epidemic, where appropriate. Eight key populations identified by the Federal Initiative that future HIV/AIDS programs, including research programs, should address are:

- People living with HIV/AIDS;
- Gay men;
- · Injecting drug users;
- Aboriginal peoples;
- Prison inmates:
- Youth at risk:
- · Women at risk; and
- People from countries where HIV is endemic. ¹⁰

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:

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

¹⁰ Public Health Agency of Canada, *Populations at Risk*, located at http://www.phac-aspc.gc.ca/aids-sida/populations_e.html, downloaded 22 April 2008.

These research priorities promote population-specific approaches targeting key populations identified by the *Federal Initiative* including people living with HIV/AIDS, gay men, injecting drug users, Aboriginal peoples, prison inmates, youth at risk, women at risk and people from countries where HIV is endemic. The research priorities identified are also relevant to global HIV/AIDS research aligned with CIHR policies.

Each priority research theme is summarized briefly below.

Health systems, services and policy

Increasing access to and uptake of testing, care, treatment and prevention services is fundamental to Canada's ability to get ahead and stay ahead of the HIV/AIDS 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-, treatment- and rehabilitation-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 health-care practices.

Related research may include:

- Access to, uptake, quality and effectiveness of testing, prevention, care, rehabilitation and other and treatment services across the healthcare continuum including community based, primary and tertiary care;
- Understanding barriers and facilitators to access, particularly for key populations and subpopulations;
- Sustainability of improved access to services including economic impacts and balancing costeffectiveness 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, including the role of community based AIDS organizations (CBAOs);
- The impact of accessing treatment and care, and prevention interventions 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 and genders particularly vulnerable to HIV and other infectious diseases while others 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, behavioural and 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 also contribute to a better understanding of these issues and their impacts.

Related research 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 genders, ages and populations;
- How different individuals and communities are affected by and deal with HIV/AIDS over the life course; 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 HIV prevention. 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 preventive vaccines;
- Investigations that lead to the discovery of new strategies such as microbicides or pre- and postexposure prophylaxis;
- Research on behavioral and social interventions and "positive prevention" tools and strategies
 specifically for key populations at risk including effectiveness and impact on individuals, families and
 communities; 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 adherence assessment. The identification of new, less toxic drugs and simplified treatment schedules continues to be of great importance to those infected with HIV.

Related research may include:

- Identification, development and testing of new drug therapies, including combination and salvage therapies;
- Understanding the mechanisms of drug resistance, toxicity and multiple drug interactions;
- 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 about 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.

Related research may include:

- Host-virus extracellular and intracellular interactions (e.g., 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 and co-morbidity

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 *Resilience*, *vulnerability* and determinants of health research priority. The co-infection research priority area 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.

Related research 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 and co-morbidities 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, chronic disease and mental illness;
- Prevention and control of co-infection and co-morbidity associated with HIV/AIDS, including
 effective treatments for co-infected individuals and AIDS-related illnesses and disabilities; and
- Issues relating to infection with multiple strains of HIV.

These six priorities will be used to guide CIHR strategic investments in HIV/AIDS research and Federal Initiative funding administered by CIHR. CHARAC will review funding allocated to the various themes and the need to update the priorities on an annual basis. Across each of the priority research thrusts, a variety of methodological and disciplinary approaches drawn from basic science, biomedical science, social science and humanities, mathematics and applied science may be relevant to addressing the HIV/AIDS challenges identified in this plan.

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

Research that contributes to control of the HIV epidemic internationally, including projects in partnership with lower- and middle-income countries, will be considered within the scope of the priority research themes, 2008-2013.



IV. 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 I: 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 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 the participation of Canadian HIV/AIDS researchers, research networks and stakeholder organizations in national and international HIV/AIDS research funding programs aligned with strategic priorities.

Indicators:

- Number and value of projects supported that address strategic priorities.
- Reports from grant holders detailing progress towards strategic goals.
- Number of researchers, networks, stakeholders and partners involved in the development of grant applications.
- Success rate of national and international grants submitted by Canadian researchers, research networks and stakeholder organizations that were supported by development program grants.

¹¹ CIHR strategic outcomes are: outstanding research; outstanding researchers in innovative environments; transforming health research into action; effective partnerships and public engagement; and organizational excellence. *Investing in Canada's Future: CIHR's Blueprint for Health Research and Innovation* 2003/04-2007/08, p. 17.



Outstanding researchers in innovative environments

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

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

- Implement and administer a research trainee awards program that encourages young investigators across disciplines 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* that enables academic-community research collaboration.
- Support development of research and networking expertise that enhances international research capacity among Canadian HIV/AIDS researchers.

Indicators:

- Number of HIV/AIDS trainees and investigators supported.
- Number of supported graduating trainees that subsequently pursue research careers in HIV/AIDSrelated fields.
- Collection and analysis of accomplishment statements from award-holders to determine the impact of the award on their career development.
- Number and value of research projects supported that involve researchers and end users/community partners, multi-disciplinary research and/or international research collaborations and related impacts.

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 and use 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.

Indicators:

- Completed research projects are assessed for KT potential, KT plans are developed and target audiences identified as appropriate to facilitate knowledge utilization.
- The CIHR HIVIAIDS Research Initiative communications plan includes a communication strategy that facilitates the promotion of KT initiatives and facilitates the translation and communication of CIHR HIVIAIDS Research Initiative outcomes to relevant stakeholder groups and partner organizations.
- KT collaborations are developed with Federal Initiative partners and stakeholder organizations.

Effective partnerships and public engagement

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

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 stakeholders¹² 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.
- Encourage and facilitate greater involvement of people living with HIV/AIDS and/or community based groups in research proposals, including promotion of innovative peer review processes.
- 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.

¹² Stakeholders may include "internal" stakeholders such as Institute-funded scientists, clinician-scientists (i.e., nurses, physicians, rehabilitation 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, international research collaborators and co-funders of HIV/AIDS research; and "external" stakeholders such as federal and provincial governments, policy and program officials, industry, non-governmental organizations [NGOs], HIV/AIDS disease-related professional groups, interest groups, Canadian researchers in other disciplines, international researchers and governments, trainees from other disciplines, patients, media and the public.

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.
- Seek joint-funding opportunities in partnership with international funding agencies and organizations to ensure Canadian scientific and professional talent contributes to the global war on HIV/AIDS and to building HIV control capacity, including in lower- and middle-income countries.
- Develop research funding programs under the CHVI.

Indicators:

- Document CIHR participation in Federal Initiative committees and in national and international committees aligned with Federal Initiative priorities.
- Document CIHR consultations with HIV/AIDS research partners, Federal Initiative partners, advisory committees, HIV/AIDS researchers and community stakeholders.
- Track and quantify by sector and stakeholder group the engagement of external research partners involved in creating new research and research training opportunities for Canadian HIV/AIDS investigators.
- Number and magnitude of collaborative funding programs supported by multiple organizations.
- Total number and types of awards granted to support Canadian researchers' participation in international research collaborations.

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 CIHR HIV/AIDS Research Initiative through regular progress reports to CHARAC, the Institute of Infection and Immunity Institute Advisory Board, CIHR Research and Knowledge Translation Committee (RKTC), 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 and stakeholder organizations.

Objective 5.3: Enable organizational flexibility and responsiveness.

- Ensure that the CIHR HIV/AIDS Research Initiative has an ability to respond rapidly and decisively to emerging HIV/AIDS research needs and threats to the health of Canadians.
- Encourage peer review responsiveness to the unique needs of community-based research initiatives.

Indicators:

- A strategic and operational plan to guide the priorities and activities of the CIHR HIVIAIDS Research Initiative is in place and operational plans are updated annually; strategic plans are updated quinquennially.
- A performance measurement and evaluation framework associated with the strategic goals and objectives of the CIHR HIV/AIDS Research Initiative is in place; the results are reviewed annually and feedback is used to refine operational plans.
- Performance and outcome measures for each HIV/AIDS initiative/funding program are developed and tracked.
- Financial transparency and accountability are ensured by regular progress reports to CHARAC, the Institute of Infection and Immunity Institute Advisory Board, RKTC and Treasury Board via the Federal Initiative.
- Evidence of sufficient administrative flexibility in the financial management of the CIHR HIV/AIDS Research Initiative so as to enable rapid and decisive responses to unanticipated HIV/AIDS research needs and threats to the health of Canadians.
- A comprehensive communications plan is in place.

V. Conclusion



The CIHR HIV/AIDS Research Initiative Strategic Plan 2008-2013 builds on the strategic research priorities developed to guide the administration of Federal Initiative funds for HIV/AIDS research within CIHR. This strategic plan represents a living document against which the activities and investments of CIHR and the Federal Initiative supporting HIV/AIDS research in Canada can be assessed.

Within each five-year planning cycle, this plan will provide a useful reference point against which progress can be annually documented and performance outcomes reviewed. The CIHR HIV/AIDS Research Initiative Strategic Plan 2008-2013 should undergo review and revision at regular five-year intervals in parallel with the review and renewal of the CIHR Institute of Infection and Immunity strategic plan within which it is nested.

CHARAC commends CIHR for its support of HIV/AIDS research, and trusts that this inaugural strategic plan underscores the importance placed on addressing the HIV/AIDS epidemic by Canadian health researchers and the broader HIV/AIDS community.

CHARAC looks forward to supporting the implementation of this plan, and in doing so, to contributing to the realization of the goals of the Federal Initiative to Address HIVIAIDS in Canada.

CIHR HIVIAIDS Research Advisory Committee September 2008



Appendices



Appendix A: About the Canadian Institutes of Health Research and the Institute of Infection and Immunity

The Canadian Institutes of Health Research (CIHR) is the federal agency responsible for health research leadership and funding in Canada. The CIHR mandate is "to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system" (Bill C-13, April 13, 2000).

CIHR is organized around 13 Institutes that are mandated to support health research across four domains: biomedical, clinical, health systems and services, and population and public health. Each Institute is led by a Scientific Director, who is an internationally recognized leader in their field. The Scientific Director receives guidance from an Institute Advisory Board (IAB) composed of volunteers from all areas of the health research community, including those who fund research, those who carry it out and those who use its results. Institutes are formally accountable to the President of CIHR, and, through the Minister of Health, to Parliament. The 13 Institutes share responsibility for achieving the CIHR mandate. The CIHR approach to supporting health research is broad, inclusive and unique worldwide.

The CIHR vision is to position Canada as a world leader in the creation and use of knowledge through health research that benefits Canadians and the global community. In pursuit of its mandate and vision, CIHR seeks five key outcomes: outstanding research; outstanding researchers in innovative environments; transforming health research into action; effective partnerships and public engagement; and organizational excellence.

Since 2000, the Institute of Infection and Immunity has had a mandate to develop and coordinate infection and immunity research on behalf of CIHR 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 health, social and economic impact.

The **mission** of the Institute is to provide national leadership, priorities and programs that promote novel infection and immunity research.

The **vision** of the Institute is to be an internationally-recognized innovator in support of infection and immunity research and a catalyst for the translation of new knowledge for global impact.

The **values** that guide Institute decisions, strategies and actions are excellence, innovation, collaboration, transparency and accountability.

Consistent with its mission, vision and values, the Institute will focus investments from 2007 to 2012 in five areas, one of which is HIV/AIDS. Areas of strategic research focus over the next five years are:

- Emerging Infections and Microbial Resistance: Solutions from innovation in tools and technologies
- HIV/AIDS: From prevention and therapy to addressing global health challenges
- Immunotherapy: New approaches through systems biology
- Pandemic Influenza Preparedness: Prevention, therapy and public health challenges
- Vaccines of the 21st Century: Integrating innate and adaptive immunity and novel vaccine technologies.

While HIV/AIDS research is relevant to all 13 CIHR Institutes, the Institute of Infection and Immunity acts as the CIHR lead overseeing the allocation of HIV/AIDS research funding provided by the Federal Initiative to Address HIV/AIDS in Canada.

In the context of its investments in the five areas of strategic focus, the Institute will pursue the following strategic goals, 2007-2012:

- Encourage and support high quality research in infection and immunity that contributes important knowledge and new insights relevant to human health
- Foster and sustain innovative environments to attract, train and retain high-quality research personnel across the spectrum of disciplines contributing to the achievement of the Institute's research mandate
- Encourage and facilitate knowledge translation in all fields and sectors related to the Institute mandate
- Develop and maintain effective partnerships that benefit research domains of the Institute
- Maintain and enhance organizational excellence through effective planning, communication and collaboration.

Over the next five years, the Institute aims to provide national leadership in enabling research excellence, leverage relationships and partnerships to promote innovation, and facilitate national and international research impacts through knowledge translation and communication. Across the full spectrum of its funding portfolio, the Institute of Infection and Immunity seeks to invest in health research that will improve and sustain the health of Canadians and contribute to reducing the global burden of disease.

Appendix B: About The Federal Initiative to Address HIV/AIDS in Canada: Strengthening Federal Action in the Canadian Response to HIV/AIDS

Building on recommendations from the House of Commons Standing Committee on Health, lessons learned from past federal HIV/AIDS strategies, and stakeholder and provincial/territorial consultations, in May 2004, the Government of Canada announced a doubling of HIV/AIDS annual funding from \$42.2 million to \$84.4 million by 2008-09.

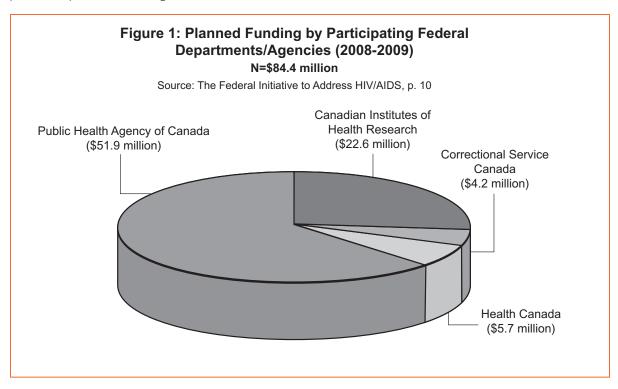
The subsequent release of The Federal Initiative to Address HIV/AIDS in Canada: Strengthening Federal Action in the Canadian Response to HIV/AIDS in late 2004 represented the Government of Canada's response to a pan-Canadian call for a more strategic approach to HIV/AIDS in Canada. The Federal Initiative envisions unprecedented engagement, increased collaboration and enhanced planning across a broad cross-section of organizations and individuals sharing a vision of ending the HIV/AIDS epidemic. A broadly based national consensus position on the optimal response to HIV/AIDS in Canada was detailed in the 2005 report Leading Together: An HIV/AIDS Action Plan for All Canada.

The official launch of *The Federal Initiative* in January 2005 signalled a renewed and strengthened federal role in the Canadian response to HIV/AIDS. *The Federal Initiative* — a partnership of the Public Health Agency of Canada, the Canadian Institutes of Health Research, Health Canada and Correctional Service of Canada — works toward a Canada free from HIV/AIDS and the underlying conditions that make Canadians vulnerable to the epidemic.

The four federal partners in the Federal Initiative collaborate with other federal departments and agencies, other levels of government, non-governmental organizations, researchers and other stakeholders to achieve the following goals:

- Prevent the acquisition and transmission of new infections;
- Slow the progression of the disease and improve quality of life;
- Reduce the social and economic impact of HIV/AIDS; and
- Contribute to the global effort to reduce the spread of HIV and mitigate the impact of the disease.

Figure 1, below, provides a summary of the distribution of *Federal Initiative* resources across the four federal partner departments and agencies for 2008-09.



The Federal Initiative to Address HIVIAIDS in Canada identifies five areas for increased federal action and investment:

Program and Policy Interventions (\$35.4 million)

Enhanced national and front-line HIV/AIDS programs will be evidence-based and aligned with the regional characteristics of the epidemic and the specific needs of vulnerable populations. Programs will be established to improve front-line capacity to deliver population-specific education and prevention initiatives and to increase access to care, treatment and support.

Knowledge Development (\$31.9 million)

Knowledge development will be enhanced to improve understanding of the HIV epidemic and inform the development of policies, programs and interventions, such as new prevention technologies and therapies. The focus will be on improving population-specific surveillance; epidemiological, socio-behavioural, ethnographic and community-based research; and biomedical and clinical research, including clinical trials. New knowledge transfer opportunities will be established.

Communications and Social Marketing (\$4.7 million)

National and front-line communications and social marketing activities will be expanded to improve Canadians' knowledge of HIV, address community and societal attitudes and reduce the stigma and

discrimination that fuel the epidemic. National public awareness campaigns will be developed to raise awareness in the general population and encourage people to access HIV/AIDS programs.

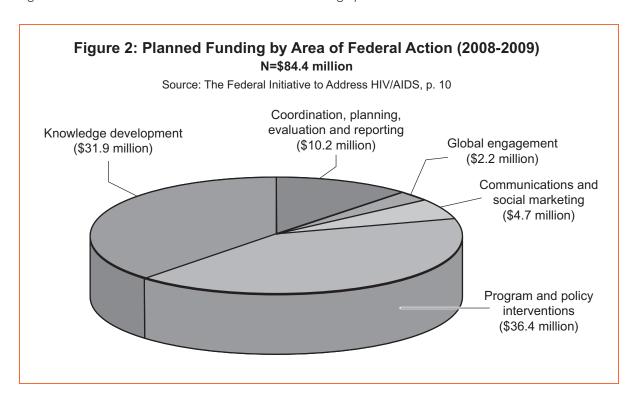
Coordination, Planning, Evaluation and Reporting (\$10.2 million)

Coordination, planning, evaluation and reporting will be enhanced to optimize both the federal and pan-Canadian responses to the epidemic and the use of resources. The focus will be on supporting the implementation of *Leading Together* and the development of issue-specific plans (for example, vaccines and population-specific approaches) and an evaluation strategy for the *Federal Initiative*. Integral to this will be mechanisms that enhance the engagement of people living with and vulnerable to HIV/AIDS.

Global Engagement (\$2.2 million)

Global engagement activities will be strengthened to demonstrate the Government of Canada's commitment to a global response to HIV/AIDS. The focus will be on partnerships that increase Canada's contribution of technical and policy support and health sector experience and knowledge, promoting learning between the domestic and international responses, and that ensure policy coherence and alignment of federal activities. Opportunities will be developed to encourage Canadian researchers to collaborate in international initiatives.

Figure 2 illustrates the allocation of Federal Initiative funding by area of action and investment 2008-09.

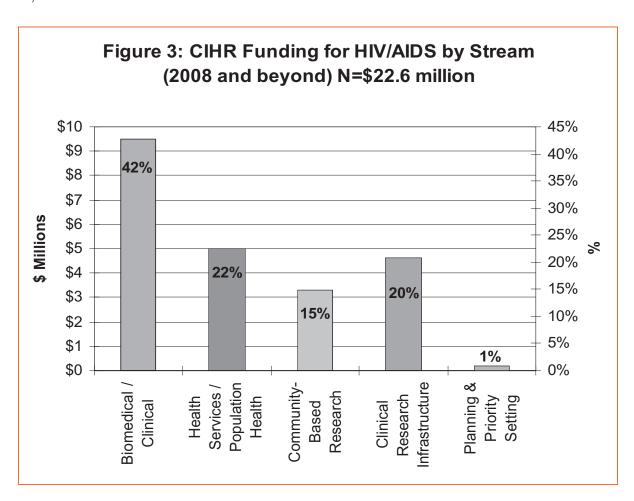


As the Government of Canada's agency for health research, CIHR provides leadership and direction for the Federal Initiative's investments in extramural research. The CIHR Institute of Infection and Immunity leads the CIHR HIV/AIDS Research Initiative and the identification of research priorities and development of collaborative research initiatives to reduce the burden of HIV/AIDS domestically and internationally.

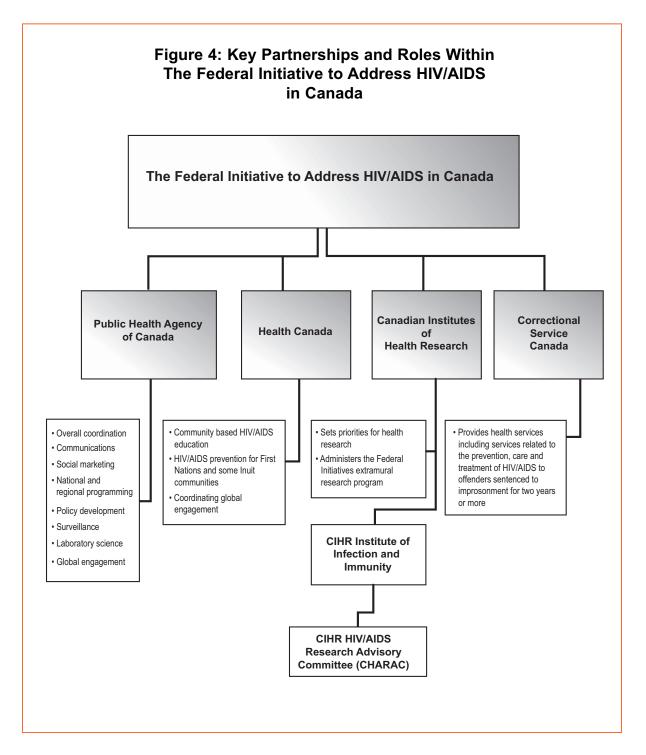
These efforts are guided by the CIHR HIV/AIDS Research Advisory Committee (CHARAC), whose membership ensures that the HIV/AIDS Research Initiative is led by a group of individuals that collectively possesses in-depth knowledge of all aspects of HIV/AIDS and which encourages communication between CIHR Institutes and stakeholders interested in HIV/AIDS research.

Recognizing the breadth of research required to combat the HIV epidemic, the Federal Initiative supports biomedical, clinical, health services, population health and community-based research streams. Federal Initiative funds also support Canadian HIV clinical research infrastructure.

Figure 3 illustrates the allocation of CIHR's share of Federal Initiative funding by research stream for 2008 and beyond.



Finally, Figure 4 provides an overall organizational perspective on the relationship among the key federal partners and related CIHR lead and advisory bodies.



Appendix C: A Chronology of the Development of Canada's CIHR HIV/AIDS Research Strategy

Chronology of the Development of Canada's CIHR HIV/AIDS Research Strategy			
When	What	Significance to HIV/AIDS Research	
March 1982	First cases of AIDS reported in Canada	HIV/AIDS affects mainly the gay male population and people infected through the blood supply	
1980s	A number of national AIDS non- governmental organizations are established	These organizations serve to raise public awareness of HIV/AIDS and related issues and identify the need for better information on HIV/AIDS	
1983	HIV virus isolated at the Pasteur Institute	Discovery triggers expansion of global HIV/AIDS research agenda	
1983	Canada forms a National Task Force on AIDS	AIDS placed on federal agenda	
1986	Federal Centre for AIDS established within the Health Protection Branch of Health Canada	First step towards a comprehensive approach to federal support for HIV/AIDS research and surveillance	
1989	Canadian researchers discover the anti- HIV activity of the drug 3TC	Discovery raises international awareness of Canadian HIV/AIDS research capacity and expertise	
1990	National AIDS Strategy launched with \$37.3 million per year	Federal government, which had been investing in HIV/AIDS programs since the mid-1980s, recognizes the need for a more formal approach to HIV/AIDS, with specific funding directed to research	
1990	Canadian Association for HIV Research (CAHR) established	First forum for Canadian HIV researchers to meet annually and share research results; CAHR has met annually since 1990	

When	What	Significance to HIV/AIDS Research	
1990	Establishment of Canadian AIDS Treatment Information Exchange (CATIE)	CATIE is a national, not-for- profit organization that works in partnership with a network of information providers, including HIV/AIDS researchers, to ensure that people living with HIV/AIDS and their caregivers have access to research evidence and information to make informed health care choices	
1993	National AIDS Strategy renewed for five years	\$42.2 million is provided per year for five years of which \$8.7 million per year is directed to extramural research	
1996	Potent combination of anti-viral drugs developed that significantly prolongs the lives of people with HIV/AIDS and diminishes complications	Some research leading to this breakthrough is undertaken in Canada	
May 1998	Canadian Strategy on HIV/AIDS (CSHA) launched	 \$42.2 million per year for the national AIDS strategy \$12 million per year for extramural HIV/AIDS research Acknowledges that spread of HIV is influenced by social, economic and political factors as well as biological conditions 	
1998	National Health Research and Development Program (NHRDP) administers three extramural research funding streams	 \$3.2 million in infrastructure for Canadian HIV Trials Network (CTN) \$2.4 million for epidemiology and public health research \$1.8 million for new Community Based Research (CBR) program 	
1998	Medical Research Council (MRC) administers one extramural research funding stream	\$4.6 million for biomedical/clinical HIV/AIDS research	

Chronology of the Development of Canada's CIHR HIV/AIDS Research Strategy			
When	What	Significance to HIV/AIDS Research	
2000	NHRDP CBR program introduces Aboriginal and General CBR Capacity- Building streams	 \$0.8 million for Aboriginal community based research \$1 million for community based research 	
June 2000	Canadian Institutes of Health Research (CIHR) established	Replaces the Medical Research Council and leads to the establishment of 13 "virtual" research institutes	
2000	Canadian Strategy on HIV/AIDS Direction-Setting Meeting (Gray Rocks)	10 broad strategic directions are identified to guide the work of the Canadian Strategy for HIV/AIDS (CSHA)	
2001	United Nations General Assembly Special Session Declaration of Commitment on HIV/AIDS published	Calls for national strategic plans to address HIV/AIDS	
2001	Health Canada closes NHRDP program	 Administration of CSHA's CTN and epidemiological and public health research transferred to CIHR Administration of CSHA's CBR program transferred to the HIV/AIDS Division of Health Canada 	
2001	An Aboriginal Strategy on HIV/AIDS in Canada for First Nations, Inuit and Métis People released by the Canadian Aboriginal AIDS Network	Provides a guide to policy, program and research related to HIV/AIDS among Aboriginal populations	
April 2002	Direction Setting Follow-up Meeting, (Gray Rocks II), Montreal, Quebec	The 10 broad directions identified at the Gray Rocks, 2000 meeting are further developed; this meeting launches a national, multisectoral strategic planning process for HIV/AIDS programming that culminates in the 2005 Leading Together action plan	

Chronology of the Development of Canada's CIHR HIV/AIDS Research Strategy			
When	What	Significance to HIV/AIDS Research	
2003	Health Canada's multi-sectoral Five-Year Review Advisory Committee issues report Getting Ahead of the Epidemic: The Federal Government Role in the Canadian Strategy on HIV/AIDS, 1998-2008 and House of Commons Standing Committee on Health issues report recommending a strengthened federal role, including research, that would contribute to more effective interventions and improved HIV/AIDS prevention and treatment initiatives for at-risk populations under federal jurisdiction	These reports provide justification for additional federal investment in HIV/AIDS research in the context of an evolving federal strategy to address the epidemic	
2003	CIHR HIV/AIDS Research Advisory Committee (CHARAC) established	This new sub-committee of the Institute of Infection and Immunity Advisory Board is established to advise on the strategic development of CIHR's research agenda in the area of HIV/AIDS	
2004	Administration of HIV/AIDS CBR program transferred from Health Canada to CIHR	CIHR Institute of Infection and Immunity assumes overall responsibility for Federal Initiative-supported HIV/AIDS extra-mural research	
September 2004	Creation of the Public Health Agency of Canada	Creates opportunities for HIV/AIDS researchers to develop new partnerships and strengthen the public health dimensions of HIV/AIDS research, especially related to epidemiology and surveillance	
Late 2004	Federal Initiative to Address HIV/AIDS in Canada released	 Announces funding to address HIV/AIDS will increase from \$42.2 million to \$84.4 million annually by 2008-2009. HIV/AIDS research funding to increase from \$12 million to \$22.6 million annually by 2008-2009 	

Chronology of the Development of Canada's CIHR HIV/AIDS Research Strategy			
When	What	Significance to HIV/AIDS Research	
October 2005	Leading Together: Canada Takes Action on HIV/AIDS (2005-2010), a multisectoral blueprint for Canada's optimal response to HIV/AIDS, released	Leading Together provides key directions for HIV/AIDS research in Canada	
2005-2006	CHARAC develops research priorities to guide CIHR HIV/AIDS Research Initiative funding decisions	CIHR aligns research support with the strategic priorities of the Federal Initiative	
February 2007	Canadian HIV Vaccine Initiative (CHVI) announced in partnership with the Gates Foundation and the Government of Canada	Provides a nexus for Canadian research on HIV vaccine development, with funding administered through CIHR	
2007	CIHR Institute of Infection and Immunity updates strategic plan	Confirms HIV/AIDS research as one of the Institute's five research priorities to 2012	
2008	Federal Initiative fully implemented	Funding increases for HIV/AIDS research enable CIHR to provide sustained support to Canadian HIV/AIDS research and research capacity development	
2008	A strategic plan 2008-2013 is developed for the HIV/AIDS Research Initiative in consultation with the broader HIV/AIDS community	CIHR HIV/AIDS research programs administered by the CIHR HIV/AIDS Research Initiative are aligned with the goals of the Federal Initiative, CIHR and the Institute of Infection and Immunity	

Appendix D: CIHR HIV/AIDS Research Advisory Committee

(CHARAC) 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 appointment pending

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 (to January 2008 - on leave)

Andrew Matejcic – Team Lead (from January 2008)

Paula Kirton - Special Advisor

Jennifer Ralph - Program Officer

Suzette Dos Santos - Program Officer

Susan Lalumière - Project Officer

Former CHARAC 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, Coalition des organismes communautaires québécois de lutte

contre le sida, 2003-2004

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

Christopher Power, Professor, Department of Medicine (Neurology), University of Alberta,

Member and Chair 2003-2007

Rémi 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

Doug Zochodne, Professor, Clinical Neurosciences, University of Calgary, 2007-2008

Appendix E: CHARAC Terms of Reference

Canadian Institutes of Health Research CIHR HIV/AIDS Research Advisory Committee (CHARAC) Terms of Reference

(as at December 2007)

Mandate

The Committee is mandated to make recommendations to the Institute of Infection and Immunity and to the Research Priorities and Planning Committee of CIHR regarding research priorities for HIV/AIDS. It advises the CIHR Institute of Infection and Immunity Advisory Board regarding strategic initiatives in HIV/AIDS research with a view to develop future targeted Requests for Applications (RFA), including those that will be funded through the Federal Initiative to Address HIV/AIDS in Canada.

Roles and Responsibilities

The roles and responsibilities of the CIHR HIV/AIDS Research Advisory Committee are as follows:

- ▶ To make recommendations on HIV/AIDS research policies and programs
- ► To make recommendations to the Institute of Infection and Immunity and to the CIHR Research and Knowledge Translation Committee (RKTC) regarding research priorities for HIV/AIDS
- ► To act as a champion for HIV/AIDS researchers.

Membership

The CIHR HIV/AIDS Research Advisory Committee is composed of researchers from across the full spectrum of health research, as well as representatives from multiple CIHR Institutes, community organizations, and Federal Initiative partners.

The membership comprises representatives from the following:

- I Institute of Infection and Immunity
- I Institute of Aboriginal Peoples' Health
- I Institute of Health Services and Policy Research
- I Institute of Neurosciences, Mental Health and Addiction
- I Institute of Population and Public Health
- 4 Researchers from across the pillars
- 2 Community representatives
- I Ministerial Council on HIV/AIDS
- I Public Health Agency of Canada

The Scientific Director, CIHR Institute of Infection and Immunity, will sit on the Committee in an ex officio capacity.

Chairmanship

The CIHR HIV/AIDS Research Advisory Committee will be chaired by a representative of the CIHR Institute of Infection and Immunity Advisory Board.

Terms of Appointment Meetings

The members will serve on the Committee for two year terms. Rotation will be staggered and a call for nominations will be sent out on the web site.

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Face-to-face meetings will be conducted three times a year in predetermined locations. Teleconferences will be held on an "as needed" basis.

A majority of its members (50% plus $\,$ I)

Quorum Authority

The CIHR HIV/AIDS Research Advisory Committee is intended to operate in the way it deems will most effectively achieve its objectives. To this end, it has the authority to:

► Create subcommittees and working groups to address HIV/AIDS related issues.

Reporting

The CIHR HIV/AIDS Research Advisory Committee will report, via the Chair, to the CIHR Institute of Infection and Immunity Advisory Board and via the Institute Advisory Board and Scientific Director to the CIHR RKTC, which is composed of 13 Institute Scientific Directors, 3 CIHR Vice-Presidents, Director of Ethics, Chief Financial Officer and is chaired by the President. This reporting will ensure that the work of the CIHR HIV/AIDS Research Advisory Committee receives input from all 13 CIHR Institutes.

Evaluation

The terms of reference of the CIHR HIV/AIDS Research Advisory Committee will be reviewed every two years by the Committee.

Appendix F: Strategic Planning Methodology

This strategic plan aims to communicate the strategic goals and objectives that will guide the development of the CIHR Institute of Infection and Immunity HIV/AIDS Research Initiative for the next five years in clear and concise language that allows all stakeholders, including the public, to clearly understand:

- What role the CIHR HIV/AIDS Research Initiative plays within the context of CIHR (mission);
- What it seeks to become (vision);
- The core values and principles that guide its decisions and actions;
- What it has set out to achieve within CIHR key outcome areas (strategic research priorities, and organizational goals and objectives);
- Actions the CIHR HIV/AIDS Research Initiative will take to realize its strategic goals and objectives (tactics); and
- How performance will be assessed.

Research and consultation underpinning the development of this strategic plan include:

Documentation and literature review - Summer 2007

Key informant interviews - Fall 2007

Strategic planning meeting of the CHARAC - October 2007

Stakeholder consultation on the plan - Winter 2007-08

Revisions to the plan - March/April 2008

Final IAB approval of the plan – May 2008